HISTORY'S OPENING ACT

Meditations on Genesis 1-11

Abstract

365 daily meditations on Genesis 1-11 with an apologetics focus, which integrates scientific and historical facts, and a covenantal theological framework, into a comprehensive model for understanding God's first communication to mankind.

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Unless otherwise noted, direct Bible quotations are taken from the English Standard Version (ESV).

Contents

Preface	1
God Exists [January 1]	5
When Time Began [January 2]	6
"God Created" [January 3]	7
God, The Creator [January 4]	8
Wonders of Creation [January 5]	10
God Created the Universe [January 6]	11
Creation Ex Nihilo? [January 7]	
Why God Created the Universe [January 8]	13
Tough Questions Answered [January 9]	14
Biblical Science vs Pseudo-Science [January 10]	16
Young Earth [January 11]	
Primordial State of the Earth [January 12]	
The Nature of Matter [January 13]	
God is Spirit [January 14]	21
The Spirit of God and Hints of the Trinity [January 15]	22
God's Eternal Plan [January 16]	23
"And God Said" [January 17]	24
God's Self-Authenticating Word [January 18]	25
Creation of Light [January 19]	27
Variable Speed Light [January 20]	28
The Good Creation [January 21]	29
Separation of Light from Darkness [January 22]	
24-hour Creation Days [January 23]	
Non-Historical Views of the Six Days of Creation [January 24]	
"For Six Days God Created" [January 25]	
Counting and Mathematics - From the Mind of God [January 26]	35
The Creation Account Referenced in the Rest of the Bible [January 27]	
The Creation of the Atmosphere [January 28]	
The Creation of the Land [January 29]	
The Creation of Plants [January 30]	40
In the Beginning was Information [January 31]	41
DNA: Complex, Specified Information [February 1]	43
The Verdant Earth [February 2]	44

Measures of Time [February 3]	45
Heavenly Signs [February 4]	46
The Anthropic Principle [February 5]	48
The Young Universe (part 1 of 3) [February 6]	49
The Young Universe (part 2 of 3) [February 7]	50
The Young Universe (part 3 of 3) [February 8]	51
When Was the World Created? [February 9]	53
The Age of Earth and the Introduction of Death [February 10]	54
The 'Starlight Problem' [February 11]	55
Relativistic Time Dilation [February 12]	57
God's Orderliness [February 13]	58
The Moon [February 14]	59
Laws of Nature Defined in Mathematics [February 15]	60
The Creation of Sea and Air Animals [February 16]	62
STEM is Dead! [February 17]	63
Abiogenesis Mythology [February 18]	64
The Creation of Land Animals [February 19]	65
Genetic Code Complexity [February 20]	67
Cellular 'Machines' [February 21]	68
Created Kinds [February 22]	69
The Epigenetic Conundrum [February 23]	70
Evolution's Myths [February 24]	72
Evolution is Supported by Consensus, Not Evidence [February 25]	73
The Creation of Man [February 26]	74
Non-Ape Man [February 27]	75
The Image-Bearer of God [February 28]	77
Homo Faber [March 1]	78
Induction and Image [March 2]	79
How Smart was Adam? [March 3]	80
Mankind's Two Sexes [March 4]	82
Gender Roles [March 5]	83
Gender-Inclusive Pronouns [March 6]	84
Man's Dominion [March 7]	85
Population Multiplication [March 8]	87
God's Provision of Food [March 9]	88
Everything God Created Was Very Good [March 10]	89
God's Goodness Manifested in Creation [March 11]	90

The Wonder of the God of Creation [March 12]	
"Worthy Are You, Our Lord and God" [March 13]	93
God Rested [March 14]	94
The Seven-Day Week [March 15]	95
The Sabbath Instituted [March 16]	97
Holiness [March 17]	
Assembled Accounts [March 18]	
Literary Structures in Genesis 1-11 [March 19]	
The LORD God [March 20]	
When Yahweh God Created [March 21]	
Flashback – Preparing the World for Man in the Garden [March 22]	
Man is a Living Being [March 23]	
Body of Wonder [March 24]	
Immortality [March 25]	
The Breath of Life [March 26]	
Mind and Brain (part 1 of 2) [March 27]	
Mind and Brain (part 2 of 2) [March 28]	
The Garden of Eden [March 29]	
The Covenant of Creation [March 30]	
The Covenant of Creation is Founded on Grace [March 31]	
Why God Uses Covenants [April 1]	
Where was the Garden of Eden? [April 2]	
A River Flowed Out of Eden [April 3]	
Man was Created to Work [April 4]	
God Provides Food for Mankind [April 5]	
God, the Lawgiver [April 6]	
The Universal Applicability of God's Law [April 7]	
Implications of the Universal Applicability of God's Law [April 8]	
Universal, Innate Knowledge of God's Moral Law [April 9]	
Negative-Action Commands [April 10]	
Obedience Test [April 11]	
Man's Moral Responsibility [April 12]	
The Threat of Death [April 13]	
Causal Conditionals [April 14]	
Man is Relational [April 15]	
Naming the Animals [April 16]	
Language Processing – a Precursor of Naming [April 17]	

Good Civil Government [April 18]	
Man and Woman – Fit Helpers [April 19]	
The Creation of Man's Partner [April 20]	141
Naming the Sex of Man's Partner [April 21]	142
The Institution of Marriage [April 22]	
God's Definition of Marriage [April 23]	
Reproductive Technologies [April 24]	
The State of Innocence [April 25]	147
A Creation Manifesto [April 26]	
Satan and the Serpent [April 27]	
Satan [April 28]	
The Origin of Evil [April 29]	
Satan Tempts Eve [April 30]	
Satan's Temptation Tactics [May 1]	
God's Authoritative Word [May 2]	
Empiricism vs Presuppositionalism [May 3]	
Is vs Ought [May 4]	
Mankind's First Formal Sin [May 5]	
Desires of the Eyes [May 6]	
Interconnected Sins [May 7]	
Original Sin [May 8]	
Why Did God Permit Man to Sin? [May 9]	
Experiencing Guilt [May 10]	
God Walked in His Garden [May 11]	
Guilt Leads to Fear [May 12]	
God Seeks for Man [May 13]	
God Is Love [May 14]	
Innocent Until Proven Guilty [May 15]	
Before God's Tribunal [May 16]	
Blame Game [May 17]	
The Cult of Irresponsibility [May 18]	
The Cult of Irresponsibility – Its Consequences and Cure [May 19]	
The Serpent's Punishment [May 20]	
Satan's Punishment [May 21]	
Messianic Promise [May 22]	
"I Will" [May 23]	
Is the Bible True? [May 24]	

Eve's Punishment [May 25]	
The Problem of Pain [May 26]	
Adam's Punishment [May 27]	
Cursed Creation [May 28]	
Genomic Decay [May 29]	
Cursed by Limitations [May 30]	
Is There Intelligent Alien Life? [May 31]	
Curses Replace Blessings [June 1]	
Countering the Curse on Creation [June 2]	
Why Man Dies [June 3]	
Eve, the Mother of All Living [June 4]	
Garments of Skin [June 5]	
Idolatry [June 6]	
The Tree of Life [June 7]	
Blessings of the Expulsion [June 8]	
Angels [June 9]	
Judicial Procedure [June 10]	204
The Four States of Man [June 11]	
Children Representing the Two Lines are Born [June 12]	207
Conception is from the LORD [June 13]	
Work Specialization and Development of an Economy [June 14]	209
The Worship of God [June 15]	210
Acceptable Worship [June 16]	211
God Regulates Worship [June 17]	213
Fat from the Flock's Firstborn [June 18]	214
Envy and Its Children [June 19]	215
Anger [June 20]	216
God Confronts Cain about his Sin [June 21]	218
Cain, the Murderer [June 22]	219
Cain Denies Responsibility for His Brother [June 23]	220
Blood's Cry [June 24]	221
God's Knowledge [June 25]	222
The Unhappy Wanderer [June 26]	224
Cain's Protest [June 27]	225
Cain's Sign [June 28]	226
Cain Went to the Land of Nod [June 29]	227
Cain's Family [June 30]	229

Cain Built a City [July 1]	230
Polygamy Introduced [July 2]	231
Development of an Industrial Economy [July 3]	232
Human Creativity [July 4]	233
Lamech's Boast [July 5]	235
Establishing the Line of the Seed of Promise [July 6]	236
The Public Worship of God [July 7]	237
God's Revelation to the Antediluvian World [July 8]	238
Reflection on the Creation of Mankind [July 9]	239
The Origin of Writing [July 10]	241
Transmission of God's Image [July 11]	242
Reproductive Biotechnologies [July 12]	243
From Adam to Noah's Sons [July 13]	244
Long-Lived Patriarchs [July 14]	246
The Dating Game [July 15]	247
God's Chronometer [July 16]	248
Extra-Biblical Support for the Genesis Genealogies [July 17]	249
Death Begins to Consume the Human Race [July 18]	251
Gospel Names [July 19]	252
Enoch Walked with God [July 20]	253
Enoch, Contrasted with His Generation [July 21]	254
Enoch's Translation, a Resurrection Promise [July 22]	256
Lamech's Prophecy [July 23]	257
Noah and His Sons [July 24]	258
Lessons from the Genesis Genealogies [July 25]	259
Population Multiplication [July 26]	
The Sons of God Took Wives [July 27]	
Sexual Sins [July 28]	
Bounded Patience [July 29]	264
The Tyrannical Nephilim [July 30]	
Pervasive Perversion [July 31]	267
Gourmands Abounded [August 1]	
God's Regret [August 2]	269
God's Determination to Judge the Earth [August 3]	270
Noah Found Favour with the LORD [August 4]	271
Noah's Generations [August 5]	273
Corruption Filled the Earth [August 6]	274

Pending Punishment Announced [August 7]	275
Measurement Standards [August 8]	277
Noah's Ark – Specifications [August 9]	278
Noah's Ark – Suitableness [August 10]	279
Noah's Ark – Substantiality [August 11]	
Noah's Ark – Sign [August 12]	
Noah's Ark – Symbolism [August 13]	
Noah's Ark – Safety [August 14]	
Universal Judgement by Flood [August 15]	
God Announces the Covenant with Noah [August 16]	
Two of Each Kind [August 17]	
Provisioning Food for Consumption During the Flood [August 18]	
Noah's Obedience [August 19]	
Noah's Radical Obedience [August 20]	
"Go into the Ark" [August 21]	
Reasons for Obedience [August 22]	
Pairs of Clean Animals [August 23]	
A Week of Grace [August 24]	
Justice [August 25]	
A Worldwide Flood [August 26]	
"Come Hell or High Water" [August 27]	
Noah's Total Obedience [August 28]	
The Animals Went In, Two by Two [August 29]	
The Year of the Flood [August 30]	
Noah was Six Hundred Years Old When the Flood Began [August 31]	
Noah Entered the Ark [September 1]	
"On That Day" [September 2]	
World's End [September 3]	
'God of the Gaps' [September 4]	
Catastrophic Tectonic Failure [September 5]	
Forty Days of Rain [September 6]	
Safely Stowed [September 7]	
The LORD Shut Noah In [September 8]	
The Ark Floated [September 9]	
Dinosaur Footprints [September 10]	
Dinosaur Remains [September 11]	
The Waters Prevailed Over the Earth [September 12]	

The 'Cambrian Explosion' [September 13]	320
Total Obliteration [September 14]	321
Dinosaur Extinction [September 15]	323
Flood-Maximum [September 16]	324
Flood Chronology [September 17]	325
The Flood Fits the Facts – Geology [September 18]	327
Refuting 'Evidence' Presented Against the Flood (part 1 of 2) [September 19]	328
Refuting 'Evidence' Presented Against the Flood (part 2 of 2) [September 20]	329
The Flood Fits the Facts - Extra-Biblical Narrative Evidence [September 21]	330
God Remembered Noah [September 22]	332
High Quality Literature [September 23]	
Drying Wind [September 24]	334
When the Rains Stopped [September 25]	335
Milestones Marking the Flood's Retreat [September 26]	336
Earth's Topography was Shaped by Flood Events [September 27]	
The Ark Rested on the Mountains of Ararat [September 28]	
Continental Breakup [September 29]	
Bird Tests [September 30]	341
Drained and Dry Earth [October 1]	342
God's Command to Exit the Ark [October 2]	344
Swarming and Multiplying on the Earth [October 3]	345
Men and Dinosaurs (part 1 of 2) [October 4]	346
Men and Dinosaurs (part 2 of 2) [October 5]	347
A 'New' Humanity [October 6]	349
Post-Flood Animal Dispersion [October 7]	350
A Pleasing Sacrifice [October 8]	351
The First Thanksgiving [October 9]	352
God's Word is Reliable [October 10]	354
Why God Cannot Lie [October 11]	355
Limiting the Curse [October 12]	356
Enduring Seasons [October 13]	357
The End is Near [October 14]	359
The Ice Age [October 15]	
Commencement of the Ice Age [October 16]	
Progression of the Ice Age - Cool Summers, Heavy Precipitation [October 17]	
A Mammoth Die-off [October 18]	
A Single Ice Age [October 19]	

Global Warming [October 20]	
A New World Constitution [October 21]	
Fruitful Multiplication – A Commanded Blessing [October 22]	
The Mythical Population Bomb [October 23]	
Diminished Dominion [October 24]	
Providential Provisions [October 25]	
Why God Allowed Man to Eat Meat (part 1 of 2) [October 26]	
Why God Allowed Man to Eat Meat (part 2 of 2) [October 27]	
Blood, the Life-Tribute Owed to God [October 28]	
Capital Punishment – Required for Murder [October 29]	
Capital Punishment – A Standing Requirement [October 30]	
Capital Punishment – Its Agents of Application [October 31]	
Abortion is Murder [November 1]	
Justified War [November 2]	
New World Covenant – A Covenant of Life [November 3]	
New World Covenant – Universal Applicability [November 4]	
New World Covenant – Promised Continuity [November 5]	
New World Covenant – Rainbow Sign [November 6]	
Covenant Signs and Seals [November 7]	
Noah's Descendants [November 8]	
Neanderthals – Noah's Descendants [November 9]	
Human Population Dispersion [November 10]	
Noah's Sin [November 11]	
Adam, the Second Adam, and the Last Adam [November 12]	
Ham's Sin [November 13]	
Canaan is Cursed [November 14]	
Noah Blessed God [November 15]	
Shem and Japheth are Blessed [November 16]	400
Celebrating God's Retributive Justice [November 17]	401
All the Days of Noah [November 18]	402
Table of the Nations – An Historical Record [November 19]	404
Table of the Nations - An Ancient Record [November 20]	405
Table of the Nations – The Babel Effect [November 21]	406
Table of the Nations – A Theological Treatise (part 1 of 2) [November 22]	407
Table of the Nations – A Theological Treatise (part 2 of 2) [November 23]	409
Sons of Japheth [November 24]	410
Coastland Peoples [November 25]	411

Sons of Ham [November 26]	
Nimrod (part 1 of 2) [November 27]	
Nimrod (part 2 of 2) [November 28]	415
Sons of Shem [November 29]	416
The True Shemites [November 30]	417
Lands, Languages, Clans, and Nations [December 1]	
Earth's Division in the Days of Peleg [December 2]	
Ice Age Civilizations [December 3]	
One Language [December 4]	
Settling on the Plain of Shinar [December 5]	
Brick Making Techniques [December 6]	
Towering Aspirations – False Religion [December 7]	
Towering Aspirations – Faithless Rebellion [December 8]	
God's Observation [December 9]	
Language Confusion [December 10]	430
The Origin of Languages [December 11]	431
Extra-Biblical Evidence of Language Disruption [December 12]	432
The Origin of Prejudices [December 13]	434
Towers of Babel [December 14]	435
What Happened to Nimrod's Empire? [December 15]	436
Dispersion Over the Face of the Earth [December 16]	
God's General Grace [December 17]	439
Countering the Babel Effect [December 18]	
Genealogy of the Covenant Line (part 1 of 2) [December 19]	
Genealogy of the Covenant Line (part 2 of 2) [December 20]	
Historical Chronology [December 21]	
The Age of the Demigods [December 22]	
Cainan, the Son of Arphaxad [December 23]	
A Limit Placed on Man's Life Expectancy [December 24]	
Terah and His Family [December 25]	
Abram [December 26]	450
Sarai's Barrenness [December 27]	451
The Call of Abram [December 28]	452
Abram's Age at the Death of Terah [December 29]	454
A Proper Understanding of Genesis 1-11 is Important [December 30]	455
The First Bible [December 31]	456
Bible References	458

Selected Biblical and Extra-Biblical Historical Persons Index	479
Subject Index	483
Passage Index	513

Preface

In the spring of 1972, after my freshman year in university, my father and I had lots of time for discussion during our ten-hour drive from Boston to Toronto. One topic that I clearly recall our discussing was theistic evolution i.e., whether God had used natural processes to guide the evolution of pre-hominoid species and the development of modern humans. I had read Whitcomb and Morris' book, *The Genesis Flood*, a year or two before that trip and we had often discussed the topics of creation and evolution. I recall that that day we considered the possibility of theistic evolution being an intellectually plausible explanation, but that it presented many challenges for the interpretation of Genesis 1-11—in particular, how to reconcile six days of creation and the long ages required for evolution, and how to account for the presence of death prior to Adam's sin.

During my next three years of undergraduate studies, I took courses which dealt with the topic of evolution (e.g., paleontology and biology). I also had a parttime job working in the university's science center. It consisted of preparing in-class science demonstrations, operating slide and movie projectors, and videotaping lectures. I sat through a number of science courses (multiple times) taught by some of the luminaries in science (e.g., E. O. Wilson, Owen Gingerich, and visiting professor, Philip Morrison). Since then, I have maintained a high level of interest in the subjects of creation and evolution.

About ten years ago I prepared a series of ten one-and-a-half hour presentations on creation, which I presented twice in our congregation, and in another congregation. At that time, a number of people encouraged me to publish those presentations. However, they were not in a publishable format. So, I began a project assembling material in preparation for writing the commentary which is provided below.

Genesis 1-11 records events as definitive statements of historical fact. This section of the Bible establishes a foundation for all that has happened subsequently in history and revelation. It is God's first communication to mankind and it answers the fundamental questions of life—e.g., how we got here, why anything exists, what defines moral right and wrong, and how sin and death arose. How we interpret Genesis 1-11 is of fundamental importance because our understanding of these chapters colours how we interpret the rest of Scripture. For example, questioning God's statement that he created in six actual 24-hour days can easily lead to questioning his statements about the virgin conception and resurrection of Jesus.

This commentary is written from an explicitly young-earth and six-day creation viewpoint, within a Reformed and Covenantal theological framework. Many scholars in the Church today dismiss this viewpoint as a naïve fundamentalism, which they claim is non-scientific and inconsistent with empirical evidence. I declare, with no apology, that I take the Scriptures at face value—if God says it, I believe it! However, I deny, emphatically, that taking the Scriptures at face value is unscientific, irrational, or fideistic. Rather, I am convinced that only when we understand Genesis 1-11 as providing a literal account of what happened in history are we able to place scientific facts into an intellectually satisfactory model of physical reality. It is only when we accept what God says in Genesis 1-11 as statements of historical fact that we can provide a rational integrating model for theology, cosmology, biology, geology, anthropology, psychology, linguistics, morality, and history.

Many scholars, who claim to believe the Bible, attempt to reconcile cosmological and biological evolutionary theories with the Genesis account by proposing that Genesis chapter 1 was not intended to be understood as a literal historical account but rather as a merely theological or moral polemic. They claim that the genealogies in Genesis chapters 5, 10, and 11 are nationalistic legends, contain gaps, and cannot be used as chronologies. They suggest that Adam and Eve are representative first *Homo sapiens*, and were not individuals who actually lived. They position the flood as a local event rather than as a worldwide phenomenon. And, they claim that the description of events at Babel is a legend rather than history. The overriding paradigm under which they interpret Scripture is based on naturalism. They accept secular dogma that the earth is about 4.5B years old; geological and tectonic processes, over millions of years, formed the topography of the world; and that the process of natural selection operating on random genetic variation developed the variety of life which we see around us today.

These scholars often point to passages in the Bible where it speaks from a phenomenological perspective (e.g., Eccl 1.5) and declare that the early portions of Genesis may be interpreted in a similar manner. They claim that Genesis 1-11 was written from the perspective of simple folks who could not comprehend the modern scientific understanding of physics or genetics. A favourite example of their insistence that we must bring our interpretation of Scripture into line with modern scientific theories is how many in the Church at the time of the Reformation applied Joshua 10.12-13 (and similar passages, e.g., Ps 96.10; Ps 104.5, etc.) in response to scientific progress.

Copernicus, in his dedication to *On the Revolutions of the Heavenly Spheres*, wrote, "[A]s soon as most people hear how in this volume, which I have written about the revolutions of the spheres of the universe, I ascribe certain motions to the terrestrial globe, they will immediately shout to have me and my opinion hooted off the stage." He was aware that many in the Church would object to the idea that the earth was in motion. This is what in fact many did, including Martin Luther and Philipp Melanchthon. They referred to Joshua 10.12-13 and stated that the sun stood still, not the earth. In order to accept the Copernican model, it seems that one must interpret Joshua from the observer's relative perspective—it *appears* that the sun is moving—rather than from an absolute perspective.

Thus, professing Christians who reject the view that the universe was created about 6,000 years ago, over a period of six 24-hour days, claim that modern young-earth, six-day creationists react to the evidence for an ancient universe in the same way as many in the Church reacted to Copernicus' new model. However, there are fundamental differences between the rejection of the belief that the earth revolves around the sun and the belief that the world is about 4.5B years old.

- The Copernican model can be verified with empirical evidence. The origin of the universe, solar system, the world, and life on the earth were singular events which cannot be subjected to verification. The movement of solar objects is the subject of scientific investigation. The creation of the world is a matter of *historical* analysis. We can either accept or reject God's record of history, but we cannot prove what happened at the beginning through scientific experiments. All cosmological (e.g., the Big Bang) and biological (e.g., speciation through natural selection) theories about origins, not based on the Bible, are merely speculative.
- The Copernican model banished the Ptolemaic model with its epicycles. The Copernican model of the heavenly spheres was simpler and elegant. The cosmological and evolutionary models which have been developed since the mid-19th century do not simplify our understanding of origins or of the operation of the universe. Instead, they have become increasingly convoluted and complex—with many fudge factors—as they try to account for the observable facts of nature within their naturalistic hypotheses. The model based on a unique, recent creation and a worldwide flood provides an amazingly straightforward, consistent explanation of how things came to be as they now appear.
- There is nothing in Joshua's statement about the movement of the sun that is inconsistent with a literal interpretation of Scripture. From a phenomenological sense—described from the perspective of the observer—the sun did stand still. Joshua 10.12-13 allows either a geocentric or a heliocentric view of the solar system, depending on the observer's perspective. Modern scientists should not object to the concept of phenomenological observation since they accept this concept with their understanding of the theory of relativity—from an observer's perspective, time passes at a constant rate. Genesis chapter 1, in contrast, was not written from a phenomenological perspective. Therefore, as he describes the creation events he is describing them as they actually happened.
- Regardless, it may not be necessary to appeal to a phenomenological interpretation of Joshua 10.12-13. The sun may have actually stood still. Galileo, in a letter to the Grand Duchess Cristina, points out that the *primum mobile* (i.e., the sun), and all associated heavenly movement along with it, may have been halted, as suggested by Joshua's simultaneous command to the moon. The entire solar system—even the entire universe—may have stood still, displaying the infinite power of the Creator.
- Genesis 1-11 does not permit an interpretation relative to the observer's perspective. It is written as historical narrative. Every attempt to interpret it as a metaphor or in some other non-literal manner fails to account for

all the facts (e.g., the impossibility of reconciling the creation of the earth before the sun and stars, the unique creation of humankind, the entrance of death into the world only after Adam sinned). Every attempt to reconcile Genesis 1-11 with current scientific theories is an example of making the text read the way the interpreter wishes it to read, rather than accepting what the Scriptures actually say.

• Copernicus, Tycho, Galileo, Kepler, and Newton all worked within an expressly Christian worldview and attempted to reconcile their cosmological models with God's word and governance of the universe. Modern cosmological and biological theories of origins have been developed within a naturalistic worldview which attempts to dismiss God as irrelevant.

The young-earth, six-day creation viewpoint is despised by the academic community (in secular and in many professedly Christian institutions) not because it is wrong or anti-science, but because it makes man accountable to God. The snobbery of the intellectual academy cannot tolerate a viewpoint which requires the presence of God in order for the universe to function. The Psalmist declares (twice) that. 'The fool says in his heart, "There is no God.'' (Ps 14.1; Ps 53.1). It is moral and intellectual foolishness to reject the fact that Genesis 1-11 provides a literal and accurate historical account.

Someone might ask why another book has been written on the subject of creation *vs* evolution. It is true that many good books are available from the young-earth, six-day creation perspective. However, that is the problem—there are many books that a person would have to read to gain a comprehensive understanding of all the topics covered in Genesis 1-11. And, most of these books are specialized and deal with a narrow subject. For example, they deal with single subjects such as planet formation, the speed of light and relativity, speciation and common descent, radioisotopes, genetics, the Cambrian Explosion in the fossil record, flood hydrology, geology, dinosaurs and rapid fossilization, and intelligent design. In addition, almost every commentary written on Genesis, even those from Evangelical publishers, casts doubt on the historicity of Genesis 1-11. They avoid dealing with what they call 'questions of science' or when dealing with Genesis chapter 1, they propose a gap-theory, a day-age theory, a topical framework, etc. for interpreting the length of the days in that chapter.

This commentary is written in the form of short topical meditations on verses and larger sections from Genesis 1-11. In addition to dealing with explicitly theological topics (e.g., God, sin, covenants, Sabbath, God's law), this commentary integrates science facts, secular historical facts, and lessons which we can derive from the opening chapters of God's communication to mankind. This commentary is intended to provide an eclectic, integrated view of reality structured around the historical account in Genesis 1-11.

Before I began writing this commentary, I completed a commentary on a harmony of the Gospels also in the form of a series of topical meditations. I designed each of those topics to fit on two sides of a half-page so that, when printed, each could be inserted into our congregational bulletin. I structured the commentary into 365 sections so that when it was complete, it could be packaged as a collection of daily readings. During the years I have been issuing the meditations on the Gospels, the internet has become an important information and communication channel. It happened that the format and style I had been using is consistent with the, now popular, editorial essay approach called *blogging*. In addition, in the age of the internet, people seem to prefer obtaining their information content in short bursts. Thus, the meditations on the Gospels and Genesis 1-11 have been structured in a format that allows each topic to be read in about 10 minutes.

If you believe that the Bible is the inerrant word of God, then, as you read these meditations, you will be thrilled to discover how consistently the Bible is supported by scientific facts and how the Bible's account better explains the origins of the physical realm—e.g., the solar system, life, death, languages—than naturalistic theories of origins. You will also see how well the Bible integrates all domains of truth, and your faith will be strengthened. If you are sceptical about the young-earth, six-day creation paradigm, I hope that you will read these meditations anyway and discover how satisfactory a Biblical-based model is for explaining the origin and nature of physical reality. This commentary was written to show that accepting Genesis 1-11 as a literal, historical account is not a step into a void

of blind faith, but a rational, intelligent, and bold act of trust in the God who created the universe and who tells us how he did it. I pray that God may bless your perusal of these daily meditations.

I wish to thank Catherine MacDonald for proofreading the text. Any remaining errors are, of course, my own.

Jim Hughes Toronto, Canada August, 2014

Addendum (2015-10-25)

When I had finished writing the first draft of this series of meditations, there was no commentary available on Genesis 1-11, which dealt with the text from a young-earth, six-day creation perspective. However, in 2015, Creation Ministries International published Jonathan Sarfati's *The Genesis Account – A theological, and scientific commentary on Genesis 1-11*. Sarfati deals with the Biblical account faithfully and presents the young-earth, six-day creation perspective effectively. In some areas, my views differ from his in minor ways—for example, whether the toledoths are colophons or headers, the nature of Ham's sin, and the explanation for the introduction of the name Cainan in Luke 3.36. I also have questions about Sarfati's commentary in the following areas:

- While he is explicit in chapter 21 (*God's covenant with Noah*) about the enduring requirement for murderers to be executed, in chapter 11 (*God "rested"*) he does not mention the covenantal aspect of the Sabbath and the fact that it is a creation ordinance which is applicable to all mankind through all generations. He appears to reflect the generally held view among Evangelicals that the Sabbath law was applicable to the Jews only.
- In chapter 12 (*Adam and Eve*), he refers (p. 319) to God giving only one command which Adam had to obey. However, he misses the opportunity to expand on the significance of God's giving this command to Adam as mankind's covenant head and of the universal and perpetual obligation which mankind has to obey God's commands.
- He mentions the Jew's (Talmud) enumeration of Noahide laws (p. 609) but does not deal with the fact that the essence of the Ten Commandments was known to mankind during the period before Abraham and before they were delivered explicitly, in written form, on Mt. Sinai. This knowledge of God's universally applicable law was both innate (i.e., 'natural law') and the result of pre-Mosaic revelation (e.g., through Adam, Noah and Shem).
- In chapter 16 (*Wickedness before the Flood*) he defends the view that Genesis 6.2, 4 refers to an intermarriage of angels with humans. However, it is clear that the covenant line from Seth (i.e., the sons of God) is in focus. He ignores the covenantal aspect of the genealogical references and God's displeasure with inter-marriage between members of the covenant family and unbelievers. He also misses the fact that a key reason for why God punished the antediluvian world was because of sexual sins, along with the excessive violence (Gen 6.13) of the tyrants (*nephilim*).

With these caveats in mind, I do recommend Sarfati's commentary as a useful antidote to the insipid compromise with evolutionary and long-ages theories found in many modern commentaries on Genesis.

God Exists [January 1] (Gen 1:1)

The Bible opens with the assumption that God exists. In this verse God refers to himself as 'God'. Later, but still before the flood (Gen 2.4), he will introduce to mankind his personal name—LORD. The Bible never recounts the origin of God, like pagan myths do; or attempts to prove his existence, like sceptics wish he would do. Nor does the Bible begin with a description of who God is, like a theology textbook. Rather, it demonstrates who God is by what he does in creating the universe and dealing with man's rebellion.

Sinful men (and even many who profess to be believers) struggle with a lack of proof for the existence of God in the Bible, or outside of the Bible. They claim that it is incumbent on God to prove to us that he exists. Some people even challenge God and say that if he would but prove his existence to them, they would believe in his existence. Many philosophers and theologians have attempted to prove the existence of God through different forms of 'proof', such as the: cosmological (there must be a first cause), teleological (order, complexity, and design are evident in nature), ontological (God must be the greatest entity conceivable), moral (an objective standard must exist), epistemological (we can know only as his image bearers), or transcendental (logic, beauty, ethics, etc. make no sense without the existence of God).

These arguments flounder on one common problem. To *prove* the existence of God we would have to stand somewhere outside of God and the universe and declare our standards for logic and proof to be ultimate. This simply cannot be done since we cannot step out of our existence as creatures within God's created realm. In addition, we would have to analyze God with our polluted intellects and powers of reasoning. The very idea of subjecting God to our analysis in order to establish the truth of his existence is absurd as well as being blasphemous. God is the final authority for all truth, not man; and God is not going to cede his authority by allowing men to think that they can decide for themselves whether or not he exists.

All men know that God exists (Rom 1.18-23). Man's problem is not a problem with the existence of God. It is not a problem of knowledge but a problem of will. By nature, men don't want to acknowledge that God exists. We can respond to the professed atheist who demands proof of the existence of God, by reminding him that he must acknowledge that he cannot prove that anything exists-including himself, the universe, systems of order and repeatability, or even thoughts and concepts. He ultimately must assume the existence of all these things on faith. He hides his presuppositions behind his denial of God's existence. Even though he claims to reject the existence of God, he actually assumes his existence while claiming he doesn't exist, because otherwise he would have no basis on which to replace capricious materialistic chance (e.g., the random vibration of atomic particles) with meaning, order, repeatability, and logic. So, he actually accepts the existence of God on faith! But in his case, it is blind faith because he denies that there is a rational reason for why he believes in the existence of anything. Only the Christian's worldview accepts, based on a rational faith in God's word, the fact that order and repeatability exist throughout the universe because God has decreed them. The non-Christian's worldview accepts, on *irrational* faith that they exist, based on his limited assessment of his experiences-in other words, on his own authority. He works on the principle that they exist everywhere in the universe even though he can have no experiential or empirical basis for his conclusion. In philosophy, this is called the problem of induction, and it includes a search for a justification for inductive reasoning. The philosopher David Hume noted the problem that "everyday reasoning depends on patterns of repeated experience rather than deductively valid arguments."

Professed atheists suppress the truth about God because they hate him and his authority, *not* because they believe that he does not exist. They even try hard to disprove his existence, which shows that they know that he is real. Men don't try to disprove something that they know does not exist—like a manticore or a centaur. Nor do they hate something that does not exist.

By definition there can only be one God. It makes no sense to speak of 'Gods' (as distinct from 'gods') since there can be no equal to God (Is 46.5). This, of course, does not exclude the existence of the Trinity. It is not illogical to

say that there are three persons in the Divine being; it is only incomprehensible. The existence and nature of God is, without a doubt, a mystery to us because of our finiteness. We simply cannot grasp the full meaning of God. So, men are inclined to envelope God in limitations and define him after their own imaginations. They limit God in many ways. For example, they claim that God cannot know the future if man is volitionally free, that God cannot suspend the 'laws' of physics, or that he cannot simultaneously know precisely the present position and momentum of a subatomic particle.

The Bible calls deniers of God's existence fools (Ps 14.1) because they are irrational—denying the one whose very systems of causation, order and logic they use in their feeble attempt to dethrone him—and immoral—denying that their maker has a right to demand their allegiance and obedience. As we continue our studies in Genesis 1-11, we must avoid any interpretation which would place man-defined limits on God, the infinite and all-powerful Creator.

When Time Began [January 2] (Gen 1:1)

The title of this meditation contains a contradiction. We can easily understand a statement like, 'when I moved to the new city'. It means that at a point in time I arrived with my household goods in the new city. However, what does it mean if we say 'when time began'? How can time begin, at a point in time, if time didn't exist before time began?

I use this conundrum to illustrate the point that we are so time-bound, so much creatures of time, that we cannot speak about time without assuming the existence of time. Even the Apostle Paul, under the guidance of the Holy Spirit, used a similar construct. He said 'before the ages began' or 'before the beginning of time' [NIV] (2 Tim 1.9; Titus 1.2). From one perspective, this is meaningless. How can there be a 'before' when there is no time? What can precede time, in time, if time doesn't exist? However, our finite minds cannot understand the concept of something existing outside of, or without, time. So, we need to speak of a timeless eternity using time-based constructs or we cannot communicate.

It is difficult, or even impossible, to give a precise and consistent definition of time which applies across multiple disciplines including theology, philosophy, and science. Two primary competing views about the nature of time have been proposed by philosophers: 1) In the 'realist view' time is a component of the universe (e.g., a dimension). Events flow through time and occur in sequence; like rubber balls can exist in three-dimensional space, instances of a rubber ball can exist in time. 2) Time is an abstraction like numbers and events; therefore objects do not occur in time and objects do not move through time, rather time markers are merely labels placed on objects.

The concept of time is much more difficult to grasp than it first appears. In the past, time was assumed to be a constant and most materialistic naturalistic philosophers assumed that it was a transcendent universal. For example, Immanuel Kant arguing against the existence of God said, "Now this cause must itself begin to act, and its causality would therefore be in time, and so would belong to the sum of appearances, that is, to the world. It follows that it itself, the cause, would not be outside the world—which contradicts our hypothesis. Therefore neither in the world, nor outside the world ... does there exist any absolutely necessary being." [*The Antinomy of Pure Reason*, Fourth Conflict of the Transcendental Ideas] Because Kant assumes that time is a non-created, transcendental, entity, he argues that a first cause—God—must exist in time. But, as Genesis chapter 1.1 tells us, time came into existence as God created the material universe—i.e., God created time with everything else.

Einstein theorized in his Relativity models that time is variable. Some of his ideas about time have been demonstrated empirically. For example, General Relativity predicts that clocks in a stronger gravitational field will tick at a slower rate. The clocks in GPS satellites run faster than identical clocks on Earth, by about 46,000 nanoseconds a day. So, today the concept of time as a constant has been rejected by much of scientific and philosophical thinking. However, the idea that time had a beginning is an idea that is harder to demonstrate. Some proponents of the Big Bang cosmological theory claim that space-time came into existence at the moment of the

Big Bang and that it is meaningless to ask, 'What came *before* the Big Bang? Of course, they then are confronted with a logical impossibility—*nothing* created something. In contrast, the Bible states that God created time along with the physical universe. This truth must be accepted on faith as revealed by God as it is impossible for us to go back to the beginning and demonstrate it empirically.

God is the creator of time, is not time bound, and is not subject to time. This has profound implications that we must note. For example, it should not be a surprise that God could make the sun stand still and effectively stop time for a whole day (Josh 10.3), or reverse time by a few hours (2 Ki 20.5). Sceptics claim that the inertia of the earth as it rotates would make it impossible to suddenly stop its rotation or to change time. They forget that they are not challenging the word of a superman, but of God—the God who by speaking over six days of creative work brought into existence, instantaneously, all of space-time reality.

Since God created and controls time we must heed the truth that our times are in his hands (Ps 31.15). To everything there is a season (Eccl 3.1-8) and that includes the seasons of our births and deaths. We are given the gift of time in which to serve our Creator. If we waste it on frivolous activities or use it to gratify our pleasures, ignoring spiritual realities, we will experience the consequences in an everlasting hell. Therefore, as Paul says, we must make the best use of the time given to us (Eph 5.16).

Just as time had a beginning it will have an end. Justin Martyr was probably the first Christian writer to draw this inference. He observed that time was created along with the heavens and so both will be dissolved together (*Hortatory Address to the Greeks*, 33). Time will end with the renovation of the physical order (2 Pt 3.7, 12-13) and will be replaced by either a timeless eternity or new reality with a different form of time. Existence outside of our current conception of time is not something we can understand, but we have to accept it on the word of God who is the Creator and Lord of time.

"God Created" [January 3] (Gen 1:1)

How did everything we see around us get here? If you are sitting on a chair in a room as you read this meditation, most of what you see is man-made. But take the question to a deeper level—where did the base matter and energy which make up the universe come from in the first place? There are only a few possible answers to this question:

- The material realm **doesn't** actually **exist** and everything is a projection of someone's mind. Movies like the *Matrix* deal with this idea. We can reject this scenario, otherwise there is no reason to continue to write or speak about anything since we are all nothing more than an illusion.
- The material realm **created itself**, or came into existence from nothing without any causal agency. Some scientists and philosophers hold to this position. However, it is essentially nonsense to say that *nothing* generated something.
- The base constituents of the material realm are **eternal**. This is the most popular view among anti-Christian philosophers, scientist and religions. However, it flounders on the fact that entropy increases as the universe decays and dies. If it were *eternal* it would already be cold dead.
- The material realm was **created** by a non-material entity. This entity, being non-material, could be eternal because it would not be subject to the physical laws, such as the second law of thermodynamics.

The Bible tells us that the entity who created the universe is God, not a force. In this verse God uses a self-reference, translated as 'God', which includes the idea of 'strong' or 'mighty', and implies that he is the Supreme Being. The fact that God created could only have become known if God revealed it to mankind—it cannot be proven by deductive logic. So, the account which we have in Genesis chapter 1 had to come from the mouth of God himself. Therefore, the very existence of the first verse of the Bible informs us that the God who created the universe is both a personal being and an intelligent agent—an impersonal, non-intelligent entity cannot create anything and certainly does not communicate anything about its actions.

The Hebrew word translated 'created' does not mean 'formed' or 'moulded'. It means to make something original, and essentially out of nothing—i.e., to create. This translation is supported by the statement in the NT: "[W]hat is seen was not made out of things that are visible." (Heb 11.3) The Bible leaves no room for the view that during the creation week God formed or shaped pre-existent matter (whether eternal or created billions of years previously) into biological forms. Nor does it allow for the idea that God used a process such as evolution to shape simple life forms into more complex ones. The bulk of what God created, he brought into existence instantaneously from nothing that was pre-existing. Exceptions, such as forming dry land from the primordial sea and man's body from dust, are stated in the creation account.

Because it is impossible to prove that God created the universe, it must be accepted on faith (Heb 11.3). However, this faith is not naive or blind as some suggest. It is based on the truthful, self-authenticating, revelation of the God who created all things. The fact that knowledge of creation is based on revelation bothers anyone who says that it must be possible to test all claims empirically and provide explanations for how the material realm came into existence without intervention of the supernatural. However, the real naivety rests with those who stand above Scripture with their 'scientific' method. They hide behind their supposed objectivity and ignore the fact that all religious, philosophical, and scientific systems must rest on unproven axioms. For example, the idea that only materialistic mechanisms can be permitted to explain ontological causation is an assumption which must be accepted on faith. Materialistic thinking rests on inconsistent and logically self-refuting ideas. Only the Christian worldview provides a consistent view of reality.

The world rejects the fact that God created the universe; not because it is against the idea that someone could be a masterful craftsman, but because of the moral and accountability implications that follow from God being our Creator. We could quote numerous examples from modern 'neo-atheists' such as Richard Dawkins or Christopher Hitchens who disparage the Bible. However, an entry in Joseph Goebbels' diary serves to illustrate the disdain with which the world views the creation account: "Whereas the most learned and wisest scientists struggle for a whole lifetime to study but one of the mysterious laws of nature, a little country priest from Bavaria is in a position to decide this matter on the basis for his religious knowledge. One can regard such a disgusting performance only with disdain. A church that does not keep step with modern scientific knowledge is doomed. It may take quite a while, but it is bound finally to happen. Anybody who is firmly rooted in daily life and who can only faintly imagine the mystic secrets of nature, will naturally be extremely modest about the universe. The clerics, however, who have not caught a breath of such modesty, evidence a sovereign opinionated attitude toward questions of the universe."

It is utter foolishness for man, the creature—who cannot *create* an atom or even explain where anything came from without God—to reject the account from God, the Creator. God's record of creation stands above man's foolish theories and opinions which rule out God's creating the universe in six days.

God, *The* Creator [January 4] (Gen 1:1)

The Biblical account of creation is the original. It was delivered to Adam by God and handed down by his descendants (e.g., through Enoch, Noah, Shem) to Jacob and eventually to Moses, who incorporated it into the Pentateuch. The Biblical account of creation was not derived from a Mesopotamian myth. If there are similarities between the Biblical account and early, postdiluvian myths (e.g., the *Enuma Elish*, that includes the Babylonian creation account), it is because the invented myths and religions of men include vestiges of the Bible's account alongside their perversions: emanationism (the real or imaginary universe is an extension of an eternal essence); polytheism (many gods were involved in creating the material universe); dualism (eternal good and evil—yin/yang—forces participated in making all things through a series of conflicts); Gnosticism (spirit is good, matter is evil, and a demiurge made the world); and deism (a creative being or force disengaged from creation). Fact was perverted into myth; myth did not become fact. God stands alone as the one and only Creator, who describes what he did in Genesis chapters 1 and 2.

The most fundamental distinction in all of reality is the distinction between God, who is the uncreated, selfcontained, and independent creator, and every other entity. Everything, other than God, whether visible (the physical universe) or invisible to us (e.g., angels, demons, heaven), is created. God uses the fact that he is the Creator to defend his absolute authority over all of creation (Job 38.4; Is 40.28; Is 45.12). Genesis 1:1 plunges the dart of truth through all forms of philosophical and religious deism and dualism.

There is one God and he alone is the Creator. This is a foundational truth on which other key doctrines in the Bible rest; for example:

- God's transcendence and sovereignty (Gen 14.19, 22; Ps 89.11)
- Man's accountability to God (Rom 1.18-20, 25; Heb 4.13)
- Christ's divinity and authority (Col 1.15, 16)
- God's revelation of himself (Is 45.18-19; Zech 12.1-2; Eph 3.9)
- God's worthiness of universal praise from all his creatures (Ps 148.5; Jer 32.16, 17; Rev 4.11; Rev 14.7)
- God's trustworthiness; i.e., the one we can trust (1 Pt 4.19)
- Man's fear and reverence of God (Ps 33.6-10)
- The Covenant of Redemption (Is 42.5-7; Is 43.1-7)
- God's law—specifically the Sabbath (Ex 20.11)—and our required obedience (Dt 32.5, 6; Mal 2.10; Acts 17.24, 30)
- God's providential care for his people (Gen 14.19, 20)
- God's knowing all that will happen in the future, because as Creator he decrees it (Is 45.1, 7, 11-13).
- Why God can bring about a new spiritual creation (Eph 2.8-10; Col 3.10)
- God's acting as the judge of nations (Jer 51.15-16) and the sovereign judge (Rev 10.5-7)
- God's promise to renovate the physical creation (Is 65.17, 18; Rom 8.19-22).

If we don't have a solid foundation, based on an acceptance of the doctrine of creation as God communicates it in the first two chapters of Genesis, all of our thinking about the rest of Scripture and its teachings will not stand before the wind of secular humanism and the rain of materialistic naturalism.

What we read in Genesis 1-11 is history, not myth. It is a straightforward, account of what God did when he created the universe, and of his dealings with mankind in the earliest periods of history. There are significant spiritual and moral lessons which we must derive from these chapters, but the account is not a parable or figurative. We may find literary structures in the account, but this demonstrates the intelligence of the men who recorded the content of these chapters and of God who is their ultimate author, not that the account is to be understood merely as a metaphor for life or as a simplistic view of reality to teach spiritual lessons. Jesus and the writers of the NT refer dozens of times to these chapters, treating them as historically accurate. We must follow the example of Jesus, Paul, Peter, and John and accept the account as an exact and accurate record of what happened. We must read Genesis in its plain sense and let it govern our scientific conclusions; not twist the Bible to accommodate the ever-changing theories of men whose minds are darkened by sin and who do everything possible to suppress the truth of God.

We must reject the post-Enlightenment rationalism that leads 'card-carrying' members of the anti-God league to indulge in a cultural hubris that dismisses the acceptance of the reliability of the Genesis account as a misplaced naivety. We must reject the claim that the Bible's account must be tempered by a 'scientific realism'. Jesus Christ is the God-man who speaks only truth, without error. He informs us that God created mankind at the beginning (Mt 19.4)—not billions of years after the universe came into existence from a quantum wrinkle—as a totally distinct form of creation—not through a process of evolution from an animal. Spiritual renewal includes accepting God as the Creator, as he teaches about himself in the Bible—not abstractly or with imprecision, but with specific detail! The Church will only be strong when it stands unequivocally for the doctrine of Creation (in six actual days, about 6,000 years ago) and does not compromise in any way with the religion of man that espouses Gaia as its god, evolution its doctrine, Darwin its prophet, rationalism its sacrament, and men in white lab coats its priests.

Wonders of Creation [January 5] (Gen 1:1)

In Western culture scientists are revered as if they were the mythical Merlin of King Arthur's court or the Magi astrologers of ancient Babylon. Many people today think that if a speaker or writer has a Ph. D. in physics or biology he must be very intelligent, speak truth, and have something important to say. If a 'scientist' claims that the universe began with a bang ~14B years old, then it must be true. If he claims that man is descended from a lemur-like creature, then we must be intelligent apes. If he says that carbon dioxide, generated by human activities, threatens the survival of mankind and the future of the planet, then we had better enact ethanol quotas for gasoline, ban incandescent light bulbs, and prohibit the use of coal. After all science knows best!

This naïve view of science and scientists is misplaced, and even dangerous, because a majority of scientists today are:

- *Professing agnostics*. They presuppose materialistic naturalistic causes for all that exists and rule out the existence of the supernatural and God. For example, they claim that God could not have created the universe out of nothing pre-existing or caused a worldwide flood.
- *Close-minded*. Despite their claim that they are truth-driven, they are not open to considering paradigms which undermine their hallowed beliefs. They ignore data which contradict their hypotheses and models—e.g., evidence for a young earth—and prevent communication of contrary opinions—e.g., excluding articles written by creationists in peer-reviewed journals and preventing their receiving university tenure.
- *Conformists*. They succumb to pressure to accept and espouse prevailing opinion—they know that they will have difficulties securing grants or having their papers published if they don't conform.
- *Over confident*. They make pronouncements heralded with bold headlines. Later, corrections, reassessments, or retractions appear in 'small print' in back pages of technical journals. For example, consider how many 'certainties' about the 'primitive' Neanderthals have been published, only to be revised after new discoveries have been found in their habitations.
- *Highly specialized*. They are often 'smart' but not very knowledgeable. Very few are able to consider interdisciplinary implications beyond their domain of specialty research (e.g., ethical, political, societal, economic).
- *Fools*. Scientists are sinful humans, with the same natural tendencies as a proverbial 'politician' or 'used car salesmen'. To the extent that they reject Biblical truth and the existence of the Creator God, and claim to be wise, they are but fools (Ps 14.1; Rom 1.22; 1 Cor 1.18-25).

Thus, the thinking of most scientists has been darkened because they worship the creation and do not bow in awe before its Creator (Rom 1.21). So, even as they examine the physical world they are blind to the wonders of creation which declare the glory of God (Ps 19.1-4).

As we explore deeper into the workings of God's creation, we discover how wonderful it is and how limited our understanding is. Scientists are able to describe, at a superficial or surface level, how many things in nature operate but are unable to explain how they work at a deep level or why they operate as they do. Consider the following examples:

- To answer the question 'What is gravity?' a NASA web site says "Gravity is what makes pieces of matter clump together into planets, moons, and stars. Gravity is what makes the planets orbit the stars..." That does not explain what gravity *is*, it only tells us what gravity *does*. Saying that it is a 'force' doesn't help, because then we have to define what a force is.
- Scientists can describe the mechanical processes for the formation of a new life—copulation, fertilization, zygote cell division, and birth—but they are clueless when it comes to providing a definition of what life is, and explaining how life can exist if animals are only electrically charged bags of chemicals.
- Normal human body temperature is 37°C. Animal body temperatures vary depending on body size—small animals generally have higher metabolism rates and slightly higher body temperatures than larger animals. Body temperature is monitored by sensors in blood vessels which report readings to a part of the brain called the

hypothalamus; which in turn sends out signals that regulate the body's heat production (e.g., shivering) or cooling (e.g., dilation of blood vessels) functions. As we look into the deeper aspects of homeostasis we do not find that scientists can explain the 'how' and 'why' of the body's thermostat.

We could consider hundreds of other examples of the wonders of creation, such as what causes a human heart to beat about 3B times during a lifetime, why electrons spin continuously around atomic nuclei, why a body's immune system doesn't reject its own body, how complex systems coordinate in cells to manufacture DNA, how DNA replication can be so amazingly accurate, how plant and animal symbiosis began and continues to function, how non-physical mind can control physical matter (brain-body), how birds migrate without compasses or GPS devices, how time can be variable and relative to the observer and not absolute, and how light can propagate through a vacuum. The more we explore God's creation, the more we marvel at the wonders of creation and realize that behind it all is the mind and hand of the infinite God who created all things and holds them together (Col 1.17).

God Created the Universe [January 6]

(Gen 1.1-31)

We know that God created the *universe* (Heb 11.3). Does this mean the same thing as the phrase 'heavens and earth'? Some say that since Hebrew does not have a word for 'universe', the phrase is used to encompass everything in the created realm—"the whole frame and furniture of the universe" (Matthew Henry). If this is the case, the statement serves as an opening summary of what will be covered in the following account. However, this verse includes details which are not mentioned in the subsequent account. In this verse, we learn that God created the heavens, which includes what we call 'space', the container for the heavenly objects. Thus, space is a created entity along with all the matter which it contains and time that was created at the beginning. In addition, this verse informs us that God created the 'ball' of matter which we call *earth*. So, this verse makes key ontological distinctions, between God and everything else, and also between the container and objects it contains.

What exactly is the universe? The universe is often defined as the totality of everything that exists. However, that is not a valid definition since God exists and he is not part of the universe. A more precise definition would be, "the totality of everything created by God". Even that definition may not be sufficiently precise. The angels (and demons), Heaven, and Hell are all created entities. Do they belong to the universe? From one perspective they do, since they are included in "everything created by God". It is probable that God created the invisible, spiritual, realm on the first day of creation. This inference is supported by the following: 1) These entities had to be created as some point, so at the beginning makes sense (Ps 104.2-5). 2) The term 'heavens' includes at a minimum the atmosphere and space, but may also include the third-heaven—the abode of the angels, Enoch and others with bodies; and the place where God has placed his throne (Neh 9.6). 3) Paul tells us that Jesus created all things, in heaven and on earth, visible and invisible (Col 1.16). 4) The angels may have been witnesses to the rest of God's creative work (Job 38.4-7). However, since the Bible does not state when God created the non-physical realm, we will confine our definition of the universe to 'everything that was created and exists in the temporal-spatial realm'. From this definition, we may derive significant inferences.

First, the universe includes *everything* in the temporal-spatial realm. This excludes the existence of 'multiverses'. The concept of multiverses is not new. Origen refutes this idea, along with the idea of a cyclical universe (*de Principiis*, bk 2, c 3; *Against Celsus*, bk 1, c 19). Stephen Hawking and other modern cosmologists think that they can explain away God's creation of the universe by redefining it to be not *all* of the physical reality, but one of many self-contained, physical temporal-spatial entities. Thus, they claim that our universe is a chance instance in an infinite range of universes. All they do is defer the difficult questions: where the multiverses (of space, time, energy, matter and life) came from, why they exist, and how the physical realm arose out of nothing. Their scenarios or formulas for the spontaneous self-creation of the universe, and claims that our universe is an inevitable consequence of physics and chemistry, are cosmogenic myths used to replace the explicit statement of God. We have to accept on faith that God created the universe (Heb 11.3) because no human witness was present at the beginning and we cannot reproduce the creation scenario in our labs. But it takes more faith to believe against

reason and evidence the idea that the universe created itself.

Second, since Jesus is credited with creating the universe (Col 1.16) he must be God. He is not a demiurge through which a divine force or being acted, as the Jehovah's Witnesses claim. Their claim is a recent instance of the Arian heresy that was rejected by Athanasius (*On the Incarnation of the Word*, c 2) and the Council of Nicaea in 325 AD.

Third, since the universe was created, it cannot be eternal or infinite. We have already noted that it had a beginning, and it will have an end, as Peter teaches (2 Pt 3.7-10) and the 'law' of entropy confirms. The idea that it is finite is hard to grasp; but being finite, it must have an 'edge'. We think of space as being endless—if we left the earth in a fast spaceship, eventually we would pass all the galaxies and continue on in empty space forever. This is not correct. Nor is the universe contained in something else, thus having an outside. The best we can do to understand the finite universe is by analogy. Consider a two-dimensional being on the surface of a sphere. It could not comprehend 'up' or 'down'. However, it could go forward, back, or sideways. If it went in one direction it would go around the sphere and return to where it started. We can extrapolate this concept into three dimensions. Some suggest that space is curved and is wrapped into a fourth (and possibly more) dimension. If you set out from the earth in any direction you would eventually return to earth.

Fourth, earth is at the centre of the universe—not necessarily spatially, but in God's creative purposes. The earth and all that surrounds it was created to provide a fit habitation for man (Is 45.18). Therefore, it is not surprising that we see in the universe strong anthropic indicators, with all the fundamental physical constants tuned to accommodate human life.

When we think about the vastness, complexity, and beauty of the universe we should bow in awe before the God who created the heavens and the earth.

Creation Ex Nihilo? [January 7] (Gen 1:1)

Among Christians who believe in God as the Creator, it has been traditional to speak of his creating the heavens and the earth *ex nihilo*—the Latin for 'out of nothing'. The idea behind the expression is that God did not form the universe out of anything that was pre-existing, and created it over a six-day period. This is in contrast to concepts held by other worldviews such as:

- *Eternal matter* Ancient myths (e.g., from Sumer, Assyria, Babylonia, Greece, and Egypt) claim that a god or force worked with eternally existing primeval matter—an eternal energy-matter 'seed' called *chaos*—to form the current universe. This is the primary view held today by the adherents of Hinduism and of some forms of Buddhism.
- *Guided ancient matter* Many religions (e.g., Judaism, Islam, the Jehovah's Witnesses, and Mormonism) and a number of professing Christians appear to hold a view that a god, or God, worked with previously created matter and guided the formation of the universe over billions of years.
- *Unguided ancient matter* Philosophers, from the Greeks onward, have struggled with the concept of uncaused causes and have concluded that some form of cause (a deity or an impersonal force) originated the universe which then evolved into its current state following unguided 'laws of nature'. Unitarianism and Deism espouse this view.
- *Self-created matter* Modern materialistic naturalists attempt to explain the origin of the universe (or multiverse) without recourse to any pre-existing god or pantheistic force. They claim that the universe originated from a chance 'wrinkle' in a net zero-energy state (i.e., 'nothing').

The concept of something arising out of 'nothing' is at the root of all of these worldviews, except the one which holds to the idea that space, time, energy, and matter (STEM) are eternal. However, the idea that STEM is eternal can be dismissed, since it is a contradiction of the second law of thermodynamics: the entropy in an isolated system

(e.g., the universe or the totality of all STEM) increases with time. Thus, in *infinite* time an eternal system would reach a state of total entropy and be entirely devoid of energy. The fact that our universe is not entirely 'cold' (energy-less) indicates that it had a beginning in (or with) time. It is impossible to have an isolated system which violates this law (e.g., a perpetual motion machine). Any suggestion that the universe, as an isolated system, spontaneously decreases its entropy—e.g., through the addition of new matter or energy—means that it is not truly an isolated system, or places the system into the realm of self-creation, and it can no longer be defined as being eternal.

There are only two possible options for a universe which had a beginning. Either the universe is self-created or it was created by God.

Proponents of the view that the material universe is self-created—i.e., coming into existence spontaneously, without the intervention of a pre-existing mind or force—have written books and articles with titles such as: *Nothing: A Very Short Introduction* and *A Universe from Nothing: Why There Is Something Rather than Nothing.* They create a hierarchy of 'nothings' (in one instance with nine levels) from empty space (which actually contains particles and waves), to a theoretically pure vacuum, to the complete absence of STEM, to the non-existence of universals and abstract concepts (e.g., numbers and properties), to absolute nothing—the non-existence of anything. The concept of 'nothing' is non-trivial. Thus, some argue that it is impossible to achieve and even to conceptualize. From within this hierarchy they attempt to explain how matter and mind could have arisen. However, the idea that mind could arise spontaneously out of matter falls into the realm of science fiction—akin to computers becoming sentient—and is, despite popular opinion, absurd.

We can apply the law of non-contradiction from logic to assess the concept of the universe being self-created. This law states that an entity, for example a dog, cannot be *dog* and *not-dog* at the same time. Likewise, *nothing* cannot be *nothing* and *not-nothing* (i.e., something) at the same time. Self-creation is logical nonsense and an impossibility. A scientist who claims that the universe is self-created is a Buddhist—who can hold to the possibility of two contradictory concepts both being true at one time—or he is a very poor logician.

God is not self-*created*, so the law of non-contradiction does not apply to his nature and circumstances. God is self*existent*—existing of, for, and from himself. He is eternal and did not come into existence, and is non-material, so the concept of self-creation does not apply to him. Thus, there is no logical contradiction with God's existence although it is impossible for us to grasp what it means for him to be self-existent (Ex 3.14), eternal (Rom 16.26), and a spirit (Jn 4.24).

The title of this meditation includes a question mark—not because there is any doubt that God created the universe without using primordial material, but because the concept of creation *ex nihilo* can be misunderstood to include the universe creating itself out of nothing. The universe was created out of the mind of God—when God thought, the universe became. Since God is not *nothing*, the universe was not created out of *nothing*. It is probably better for us to say that God created the universe out of no pre-existing STEM.

Why God Created the Universe [January 8] (Gen 1.1-31)

Martin Heidegger, a German philosopher who asked existential questions, said that the fundamental question of metaphysics is: Why is there something instead of nothing? Adolf Grünbaum, a German philosopher of science and a critic of psychoanalysis, calls this question the Primordial Existential Question (PEQ). Stephen Hawking has said that it is "the granddaddy of all philosophical questions. ... No matter how clever you are, if you don't have a compelling answer to that question, you can only aspire to knowledge—albeit impressive knowledge—but not wisdom." There is a book available on Amazon entitled, *Why Is There Something Rather Than Nothing? 23 Questions from Great Philosophers*. Many philosophers have attempted to answer this question from a rationalistic perspective. Others have dismissed the question as being meaningless, unanswerable, or "a daring attempt to fathom

the unfathomable". Others try to answer it simplistically, by saying, "Because it is possible"—which begs the question—or by "Why not?"—which they then dress up in fancy language. Still others attempt to provide an answer by saying, "Because it is impossible for there to be nothing, or we couldn't ask the question." Some people become distressed as they think about this question, and others couldn't care less about the answer.

One writer has said, 'Ultimately, the problem is that the question—"Why is there something rather than nothing?" doesn't make any sense. What kind of answer could possibly count as satisfying?' In fact the question makes great sense, and a satisfying answer can be given to it. The reason that most philosophers and scientists find the question so perplexing is because they start their search for an answer in the wrong place—in the material realm—and base their arguments and logic on the presupposition that there cannot be a God who created and actively governs the universe.

There are two levels at which we can ask this question. We can ask it at the ultimate level—i.e., "Why does *God* exist?" Or we can ask it with regard to our temporal-spatial realm—i.e., "Why does the universe exist?" The answer to the question, "Why does God exist?", is not unknowable, although it is difficult for us to understand at this time—we may be given a fuller answer in Glory when our minds are purged of the ravages of sin and we can better understand aspects of God's infinite nature. Some people suggest that the answer is because if he didn't exist, nothing else could exist. However, that doesn't answer the question because it is an indirect 'proof' for the existence of God, and does not answer the 'why' question. No answer that makes God contingent on the created realm can be considered sufficient. The answer must lie in the aseity of God—i.e., in his self-existence. God exists from, of, and for himself. God communicates this self-existence in his chosen personal name 'I AM WHO I AM' (Ex 3.14). God exists because it is a necessary aspect of his being. To ask 'why' in an endless regress of causation is to misunderstand the nature of God. As it is of necessity that God be the Uncreated-One, so God exists because it is necessary for him to exist. Any other definition of God would not define God.

When we ask the question, "Why is there something instead of nothing?" with respect to the created order—in particular everything which God created in the temporal-spatial realm which we call the universe—a most direct answer is, because God chose to create everything. However, that only leads to another question, "Why did God choose to create?" The answer cannot lie in God's *need*. God did not create because something was lacking in himself. As an infinite, omniscient, self-existent, tri-unity he is, and has, all that he needs. However, it is possible to provide an answer from God's own revelation. At least the following reasons can be given for why God created the heavens and earth:

- 1. *For his own glory*. God demonstrates his infinite power to himself through his acts of creation and sustaining providence (Rom 11.36; Col 1.17). Even if there were no intelligent created beings (angels or men) to observe the created realm, God would still receive glory by observing what he had created to be an awesome display of intelligence, power and perfection (Ps 19.1; Gen 1.4).
- 2. *To receive honour from his intelligent creation.* The greatness of God is perceived through his creative works (Ps 8.3). Both the angels and men are called upon to praise God for his person and creative acts (Ps 148.5; Rev 4.11). There can be no better way to give him praise than by singing the Psalms which are full of the glory of his creative power.
- 3. *For his enjoyment*. God designed his creation for his own enjoyment. For example, he walked in the pleasant garden which he had created (Gen 3.8). God, in both his divine nature and human nature through Christ, desires to have fellowship with his rational creatures—this is one reason why the Lord's Supper was instituted, it is also a reason why we are called to pray to God.
- 4. *For our enjoyment.* The *Westminster Shorter Catechism*, in its opening question, reminds us that we are to glorify God—our primary purpose for existence—and to enjoy him forever. Enjoying God means to delight and share in his person and works and in the gifts he has given to mankind. For example, he gave Adam and Eve a perfect garden in which to dwell in happiness (Gen 2.8), and he gave them responsibilities (Gen 1.26) to act as rulers over his creation.

Tough Questions Answered [January 9]

(Gen 1:1)

In early July, 2012, the media were filled with news about the apparent discovery of the hypothesized Higgs boson (the 'God-particle') by physicists at CERN, which operates the Large Hadron Collider, a 27 mile circumference tube used for accelerating and colliding sub-atomic particles. Some headlines made bold declarations, such as: "Physicists Find Elusive Particle Seen as Key to Universe" or "The Spark That Caused the Big Bang". Reading further, the articles were somewhat more cautious about declaring the implications if it were later to be confirmed that the Higgs boson actually exists. From the perspective of most physicists, finding the Higgs boson is key to validating the Standard Model—a suite of equations which are supposed to explain how the universe is held together and provide hints about how it came into existence. The Higgs boson, is an elementary 'particle' predicted by the model which may explain how elementary particles take on mass. Whether or not scientists have confirmed the existence of another sub-atomic 'particle' is less important than they would have us believe.

At root, the quest to 'prove' the Standard Model, and the search for a grand unifying theory of energy-matter-force is based on more than a desire to understand the magnificent universe that God has created. The real goal is to find a model that leaves no room for God and nothing for a Creator to do. The quest is based on faulty presuppositions, such as: everything that exists came into existence spontaneously from a quantum wrinkle in the space-time fabric; the universe began when an incredibly small, dense, entity exploded in a 'big bang'; and all that we see today is the result of energy guided only by natural forces acting on matter, through billions of years. The tough questions that scientists are asking, or should be asking, will *never* be answered as long as they reject the Bible and God's explanations for how things came to be. Consider a few of these questions:

- 1. What existed before the universe began? From one perspective the question is meaningless—how can there be a 'before', before time began, as part of the space-time-energy-matter universe. Being creatures who exist in time, we cannot think outside of the concept of time. Even the Apostle Paul, under the guidance of the Holy Spirit, used a similar construct (2 Tim 1.9; Titus 1.2). Modern thinking about this question appears to be sophisticated, proposing concepts such as a hyper-universe that spawns an unending sequence of universes. However, the concept proposes nothing other than the eternal existence of space, time, energy and matter; and is, in essence, Hindu pantheism dressed up in fancy mathematics. The only way to adequately answer the question is to state that the non-material, personal, God existed before the universe.
- 2. *What caused the universe to come into existence?* Or, as Michio Kaku, a professor in theoretical physics, asked in an article in the *Wall Street Journal*, "What put the big bang in the 'big bang'?" His answer is that a Higgs-like particle sparked a cosmic explosion and all that we see owes its existence to the Higgs boson. In essence, modern thinking is that the universe is self-creating. The only way to adequately answer the question is to state that God created the universe out of no pre-existing material, by the word of his power, over the space of six days; and that we accept it as truth, based on faith in the reliable word of God (Heb 11.3).
- 3. *Of what is the universe made*? Based on the estimated 100 sextillion stars in the universe, scientists can calculate how much matter there could be in the universe. However, the amount of observable matter accounts for less than 5% of the matter that would be required if the current standard cosmological model is correct. So, scientists propose the existence of 'dark matter' which does not give off an energy signal that can be detected by our current instruments. In contrast, God's account in this chapter tells us that all the planets, stars, and galaxies were created in an instant with their constituent matter and motion. With God's explanation there is no need for 'dark matter' or 'dark energy'!
- 4. *Must time and space exist?* With our limited intellectual capacities, it is difficult to think of the existence of matter, energy, and life other than in the context of time and space. Both were considered for centuries as invariant. However, since Einstein presented his theories of relativity the thinking of scientists has changed. They now speak of curved space and relative time. We know from the Bible that God is a living being and that he does not exist in time and does not take up space—he is not physical (i.e., he is spirit). Also, Jesus and others (e.g., Enoch and Elijah) have physical bodies but do not now exist in the temporal-spatial realm.
- 5. *What will happen to the universe?* Modern theories propose that the universe will eventually fly apart with the dissolution of matter, collapse in on itself, or die a cold death. The NT teaches that it will be consumed by fire (2 Pt 3.7, 10-12) and then be re-created (Rom 8.21; 2 Pt 3.13).

The models of modern science are full of guesses and lead nowhere but to meaningless despair and hopelessness. In contrast, God's account gives answers to the tough questions and is full of hope. The NASA astronomer, and Dartmouth College Professor, Robert Jastrow once said: "For the scientist who has lived by his faith in the power of reason, the story ends like a bad dream. He has scaled the mountains of ignorance; he is about to conquer the highest peak; as he pulls himself over the final rock, he is greeted by a band of theologians who have been sitting there for centuries.

Biblical Science vs Pseudo-Science [January 10] (Gen 1:1)

We have all heard of the supposed conflict between religion and science. It is often presented, particularly by the mass-market media and 'neo-atheists', with the claim that religion and science are incompatible—i.e., a scientific person cannot be religious (at least not a Christian, if possibly a Buddhist). The 'conflict' has often been contrasted in terms of evidence—religion is based on revelation, whereas science gathers evidence empirically; the use of reason—religion is based on instinct or feeling, whereas science uses critical thinking; and conclusions—religion decrees absolutes, whereas science forms tentative theories that are subject to doubt. Some people deny that there is any conflict, and instead claim that religion and science are different ways for finding truth, or that they deal with entirely different subjects—science with 'how' and religion with 'why'—so can be considered independently.

In fact, there is no conflict between Christianity and science. They do not deal with different subjects, and do not use different methodologies. How can I be so emphatic? Because, ultimately all truth is God's truth—God's thoughts revealed to mankind and then discovered by men. There is not one kind of truth in science that is derived only through empirical means, another kind of truth in philosophy that is developed by reason, and a third kind of truth for faith that is revealed by God. Truth does have a number of dimensions but is unified as a whole, with one source and one standard—God. Truth is consistent with a single, absolute, factual, objective reality which is invariant through time and space. Truth encompasses all of the factual descriptive attributes of physical objects (e.g., colour, height, and weight), valid concepts in the rational realm (e.g., logic, mathematics, moral imperatives, and law), and reliable statements about entities in the non-physical realm (e.g., God is a spirit and angels exist).

We live in, and study, God's creation. We make hypotheses about observable processes to discover how God has endowed the universe. We test our ideas using rules of evidence and statistical probability, and we expect the results to be reproducible because we live in a universe ordered by God. When we explain the facts, with valid and rational logic, we model God's thinking.

In every domain of knowledge, God's mind is supreme. The natural man, in sin, does not want to hear this truth because it places God at the centre of epistemology and not man. It means that what God says in his Word is the definitive standard for truth in all areas in which it speaks. This has significant implications for our understanding of the world around us. When the Bible records history it is not another source for history, to be compared with archaeology and manuscript evidence; it is the final source. Thus, when it gives a name, event, or date all other sources for history must be correlated with the Bible. Similarly, when the Bible declares anything that falls into the domain of what we call 'science', it speaks with absolute authority. So, since it says that God created the universe in six days, and provides a chronology that places that creation at about 6,000 years ago, then all of man's theories about cosmology, geology, and biology must be brought into harmony with that truth. Likewise, in anthropology, psychology, sociology, political theory, and economics the Bible stands supreme over all of man's theories.

We reject the naïve, and self-refuting, idea that truth can *only* be derived from the application of natural laws. We also reject the idea that there can be such a thing as a neutral fact. All facts are filtered by assumptions, preconceptions, presuppositions, beliefs, and experiences. The assumptions one starts with radically colour the interpretation one gives to the facts. When we accept the Christian's presuppositions, all facts can fit a coherent model. Rarely, if at all, will the evolutionist or naturalistic scientist be able to challenge the interpretations made of

the facts by Christians if they accept, for the sake of argument, Christian presuppositions. The real issue is not the methodology but the presuppositions. Our assumptions are based on our worldview, and our assumptions cause us to interpret the facts according to that worldview.

The clash of worldviews is not between Christianity and science but between science that is based on Biblical truth and the pseudo-science of materialistic naturalism—Scientism. Scientism is a worldview that allows only for natural explanations for all phenomena, denies the existence of the supernatural and spiritual, and claims to embrace reason and empiricism as its hermeneutic. In Scientism, naturalistic cosmological, biochemical and biological explanations supplant God's stated account of creation. Truth is rejected in favour of myth in an attempt to leave no room for God, supply answers for those whose spiritual needs are not met by atheism, and make belief in God unnecessary.

Since the belief in Biblical authority is a religious presupposition, then the denial of this must also be a religious presupposition. Therefore, the ultimate conflict is not between religion and science, but between Biblical Christianity and all false religions, including Scientism and its popular cult, evolution. Evolution is not scientific its claims that life originated spontaneously from inorganic materials, and of increased genetic complexity through time, cannot be demonstrated by empirical research. Belief in evolution is a religious conviction founded on arbitrary assumptions and a false faith. Evolution is sustained by weaving together rationalizations and *Just So Stories* which are entirely unconvincing to anyone not emotionally committed to its defence.

Young Earth [January 11] (Gen 1:1)

Most geologists believe that the earth is around 4.5B years old. However, using the genealogies in Genesis chapters 5 and 11 and some other key date markers in the OT, it is possible to calculate the year in which the world was created to within five or ten years, and to place the creation of the world about 6,000 years ago. The primary 'evidence' that geologists use to derive their estimate for the age of the earth is:

- *Radiation isotope decay ratios* The ratios of uranium *vs* lead, potassium *vs* argon, and other pairs of elements, are used to calculate how much time it has taken for each original element to decompose into a 'daughter' element. This factor relies on three assumptions: 1) that the initial ratios of 'parent' and 'daughter' elements are known, 2) that the decay rates have remained constant, and 3) that rocks containing the elements have been completely isolated from any external influences. It is impossible to prove these assumptions since no one was present to make observations.
- *Natural processes* Processes as we experience them today (e.g., the erosion of canyons and the uplifting of continental plates) have taken millions of years to create the world's current geography. This factor relies on three assumptions: 1) that the current natural processes would actually create the landforms we now see, 2) God did not create the world in a mature form, and 3) there was no worldwide cataclysmic flood.
- *Fossils* The fossils were formed through natural processes. As above, this factor assumes that the flood recorded in Genesis did not occur.

There are significant issues with rock age measurements using radioisotopes. Calculated rock ages that do not give an answer which falls within the expected range (based on a long-ages presupposition) are dismissed as being anomalous. However, there are many examples of rocks of a known age (i.e., they were formed by volcanic activity within historical timeframes) which have been 'dated' with radioisotopes and found to be much older than their actual age. For example, Novarupta-Katmai, in Alaska, erupted in 1912, yet igneous samples taken in 2012 were 'dated' as high as 5M years. An eruption at Mt. Rangitoto in New Zealand occurred ~300 years ago, but the lava flows were dated at ~485,000 years. Rocks from the Kaupelehu Flow, Hualalai volcano (Hawaii), which were formed about 1800, have been 'dated' (in 12 samples) from 140M years to 2.96B years, with an average of 1.41B years. Rocks formed in 1986 as part of the lava dome, from the explosion of Mount St. Helens, were 'dated' from 300,000 to 2.8M years. In the Grand Canyon area, recent volcanic activity (within Native American history) was 'dated' at 100M+ years with one technique, and at 1B+ billion years with another, but is on top of sedimentary rocks that are 'dated' at less than 5M years by their 'index fossils'. Many more examples could be given. 'Dating' methods using radioactive decay calculations produce results which are worthless.

In a future meditation we will consider some of the evidence that the universe is not as old as the \sim 14B years most cosmologist claim. Similarly, there is evidence that indicates that the world cannot be 4.5B years old. For example,

- Observations indicate that the moon's orbit has been increasing by 3-4cm per year. If it is assumed that the present rate has been constant (a favourite assumption of materialistic naturalists) the moon would have been touching the earth in a shorter timeframe than its assumed age.
- Since measurements were first taken by Carl Gauss (d. 1855), the strength of earth's magnetic field has been measurably decaying, with a half-life of about 1,400 years. If we assume that the current rate of decay has held constant, then the earth cannot be more than 10,000 years old. At about 100,000 years, earth would have had a magnetic force comparable to a neutron star. Life could not have existed under the intense magnetic force and extreme heating. In another ~1,000 years, the magnetic field will decay so much that for all practical purposes it will cease to exist and living entities will be at risk from cosmic rays. The materialistic naturalists' response, without observational evidence, is that the force field will reverse and regenerate.
- Fulgurites (fused sand from lightning strikes) are rare. Yet, they should be common, if the world is old, given the frequency of lightning strikes.
- There have been recent discoveries of soft tissue (with intact cells and blood vessels) in partially fossilized dinosaur bones. If the bones had been buried more than tens of thousands of years ago (let alone millions or hundreds of millions of years ago) there is no conceivable way in which the soft tissue would not have been fossilized, or the organic material (e.g., collagen, proteins, and blood cells) would have decayed long ago.

We could consider other examples, such as accumulated random mutation rates and genomic decay; generation of atmospheric helium; accumulation rate of salts, sediments, and dissolved carbon in the oceans; dissipation rate of pressure in natural gas and oil wells; the presence of C^{14} in rocks supposedly millions of years old; and continental erosion *vs* mountain building rates. All of these indicate (assuming constant rates) that the earth cannot be anywhere near as old as most geologists postulate. We will look at similar examples in detail when we consider the impact of the flood.

When we deal with beliefs about earth's age we can fall into the trap of using circumstantial evidence to determine which option is more plausible, or fall for the fallacy of misplaced concreteness in which we accept a belief or hypothesis as an assertion about the way things are. The *only* evidence which matters is observational evidence. Only God was present at creation. He tells us that the world is young (e.g., Gen 1.1-31; Gen 5.1-32; Gen 11.10-26 and Mk 10.6).

Primordial State of the Earth [January 12]

(Gen 1.2)

God now tells us about the state of the earth when it first appeared. But, before we consider the state of the primordial earth we need to address a popular view put forth in an attempt to reconcile the Biblical account with the speculative theories of modern materialistic cosmology and evolutionary biology. This view claims that there is a gap (potentially of billions of years) between verses 1 and 2 or between verses 2 and 3. For example, some commentaries claim that the creative activities of the first day begin at verse 3. Some base this claim on the fact that the divine words—"and God said"—are missing in verses 1 and 2. They claim that Scripture is silent about the origins of the heavens and the earth. However, this is an unsupportable position. God tells us that he created them at the beginning (Gen 1:1). Also, since the rest of the objects in the universe, beyond the earth (stars, Sun, Moon, planets), were not created until the fourth day, the 'gap' theory must be rejected. The 'and' which starts verse 3 (and in other verses in the Hebrew account), could be translated as 'then', thus indicating that God is reporting a sequence of events that followed one after another.

When the earth was created it was 'without form and void'. There have been numerous attempts to explain how the two Hebrew words are to be translated, through comparison with their use elsewhere in the Bible—e.g., 'formless and empty', 'formless and void', 'shapeless and empty' 'confusion and emptiness', 'formless waste', 'mingled mass', 'disordered conglomerate' or 'sterile wasteland'. The most straightforward way to understand the state of the earth at the beginning is as an 'unformed and empty' object sitting in a low-energy, empty space envelope. It is possible that the initial constitution of the earth was only water (2 Pt 3.5). Some Christian physicists and cosmologists have suggested that the initial earth was a massive ball of water that was separated into two parts (Gen 1.6), with the upper layer of water becoming the source material for star and planet formation. Others have suggested that the initial earth was a blob, rather than a sphere—as God had not yet established the gravitational force. Others have suggested that initially the earth was a relatively smooth rocky-metallic ball covered with a shallow sea (the 'deep') covering the entire earth.

God may inform us of the initial state of the earth so that the fairy tales of the proponents of materialistic naturalism can be exposed. No one was present at the creation of the earth, so we must accept God's word about how he did it (Heb 11.3). The first component of creation was a semi-organized, semi-energized object. Some form of physical force (e.g., electromagnetic) must have been in place and there must have been sufficient energy to maintain molecular structures, since the initial constitution of the earth was *water* and not a raw quark-gluon plasma with some other elementary particles, as is supposed by those who espouse the 'big bang' theory of cosmology. In addition, since God tells us that all the other objects in the heavens were created after the earth (on the 4th day) we know that any cosmological model which has the earth being formed out of a band of solar detritus must be false.

God establishes a contrast between the initial and final states of the earth. Over the subsequent days of creation he is going to make the unformed earth into a habitation for man—a gift for them to possess, rule over, and enjoy. The reference to his hovering Spirit tells us that God superintended the details of creation, even at the lowest levels of energy and matter, to form the earth and all of the rest of creation. This reinforces the fact of God's providential, and supernatural governance of the universe and refutes the claims of those who wish to suggest a form of deism—i.e., God created an initial singularity and left it to explode and unfold, merely through the execution of the 'laws of nature' into the form that we see around us today.

Some commentators suggest that the Mesopotamian, Egyptian, or Canaanite myths influenced the writing of the Genesis account of creation or that the Genesis account is merely a monotheistic version of one of their creation myths. For example, they claim that there are similarities between this account and the *Enuma Elish*—that includes the Babylonian creation myth. They have tried to show that the primordial water parallels the watery god Tiamat of Babylonian myth, and that the darkness before the creation of light corresponds to the menacing evil that is a counterforce to God—i.e., a form of dualism. This approach is entirely misguided. As we noted previously, the Genesis creation account is the archetype on which the ancient myths are patterned. The Genesis account was given by God to Adam, carried through the worldwide flood by Shem, and eventually included in the Pentateuch by Moses. It was not composed by Moses five hundred years after the Babylonian myths were created. The creation myths, which arose in the nations surrounding Israel, are corrupt perversions from vague memories of God's account, created by people who did not wish to consult with the still-living Shem in Mesopotamia.

It is interesting that the new heavens and earth will not have a sea (Rev 21.1) nor will there be night (Rev 21.25) or need of a sun (Rev 22.5). While many claim that these references are merely metaphorical, they may teach that the physical reality put in place at the time of creation is not the only form that is possible—again showing that God is in control when he creates something new, and not under any compulsion to follow preordained natural laws.

The Nature of Matter [January 13] (Gen 1.2)

We take for granted the existence of matter because for most practical day-to-day activities it is matter that we interact with (step on a floor, put clothes on our bodies, eat food, etc.). But the existence of matter, and its continuing

existence, is truly amazing. According to the 'best' models scientists have constructed for the origin of the universe, matter should not exist. Their theories and calculations show that all matter should have been destroyed by antimatter almost as soon as it came into existence. Physicists cannot escape from the fact that their main theory of how the universe works—the standard model of particle physics—includes the impossibility of their own existence.

The problem of matter's existence gets worse when we consider the protons and neutrons found in every atom. Protons are remarkably stable. However, since scientists cannot explain why, they invented an arbitrary 'law' of conservation which 'prohibits' protons from decaying. In contrast, neutrons on their own decay quickly (they have a half-life of around 10 minutes) but in the nucleus of an atom they are stable. How did atoms form from the plasma of the supposed 'big bang', if neutrons are so unstable and the initial plasma was flying apart rapidly?

To compound the problem, if all the matter in the universe were spread uniformly it would be so sparsely distributed that a cube of space about 100,000Km on a side would contain only one gram of matter (the mass of one Nestlé *Smartie*). But gravity is such a weak force—at 1,000Km above the earth that a man can float—there is no cosmological model that can explain how the matter in the universe could have condensed after the 'big bang'.

What is matter? And, what holds matter together? In the past, it was believed that if you decomposed matter you would keep discovering finer components of material, but eventually reach an incredibly small particle existing in three-dimensional space with a minuscule mass, which could not be decomposed farther—for example, an atom is made up of protons, neutrons and electrons, which in turn are made up of quarks, and so on. However, the farther down into the sub-atomic substance scientists travel, the stranger things become. Instead of finding the expected 'point mass', matter seems to be composed of something with no mass. The current theory proposes that at the core of matter are 'strings' that have a non-zero length, but no mass. But these 'strings' appear not to have materiality (i.e., they are not made of anything with mass but are pure energy).

Scientists explain *how* the fundamental forces (e.g., gravity, electromagnetic forces) work from their observations, and they devise formulas to explain how they should work—for example, what will happen if an apple falls from a tree. However, they cannot explain *why* gravity and the sub-atomic forces work. Look up any definition of gravity, for example, and you will find it defined by what it does, not by what it is. Think about it for a moment, what actually is the force that makes the sun and earth attract one another? When scientists study the forces holding matter together at the sub-atomic level, they postulate that quarks are held together with 'gluons'. Apparently, gluons themselves need something by which to interact. The proposed mechanism is something called instantons which may be essentially solutions to mathematical equations but have no materiality.

According to current theories both 'strings' and instantons have basically no materiality—they are pure energy and mathematical equations—but have physical effects. This is all rather perplexing, particularly to those uninitiated into the 'cult' of modern physics. Physicists have been attempting to tie together these two aspects of matter—its substance and its 'glue'—into a comprehensive 'theory of everything'. So far, they have been unsuccessful, and the possibility seems to be as distant as ever. Their research and mathematics have not produced a single elegant solution (even with the declared discovery of the Higgs boson, an elementary 'particle' which may explain how matter takes on mass), but rather only competing models with unproven components (e.g., strings, if they exist, are too miniscule to be detected by observational equipment), hypotheticals, and fudge-factors to explain deviations between experimental results and theoretical predictions.

It is likely that aspects of the observations about the nature of the sub-atomic particles and the forces holding them together are true. If the facts about matter are in accord with a single, absolute, objective reality we should not be surprised that at the core of matter we find non-materiality and mathematics. God himself is non-material and caused material substance to come into existence, and he continues to actively govern that materiality. Also, since mathematics is true, it is a reflection of the mind of God. In addition, Paul tells us that God, in Jesus, holds all things together (Col 1.16-17). While Paul is speaking primarily of Jesus' authority over all things, he also teaches that Jesus literally holds the universe together through his thoughts. If he stopped sustaining the universe by his thought,

everything would cease to exist. Scientists cannot explain what matter and forces are through their naturalistic models. Only when they acknowledge the truth that Jesus created matter on the first day and continues to hold it all together, will they begin to move in the right direction for understanding the nature of matter.

God is Spirit [January 14] (Gen 1.2)

The Bible does not provide a single comprehensive definition of God, but it does speak of his attributes in various places—e.g., his power, infinitude, eternality, and loving and compassionate nature. Jesus, as the definitive source for information about the nature of God, gives us a simple definition of God when he informs us that God is spirit (Jn 4.24). This means that in his essence God is a spiritual being—meaning that he is non-physical, incorporeal, invisible, and indiscernible by physical instruments such as a microscope, telescope, photometer, spectrometer, or ammeter. It also means that he is indivisible—a spirit is not composed of parts. Also, being a spirit, he cannot age or decay. But, in God's case he is more than *a* spirit; he is the ultimate spiritual being and the source of existence for all created beings with a spiritual existence—angels—or a spiritual dimension of some form—humans, and animals.

As a spirit, God is substantially different from the gods of the pagans. In the man-made religious systems, such as in Sumerian, Hindu or Mormon polytheism, the gods are immortal, supernatural, physical beings who live within the universe. Or the gods are incorporeal forces emanating from the physical universe (pantheism). Being a spirit, God does not need a body to exist or a place in which to dwell. Although, he created both. He created Heaven as the place where he chooses to make his presence known to the rest of his creation. He also now has a body, since Jesus is God, and God has chosen to manifest his fullness through Jesus (Col 1.19; Col 2.9). Jesus has his resurrected body in Heaven (Acts 1.9).

As a spirit, God has thoughts, knowledge, memory, and emotions. And, he can interact with physical objects (e.g., he can cause material objects to move) without himself having any physical appendages. Since we are heavily conditioned by the physical dimension of our nature, it is hard for us to understand how a being can be only a spirit. For example, if we encounter someone with a brain injury we see that the physical damage interferes with his cognitive abilities (e.g., to recall information, communicate, or perform abstract thinking). Our understanding of a spirit being is more limited than the ability of a typical three-year-old to understand derivatives in calculus.

In this verse, God informs us that his spirit "was hovering over the face of the waters." There are two senses in which we can understand this reference to 'spirit'. It can be a reference to God, as a Trinity, declaring himself to be a spirit and actively moving over his new creation. We will explore this idea further in a moment. The second way we can understand it is as a reference to the third person of the Trinity. In the next meditation we will consider the hint that is given in this verse (and others in Genesis 1-11) which indicate that God has a Trinitarian nature.

God, as spirit, hovered over the newly formed earth that he had just created. It may have initially been entirely made of water (2 Pt 3.5). In his hovering over the waters we are to understand that he:

- *Planned*: His hovering implies that deliberate thought and planning went into the creation of the world.
- *Shaped*: The initial world at the moment it was first created was formless. But God shaped and molded it in accordance with his design. He formed other elements (beside hydrogen and oxygen), earth's atmosphere and its metallic-rocky basement, and a continent which he pulled above the sea.
- *Energized*: As he was shaping it, he added energy beyond the forces holding matter together. For example, he heated the core, magnetized the sphere, set it to rotate on its axis, and created ocean and wind currents.
- *Made alive*: His next step was to deal with its being void, by adding life to it—first plants, then animals, and finally man.

In these activities, we see that God, as a spiritual being, can make material things. Matter cannot spontaneously

create spirit, information, or life. And, even humans cannot create any of these out of merely *physical* constituents. Yet, God demonstrates through the hovering of his spirit that he can create material things with nothing more than his thoughts and word. Secondly, we see that God, as spirit, is the author of life. As a spirit he can create not only physical entities but spiritual entities. He created animals as living creatures (Gen 1.20-21, 24), and breathed the breath of life into the body he had formed to create a man (Gen 2.7). This demonstrates that life is more than a collection of chemicals with an electric charge. The essence of life, the spark of life, is a spiritual component which is created by the spirit of God.

In materialistic naturalism the idea that a purely spiritual being can exist and be alive is not acceptable. The very definition of their system forbids the idea of anything existing beyond energy-matter in space-time. Life according to their thinking is nothing more than physical and chemical reactions behaving in ways that are determined by the supposed self-organizing nature of matter and the 'laws' of nature. Their paradigm puts life into a very small box—without God. However, in their objective moments they know that life is more than mere physicality. For example, someone sitting beside another's deathbed can sense when the spirit has vacated the person's body. Something happens and the sick person's body changes from being alive to dead and the result of that change is observable, even if a spirit cannot be seen.

The Spirit of God and Hints of the Trinity [January 15]

(Gen 1.2, 26, 27)

The revelation of the Trinitarian nature of God—one God in three persons—is not fully developed in the OT. However, as God's revelation to man progressed, he began to open up this dimension of his nature. This does not mean that he was entirely silent about the existence of the three persons in the first revelation he gave to mankind. Even before the flood, in the creation account, he provides hints about the existence of the Trinity.

God uses the word *Elohim* (generally translated as 'God') as his opening self-reference in verses 1 and 2, and about 25 times in Genesis chapter 1. This is a noun of plural number. Some commentators conclude that the mystery of the Trinity, in unity, is contained in the word. Others don't understand this word to be introducing the Trinity, but instead say that it is indicating a plurality or complexity of some kind (e.g., two persons) in the Godhead. Others say that the plural noun is merely a title of honour or majesty such as is used in a royal 'we'. Others, e.g., Jewish rabbis, inferred that the term spoke of God's manifold powers. And others try to demonstrate that the use of the plural is a form of intensity—much like the Hebrew idiomatic form of repeating a word to intensify an attribute—thus meaning something like 'God of gods' or 'very God'. If this plural noun were the only hint of the Trinity in chapter 1, we might properly conclude that the reference is merely to God's majesty or power—especially since the verb 'created' is in the third person, singular, form—i.e., '*he* created'.

However, as we know, a good practice of Biblical interpretation is to interpret one verse within the context of other verses, and not to take a single verse in isolation, or as an absolute for building a doctrine. There are other hints of the Trinity (or at least of plurality) provided in the first chapter of Genesis which support the idea that *Elohim* speaks of the multi-personhood of God.

First, there is the statement that the 'Spirit of God' hovered over the waters. The ESV, along with all commonly used English translations, capitalizes the word 'spirit'. Thus, the majority interpretive view is that this is a reference to God himself and not to a wind or to God's breath—since the Hebrew word can be translated in these ways. That the Spirit of God is God and a member of the Trinity is clear from the activity which he performed—hovering over the waters of the newly created earth. The Hebrew word that is translated 'hovering' can also be translated as 'brooding' or as 'cherishing'. The Holy Spirit was the first mover. His immediate participation in creation worked on the formless and empty earth bringing it to 'life' by energizing and sustaining it. This has a polemical purpose to refute the pagan cosmogonies which start with a reign of chaos rather than order and nurture. Also, this foreshadows the same role that the Holy Spirit plays in salvation. He instills new spiritual life into converted souls and sustains the believers through life and death.

If this were the only additional revelation we had about the nature of God in the creation account, it might be possible to conclude that the reference to the Spirit in verse 2 could be speaking of a mode or activity of a single divine person. There is nothing that unequivocally indicates that the Spirit is a distinct person; distinct from the person who took the lead when God create the heavens and the earth (Gen 1:1). However, there is more revealed about God's multi-personal nature in this chapter.

In verses 26 and 27 we have two additional hints of the Trinity. When God created mankind, he created him as two persons and declared the two of them, together, to be the 'image of God'. Adam alone was not the image of God—Adam and Eve together were the image of God. The implication is that God is multi-personal (at least two persons) and a social being. We also read that God (presumably the Father) spoke and said, 'Let *us* make man.' This clearly shows that God was speaking to someone else who participated, as God, in the creative activity of making mankind. In fact, all three persons of the Trinity are present in these two verses. First there is the person of God—probably the Holy Spirit—relaying the account of creation and speaking of God (the Father) in the third person; and then there is a person (God the Son) to whom God (the Father) spoke.

A perplexing question is why the Trinity is not presented more clearly in the OT, and even in the pre-flood revelation—why is the Trinitarian nature of God not made more explicit from the beginning? The reason cannot be that God's people before the flood (e.g., Enoch) were too primitive to understand the concept of three persons in one God. To the contrary, the antediluvian patriarchs probably far outdistanced us in mental abilities. I can only suggest possible reasons. It may be that God wished to first establish the absolute fact that there is only one God (Dt 6.4; Dt 4.35)—to provide a stark contrast between truth and the pagan polytheistic tendencies in the human heart which always invent a multiplicity of gods. If God presented himself as Father, Son, and Holy Spirit at the beginning, every unbeliever would have twisted Scripture to suit his polytheistic fancies. God effectively leaves early man without an excuse—he must believe in one God. Also, God chose not to reveal fully the Trinitarian nature of the Godhead until he had first revealed more about his nature through Jesus (Col 1.15), who in turn communicated, directly and through the Apostles, much of what we know about the Holy Spirit.

God's Eternal Plan [January 16] (Gen 1.2)

The hovering Spirit of God may evoke an image of an artist contemplating an empty canvas or a sculptor sizing up a piece of stone before he begins his work. However, we must not think of God expending *time* contemplating the unformed chaos before him and working out a sequential plan for how he would form raw materials into a universe. This notion is mistaken because it places God under finite, physical, time-bound constraints.

God does not exist in time. He created time along with the rest of the universe (see, <u>When Time Began</u> [January 2]). So, he did not go through a systematic process of analysis and design to prepare for his acts of creation—as we would if we were going to design a house before building it. This does not mean that the act of creation was haphazard. Rather, it means that God is a different kind or class of entity from humans and exists *as* a different form of reality. He does not exist *in* a different form of reality, since that would imply that a reality existed eternally which contained God. Before (a time-bound concept) God created the universe (including angelic beings) he existed as the only, and total, reality—fully self-existent, self-contained, and self-purposed.

God's knowledge is complete—he is omniscient; meaning that he knows *all* things, possible and actual; simultaneously, not sequentially. There is nothing that he didn't know and had to learn. He does not acquire knowledge—he does not use instruments of sensory perception; does not observe processes, events or states; and does not use empirical methods as we do. Nor is there anything that happens within the universe which is beyond the realm of his knowledge or is a surprise to him. Our past, present and future are not past, present and future to him. They are all one ever-present component of his total knowledge. He does not look into the future to see how men will act and then make decrees based on that foresight. That is a parody of what Divine foreknowledge means.

Rather, God's foreknowledge is his loving decrees realized in his creation, in particular for his people (Rom 8.29).

Since God knows everything all at once (another time-bound concept), he does not plan as we would through a sequence of steps. He did not have to think through a spectrum of possible designs for eyes and allocate them to different designs for heads (e.g., for a fly, rat, fish, or man). He did not have to determine the best way to optimize the electromagnetic force, weak force, strong force, and gravity so that the universe would not expand or contract uncontrollably. He did not have to figure out how to design a blood clotting mechanism or how to program the human immune system so that it would not destroy a man's own body. Rather, God eternally knows all that is known and can be known. Therefore, his plan for creation was a part of his eternal knowledge-set. His plan for creation was eternally known by the Trinity in full and complete detail.

Human languages cannot accommodate the concept of how God can have a plan and yet not have planned his plan. We think of a plan as the outcome of a planning process. Our English Bible translations speak of God's plan (Acts 2.23; Eph 3.9), but the same Greek words can also be translated as 'purpose' or 'stewardship' (Lk 7.30; Col 1.25). So, although we use the term 'God's plan', it may be better for us to say 'God's purposes' (Rom 8.28; Rom 9.11; from a different Greek word) or to include an adjective and say 'God's eternal plan'. The emphasis would be on the *eternality* of God's plan—it has always existed and was not developed through a process.

Thus, everything that happens, including all intermediate second causes and conditions necessary for something to happen, in the temporal-spatial realm, is according to God's eternal plan. His eternal plan is manifested through predestination; which is God's decreeing and controlling all events (Acts 4.27-28; Eph 1.11; Eph 3.11). Most people think of the word predestination in the immediate context of God's saving the elect (Rom 8.28-30; Eph 1.4-5). However, it must logically apply to his decreeing *all* events, since nothing happens in the world which is disconnected from every other event. For example, assume that a person from a previously 'unreached' native tribe in the jungle hears a Gospel presentation, believes in Christ, and repents of his sin (Acts 13.48). His presence at the moment he heard the Gospel is connected to a long chain of events including his being rescued from a canoe accident the week before, the day of his conception, and the year in which his distant ancestors began their migratory trek from the vicinity of the Tower of Babel. Likewise, the presence of the missionary at that moment is linked to a similar chain of events, which includes his parents taking him to Sunday School, the Protestant Reformation, a liaison between Charlemagne and a milkmaid, and Noah's son Japheth moving north-west from Shinar. Predestination does not apply merely to the identification of who will and will not be saved, but to every event leading up to the salvation of the last elect person, identified in God's eternal plan, who remains on the earth moments before Jesus returns to wrap up history and renovate the cosmos.

Regardless of the argument raised by many—that predestination precludes human free will—no human will or any event in the cosmos, such as an unpredictable (from our perspective) quantum state change, can deflect God's eternal plan from being completed in exact detail (Is 14.24; Jn 6.37).

"And God Said" [January 17] (Gen 1.3, 26, 28)

As God began to instill order into the initial formless and empty components of creation (space and earth), he introduced a new concept—declaring his intention to create. The expression 'and God said' first occurs in verse 3, and a total of ten times in the creation account. There may be significance in the ten words or ten commands of creation, emphasizing the completeness of the created order at the end of six days; and giving a teleological imperative, that would later be mirrored in the moral imperatives of the Ten Commandments.

It is important that God *spoke*, rather than just thinking (which he did; since thought logically precedes vocalization) or performing specific actions after having thought about them. Speaking requires a number of key precursors such as personality, rationality, intelligence, and sociability—implying that God is a communicator. We see this in his speaking about his intention to create; in his speaking among the members of the Trinity (Gen 1.26); in his speaking

directly with his rational creatures (Gen 1.28); and in his telling us how he created, as it is recorded in this chapter. The creation account is part of his special revelation to mankind in the Scriptures, which includes a record of *words* communicated by God directly to man and *words* describing revelation by other means, but no graphical representations—for example, the plans for the temple were given in words rather than with an architect's blueprint.

The fact that God communicates with language cannot be demonstrated through empirical study, such as with an experiment, or research—we cannot create a test to demonstrate that God is able to speak. It must be accepted as a presupposition and validated through God's self-revelation in the Bible. However, that God speaks is fundamental to our ability to know anything about him and the basis on which God holds mankind accountable—since God communicates we, who are his creatures, must listen to what he says.

It is significant that God *spoke* the creation into existence. It demonstrates his transcendence above any created entity and his independence from mediate means. The power of his word alone is sufficient to create everything in the universe—he spoke, and it was accomplished. Also, he did not need to form the universe out of pre-existing material—the 'laws of nature' are *descriptive* of how God usually governs his creation, they are not *prescriptive*, governing his actions. The word by which God created is the same authoritative word by which he governs and directs the affairs of men in the smallest detail—all cause and effect in the natural realm and among the dealings of men are directed by God's word, and specifically by Jesus, the Word (Jn 1.1), who is both Creator (Jn 1.10) and Governor (Jude 25) of the universe. Ironically, men who deny that anyone could create a complex universe by nothing but speaking, in turn claim that the universe created itself from nothing.

Since man is the image-bearer of God, we would expect that he would also be a personal, rational, intelligent, and social communicator-through the spoken word. Humans are distinguished, among other ways, from the animal creation by our ability to communicate abstract concepts verbally. And, to a significant extent, human personality, ideas, and society are determined by how we communicate. All of our conscious thinking and ability to form concepts is dependent on the use of words. Consider for example, concepts or abstractions such as 'city', emotions such as 'love', or descriptions of physical attributes such as 'red'. All of these depend on our ability to use symbolic communication in words. Even when we communicate in images, for example through a painting, we often need words to describe the meaning of the image—consider for example, a piece of abstract art, which requires a title and often an explanation for it to be understood. Humanistic scientists in their desperate attempt to demonstrate that man is no more than an evolved animal, teach some animals, such as apes and dolphins, to communicate in symbols. However, the fundamental differences between animal and human communication will stand forever as evidence that human communication did not evolve from animal grunts. Language is not a finite list of symbols (or even a combination of a few symbols) or a repertoire of warning calls, it is a program for constructing an unlimited number of meaningful sentences. In addition, human children have an innate ability to process complex grammars without any formal instruction and to use words to speak about language-both of which no animal will ever be able to accomplish.

Even though many men deny the existence of a personal and rational God who communicates with his creation, they know how important the ability to communicate is. We see this, for example, in mankind's expectation that we will find extraterrestrial beings who are also communicators. Scientists use radio antennas pointed at space and listen for signals from distant objects that appear to be prepared by rational minds—for example a sequence of binary numbers—rather than noise or repetitive pulses explainable by natural phenomena. It is expected that all intelligent beings will communicate their existence. The search for extraterrestrial intelligence is an irony and a key indicator of the schizophrenia of natural man. On the one hand, he hopes to discover communication from beyond the earth because he thinks he could then declare mankind not to be unique and nothing more than a product of natural processes. Yet, he rejects the truth that communication has actually come from beyond the earth, from the Creator himself.

God's Self-Authenticating Word [January 18] (Gen 1:3)

This verse tells us that God spoke. A question which someone might ask is, how can we know that he spoke, since no one was present to record what he said? The answer is simple; he tells us that he spoke. He also tells us what he spoke and what he did. This is the same answer that a Christian must give if asked how he knows that Jesus lived, died and was raised again, "because the Bible tells me so." A person may then ask how we know that what the Bible says is true. Again, our answer must be, "because the Bible tells me so!"

God told Adam (not Moses, as is often claimed) what he had said and done during the creation week, and Adam recorded this information (Gen 1.1-2.4) as a permanent record for all mankind. This account, along with Adam's personal recollections (Gen 2.5-5.1a), provided the initial word of God delivered to the people who lived before the flood. Later parts of the Bible were delivered by God through prophets and apostles (Dan 9.2; Heb 1.1) and through the God-man Jesus, whose words were recorded by eyewitnesses in the Gospels.

The Bible in its final form, with the revelation about Jesus through his Apostles, is God's true word for mankind. It communicates to us all that God wants us to know, and all that we need to know, about how to find salvation and how to live in a way that will please him. Other writings which people call 'holy books' and claim to be of equal standing with the Bible, are not holy. In many cases what they say is false, blasphemous, and perversely evil—leading men to Hell, not Heaven.

At this point, someone who wishes to challenge a Christian and his beliefs might ask for proof that the Bible is true and that, for example, the *Qur'an* is false. He will accuse the Christian of being irrational and simplistic, and of applying circular reasoning. However, the challenger is mistaken in his reproof of the Christian position, since claiming that the Bible is our ultimate authority for truth is not irrational. Also, while stating that the Bible is self-authenticating is an example of circular reasoning, it is not an invalid or untruthful claim.

It actually makes no sense for a person to ask for proof that the Bible is true. No one can *prove* (or disprove) the Bible's truthfulness—although there are many types of evidence which support its veracity and accuracy—such as the fulfillment of prophecies. The problem is that if someone attempts to prove that the Bible is true he will have to select a system of proof to demonstrate the truthfulness of the Bible. Then, his opponent could ask him to prove that whatever system he had selected was valid. For example, if we subjected the historical statements of the Bible to a test of their historicity by comparing them with non-Biblical accounts of history, we would have to ask how we could prove that the non-Biblical writings are accurate. Any form of proof brought forward to defend a lower level of proof would have to be, in turn, subjected to another, higher, level of proof; and the argument would proceed into an infinite-regress, with no hope of a solution. The Bible cannot be an *ultimate* standard if it is subjected to proof, otherwise whatever standard was used to assess the Bible would have to be considered an ultimate standard.

Each part of the Bible is a true statement of God's declared will, or of what actually happened in space-time history. The Psalmists speaks of the Bible as being true (Ps 119.160). Paul says that all Scripture is breathed out by God (2 Tim 3.16). Peter refers to Paul's writings as Scripture (2 Pt 3.16), and Jesus and the writers of the NT validate the OT by referring to it as the word of God (Mt 4.4; Jn 10.35; 2 Pt 3.5).

It is necessary to apply circular reasoning to validate *all* instances of ultimate authorities. For example, God can swear by no other so he swears by himself (Heb 6.13). Or, consider logic. It is impossible to prove that logic is logical or true—we cannot step outside the system of logic to prove logically that the laws of logic are true. Yet, if the laws of logic did not exist or weren't consistent, we couldn't make any arguments. Since we can make rational arguments using logic, the laws of logic must exist and they must be true. Logic authenticates its own existence. Similarly, you cannot prove that mathematics is true, without assuming it is true. Logic and mathematics are ultimate self-authenticating systems because they are derived from the mind of the self-existent God. The 17th-century German mathematician and philosopher Leibniz, wrote in the margin of a printed copy of his own essay *Dialogues*, a short sentence: "When God calculates and thinks things through, the world is made."

Someone might still demand that we prove that the Bible is true, otherwise he is unwilling to accept the claim that it is true, and that other writings, such as the *Qur'an*, are false. The best way to answer this demand is to suggest that the person read the Bible, and that while reading it he ask God to open his heart and mind to hear the truth of the Bible. All men know, in the deep crevasses of their hearts, even if they won't admit it consciously, that there is a God. And when they read the Bible, they know that they are hearing from the living God, even if they strenuously deny it to be his word. When men read the Bible, they encounter God and his self-authenticating word. Two of our ultimate presuppositions must be that there is a God and that the Bible is his perfect word. All men know that these things are true!

Creation of Light [January 19] (Gen 1:3)

God called light into existence as his concluding act of the first day of creation. Thus, the things he created at the beginning were the heavens and earth, and then light. If we list them in another form we find that God created space, time, energy and matter on the first day. These are the basic building blocks of everything that we know of in our physical temporal-spatial existence—i.e., that are perceived by our senses or by our measuring devices. Scientists refer to these four constituents of the universe by the acronym STEM and claim that space-time is a property of energy-matter. They also claim that if there is no energy-matter there can be no space-time and that STEM came into existence from a singularity (with or without dimensions, is debated), the origins of which they cannot explain. However, we know the origin of STEM—God created all four, and according to his account they are independent, but correlated entities. We also understand from the remainder of the creation account that he did not leave the initial STEM to unfold (evolve) according to absolute laws of physics. Rather, he continued, over the next five days of creation, commanding into existence discrete components of the universe—so that, in general, "what is seen was not made out of things that are visible" (Heb 11.3). There is absolutely no room in the Biblical account for the 'big bang' theory of origins.

What is light? Light is usually defined as a form of radiant energy in the electromagnetic spectrum that is visible to the organs of sight. Do you find that definition helpful? Probably not. Basically, it defines light in terms of one of its attributes 'colour'—i.e., where it falls on the electromagnetic spectrum. Other attributes of light include brightness (i.e., energy level), and speed (e.g., in a vacuum). Light has properties of both waves and particles (photons in packets called 'quanta') which make it difficult for us to understand what exactly it is. Also, light energy can be transformed into most other forms of energy; for example, into heat energy when it strikes a non-reflective surface, or into electrical energy through photovoltaic cells. No one can define light (or energy) because, at root, it is beyond our comprehension (Job 38.19). Light is ultimately one form of God's energizing the universe. He is moment-by-moment powering the universe by his sustaining thought.

The light which God created on the first day did not emanate from a pre-existing object such as the sun or stars which were created on the fourth day (Gen 1.15-16). God himself was the immediate source of the light (Ps 104.2; Rev 21.23; Rev 22.5). However, we must be careful not to draw faulty conclusions about the nature of light. Light is not God, God is not light, and light is not a part of, or an emanation from, God. Someone might reply and say that John (1 Jn 1.5) says that "God is light". However, John expresses a spiritual truth in the form of a metaphor; he uses light to express the purity and moral brightness of God in contrast to spiritual darkness.

Why did God create light on the first day and not wait until there were plants that would need light or until there was an object to produce light, such as the sun? One reason may be that God deliberately chose to create in the order he did to confound the pantheistic religious beliefs and humanistic naturalistic thinking which he knew would develop later. The sun is not the ultimate source of light (and heat), but merely a light-bearer, so it certainly cannot be the ultimate source of life. Light comes ultimately from God. Therefore, God shows the foolishness of the ancient pagans who worshipped the sun, and of adherents of religions (e.g., Hinduism and Buddhism), or of astrology, today which venerate the sun and claim that it is the 'giver of life' and represents our will to live and our creative life force. It is the height of idolatry and a blasphemy to worship the sun as if it had a will or is a god.

A second reason why God created light before the light-bearing objects may be that he wanted to present a clear challenge to the naturalistic cosmogony which became popular in the 20th century. Most scientists claim that, beyond a reasonable doubt, the universe began from a gravitational singularity which exploded and self-formed into the universe which we now know. In their model the stars, and then the planets, coalesced out of dust. When the stars had formed and fired up they began to give off light. God says, in contrast, that the earth and light were formed before the stars (including our sun). Both of these views cannot be correct—they directly contradict one another. Using a 'framework hypothesis' which posits that God used the six days of creation as a literary or theological framework is merely a spurious attempt to try to fit the Genesis account into the naturalistic model, and a direct denial of the word of God. We will consider the 'framework hypothesis' further, in a later meditation. God presents a clear choice for us, as he did for the people in Elijah's day, either God is God, or Naturalism is god. We must choose whom we will serve. It is the height of a dangerous folly to claim that God's word cannot be accepted as fact.

A third reason why God created the light before the rest of the created order may be that he was providing a spiritual lesson. Light must be separated from darkness before there can be life. Physical life, in a proximate sense, depends on the presence of light. So, in the spiritual realm, the light of the Gospel shatters the darkness. The Spirit brings light into the darkness of the human soul and mind before life can be re-created (2 Cor 4.6).

Variable Speed Light [January 20] (Gen 1:3)

In the 1980s, Barry Setterfield published a number of papers which dealt with the nature of atomic constants and the speed of light. In one, he presented a series of measurements of the speed of light taken over a 300-year period. These measurements showed that apparently the speed of light had declined—from $301,000 \pm 200$ Km/sec in 1675 to 299,792 Km/sec in 1976. He plotted dozens of measurements and they fit a standard decay curve. Assuming that the curve fitting the measured data correlated with physical reality, and extrapolating into the past, the speed of light at the time of the birth of Christ could have been around 392,000 Km/sec, and at the time of the flood around 1,622,000 Km/sec. Prior to that, the decay curve becomes very steep. When Adam was about 60 years old the speed of light may have been around 400,000,000 Km/sec. On the fourth day of creation, when the galaxies and stars were created, the speed of light may have been nearly infinitely fast. If it was, this could provide part of the explanation for how it is possible that light from distant galaxies can be seen on the earth and yet the universe is only about 6,000 years old. See, *The 'Starlight Problem'* [February 11] for other possible solutions to the apparent contradiction between the real age of the universe and the perceived age, based on the calculated distance of galaxies.

After Setterfield published his papers he was soundly ridiculed by physicists from many academic institutions. Their claim was that the speed of light was a *proven* constant and that it was impossible for it to be variable and to have changed through time. One of their arguments was that Einstein's formula for special relativity ($E = mc^2$) precludes a near infinite speed of light (c, in the formula), since the conversion of mass into energy would have created an incredible burst of energy—e.g., lighting a fire would have been equivalent to exploding an atomic bomb. Setterfield was able to provide reasonable explanations for how a near infinite speed of light would not produce a near infinite burst of energy. For example, he presented experimental evidence which showed that the charge-to-mass ratio of the electron has also decreased through time. Thus, mass at rest would have been increasing as the speed of light was decreasing, maintaining a proportionate output when mass is converted to energy. He adequately addressed other challenges, but his answers were largely ignored or dismissed with disdain.

However, the primary reason why most scientists objected to Setterfield's work had little to do with his assessment of the historical data, reporting of experiments, or the accuracy of his calculations. Rather it had everything to do with their desire to maintain their current cosmogony—i.e., a model of how the universe supposedly began. Accepting the idea that the speed of light is not an absolute constant and that light could have travelled more quickly

in in the past, would undermine the generally accepted model of the 'big bang' and an unbounded, inflationary universe. Sadly, many professing Christians also dismissed Setterfield's work. However, as Fred Hoyle, and others, stated in a paper published in *Nature* (1990-08-30), the cosmological model based around a 'big bang' is "subject to many doubts based on observational data". So, rejecting the idea that the speed of light could be variable, to support an inflationary universe model, is not good science—it interprets data to fit a model, rather than letting the data guide the development of a model.

Ironically, over the next 25 years scientists began to consider the idea that the speed of light may not be constant. For example, Joao Magueijo, a physicist at Imperial College in London, published an article in *Scientific American* (2001-01) in which he suggested that the "aura of invincibility" around the cosmic inflation model, may be misguided, and might "conceal a monstrous error". He asked, "Could the presumed constant actually change over time in a big bang universe, as do its temperature and density?" In 2002 a team headed by a well-known physicist, Paul Davies, published a paper in *Nature*, (2002:418) which discussed variability of constants (an oxymoron!) in the context of black holes. In April, 2013 *LiveScience* reported on papers published in the *European Physics Journal*, which postulated that the speed of light might change (speed up or slow down) depending on the presence of 'virtual particles' in the 'vacuum' of space or the number of species of elementary particles that exist in the universe.

Suggestions about variable speed light and variable 'constants', either in the past or under specific current conditions, are generally not accepted by the mainstream science community. However, when these suggestions are made by respected anti-creation scientists they are considered as possibilities. But if a Christian, who accepts a young-universe model, makes the suggestion, even his well-reasoned arguments and supporting evidence are rejected with scorn.

If the speed of light has declined since Adam sinned, this is consistent with:

- Increasing entropy and decay which are now a universal norm (Rom 8.23).
- Research which suggests that other 'constants' (e.g., radioactive decay rates) may have also been variable.
- A universe in which time and mass vary depending on acceleration.

We should consider the possibility that the speed of light is not a constant. We live in a universe, created by the infinitely wise God, about which we know very little. Don't count God short and let small-minded scientists define what God could or could not have done over six days of creation.

The Good Creation [January 21] (Gen 1.4, 10, 12, 18, 21, 25, 31)

God looked at the light that he had created and declared it to be good. Seven times in this chapter God observes his creation and calls it 'good'. With the seventh declaration he says that it was all 'very good'. The Hebrew word translated as 'good' can have multiple meanings in Genesis and the rest of the OT. It can be applied to something that is beautiful or of superior quality as well as to someone who is righteous. It can also mean something that is beneficial. God may be using a *double entendre* when he makes his declaration in this chapter. The creation, when it came from the hand of God, was aesthetically good and morally good (e.g., man and angels).

The existence of goodness implies that a standard exists by which to measure or assess the merits of an entity. You may hear people say things such as, "How could a *good* God allow ...?" When they say this they want to accuse God of evil for decreeing and permitting wickedness or disasters. We won't address the way to answer that type of question in our meditation today, as we have considered it previously, in other places. However, we will note that anyone who raises a question such as this, has stolen the idea of goodness from the Christian worldview. Without God there can be no good; without God we live in an aesthetically neutral and amoral universe. 'Goodness' does not exist in the false religions (an animistic spirit cannot be good or bad, a god of the pagan pantheons is capricious but never good or bad) or in materialistic naturalism (stones and animals cannot be morally good, they can only be

whatever they are). Ultimately the concept of goodness can only come from the Creator of the universe.

Everything that God does is good; he can *only* do good. All of his actions are morally good and all that he creates is beautiful. A good creation can only come from the hand of God. And to the extent that creation is good, it is good because God is good and because God has endowed creation with goodness, not because anything in creation is intrinsically good.

Because the creation, before sin entered the universe, was entirely good, we know that it had an aesthetic goodness—God found it pleasant to look at; the angels would have revelled in its beauty; and Adam and Eve would have been in awe at the majesty of their bodies, the garden, and the animals with which they were provisioned by God. The measure of beauty (aesthetic goodness) is absolute, since it comes from God himself. Mankind, being created in the image of God, has an innate understanding of beauty. Even now, in a post-flood world that is suffering the ravages of sin and decay, we see beauty in the creation. And, we still understand that there are universal standards for beauty. Despite what many today would claim—such as beauty is in the eye of the beholder, that standards of beauty are different in different cultures, or that standards for beauty evolve through time—the definition of beauty is not based on our subjective or learned experience, but in the attributes God incorporated into his creation. We know (innately) that the use of such concepts as symmetry, asymmetric balance, harmony, rhythm, proportion, contrast, complementary colours, and golden ratios, all have a role in producing something that is beautiful. For example, anyone viewing the Rayonnant Rose window in Notre-Dame de Paris, the Venus de Milo in the Louvre, or the Parthenon in Athens would agree that they are beautiful. Similarly, anyone, the world over, listening to Beethoven's 9th Symphony would declare it to be beautiful. We must reject, based on God's declaration that what he created was good, the 20th century's subjective definition of beauty that culminated in postmodernism's antiaesthetics.

The goodness of creation was also found in its moral purity and the absence of decay. At the time of creation the rational creatures (man and angels) were sinless and the physical universe showed no signs of the curse resulting from man's sin. Whether or not this means that there was no entropy in the original created order is debated. Some argue that increasing entropy is the result of sin. Others argue that some entropy would have been necessary or men could not have undertaken any actions—for example, friction that is necessary for walking requires the dissipation of some heat and therefore an increase in entropy. Whatever the state of physics before the sin of Adam, there was no evidence of decay, which was the result of sin.

One consequence of this consideration of the goodness of creation is that the material realm is not intrinsically evil—rather matter is amoral, even if suffering consequences from man's sin. Gnosticism, which teaches that the material world is inherently evil, is an affront to the Creator who declared his world to be good. Of course we know that the physical realm was cursed (Gen 3.17-18) after man's sin and continues to groan under the weight of its decay (Rom 8.22). However, the universe will not always be subject to decay. We have a promise that the salvation wrought by Jesus not only liberates us from sin but will liberate the universe and restore it to a state of goodness— both aesthetically and morally—in the new heavens and earth (2 Pt 3.7-13), in which we will be forever blessed by the light from God (Rev 21.23).

Another consequence of this consideration can be seen from God's looking at his creation and declaring it to be good. We also can be pleased when we look at our creative activities as long as our satisfaction does not become vain.

Separation of Light from Darkness [January 22] (Gen 1.4-5)

How did God separate the light from the darkness? Some commentators suggest that the separation occurred when he named the light and darkness as 'night' and 'day'. However, the two entities already had names—the absence of light was called 'darkness' in verse 2 and the first appearance of light is mentioned in verse 3. So, God had already

distinguished them—the naming of them is not the separation that is mentioned here.

When God created the light, it was likely streaming from himself, as a point source, illuminating the earth. If it didn't come from a point source, but permeated the entire space of the universe, then the darkness would have been eliminated, and there would have been no darkness to separate from the light and to call 'night'. The light shining on the earth from one direction caused the separation of the darkness from the light—one side of the earth was in darkness and the other side was bathed in light. It is probably at this point that God fired-up the rotation of the earth so that every hemisphere of the earth received an equal share of darkness and light. It is earth's rotation that God used to establish the measure of a day's length. Thus, the constantly recurring cycle of darkness and light on any point on the earth produces night and day. This means that the measure of the length of a day does not depend on the presence of the sun, but on one complete rotation of earth. Clearly, the definition of a day, with an 'evening and morning', does not demand the planetary arrangement of our current solar system, as some claim. God established in his action and decree the existence of a 24-hour day—and the completion of the earth's first day.

Since the earth began its existence in darkness, God defined the measure of a day as one cycle of darkness (evening) followed by light (morning or dawn). Each new day began with darkness, continued as the earth rotated into the streaming light, and ended as the earth rotated out of the light. Any point on the equator of the earth, in its original condition (whether or not it had a tilt to its axis), had an equal amount of darkness and light. God explicitly tells us what is to be the definition of a day—darkness followed by light. This ancient definition of a day did not originate with a tribe in the Middle East or with the delivery of the Mosaic Law—although the law follows the creation model (Lev 23.32). Nor do we look to the practices of the Greeks, the Gauls, or the Germans for the origin of a standard to define a day. However, their practice was consistent with the original model established at creation. It was from the Romans that we have received our current definition for the start of day—just after 12:00am. It is ironic that this time should have become the world's standard for the start of the day, since it is called 'midnight' and is clearly in the middle of the night. It is an example of man's desire to overthrow God's standards and to define his own.

Some people have attempted to show that the definition of a day in OT Israel was not standardized with evening as the day's beginning. They point to verses such as Genesis 19.33–34, and claim that sometimes a day began with the morning. However, a plain reading of the text shows that it is not dealing with the time for starting a day but utilizing the same definitions that God established at creation—with the dark hours being called 'night' and the light hours being called 'day'. One of the reasons why many attempt to find an alternate definition for a day in Scripture is because they do not want to accept the idea that Genesis chapter 1 refers to six 24-hour days. We will consider the 24-hour day in our next meditation.

God's act of naming is important since it indicates the existence of the entity being named, contributes to our understanding of the nature of the entity so named, and establishes God's sovereignty over the entity. It is his prerogative to name night and day because he is their Creator. We will see later that Adam is assigned a subordinate authority over the animals, and thus given the right to name them (Gen 2.19) to demonstrate his authority.

The separation of light from darkness is the first of three separations (Gen 1.6, 9) that prepared the earth as man's habitation. God divided time into day and night to establish a pattern for work and rest—some suggest that God undertook his subsequent creation activities only in the daylight hours. The daily pattern for work and rest is paralleled by the weekly pattern for work and rest that God establish by creating for six days and resting on the seventh.

It has also been suggested that the separation of light from darkness provides us with a constant reminder that, in this realm, we are creatures bound by ever-changing time. Even in the perfect state in the garden mankind was shown that there is differentiation and change. In the final state, this separation will take on a new dimension. In Heaven there will be only perfect and perpetual light (Rev 21.25; Rev 22.5), and in Hell there will be only utter darkness (Jude 13). The separation of light from darkness is a fitting way for God to have ended the first day of creation. He honoured the first day of the week with the creation of light and with the separation of light from

darkness. This provided a symbol of what God would do on the first day of the new creation, when Jesus rose from the dead. On that new first day God officially made available the light of truth that shines into the spiritual darkness to separate forever truth from lies, holiness from sin, and corruption from decay.

24-hour Creation Days [January 23] (Gen 1.5)

Almost every paper in a mainstream science journal or article in a newspaper which speaks about the origins of the universe makes the claim that galaxies and stars began to form about 14B years ago, and that the earth is about 4.5B years old. Today, many Christians accept this popular view as if it were a proven fact. Yet, most of these Christians would also claim to believe the creation account as given in Genesis chapter 1, and accept the view that God created everything. They do not believe that there is a contradiction between the long ages proposed by most cosmologists and geologists and the Biblical account. If they are pressed to reconcile the two views, they claim that the long ages can be fit into the six-days of creation by interpreting the word 'day' to mean an indefinite period of many years, rather than as an actual 24-hour period. Therefore, a fundamental question which we need to ask is, how is a 'day' in Genesis chapter 1 to be defined, can it be more than 24 hours?

Each use of the word 'day' in Genesis chapter 1 refers to a 24-hour period (or less, as when it is used for the daylight hours), for the following reasons:

- A 24-hour day is the natural reading of the account. It requires significant complexities to read any other interpretation into the word 'day' in Genesis chapter 1.
- The word 'day' (*yom*) has a few meanings (i.e., 24-hour period, daylight, a period of time such as 'harvest time') in the Hebrew OT, but usually it means a 24-hour period.
- The usage of 'day' in Exodus 20.11, which points to the creation account, clearly assumes that the days of creation were the standard days which make up a week.
- Also, in Exodus 20.11, the plural 'days' is used to speak of the six days of creation. An analysis appears to show that *no* use of 'days' (the plural) in the OT ever means anything other than collections of 24-hour days.
- Each day in Genesis chapter 1 has an evening and a morning; meaning a completed day. Each day is qualified by "evening and morning", which specifically limits and establishes the time frame. About the only way anyone could be more explicit about the length of a day would be to say that it had 24-hours. But the measurement of time in hours was not instituted at creation (our concept of an hour is a man-made construct). To say that a day had an evening and a morning is to state explicitly that each day involved a complete cycle of earth's rotation.
- In *all* instances of the Hebrew word 'day' used with a numerical ordinal adjective (second, third, etc.) elsewhere in the OT, 'day' never means anything other than a 24-hour period. Consistency requires that this usage functions the same way in Genesis chapter 1.
- God established a covenant with the day and the night at creation when he named them. In this covenant he appointed the times for day and night. Their times remained the same until Jeremiah's day (Jer 33.20-21), and continue to remain the same until now. This invariance in the cycle of day and night from the creation of the world until the consummation of all things is a sign of David's and Christ's kingdom.

God carefully defined the term 'day', anticipating future abuses of his word.

The 24-hour day view is often criticized as being anti-intellectual. People who believe that God created in six 24hour days are accused of being unscientific and classed with flat-earthers. However, this says more about the people who are critical of Genesis than about those who accept Genesis chapter 1 as a straightforward account of what God actually did. Non-believers (non-Christians) ridicule any part of God's teaching, so disbelief in the six 24-hour days of creation is not any different from disbelief in any miracle, including the incarnation or the resurrection. They often claim that the belief in six-day creation contradicts the fact that the universe is very old and ignores the consensus on cosmogony that exists in the scientific community. However, their posturing is nothing more than bluff. They base their views of an ancient universe on unproven, and unprovable, theories; and they interpret the data through their God-rejecting presuppositions. They demand that Christians abandon the clear word of God for the inventions of their minds. But we reject every conclusion which contradicts what God says in Scripture.

The view that the word 'day' in Genesis chapter 1 means a 24-hour (or less) period has been the standard and overwhelming majority position of the Church for the past 2,000 years. It has only been in the last 200 years that the idea arose that a 'day' in Genesis chapter 1 could be anything other than a normal 24-hour day, or the period of daylight hours. While we take our final authority from Scripture, we also are guided by the interpretations of our wise Christian forefathers such as John Calvin, John Owen, and the men who authored the *Westminster Confession of Faith*. They all held to the view that the creation days were 24-hour days. This is not because the supposed ancient age of the universe is a new concept and they were ignorant of the idea. Most of the ancient religions and philosophies held the view that the universe was either eternal or very ancient. Nothing has changed about this view, except that today it is draped in fancy formulas which are supposed to impress us. The real change has occurred within the Church; which has been fooled into thinking that modern theories of the earth's origins are more accurate than pagan myths. The Church has been cowed by the mystic cult of scientism and has lost its conviction that the word of God must have precedence over the teachings of men.

Non-Historical Views of the Six Days of Creation [January 24]

(Gen 1.5, 8, 13, 19, 23, 31)

In the previous meditation we demonstrated that the days of creation in Genesis chapter 1 are actual 24-hour days. Therefore, since God created over a six-day period we are confronted with a contradiction between the popular view (that the universe and our sun are billions of years old) and the Biblical account. The Bible states that the earth was created on the first day, plants on the third day, but the sun on the fourth day. Various attempts have been made to provide an explanation which allows for the creation account to be correct but also for the universe to be much older than about 6,000 years.

Suggestions for how we are supposed to interpret Genesis chapter 1, in a non-literal manner, fall into two broad classes, harmonizing views which try to harmonize the theories of 'science' and the Bible, and non-harmonizing views which claim that Genesis chapter 1 is not meant to be harmonized with science, but rather it is a literary arrangement used to communicate theology. Examples of these alternate views include:

- *Day-Age*: Each day covered a long time (many thousands, millions, or billions of years) to allow natural evolutionary processes to develop. This view has to resort to complex explanations such as overlapping ages (e.g., to account for the fact that insects are needed to pollinate plants; and some birds or mammals eat only insects), and that the sun existed, but only became *visible* on the fourth day. Also the Bible does not allow for the belief that birds (5th day) evolved from reptiles (6th day).
- *Gaps*: The days themselves were the days of creation, in which God created with bursts of activity. Long gaps exist between the days. Between the days God allowed nature to unfold on its own. The primary gap is between day 1 and the rest of the 'week'—to provide for an old universe. This view has similar problems to the Day-Age view.
- *Expanding/Slowing Time*: Time moved faster/slower in the past. In the first few days many events transpired in a day, giving the appearance of age. What today would take a million years would have, in the week of creation, taken only a few hours. This view contradicts the careful wording of Genesis chapter 1, teaching that the days of creation were normal days.
- *Literary Framework*: The creation week is a metaphor with the various acts of creation grouped topically. A key point in this view is that a ruler is created in the latter three days for each domain created in the first three days. This view is entirely conjectural since nothing in the text indicates that sea creatures or birds were intended to rule anything, light is not a domain, and the luminaries (4th day) are associated with the expanse (2nd day). Also, man was commissioned explicitly to rule over the land animals, created the same day (6th), and over the fish and birds created the previous day.
- *Poetry*: The Genesis account is poetry not history. No structural evidence in the Hebrew supports this view. To the contrary, Genesis chapter 1 has the linguistic attributes of narrative not poetry. For example, there is no use

of parallelism between a first and second clause, as in Hebrew poetry. Also the ratio of verbal forms is on the extreme end of narrative, far distant from the Hebrew poetic form. While the Genesis chapter 1 account is majestic, it is an historical account, not poetry.

- Analogical Days: The days of creation are God's workdays which are only analogous to our workdays. God created everything but we don't know anything about the sequence or duration of the creation events. The days are *logical* not literal *chronological* days. This view is contradicted by the use of the *waw*-consecutive ('And God said ...'') which indicates a temporal sequence of events. Also, this view inverts what God says. The Genesis account isn't structured around our week. Rather, our week is structured around what God actually did during the creation week. This is why we are to remember to keep the Sabbath day—God established it.
- *Days of Revelation or Divine Fiat*: God isn't communicating what actually happened. Rather the account of creation is an account of the sequence in which God *revealed* what he had done. The account gives no evidence of such an idea, but rather communicates clearly that it is recounting what God actually *did*.
- *Eden-Only*: The creation account deals only with the formation of the Garden of Eden. This view contradicts the explicit statements in Genesis chapter 1, that God formed the universe and world as a habitation for mankind.
- *Focus on Palestine/Temple*: The days are speaking figuratively of the formation of Palestine or the temple, from a Hebrew viewpoint, and do not speak of the creation of the world. However, Moses didn't write the creation account, although he did include it in the Pentateuch. Genesis chapter 1 was written before the flood and handed down through the patriarchs. The promise of a Jewish national homeland did not yet exist.

Each of these views has gained support in the Church only since naturalistic theories of cosmology, geology and evolution arose after 1800 AD. They are all feeble attempts to undermine God's word and conform to the evershifting teachings of men. They are all attempts to cling to Biblical authority while denying the plain-sense of the Bible's teaching. They all undermine our view of the rest of Scripture. If God's straightforward word about how he created, in six 24-hour days, is open to question, then the Ten Commandments can be treated as metaphor. The next, logical conclusion is that the virgin conception and the resurrection are merely myths with moral agendas and are not fact.

"For Six Days God Created" [January 25] (Gen 1.5, 8, 13, 19, 23, 31)

In the previous meditation we noted that numerous non-historical views have been proposed for explaining the six days of creation. The fact that people have to resort to these alternate theories, and none of them is easy to defend, provides an indirect indication that the straightforward historical reading of the text is the correct one. In addition, there are a number of reasons which show that God created the universe over a six-day period of 24-hour days.

There is nothing in the text of Genesis chapter 1 that suggests that it should be read as anything other than a literal historical account. For example, it contains no rhythms of Hebrew poetry or synonymous parallels; but rather has the usual characteristics we would expect to find in an historical narrative. There is nothing in the form of metaphor or hyperbole in the text. Also the narrative of Genesis chapter 1 flows into the following chapters to provide a continuous historical account, with the characters of Genesis 1-11 (from Adam to Noah and his descendants) being presented as people of flesh and blood. The narrative style of Genesis chapter 1 is a record of events as they actually happened, not a record of mythical suppositions or vague suggestions. If Genesis chapter 1 was not meant to be taken as a literal account, why was it written that way?

The progression of events in Genesis chapter 1 is too plain not to be accepted as an ordered sequence. If the account is not chronological why did the author choose an evidently chronological framework to communicate something that is not chronological? It was not, as some suggest, an after-the-fact structuring of the story by a tribe of wandering shepherds to align with their mythology. Rather the account of Genesis chapter 1 presents an historical chronology.

Key linguistic factors also indicate that the account is to be understood as historical. First, the use of a special Hebrew construct implies a consecutive temporal sequence of events. The *waw*-consecutive imperfect ("*And* God said ...") introducing each new day indicates chronology. The *waw*-consecutive also terminates each day ("... *and* there was evening and then there was morning ...") and reinforces the fact that the account is recording a literal chronology. Second, the use of the cardinal ("first") and ordinals ("second" through "sixth") to number the days of creation demands a sequential reading and indicates that a chronological sequence is being presented. A similar construction appears in Numbers 7.12-83 and Numbers 29.12-38. In these passages there is no doubt that the days represent sequential 24-hour days.

God did not require long ages to establish by 'natural' processes the order of his universe. Nor was it necessary for him to create over six days, as if he became tired after each day's work and had to rest until the next day. He could have created everything in one instant, but he chose to create over a six-day period to establish the pattern for man of a week of six days of work followed by a day of rest. He refers to this pattern in the fourth command (Ex 20.11; see also Ex 31.17) when he delivers the Ten Commandments and tells the Israelites to remember the Sabbath established at the time of creation. We should note that the text (Ex 20.11) actually reads "*for six days* the Lord made the heavens and earth". The 'in' is not in the Hebrew text (Ex 31.17 also does not have the 'in'). This indicates how long God took to create—i.e., "during six days".

The overwhelming view of the Church for the past 2,000 years has been that God created everything during a period of six days, about 4,000 years before the incarnation of Jesus. It has only been within the past 200 years that Christian writers began to interpret Genesis chapter 1 to accommodate the long ages proposed by evolutionary cosmology and biology. They were influenced first by the writings of men such as Voltaire and Rousseau. For example, Jacob Vernet (1698-1789) a French/Swiss pastor questioned orthodox doctrines after correspondence with Voltaire and Rousseau and through his reading the writings of the French *philosophes*. His suggestion that the Genesis chapter 1 account could be rationalized with long ages was accepted more widely in the 19th century by others who were influenced by the writings of Hugh Miller (1802–1856) a Scottish geologist who attempted to rationalize the Genesis account with a uniformitarian geological model and argued that the flood was only local.

However, it is impossible to align Genesis chapter 1 with the evolutionary models proposed by cosmologists and biologists. For example, earth was created (1st day) before the stars and planets (4th day), but according to naturalistic models the earth is less than half the age of the stars. Plants (3rd day) were created before the sun (4th day), and birds (5th day) were created before land animals (6th day). Evolutionary theories of the origin of life and species require the presence of the sun before plants could come into existence and claim that birds evolved from reptiles. It is possible, in theory, that both the Biblical account and the evolutionary models are incorrect. But, both the Biblical account and the evolutionary models are essentially correct. This is why many in the Church have attempted to create explanations for interpreting Genesis chapter 1 in ways other than as an accurate statement of history. Taking God at his word, we must declare the evolutionary models to be false and the Biblical account to be an explicitly accurate statement of history.

Counting and Mathematics – From the Mind of God [January 26]

(Gen 1.5, 8, 13, 19, 23, 31; Gen 2.2)

The enumeration of the days of the creative week in Genesis chapters 1 and 2 (Gen 1.5, 8, 13, 19, 23, 31; Gen 2.2) may appear to be rather routine. After all, we count from our earliest days—a child counts the number of days until his or her birthday. Some writers have observed that the use of the ordinal adjective ("second", "third", etc.) with the word 'day' indicates that God is speaking of standard 24-hour days, and that the use of the cardinal ("first") and ordinals to number the days of creation demands a sequential chronological reading of the text. However, while this is true, they often fail to observe that the use of the ordinals indicates that the enumeration of the creation days is of fundamental importance.

Another use of a fundamental mathematical concept in Genesis chapter 1, is the inclusion of entities in sets (e.g., six days of creative activity and "two great lights" [Gen 1.16]). Sets are based on the abstract concept that assumes the existence of universals and not merely particulars by which each entity is viewed as independent from all others. A universal is the grouping of instances by their consistent characteristics or qualities. For example, when God later spoke to Adam and told him that he could eat from every tree in the garden, but one (Gen 2.16-17), he used a universal to describe a set and Adam understood the concept to include grapes from vines, berries from bushes, and pears and nuts from trees. Universals are usually grouped into three classes: types or kinds (e.g., boats, birds, or chairs), properties (e.g., heavy, big, or small), and relations (e.g., parent, higher, colder). Since we use universals all the time, we may not understand an inherent difficulty with their existence. The *problem of universals* has perplexed philosophers from the earliest days. The challenge is how to account for their existence: Are they real? Do they exist independent of particulars? Can they exist if the universe is merely the product of random events in a material universe? Are they purely constructs of language?

The correspondence between abstractions—mathematical concepts such as ordinal counting and sets—and phenomena in nature is difficult for materialistic naturalists to explain. If mathematics is purely an invention of human minds, then it is a challenge to explain the correspondence between a mathematical equation and what happens in the natural realm. For example, vocal and instrumental sounds in a musical presentation can be represented in mathematical terms, stored in digital form (zeros and ones), and reproduced again in analog form as puffs of air with high fidelity, using computer chips called digital signal processors.

Cornelius Van Til, a theologian and philosopher, said, "Unbelievers can very well count, but they cannot account for counting." What he meant was that they can use the mechanics of mathematics without being able to explain what counting is or provide a logically consistent reason for why mathematics works, particularly when applied to natural systems. The problem is that their worldview claims that the universe came into existence by chance and has no non-material dimension (e.g., human spirits). The fact that materialistic naturalists count and use complex mathematics to accomplish amazing things illustrates that they live in practical terms as if there is a God behind the universe, while denying his existence (Rom 1.18).

The efficacy of mathematics is astounding. With calculations men and women guided the Apollo missions to the moon, can triangulate on signals generated by 'black' boxes to find a lost airplane at the bottom of the ocean, and can synchronize computers 20,000 kilometers apart so that they receive e-mail messages correctly. A materialistic naturalist cannot explain *why* pure abstractions—e.g., trigonometric equations can have such an effect on the physical universe, any more than they can explain how mind can control matter in the mind-brain-body system; or how, in their view, matter could have spontaneously spawned consciousness.

The existence of counting and mathematics is evidence that the universe was created by an intelligent designer the God of the Bible. The fact that 2 + 2 *always* equals 4, everywhere in the universe through all time, is not a chance occurrence nor an artifact of a self-organizing universe. The laws of mathematics (e.g., commutative, associative, and distributive) come from God's mind. Mathematics is one form of God's thought—others include, descriptive (Gen 1.1-31), naming (Gen 1:5), animating (Gen 2.7), visualizing (Ex 25.40; Ex 26.30), and logical (Is 1.18). The laws of mathematics exist in God's mind and were not affected by the fall of man into sin. The laws of mathematics are therefore perfect (Ps 19.7) and can be derived without error. Of course, this does not mean that accountants and engineers (and others), affected by the curse (Gen 3.17-19), will always perform their arithmetic calculations without error. We can count and perform mathematical calculations because we are image-bearers of God (Gen 1.26-27) and think God's thoughts after him.

The Creation Account Referenced in the Rest of the Bible [January 27]

(Gen 1.1-31)

The rest of the Bible supports the fact that Genesis chapter 1 presents an explicitly accurate historical account. We will review a few sample passages from different parts of the Bible which reference this chapter and derive

significant implications from our consideration of these passages:

- The Sabbath command in Exodus 20.11 (Ex 31.17) patterns man's workweek after God's original workweek. It is necessary that the creation week consisted of six 24-hour days or man could not be held accountable for working six days and resting on a seventh. Also, it would be a lie for God to tell Moses and the Jews that he had worked six days and rested from creating on the seventh day, but had not actually done so.
- The sequence of the creation week is reiterated in Psalm 104.1-35 (day 1: verse 2a; 2: 2b, 3; 3: 5-18; 4: 19-23; 5: 24-26). Although this Psalm presents the creation events in poetical form, it assumes that Genesis chapter 1 is to be understood as a literal, chronological, account of creation.
- Christ placed man's creation temporally close to the other events in the creation week when he said, "from the beginning of creation, 'God made them male and female'" (Mt 19.4; Mk 10.6). If the universe were actually 14 billion years old, then man's presence in the universe would represent at most .001% of the time the universe has been in existence. The words of Jesus don't make any sense if man came into existence billions of years after the beginning. Who will accuse Jesus, the God-man, of being naïve about when mankind was created or, worse, accuse him of lying?
- The New Testament Church (Acts 4.24) praises God as the Creator.
- When Paul spoke before the Athenian council he informed them that God created the world and everything in it; and that all mankind is descended from a single man—Adam (Acts 17.24, 26).
- Paul, in 2 Corinthians 4.6, accepts the fact that God created light by a word of command.
- Paul also tells us that man was created before woman: "For Adam was formed first, then Eve." (1 Tim 2.13) This does not support the idea that man evolved from some ape-like creature into which God breathed a human spirit.
- Hebrews 11.3 treats acceptance of Genesis chapter 1 as an object of faith: "By faith we understand that the universe was formed at God's command, so that what is seen was not made out of what was visible." Notice that this verse informs us that the universe was created from nothing except by the word of command from God. Therefore, the universe cannot be infinite or eternal. The fact that it was created by a command indicates that the universe is the product of an intelligent agent. There is no room for some form of deism or the idea that the universe is an emanation from God. Also, this verse tells us that the different kinds of animals were created uniquely and did not evolve from other kinds. Any form of evolution which would cross the boundary of kinds is excluded.
- James (James 3.9) reminds us that we were created in God's image, as God said he would do (Gen 1.26).
- Peter (2 Pt 3.5) reminds us that sceptics in the last days (our era) will deliberately forget (suppress the truth) that God created the earth out of water. Peter accepts the fact that the land (3rd day) was created out of the initial ball of water, or out of the globe which was covered entirely with water.
- Both the OT¹ and the NT² contain numerous other references to the creation account in Genesis chapter 1. All of these references assume that the Genesis account is representing history accurately.

These references require that we dismiss any notion that the account is merely a theological construct, a metaphor for faith, or a simplistic account written for a primitive audience. Anyone who does not accept Genesis chapter 1 as a record of what actually happened during an actual six-day period, is guilty of:

- 1. *Rejecting the straightforward word of God.* All of Genesis, including chapter 1, is written as an historical account, and must be interpreted in accord with a straightforward reading of the text.
- 2. *Calling the Holy Spirit, a liar.* The Holy Spirit, who hovered over the waters on the first day of creation, knows exactly what happened during the six days of creation. As the ultimate author of all Scripture, we would expect him to communicate elsewhere in Scripture a consistent message.
- 3. *Calling Jesus and the Apostles liars*. Jesus and the writers of the NT accepted the account as historical and based their arguments on its historicity. They were not fooled by an ancient legend, but accepted the account as

¹ E.g.: Job 26.7; Job 35.10; Job 38.4; Ps 8.3; Ps 33.6, 9; Ps 74.16; Ps 89.11; Ps 95.5; Ps 100.3; Ps 102.25; Ps 104.24-26; Ps 136.5-9; Ps 146.6; Ps 148.4-6; Prov 3.19; Prov 8.22-24, 28, 29; Is 37.16; Is 40.26; Is 42.5; Is 44.24; Is 45.7, 18; Is 51.13, 16; Jer 4.23; Jer 10.10-12; Jer 31.35; Jer 32.17; Jer 33.20, 25; Jer 51.15; Zech 12.1.

² E.g.: Acts 14.15; Rom 1.19, 20; 1 Cor 8.6; 1 Cor 11.8, 9; Col 1.16, 17; 1 Tim 4.4; Heb 1.2; Rev 4.11; Rev 10.6; Rev 14.7.

history.

4. *Undermining the truthfulness of all of Scripture*. If Genesis chapter 1 is not accepted as an accurate statement of history, as the Bible claims it to be, then there can be no valid or consistent reason for claiming that the rest of the Bible is accurate. When Genesis chapter 1 is relegated to the realm of legend or myth, the rest of the Bible will soon be also.

These are sober charges to be considered by all who refuse to accept the truth that God created the universe in six 24-hour days, about 6,000 years ago.

The Creation of the Atmosphere [January 28] (Gen 1.6-8)

As with much of the account in Genesis chapter 1, there is considerable speculation about the meaning of this passage. A common misinterpretation is that the expanse that God created must be understood in the context of a scientifically naïve belief about the nature of the universe. It is stated by many, particularly among those whom we would call *liberals*, that the ancient Hebrews were influenced by their Egyptian background and Babylonian contemporaries and that they believed that the expanse was a solid half-dome in which the stars were placed (Gen 1.14). They argue that the meaning of the Hebrew word that is translated as 'expanse' (ESV), means 'dome', 'vault' or 'hammered out metal plate' (Job 37.18; Ezk 1.22-26). Because earth is not actually surrounded by a solid dome, these commentators conclude that Hebrew cosmology, and thus the Bible, is nothing more than a myth.

There are many reasons why this interpretation is fallacious, including:

- This account was not composed by Moses, or by a later Jewish prophet or priest. It was communicated by God and written down by Adam; and eventually handed down to Moses, who included it as he wrote Genesis. So, it could not have been influenced by any postdiluvian mythologies or cosmologies from religions contemporary with Moses. If the Egyptian and Babylonian myths include a solid dome above earth, it is their cosmologies that are wrong not the Bible.
- The meaning of the word translated 'expanse' may be from a root word that has the meaning (from its verbal form) of 'to spread out', as in Isaiah 42.5. Even if the word could mean a 'solid vault', this does not exclude it from also meaning an 'airy expanse'. In English we have words, such as, 'cleave' or 'bill', which can have multiple meanings, even opposite ones. In the ESV the word 'fortunate' is used, at times, instead of 'blessed' or 'happy'; but it clearly is not to be understood as having anything to do with the Roman goddess Fortuna. Likewise, there is no need to force the word that is translated as 'expanse' to have a meaning that is derived from ancient mythology.
- We must interpret the meaning of the word from God's perspective. Since God knew that the expanse was not a solid dome, the word cannot mean a 'solid dome', or similar, when used in Genesis 1.6.

The traditional interpretation of this section is that it is recounting the creation of earth's atmosphere and the establishment of the hydrological cycle with clouds being placed in the sky (or heavens). Some interpreters suggest that this cannot be the interpretation since the expanse separates waters that are above from ones below and that the clouds are *in* the expanse, not *above* it. They have also argued that it cannot be the domain of the clouds which is under consideration, since the stars are placed in the same expanse (Gen 1.14). Some have suggested that the water above the expanse was a large quantity of water that was separated from a massive original watery earth and then was rapidly spread out as the source material from which God created the galaxies and stars throughout the universe. This implies that the galaxies and stars were not original creations but were created from pre-existing material, contrary to what God says (Heb 11.3). Others have suggested that God created a vast reservoir of water above the atmosphere that later burst open during the flood. This idea has some serious challenges, including the fact that the water would have blocked visibility of the stars and would have also caused the earth to become extremely hot. Also, it is difficult to explain how the water (as distinct from vapour) would have stayed aloft.

The most straightforward way to read this passage is to understand it as speaking from a human observer's

perspective. The atmosphere separates the waters covering the earth (no dry land had yet been created) from the waters in the clouds above—i.e., in the sky. We see the clouds in the sky and we also see the stars in the sky—for example, we say that the stars are in the 'night sky'. We know that the stars are not actually *in* our atmosphere and yet they appear in the sky. God did not create space on the second day, it had already been created on the first day. When he created the stars on the fourth day they appeared in our sky. The water in the clouds is stored up in the heavens and is above the heavens (Ps 148.4)—i.e., above the atmospheric expanse—and rains on the earth (Gen 7.11; Gen 8.2; Ps 78.23).

God informs us of the creation of the atmosphere and the establishment of the hydrological cycle in order to:

- *Proclaim* God demonstrates his power and declares that he is in control of the formless waters and sets their boundaries (Job 38.8-11; Ps 33.6-7).
- *Position* God shows that he was continuing to make earth habitable for man—the pinnacle of his creation. The atmosphere, with water vapour, is essential for sustaining life. It provides for the breath of life and the fresh water we need daily. There are many other ways that the atmosphere is important (e.g., stopping excessive radiation from the sun) but we won't consider them at this time.
- *Prevent* God anticipates pagan religions that would make the sky, air, and rain into gods—for example the Sumerians had Anu the sky god, and Enlil the air god; and the Babylonians had Baal, the god of the storm. God dismisses these superstitions by showing that the objects created on the second day are mere created entities.

The Creation of the Land [January 29]

(Gen 1.9-10)

On the third day of creation, God continued to prepare earth as a home for mankind. First, he established the landmass on which man would dwell.



There is considerable evidence that the landmasses of our current world were previously combined into a single continent. Geologists refer to this super-continent as either Rodinia or Pangaea. Some of the observable evidence for the existence of a single continent include matching geological trends on the east coast of South America and the west coast of Africa; continuity of older mountain chains—for example the Appalachian Mountains appear to extend from the US to Greenland, the Caledonides of Ireland and Britain, and into Scandinavia; the presence of similar fossil strata in distant continents which could have been adjacent when the fossils formed; the alignment of magnetic rocks, which would have obtained their properties when formed but are now in different orientations in their current continental positions; and the way in which the current continental plates appear to fit together as if jigsaw pieces.

Of course, the observed facts about our environment are assessed through interpretive filters, or worldviews. Most geologists claim that Pangaea existed millions of years ago. However, we do not

have to agree with their long-ages view to accept the pre-flood existence of a single land mass, since it fits the Bible's account of creation.

When the earth was created, it may have been a rocky-metallic sphere covered by a shallow sea. God pulled out of the water a continent on which plants, animals, and men would be placed. The existence of a single continent in the pre-flood period not only fits the evidence discovered by geologists, but also is supported by other considerations

from the Bible. For example, one of the criticisms that is often levelled against the Creationist's belief in a worldwide flood is that unique animals in Australia or South America would not have been able to come to Noah to enter the ark. However, with the existence of a single landmass, this objection is silenced.

This single continent had mountains (Gen 7.9) and thus river valleys; although the mountains were probably much lower than the tallest mountains today, which were formed after the flood. We can estimate the maximum height of the antediluvian mountains to be roughly 2Km (Mt. Everest is 8.9Km high), if the original seas had an average depth of .5Km (today, the oceans have an average depth of 3.8Km [we will address the question of where all the extra water came from, when we study Genesis chapter 7]). At the heart of the continent, probably on a plateau near the highest point, God placed the Garden of Eden. From this high point four rivers flowed out across the continent (Gen 2.10). The entire continent would likely have been covered with lush vegetation (Gen 1.11).

Many Christian scientists and theologians have accepted the naturalistic myth that the earth is billions of years old and conclude that a single continent of 'Pangaea' could not have been the original land mass that God created on the third day. They have also fallen for another myth—that Noah's flood was only a local flood. So, they refer to seasonal rains and periods of drought and flooding before Noah's flood, as if the pre-flood people lived in the Middle East. However, as we will see, the Bible says that the flood was a worldwide cataclysm of extraordinary proportions. Near the end of the flood, the original continent was broken up and the geography of the earth was radically changed.

When God created the dry land it did not remain a mere rocky outcrop rising above the sea for millennia. On the third day, God created the plants that covered the earth. So, the original continent must have been created with a fully developed layer of soil in which God could place large plants. This is an important consideration since it indicates that each day's creative activities resulted in entities which *appeared* as if they had developed through a process. Under today's conditions it can take years or decades for soil to form. But God created the original soil instantaneously. When we understand that God created 'mature' entities such as soil, trees with fruit and seeds, animals which could fend for themselves, and man as an adult, it will help us to deal with the 'starlight problem' raised by people who claim that the universe must be very old because stars are millions of light years away.

God did not end the second day's activities with the declaration that "it was good" (Gen 1.8). It appears that he was waiting until he had completed three actions of separation—light from dark, the waters above and below the expanse, and the land from the seas—to declare it all to be good (Gen 1.10), as a fit habitation for living entities which he would now begin to create.

The Creation of Plants [January 30] (Gen 1.11-13)

As God continued to prepare the earth for mankind, he created the first forms of the earth's living entities—plants. Generally, we think of something as being alive if it has processes for metabolism, maintaining homeostasis, growth, stimuli response, signaling (communication), and reproduction. However, this is only a rough definition since God is alive (Ps 42.2; Jn 6.57) and most aspects of our understanding of 'life' apply only to biological life. In addition, we need to distinguish between different types of biological life. Plants, while having the characteristics of life, and being composed of the same organic building blocks, do not have the same *form* of life as either animals or man. In the creation account, God refers to animals as 'living creatures' (Gen 1.20-21, 24), but not plants. This is an important distinction for two reasons:

- Biological life does not form a continuum including plants, animals, and man; with all having the same kind of existence. Animals and man did not evolve from some primitive plant-like multicellular organism.
- Biological decomposition (e.g., of an extracted dandelion in a compost pile) is not *death*—plants can wither (Ps 37.2) but they do not die. Biological decomposition is similar to the clouds giving up their water vapour. So, when Adam or animals ate a tomato in the original perfect world they were not killing anything. The death that man introduced into the world after eating the forbidden fruit is not mere biological decomposition.

Even though plants are not alive in the way either animals or man are alive, the empty and sterile earth began to be filled with life when God commanded the plants to sprout from the earth. The earth did not of itself contain the seeds of life. The origin of the complex information coded in DNA molecules did not arise spontaneously on an inorganic scaffolding (such as in clay) and, over millions of years, develop into its present forms; but was introduced explicitly and instantaneously by the intelligent Designer of the universe.

These verses inform us that God created three major classes of vegetation—grasses, plants, and trees. Within these major divisions, God created various subdivisions which are referred to in the account as 'kinds'. A Biblical kind is not equivalent to our modern species, but may be equivalent to our concept of genus or family. At the time of creation, a kind would have had a broad spectrum of genetic diversity, which could produce a plethora of different descendants (think, for example, of the variety seen among orchids). Prior to the flood, the original genetic pool of each kind would likely have remained fairly diverse across the entire population because of constant genetic mixing within the kinds on the single pre-flood continent. The same thing would have occurred among the animal kinds; and at the time of the flood representatives of each animal kind came to Noah for preservation on the ark. However, after the flood, small populations of the kinds would have become isolated from one another—due to separation caused by the ice age glaciers and movement of the continental plates—lost genetic diversity, and formed into clusters along the lines of the species we know of today.

God's creation of kinds, with deep genetic diversity, speaks to his organizing power and the magnificence of his creative work. This diversity allowed for a great adaptability within the kinds, which could populate different niches in a variety of climatic and geographic zones. It also demonstrates that God did not create a merely utilitarian world. He created plant (and animal) life which could take on a multitude of forms, contributing to the variety, beauty, and goodness of his creation. However, each kind had its own base DNA, "yielding seed according to their own kinds" (Gen 1.12), which indicates that God prescribed boundaries for each unique kind. This means that one kind did not evolve from another—like produces like—and that cross-kind hybridization is not possible naturally, and is likely prohibited by God (Lev 19.19 may speak to this), indicating that it is morally wrong for men to breed cross-kind chimera. It also means that intermediates between kinds never existed and that intermediate fossils—the desperately sought 'missing links'—do not exist and will always be missing.

When the plants first appeared they were fully mature and functioning. For example, God created "trees bearing fruit in which is their seed" (*not* "fruit-bearing trees"). This means that the animals and man, which would appear on the earth three days later, would have food available to sustain them (Gen 1.29-30). God did not deceive mankind by instantaneously making plants that appeared to have developed by a natural process; he tells us what he did. The process of creation was the result of a self-sufficient, first cause—God acting directly. God now uses primarily intermediate and secondary causes to sustain what he has created. However, he is the ultimate cause of plant growth (Ps 104.14; Ps 147.8). The distinction between his creative work and his providential governing work can be seen by analogy in the difference between the work involved in building a subway system and the work required to operate it—different types of work and different processes.

God may have deliberately created the plants before the sun could produce light to support their growth and insects existed to pollinate them, in order to demonstrate the foolishness of people who claim that the existence of vegetation and its reproductive processes are ultimately dependent on natural entities (e.g., the sun), or who attempt to create a synthesis between the evolutionary model and the Biblical account.

In the Beginning was Information [January 31] (Gen 1.11-12)

John tells us that, "In the beginning was the Word, and the Word was with God, and the Word was God." Of course, he is referring to Jesus as the living Word. However, his choice of the Greek word *logos* as a name for Jesus tells us that information (words) is a key attribute of God—although information is not God, God is characterized by the

existence of information. Knowledge, intelligence, and omniscience cannot exist without information. Thus, we can infer that God's information existed eternally since it is an essential attribute of his nature. In addition, communication cannot occur without the pre-existence of information. In these verses we read that God said, "Let the earth sprout vegetation..." Since what God said was not a meaningless jumble of sounds, but rather something intelligible, he was communicating information. Therefore, before God could speak information had to exist in his mind.

God is spirit (Jn 4.24) and information exists in his mind. Therefore, information must be an attribute of a spiritual being rather than an inherent property of matter. Of course, information can be stored in material objects such as a book or a USB data stick. But the ink and electronic bits are not information. They are deliberately prepared arrangements of atoms which can be interpreted by intelligent minds to derive information. Since information is not a property of matter, material processes cannot *create* information. Many proponents of matter can create information. However, they have never been able to demonstrate through an experiment the spontaneous creation of information by material entities. Nor have they provided a testable model to support their assertion. Every attempt to demonstrate the creation of information requires input by an intelligent agent—e.g., computer simulations of life require a program, behaviour rules, and a predefined target which the simulation attempts to reach. Their assertion that matter can create information without intelligence is nothing more than an untested declaration. To the contrary, everything we know about information indicates that it is the product of an intelligent mind.

Information can only exist if it has been created by an intelligent mind. But, even when intelligence exists this does not mean that information is being created—a 'couch potato' may absorb quantities of vapid information and create very little. To create information requires a volitional act on the part of an intelligent agent. For example, an author must decide to write a story or a musician to compose a concerto. Likewise, God willed to eternally create information which he in turn communicated in time—as he spoke life into existence, as in verse 11; and when he produced his revelation in the Bible.

No material process can create information because matter is not alive and does not will to create information. Therefore, a computer cannot create original information, it can only process information, which it has been supplied, by sorting, cataloguing, linking, and storing it; as it applies software algorithms (processes) written by computer programmers (human intelligent agents). Although science fiction stories commonly include instances of artificial intelligence, the concept of a machine spontaneously becoming volitional and creating original information will forever remain mere fiction.

Information can be catalogued at various levels of complexity. The kind of information which is necessary for the existence of life has been called 'complex, specified information' (Dembski) or 'universal information' (Gitt). This form of information is more than just a string of random numbers or a pulse pattern from a binary star. It consists of attributes which indicate that it is not the result of a naturally occurring phenomenon. Its key attributes are:

- 1. The content is (or can be) transmitted, received and stored for later recall.
- 2. The information can be structured with an understandable abstract coding system (e.g., an alphabet, math symbols, pictograms, or binary digits).
- 3. Meaning can be assigned to entities within the coding system, within their context. For example, the word 'blue', composed of three phonemes and four letters, as a concept can refer to a particular light wave, a shade of paint, a discolouration, something profane, a political affiliation, or an emotional response, depending on the context.
- 4. The content provides directions—explicit or implied. For example, if a husband asks his wife to pick up his dry cleaning. She understands not only the meaning in context (e.g., clothes sent to be cleaned), but that she is to stop at a strip-mall on her way home and retrieve his pants.
- 5. It has a purpose. When explicit directions are given, the purpose is often obvious. For example, the Apostle John says that he wrote to his recipients that they might believe in Jesus (1 Jn 5.13). Information is

communicated for a purpose, such as to impress, give direction, provide comfort or curses, or guide a machine to assemble an automobile.

Information necessary for the existence of life is encoded in DNA. It displays all five attributes of complex, specified information. Information is stored in the gamete's nucleus and structured with four nucleotide bases or chemical 'letters' (A, T, C, G) into 20 standard 'words' (amino acids). Each 'word' has a particular meaning when combined into DNA 'sentences'. DNA gives direction, e.g., for RNA transcription; and it has a purpose—to build the next generation cell. We will consider the wonder of DNA in the next meditation.

DNA: Complex, Specified Information [February 1]

(Gen 1.11-12)

In the previous meditation we considered five attributes of complex, specified information, and noted that DNA displays all five of these attributes: (1) The information content is stored in the nucleus of a gamete cell, (2) structured with four nucleotide bases or chemical 'letters' combined into 20 standard 'words' (amino acids). (3) Each word has a particular meaning when structured into DNA 'sentences'. (4) DNA gives direction, e.g., for RNA transcription, and (5) it has a purpose, to build the next generation cell (of the same or a different type). DNA is necessary for the existence of life. Since DNA is complex, specified information, information is therefore necessary for the existence of life. And, since complex, specified information cannot be created by unguided material processes, but is created only by an intelligent, wilful agent, DNA must have been created by an intelligent agent—God.

When Watson and Crick deciphered DNA they discovered that the structure of the information stored within a cell is far more complex than had ever been imagined. In the 60+ years since their discovery, scientists have uncovered layers of complexity in DNA that even Watson and Crick could not have imagined. Let us consider a few of the wonders of DNA that are known today—more are being discovered every year.

- The coding system in DNA is a marvel of optimal design. It consists of four letters—contrasted with computer systems which are built around a binary system (0 and 1) and English which uses 26 letters. These four letters are nucleotides made up of a nitrogen base (thus the reason we add high-nitrogen fertilizer when we want plants to grow more quickly), a phosphate and a sugar. These are combined into twenty standard amino acid three-letter words, with a few additional specialised combinations. These words are then combined into the sentences which make up the genes in the DNA double helix. The DNA three-letter word system has been demonstrated to be the most efficient coding system which could be devised for ensuring high-density storage, simplicity of replication, and minimizing copying errors. It can only be described as being brilliant. This aspect of DNA alone should amaze us. All of the variety of life on the earth can be described with just twenty standard words combined into different sentences. In contrast, barely to begin to describe the precise intricacies of DNA requires hundreds of different English words.
- The storage density of DNA is phenomenal. The amount of information stored in the DNA of a single human cell has been estimated to be the equivalent of 20GB of information in a computer storage system. And, this information is stored in the incredibly small nucleus of the cell. At the same density (about .2GB per 1 μ m³), all the electronic data on the internet would fit in the volume of a single USB data stick!
- DNA replication is very precise. The transcription error rate is about one mismatched nucleotide for every 100,000 copied. However, the DNA copying process has error correction mechanisms. After these are applied, on average, one copying error remains in about one trillion transcriptions. The best human manufacturing processes strive for what is called six-sigma—one error in about 300,000 instances of finished product. DNA transcription is therefore over 3,000 times more accurate than the best manufacturing processes humans have devised.
- Defect correction mechanisms for correcting DNA copying errors are truly amazing. Defects are often caught during replication through 'proofreading'. When an incorrect nucleotide is added to the new strand of DNA, its exposed part can be sensed as being in the wrong position and enzymes replace the out-of-place nucleotide with

the correct one. After replication, mismatch repair processes identify deformities and cut out and replace the offending nucleotides.

- Even when copying errors escape detection and form mutations, they are not always passed on to daughter cells. Cells can sense when they are damaged and can go into an irreversible state of dormancy (senescence) or issue instructions for apoptosis—i.e., they commit 'suicide'.
- The DNA system also contains redundancy, in which biochemical functions are encoded by two or more genes. Thus, if a mutation occurs in one, the fitness of the organism may not be affected.
- DNA not only contains information which guides the exact replication of DNA strands but also has additional layers of information which can reprogram the transcription processes. This metadata controls the threedimensional structure of the double helix and determines which proteins can bond with the DNA strands, thus determining the types of daughter cells (e.g., nerve, muscle, skin) that will be produced. Other aspects of the metadata enable multi-tasking and parallel processing and provide controls to turn on and off particular genes.

To suggest that DNA is the product of a merely random process of self-organizing molecules assembling in a chaotic environment over a billion years, is as absurd as suggesting that a child's balsawood airplane could carry 300 passengers from Toronto to Singapore. To suggest that DNA arose by chance and was not designed by God, is a greater deception perpetrated on an unsuspecting public than Bernie Madoff's Ponzi scheme. When we consider the wonders of DNA we should feel compelled to bow in worshipful awe before the God who created such an amazing coding system of complex, specified information.

The Verdant Earth [February 2] (Gen 1.11-13)

God filled the earth with a great variety of different kinds of vegetation. This variety reflected the glory of his creative mind; provided a diversity of biomes with plants perfectly suited to the pre-flood topographic, geographic, and climatic conditions; and supplied a virtual 'supermarket' of food that was nutritionally balanced to meet the dietary requirements of all the animals and mankind (Gen 1.29-30). These plants would have also supplied for man's other needs such as for building materials (Gen 6.14) and for fire (Gen 4.22) since fossil fuels, resulting from the flood, would not have yet existed.

The pre-flood continent contained mountains (Gen 7.19) and river valleys (Gen 2.10), and likely plains on the coast and at higher altitudes. The continent was probably situated to straddle the equator; and thus did not experience the extremes of the far northern and southern winters, but rather had mild seasonal (Gen 1.14) variation. In addition, the pre-flood world may have had a somewhat different hydrological cycle than we have today. Rains³ would have been more constant, and extremes (drought and storms) were non-existent before man's rebellion; and muted before the flood, compared with the weather extremes of today. Thus, much of the continent could have been covered in a tropical and subtropical lushness which, before the sin of Adam and the curse on the created order (Gen 3.17-18), would have been a beautiful paradise to inhabit. Even after Adam's sin, before the flood, the remnants of that lush paradise were available to the expanding human population.

Fossil evidence shows various kinds of large plants which are no longer found today; or are found in limited, and much smaller, examples. Some of these plant fossils appear to be of a type which does not grow in soil. They appear to have had hollow trunks and roots but grew as large as trees (in the range of 10m tall). Since so many of the remnants of these plants are found in coal seams and in mineralized fossils, it is possible that there were large floating collections of these plants covering portions of the surface of the original shallow sea. These 'rafts' would have had plants which, like lilies, grow in water and float. The 'rafts' would have been similar to what are called quaking bogs today, which can be as thick as .5m and dense enough to walk on.

³ We will address the question of whether there was rain before the flood, when we look at 2.5.

Based on the incredible amount of organic material found in the postdiluvian sedimentary layers (e.g., vast quantities of coal) spread across the globe, it is possible that these pre-flood plant 'rafts' were considerably larger and thicker than any quaking bog is today. These 'rafts' would have provided habitats for other plants and for animals suited to that biome. In the center there could have been soil in which could grow smaller land-based plants. Also, insects, and animals could have lived on the 'rafts'. The fossil evidence shows that a mix of plants and animals lived together before the 'rafts' were broken up by tsunami-force waves and covered by sediment washing off the continents. The striated layers of organic material and non-organic sediment found throughout the world in geological formations supports the catastrophic flood-model, in which waves of currents would have laid down a layer of plants from the 'rafts' as they broke up or washed off the continents, followed by a layer of sediment being eroded off the increasingly higher elevations of the continent as it was being inundated.

If they existed, these large floating plant masses would have contributed to a calming of the pre-flood sea, since there would have been fewer large open areas of water across which wind would have blown to create large waves. This adds to our understanding of the early earth as it came from the hand of the Creator and reinforces our picture of a central continent with a mild climate and an unlimited supply of high quality plant growth to meet every physical need of all men throughout their long lives—even after the effects of the curse on the earth.

God not only created the world as an ideal place for man to inhabit in a sinless state, he also anticipated the needs of mankind throughout history—even after Adam and Eve broke the covenant and after the flood wiped out the excessively sinful original world. We see the foresight and planning of God when he filled the earth with vegetation, and took into account our needs. We are the beneficiaries of this blessing today. For example, the plants which survived the flood are sufficient to provide more than enough food for animals and billions of people. Another example is how he orchestrated events so that the lush vegetation of the original world would be turned into vast quantities of useful fossil fuels—coal, liquid oil, oil in sand and shale, and natural gas—through a destructive flood. Under any model of the earth's formation proposed by materialistic naturalists, it is impossible to account for the vast reserves of these fossil fuels. Their models cannot explain how the large reserves of coal, oil, and natural gas could have been formed under processes which are known today, and how they could still be available today—e.g., why all the natural gas has not dissipated during the millions of years that it is supposed to have been trapped in porous sedimentary rock.

We should also note that the verdant earth which God originally created, with its very pleasant living conditions, provides a hint of the everlasting paradise that God is going to provide for his people when he renovates this earth.

Measures of Time [February 3] (Gen 1.14-19)

Some interpreters attempt to read subtleties into this passage. They claim that since it says that God 'made' the objects in the sky, he didn't create them out of nothing as he had the other constituents of the universe. They argue that God used pre-existing material, that he had created on the first day, and, over time, shaped that material into stellar objects—possibly using natural process guided by the 'laws' of physics, which caused them to coalesce from the dust spewed out by a massive explosion of an original singularity. They claim that on the fourth day God made the stellar objects *appear* in the sky (they had been there all along, but were not visible); that he *completed* the process of creating the stars; that he *appointed* existing objects with a stated role; or that he merely *reports* what he did, using a topical format. These suggestions are nothing more than bogus attempts to reconcile the Biblical account with an inferred age of stellar objects [we will address the age of the universe in a future meditation] or to accommodate the reigning myth of a 'big bang'.

We must emphasize that this account is to be taken in its plain sense. God said 'Let there be ...', and created out of no pre-existing matter and formed, instantaneously, all of the objects which we see in our sky during the day and night. This account is not merely a literary artifice, nor does it merely have moral or theological implications. It is an account of what actually happened on the fourth 24-hour day of creation.

Why did God create the objects which appear in the sky? The first reason he gives is that the sun, moon, and stars (including the 'wandering stars', which we call planets) were intended to provide measures of time for different periods—days (day and night), months, seasons, and years. We continue to use these same measures of time 6,000 years after God established them. For example, the seasons start on the equinoxes and solstices; and a year is defined by one complete cycle of the seasons, or one revolution of the earth around the sun. Most commentators infer that in these time measures there is an allusion to the appointed festivals of the Jewish calendar. However, the religious festivals defined in the OT did not appear formally until the time of Moses. There is no indication in Scripture that the religious festivals were the same before the flood, or even at the time of the patriarchs—e.g., Abraham. We must be careful not to read into the text something that is not there, since Genesis chapter 1 was not written by Moses, but by Adam. However, if the Mosaic religious festivals are not in focus, then we need to determine why God calls out the need for dividing time into periods such as seasons. With the cycle of days, seasons and years mentioned here-and with the weekly cycle that is defined with the sanctification of the seventh day-God establishes patterns to regulate human behaviour. For example, the mention of seasons in these verses implies that the antediluvian earth had an inclined axis of rotation—though it may have had a different angle. This means that there would have been periods of more abundant plant growth and periods of dormancy, or times when animals would have bred and then borne their young. Man was going to be required to regulate his work, plan for the future, and store up produce. God seems to be reminding mankind that he should not live for the moment, and that men and women should pace their lives around natural cycles—e.g., times for labour and rest, and times for work and worship.

Mankind has attempted to ignore God's measures of time and has suffered consequences because of it. For example, when men work nightshifts they often have sleeping problems and suffer from personality disorders. Men have also used the heavenly objects to satisfy their own fancies by attributing causality to the cosmic cycles which God has defined. The ancient pagan religions held that the alignment of stars and planets were portents for the future. This superstition has not been erased by our learning that these objects are not rational or supernatural, but merely lumps of rock and balls of gases. The continuing appeal of astrology demonstrates the foolishness of mankind with regard to how he views God's handiwork. God declares the sun, moon, and stars to be light-bearing bodies to serve mankind and not cosmic deities worthy of worship or consultation. And, he appears to have deliberately created them on the fourth day, after the plants and the earth, to demonstrate that he is the author and sustainer of life, which the celestial bodies are not. This is why it is a grave sin to worship the sun, moon, and stars (Dt 17.2-5).

It is ironic that the more we have learned about the universe and the objects in it, the smaller God has become in the estimation of mankind. Before the arrival of modern science, men in the West revered the God who could create the few thousand stars which were visible. They had no idea how wrong they were in their estimation of the magnitude of the universe and the uncountable number of stars within the myriad of galaxies. But now men dismiss God and say that he could not have created the celestial objects in a single day, and at the same time claim that the universe is self-created from a chance wrinkle in a space-time-energy-matter continuum. Notice how God deals with this foolish thinking of men. He gives a mere mention to the creation of the stars (Gen 1.16) as if they are of little consequence. It is no greater feat for the God who created, out of no pre-existing matter, this complex world with its life, to create an estimated 100 sextillion stars. This should cause us to reflect on his almighty omnipotence and marvel at what he has done. We should be ever grateful for the good creation (Gen 1.18) he put in place for our benefit.

Heavenly Signs [February 4] (Gen 1.14)

There is no description of the false religious practices men invented before the flood—although we can be certain that men replaced true worship with pagan rituals (Gen 4.3; Gen 6.5). Likewise, within one hundred years of the flood, men had created a false religion (Gen 11.4) which, over time, developed a pantheon of gods associated with the sun, moon, stars, and constellations. For example, the Sumerians in southern Mesopotamia had Utu the sun god,

Nanna the moon god, and Inanna for Venus. In the north, the Akkadians had similar gods. The Babylonians, called Chaldeans—a name associated with their astrologers—had a full stable of celestial deities. The Egyptians, Persians, Greeks, Romans, and peoples beyond the Mediterranean (India, China, and northern Europe) also adopted the same pantheon, or developed similar ones. For example, the Persians referred to the goddess Venus as Ishtar (probably the name Hadassah was given when she joined Ahasuerus' harem as Esther).

Contrary to what the majority of historians claim, monotheism—the belief that there is only one God—is not a late development. Monotheism was the original religion of Adam and Noah (Gen 4.26; Gen 8.20). However, even though Noah lived for many centuries after the flood, his contemporaries departed quickly from the true worship of God and invented false gods, crafted images of their gods, and practiced blasphemous religious rituals. One dimension of this pervasive false religion is a belief that celestial objects and phenomena—whether identified as gods or not—are involved with human destinies. Thus, planetary alignments and eclipses, birth dates associated with particular houses of the zodiac, or events such as 'blood' moons are said to influence a person's personality and destiny, and thus the future of mankind.

Men believe that phenomena in the sky can influence events on the earth for a number of reasons. Light from the sun is important for sustaining life—e.g., through photosynthesis and by providing warmth—so men incorrectly inferred that if it sustains life it also must be the source of life. In addition, the order and regularity observed in heavenly phenomena (e.g., diurnal cycles, seasons, and eclipses) influenced men who lived with temporal uncertainties to ascribe causal significance to celestial objects. Another reason is that people wish to have information and assurance about their futures, and the purveyors of astrology claim to provide this. However, the most significant reason why astrology developed is that men wish to suppress their innate knowledge of God and exchange his glory for images (Rom 1.29-23). As has often been quoted, "When a man stops believing in God he doesn't then believe in nothing, he believes anything." (Attributed to G. K. Chesterton)

Our culture is 'schizophrenic' when it considers astrology. The modern 'scientific' mind claims that there is no evidence that the motion of distant celestial objects has any impact on human destinies. From this perspective, it is considered nonsense to ask questions such as, "How accurate are horoscopes?" Yet, our culture is as obsessed with astrology as were ancient Babylonians. Anecdotal evidence can be found on news web sites, such as that for the *National Post*, which include a banner menu which lists sections such as 'sports', 'business', 'commentary', 'arts', and 'horoscopes'. Surveys of North Americans indicate that over a quarter of them say that they believe in astrology. Even among people who claim to be Christians, the proportion claiming belief in astrology appears to be as high as twenty percent. Also, many Christian writers and preachers claim that celestial phenomena can be interpreted as last-days indicators. For example, John Hagee claimed that tetrad eclipses correlate with significant events in the history of the Jews (e.g., the 1492 expulsion from Spain, the founding of modern Israel in 1948, and the six-day war in 1967). Hagee's small sample is selective, and even if there is a correlation it is as meaningful as the actual high correlation between US spending on space technology and suicides by hanging, strangulation and suffocation in the decade 1999-2009.

The Hebrew prophets used an interesting wordplay when they identified the constellations, particularly the star cluster we call Orion (Is 13.10; Amos 5.8). The same word is translated as 'fool' or 'foolish' in other places (Prov 10.1, 23). They were saying that the sky gods of the Babylonian pantheon were a silly superstition. Elsewhere, God gives explicit instruction to his people that they are not to consult fortune-tellers and diviners (Dt 18.10-14), and classes such action as an abomination. It would be difficult to convince most Christians today that consulting a horoscope is an abomination before God.

God states here (Gen 1.14) that a purpose of the celestial objects, is to serve as "signs and for seasons, and for days and years". This is how we use them—to measure the length of a day and a year, and to determine the dates of equinoxes and solstices. In addition, they have proven useful for navigation purposes for millennia (e.g., Ursa Major and Ursa Minor can be used to identify the North Star). God also used miraculous celestial phenomenon (e.g., when Joshua defeated the Amorites and to lead the Magi to Bethlehem), and he speaks of such phenomena in apocalyptic prophecy. However, the prophecies (e.g., in Joel, Isaiah, and Revelation) are to be understood as typology for the Church age (e.g., Mt 24.29-30; Acts 2.16-20) and not as speaking of literal events to occur in our solar system and galaxy. God controls our futures, not planetary alignments. Our destiny is not written in the stars.

The Anthropic Principle [February 5] (Gen 1.14-19)

Deism and its children—Naturalism or Nihilism—cannot attribute a teleology to creation. However, God does! Ultimately the universe was created by God to declare the glory of God (Ps 19.1) and secondarily for man's benefit. In the previous meditation we noted that one reason God supplied the lights in the heavens was to provide measures of time, with regular cycles, around which man is to structure his life. Another reason given in the text is to provide light for the earth (Gen 1.15, 17). Underlying both of these reasons is the fact that the earth and universe were created for man to inhabit.

A purposeful universe, with man at the centre of it, is anathema to modern philosophy and science; but it is God's declared intent. There is considerable evidence that the universe is specifically designed for man—the evidence of man-centered design in the universe is called the anthropic principle—some of which we will consider today. We should remember that how this evidence is interpreted depends on our philosophical presuppositions. If we believe that the universe is merely the result of random events through 'infinite' time, then these evidences will be nothing more than a series of amazing coincidences. If, however, we believe that the all-wise God created the universe, we will be constrained to declare with the angels, "Worthy are you, our Lord and God, to receive glory and honor and power, for you created all things, and by your will they existed and were created." (Rev 4.11)

If the universe were a mere product of chance, logically it should be chaotic. However, it is not, but is balanced to maintain stability. If it were not for this balance, life could not exist. Let's consider a few examples:

- The fundamental forces vary from the strongest (nuclear) to the weakest (gravity) by a factor of 1,040. If the factor were 1,041 earth would not hold its atmosphere. If it were 1,039, the sun would burn out so fast it would be useless for supporting life.
- If Planck's constant, which measures the amount of energy in a 'particle' (quantum) of light (6.6X10⁻¹⁴ jouleseconds), were less, photosynthesis would not be possible since each quantum of light would have too little energy. If it were larger, plants would be destroyed by excessive energy.
- The planetary gas giants (Jupiter and Saturn), with near-circular orbits, serve as cosmic 'vacuum cleaners', sweeping up comets and asteroids, so that they don't hit the earth. Without them, comets and asteroids would hit the earth thousands of times more frequently than they do today.
- The earth spins on its axis at the right speed to avoid excessive heating and cooling, and it travels around the sun at the right distance and speed to support life (not too hot, as is Venus; not too cold, as is Mars).
- A hospitable planet needs a critical amount of radioactive elements to produce heat to generate a magnetic field. Without a magnetic field, our atmosphere would be destroyed. Of all our solar system's planets, an adequate magnetic field is found only on the earth.
- If the earth were not tilted 23.5 degrees on its axis, there would not be seasons, the poles would always be in darkness and cold, water vapour would migrate toward the poles and freeze, all the water in the oceans would accumulate at the poles, and the earth would be a frozen desert.
- Habitable planets must be members of a double-planet system. The moon is the right distance from the earth to create tides but not extreme flooding. The moon's mass creates a stabilizing anchor for the earth, preventing it from tilting too far on its axis due to the attraction of the sun and Jupiter; thus preventing extreme greenhouse-effects, as on Venus, or a permanent ice age, as Mars would experience if it had more water.
- The earth's mass provides enough gravity to hold its atmosphere. Mars and the moon, for example, are too small to have atmospheres.
- The earth's atmosphere contains the optimal mix of oxygen and nitrogen to dilute the oxygen to its proper strength for use by living organisms. The atmospheres of other planets are mostly poisonous gases.

- The earth's atmosphere protects the earth from meteors—99.99% of them burn up—and from harmful UV rays from the sun.
- The first matter that God created was water (Gen 1.2) and today 71% of the earth's surface is covered with water. Water has amazing properties related to its specific heat, latent heat, thermal conductivity, transparency, expansion before freezing, evaporation, solvent action, erosive force, ionizing ability, surface tension, etc. Without water, life as we know it, could not exist.
- Only a tiny portion of our galaxy, at the outer fringes, is fit to support life. In recent years astronomers have gained a sobering appreciation of how deadly our galaxy is, with low levels of heavy elements, evaporative effects of giant stars, ionizing gases, intense radiation, and debris from stellar explosions. As with real estate, location is critical, and the earth is positioned in the only safe place within a mostly uninhabitable galaxy.

The parameters which define the multitude of attributes for a habitable earth, make it extraordinarily improbable that there is an earth-like planet anywhere else in the universe—in fact it is beyond all probability. This should not surprise us since we know from God's word that there is only one earth (Gen 1:1). These amazing factors clearly point to the hand of God. They demonstrate his creative design and sovereign control over the universe and challenge the claim that the universe arose by chance out of chaos.

The Young Universe (part 1 of 3) [February 6] (Gen 1.14-19)

The cosmological model which posits that God created in six actual days, about 6,000 years ago, is scorned by the scientific establishment and by the mainstream media. A politician who holds to this view is derided by the media, and a university professor who defends it is dismissed with strident anger. The ruling paradigm claims that the universe is about 14B years old. Yet, the Bible clearly teaches that the universe was created in six-days about 6,000 years ago. As Christians, who believe that God is rational and that he demands that we use our rational faculties, we must be able to give an explanation for a belief which appears to be so contrary to the evidence.

Ultimately we start our defense with a position which could be summed up as, 'the Bible tells me so'. Basically we argue that since God says it, it must be true. This approach is scornfully called 'fundamentalism' and laughed at by almost every faculty member in every university and seminary, whether secular or religious. We should not be ashamed to take God at his word. Peter warns us that scoffers will deride us for taking such a position (2 Pt 3.2-7). We also defend our position by pointing out that the debate about the age of the universe is not a debate between religion and science—as many attempt to make it. Rather, it is between two religious worldviews—Christianity and Naturalism—about an *historical* event. True science deals with repeatable phenomena and empirical evidence. Those who claim to be scientific in their approach to the origin of the universe do not see the inconsistency of their position. The creation of the universe was a one-off event that is not reproducible, and no human was present to observe how the universe began.

Someone might respond with the argument that we also base our beliefs on circumstantial evidence—for example in archaeology or when recreating a crime scene. The question, then, is which model of origins best accounts for the available data? The materialistic naturalist argues that stellar red shift, the speed of light, the distance between the galaxies, the cosmic background radiation, and similar observations make it impossible to accept a recent creation. So, because they dismiss the Biblical account, they must (because we were created to seek answers to the 'big' questions) create an explanation of origins. Almost every religion provides an explanation, and Naturalism is no exception. The most widely accepted model is called the 'big bang'.

However, the 'big bang' is a cosmogenic myth, and isn't in essence different from the myths of the Greeks or the Iroquois. How can I make this 'absurd' claim? The 'big bang' model has gained ascendancy only because, as Carl Sagan said in his introduction to Stephen Hawking's *A Brief History of Time*, it provides for "a universe with no edge in space, no beginning in time, and nothing for a Creator to do" The 'big bang' model is popular because it

dismisses God, not because it accounts for the facts. It is based on untested, and even untestable, assumptions and is so full of holes as a scientific model that it makes Swiss cheese look like Cheddar. There are many things about reality that the 'big bang' model cannot explain. For example:

- The microwave radiation that fills space is at nearly the same temperature everywhere. According to the standard model, this doesn't make sense since heat radiation could not have travelled from one end of the visible universe to the other to develop thermal equilibrium within the theoretical age of the universe. This challenge is called the 'horizon problem' and has caused cosmologists to speculate that the universe expanded very quickly, within the first small fraction of a second after the 'big bang'.
- The standard form of the model assumes that all parts of the universe expand simultaneously. How could all parts synchronize the beginning of their expansion? Who or what gave the command?
- If the universe began in a huge burst of energy, it should have equal parts matter and antimatter. But instead the stars are made of protons, neutrons and electrons and not their antimatter equivalents. Antimatter is missing, and the asymmetry cannot be explained by the standard model.
- The 'big bang' supposedly ejected matter in a radial explosion. A law of physics related to the conservation of angular momentum states that uninfluenced radial motion cannot give rise to curvilinear motion. How did the supposed explosion that expelled gas in a straight line convert that stream of matter into orbiting galaxies and planetary systems?
- How did matter coalesce into stars? Gravitation and temperature models show that stars will not spontaneously form in space since the outward force of a gas (due to the latent heat) is greater than inward gravitational force. Hydrogen atoms would float apart long before matter formed.
- Stars with extremely low quantities of 'metals' (atoms heavier than helium) should not exist according to the widely accepted theory, because the clouds of material would not have had the density to precipitate their condensation. Yet they exist.

We will continue to look at the problems with the 'big bang' model in our next meditation. However, based on the problems we have considered thus far, it is evident that the 'big bang' model has serious difficulties. It is absurd for Christians to try to twist Scripture to fit the 'big bang' theory (or any other naturalistic model)—for example, postulating a framework for Genesis chapter 1 based on an allocation of functions, or introducing long age gaps between verses. Instead, we must accept what God says about when he created.

The Young Universe (part 2 of 3) [February 7] (Gen 1.14-19)

In the previous meditation, we began to consider some of the problems with one of the key theories of materialistic naturalism—the 'big bang'. The following are some additional problems with this cosmological model:

- Matter is spread remarkably uniformly throughout space. Its distribution departs from perfect homogeneity by less than one part in 10,000. Yet the universe contains stars and galaxies and other agglomerations of matter. Scientists cannot explain why the universe is so uniform on a large scale and at the same time suggest a valid mechanism that produces galaxies. Explaining the existence of galaxies has proved to be one of the most difficult problems in cosmology.
- The largest structure in the observable universe appears to be a super cluster of quasars and galaxies, massed together across 600-million light years of space. It is impossible to explain how such a large structure could have formed naturally after the 'big bang' in a relatively short time.
- The model calls for the universe to contain a lot more matter than it does. Applying our understanding of gravity to the way galaxies spin, suggests that galaxies should be flying apart. Galaxies orbit around a central point because mutual gravitational attraction creates centripetal forces. But there is not enough mass in galaxies to produce the observed spin. The response has been to suggest that there is matter in the universe that we can't see. But no one can explain what this matter is. The search for the 'missing' cold, dark matter continues, but it is still a theoretical artifact.
- The universe appears to be expanding at an ever-increasing speed. Yet, the standard cosmological model claims

that it should be slowing down. This inconsistency presents an embarrassing problem for theorists. Some have suggested that there is a property in empty space that is responsible, and they refer to it as 'dark energy'; but they are only guessing. This is akin to the proposed 19th century *ether* model for the propagation of light.

- Within our own solar system, Venus and Uranus rotate in a retrograde manner (clockwise when viewed from the north plane) whereas the other planets rotate in a counter-clockwise manner. The standard model claims that planets formed out of dust and gasses spinning around a developing sun; thus all planets should orbit and rotate in the same direction. Anomalies like Venus cause the model to be changed arbitrarily, e.g., assuming planet capture. But, a number of the moons in our solar system also have retrograde motion. So, extensive 'planet capture' must be assumed; but the model offers no suitable mechanism through which moons could be captured.
- Planetary orbits should be circular. Many orbits in our solar system, and in extra-solar systems, have elliptical orbits. In addition, comets have elliptical orbits. Also, the orbits of many of the objects in the solar system are not in the same plane. The standard model cannot explain how these orbits formed without resorting to the introduction of many exceptions.
- The earth, and most of the other planets in our solar system, have markedly different compositions. It is impossible to explain with the current model how they could have had a common origin from a dust cloud orbiting the sun, and yet be so different.
- The sun contains more than 99% of the total mass of the objects in the solar system, but less than 2% of its total angular momentum.
- Some of the supposed constants of physics don't seem to be constant after all. For example, observations of light from distant quasars, that has passed through interstellar clouds with metal atoms (which absorbed some of the light photons), appears to have a different 'signature' than expected. If the observations are correct, the only explanation that makes sense is that a constant, called the fine structure constant, or alpha, had a different value when the light passed through the clouds. But a change in alpha would have dramatic results for all of cosmology. No one wants to believe the measurements, but no one has been able to find an error. Recent analysis of natural nuclear reactions suggests something about light's interaction with matter has changed, and that the value of alpha may be decreasing through time. Studies have also suggested that the speed of light may not be a constant. If 'constants' can change, then the standard cosmological model would be wide open for revision.

There are other problems with the 'big bang' model, but you get the point—it cannot explain the origin and order of the universe. The model is based on extremely complex physics concepts, an excessive lack of detail, and a lot of ingenious speculation and hand waving. The model has been repeatedly covered with duct tape to hold it together, and the need for additional patch-ups will continue to expand as we learn more about the amazing universe that God created. The primary reason that the 'big bang' model has problems is that it rejects God's causation and claims that the universe evolved, of its own accord, from a chaotic explosion into its highly structured form.

It is sad that many Christians have swallowed the world's theory about the universe's origin and have compromised their view of Scripture in an attempt to reconcile the Bible with the myth of the 'big bang'. Ironically, as some naturalistic scientists begin to question the sustainability of the 'big bang' model, the Christian world seems to be falling over itself to accept the belief that the universe is billions of years old. As the scientific community begins to reject the model, they won't turn to the Bible's cosmology because men love darkness and lies rather than the truth, and because the Church has not been effective in providing a significant witness to the word of God.

The Young Universe (part 3 of 3) [February 8] (Gen 1.14-19)

In our previous two meditations we reviewed serious problems with the most popular naturalistic explanation for the origin and order of the universe—the 'big bang' model. We also noted that the primary reason this model is so popular is because it supposedly provides an explanation of how things came to be, without recourse to God. Another reason this myth is so popular is because the universe appears to be very old (about 14B years old), whereas

the Bible indicates that the creation of the universe occurred about 6,000 years ago. This discrepancy causes much anxiety among Christians who feel that the evidence for an ancient universe is convincing. They believe that the Genesis account has a problem, based on a simplistic view of physical reality, and needs to be interpreted in another way, not as an historical account.

The primary, stated, reason that most scientists believe that the universe is billions of years old is because of their measurements of the distance to stars and galaxies. If light travels at a constant speed, and if the most distant observed objects are about 14B light years away, then logically, it would seem, that the universe must be \sim 14B years old. This does, apparently, present a challenge for those Christians who believe the universe was created about 6,000 years ago—within the Christian community this is often referred to as the 'starlight problem'. We will address this topic in a subsequent meditation.

The distance to nearby stars can be measured using a parallax technique which measures the angle of light at different positions of the earth in its annual orbit. This means can be used for measuring distances up to about 300 light years. Beyond this, the angles become so small (less than .000003°) that differentiation is not possible. Some astrophysicists have used other methods, but the primary technique for calculating distances to the galaxies and other very remote objects is through measurement of the degree to which their light signature is shifted into the red spectrum, indicating the distance (assuming a central point of origin) of the object. We do not need to consider the physics of this Doppler Effect today. However, we should note that there are serious challenges to the redshift assumptions, for example:

- Some quasi-stellar objects have been observed to have rapidly varying redshifts which may indicate that there are intrinsic factors within the objects, rather than their distance, which changes their light signature.
- A bright spiral galaxy (NGC 7603) is joined by a luminous bridge to a companion galaxy with nearly twice the redshift. This suggests that galaxy redshifts may not be attributable to their distance from the earth.
- A binary star system (SS 433) has been observed with the pair of stars both moving toward and away from the earth at a great speed (50,000Km per second). Its calculated distance of 15,000 light years may be suspect.
- A quasar, whose light spectrum puts it at billions of light years away, has been found in a spiral galaxy (NGC 7319) that is supposedly 300 million light years away. This anomaly is difficult for astronomers to explain.
- An extremely bright explosion in deep space has confounded astronomers since its burst of gamma ray energy in one second was almost equivalent to all the energy released by all the stars in the universe. The problem may be with the assumption that it is 12B light years from Earth, based on its redshift. If it is much closer, the energy level may be much lower.

Redshifts may not measure distance; alternative causes have been suggested, such as gaseous matter in space. However, the scientific community, mostly, ignores the challenges and rejects the alternative explanations, clinging to the belief that redshifts must measures distance. The underlying reason is that materialistic naturalism requires a very old universe to provide enough time for cosmological and biological evolution to occur.

There are indicators that the universe may not be anywhere near as old as the majority of cosmologists claim. For example:

- Galaxy clusters should have dispersed long ago. The mutual gravitation of all the galaxies in a cluster isn't enough to hold a cluster together.
- Sirius B has visibly changed from a red giant to a white dwarf, over 1,000 years of observation. This star is apparently decaying at a much faster rate than any current theory would suggest. Similar colour changes have been found with the giant star Betelgeuse.
- Comets continually give up their ice and gasses and eventually evaporate. If the solar system is billions of years old, there should be no comets. Materialistic naturalists propose a hypothetical storehouse of comets in the outer reaches of the solar system called the Oort Cloud. There is no empirical evidence that this proposed source of comets exists.
- Ganymede, a moon of Jupiter, has a magnetic field that is generated by interior planetary porcesses. However, the field is dissipating so quickly that the moon cannot be 4.5B years old. Also, measurements of Mercury's

magnetic field taken by flybys from 1974 to 2011 show a decrease that is astonishingly fast and correlates with creation about 6,000 years ago.

These examples do not *prove* that the universe is younger than ~14B years old. However, they do indicate that the theoretical cosmological model used by materialistic naturalists has serious challenges. When a model of reality does not fit the facts, a wise course is to question the model. The *only* model which fits *all* of the observed data (not filtered through naturalistic presuppositions) is the Biblical model, which presents God as the creator of a universe which was created in a series of instantaneous acts over a period of six actual days.

When Was the World Created? [February 9] (Gen 1.1, 14-19)

The question, "When was the world created?" has been asked and considered for centuries. A number of the writers of books in the OT address it indirectly with the inclusion of chronologies, and post-NT writers such as Eusebius and Augustine consider the topic. A well-known, and widely ridiculed answer to the question was provided by Bishop Ussher of Ireland, who in his book *Annals of the World*, placed the date of creation at 4004 BC.

There are only two possible ways to approach this question. One is to claim that man's theories and his cosmological, geological, paleontological and archaeological 'measurements' of time are reasonable and reliable. The other is to conclude that God provides an accurate chronology of events in his word, the Bible. In essence, how one answers the question comes down to the basic presupposition which one has about the word of God. Either what God says is true or it is not. Either human theories and opinions are to be accepted as fact or God's statements are to be accepted as fact.

So then, a fundamental consideration is what God has stated about when he created the world. God does not provide a specific counter of events from the day of creation, saying such things as, "In the 456th year after creation x occurred." However, he does provide three key means of calculating, with considerable accuracy, when the world was created:

- Chronologies (Gen 5.1-32 and Gen 11.10-26; along with Gen 21.5; Gen 25.26; Gen 47.9) which connect creation with later events which can be assigned dates from non-Biblical history.
- Major 'signposts' which date key events in Biblical history.
- Statements about significant spans of time which allow events to be placed into a precise chronology.

We will address the Genesis genealogies (5 and 11), and the supposed issues with them, in future meditations. However, for the sake of today's consideration we will conclude that they provide an accurate statement of lineal descent from Adam to Abram, that there are no gaps in the genealogical line, and that the years assigned to each patriarch provide a means of calculating the year of birth of the key son in each generation.

The key 'signposts' and timespans given in the Bible which allow us to calculate when the earth was created are:

- 1,656 years passed from the creation of the world to the flood (chapter 5).
- Shem, was born about 100 years before the flood, around the year 1556.
- Abram was born 390 years after the birth of Shem (Gen 11.10-26).
- Abram left Haran for the land of Canaan in his 75th year (Gen 12.4), after his father died (Acts 7.4). The elapsed time was 205-75 = 130 years.
- The passage of time from Abram's entry into Canaan until the Exodus of the Israelites from Egypt was 430 years (Ex 12.40; Gal 3.17).
- From the year of the Exodus to when construction began on the temple was 479 years (1 Ki 6.1).
- From the beginning of construction of the temple to the division of the kingdom into the northern and southern portions was 37 years (the construction of the temple began in Solomon's fourth year; 1 Ki 6.1, 37, 38; 1 K 11.42).
- From the division of the kingdom to the destruction of Jerusalem, 390 years passed (Ezk 4.4-6).

If we sum up the years (1556+390+130+430+479+37+390) we get a total of 3,412. If we accept the date for the destruction of Jerusalem to be 586 BC, then we can calculate a date for creation as 3998 BC. However, we must be careful not to declare absolutely the date of creation, since events occurred *within* years. For example, the birth of each son in the genealogies could have been at any time during the year, and not on the birthday of his father. So the elapsed time in the genealogies is slightly greater than the mere sum.

Many people who accept the Bible's statements as accurate have calculated various dates for creation ranging from 3836 BC to 5501 BC, with most clustered around 4000 BC. Regardless of the exact date of creation, it is clear that the Bible supplies sufficient information to determine that the world was created about 6,000 years ago. Since the sun, moon, and stars were created on the fourth day of the creation week, they cannot be older than the earth, which was created on the first day. Therefore, the rest of the universe cannot be billions of years old. This approach for calculating the age of the earth (and universe) is laughed at by almost every scientist and professor in secular and 'Christian' universities. Regardless, it is based on the word of God, as revealed in the OT Scriptures. In addition, The NT writers accept the Biblical genealogies and chronologies as being accurate (Mt 1.1-17; Lk 3.23-38), and Paul validates one of the key measures of elapsed time (Gal 3.17).

If what God declares in his word is not accurate with respect to the date of creation, then we have no grounds for accepting his word on anything. It is highly inconsistent to claim to believe the Bible and to accept that God is the Creator of the universe and that Jesus was conceived by a virgin, and at the same time to reject God's word about when the world was created. Let God be true and every man a liar (Rom 3.4). We can know, within a few years, when God created the universe, the world, and mankind.

The Age of Earth and the Introduction of Death [February 10] (Gen 1.14-19)

From a Biblical perspective, the existence of death is a cogent argument against evolution and its necessary condition of an earth that has existed for ~4.5B years. The sin of Adam, and the curse on that sin, introduced death and continually increasing decay into the world. There cannot be any meaning to the introduction of death (Gen 2.17), if death was on the earth for millions of years before Adam sinned. Animals cannot have been fighting for 'survival of the fittest', dying, and being turned into fossils for millions of years if death was not part of the original created order. All animal fossils must be the result of events which occurred after the six days of creation and after Adam sinned.

To consider this in more detail, we first must define the terms 'death' and 'decay' carefully. When we speak of death in this instance we are considering only physical death, not spiritual or everlasting death, which we will consider when we address 2.17. Physical death is the departure of the animating sprit from an animal or man. As we noted previously, God does not refer to plants as being 'living creatures' as he does animals (Gen 1.20-21, 24). This is an important distinction. Even though plants have a form of biological life, they do not have the spirit, or breath, of life in them as do animals and man (Gen 1.30; Gen 2.7). Nor do plants have blood, which seems to be a key factor in what it means to be 'alive' (Lev 17.11). Also, plants do not have consciousness. Plants (and possibly other forms of life sometimes classed as 'animals') are not alive in the Biblical sense of living. They were created to provide food for living beings. So, biological decomposition (e.g., of a pruned leaf in a compost pile) is not death. And, when men and animals ate fruit in the original perfect world they were not killing anything. The death that man introduced into the world after eating the forbidden fruit is not mere biological decomposition.

This leads to the second consideration, that of decomposition, or decay. Paul informs us that the entire universe is subject to decay (Rom 8.20-22) as the result of man's sin. What is this decay? If the decomposition of a leaf in a compost pile is not decay as the result of sin, then what is the decay that sin introduced? Decay is essentially an increase in entropy or disorder. However, is every increase in entropy the result of sin? Friction is necessary for walking or grasping an object, and requires the dissipation of some heat and therefore results in an increase in entropy. So also, digestion and respiration result in increased entropy. It is possible that before man sinned, physics

was entirely different than it is today and that God had created means for life to exist without an increase in entropy. However, let us assume that the second law of thermodynamics was in existence in the perfect state, in the Garden of Eden and throughout the rest of the original created world and universe. If so, then decay is not inherently evil, or the result of sin. Decay is a natural process that is part of the good order God initially created. Then, plant matter decomposing into soil, rocks weathering as water from the rivers of Eden flowed over them, Adam digesting food to produce energy for working, light striking a surface and producing heat, and stars exploding to produce specialized radiation, are all in a class with clouds giving up their water vapour, and not decay that is the result of sin. The universal decay that Paul speaks of, and is the result of the curse (Gen 3.17-19), is a deleterious factor affecting natural, and good, decay. It may be that the difference is that before man sinned, the universe was not treated by God as an essentially closed physical system, but that he continued to inject into it order and fresh energy. After Adam sinned, God removed some of his sustaining influence (Col 1.15-17) so that the net effect of Adam's sin is overall decay—God handed over the universe to ever-increasing decay.

Man and the animals were created to live in God's paradise forever, without suffering and death. The long ages of the antediluvian patriarchs is evidence that man's constitution was originally quite different than it is now—e.g., the human body was able to continually restore itself, was not subject to genomic decay, could not generate harmful cells such as cancers, and could not suffer from injury. Since animals and men began to suffer and die only after the sin of Adam (Rom 5.12; Rom 8.19-22; 1 Cor 15.21), this means that evolution cannot be considered possible within the Biblical worldview since it presupposes long ages of animal births, genetic anomalies, struggle, and death. Nor is a worldwide fossil graveyard of animal remains, before the arrival of man on the earth, a possibility.

Materialistic naturalism (cosmological and biological evolution) depends on a number of speculative ideas that contradict the Bible: long ages are required to 'allow' chance to work its magic, death is a normal phenomenon in the quest for genetic survival and dominance, there is ever increasing natural progress from chaos to order, and there cannot be hope of escape from death. In contrast, the Biblical model is founded on the following facts: the earth is a recent creation (about 6,000 years ago), animals and man were created on the sixth day of creation as unique kinds, death is unnatural and the result of man's willful rebellion, the whole universe is now subject to ever-increasing decay, all the fossils in the rocks of the earth must have been deposited since Adam sinned (e.g., during the flood that was sent to punish the exceedingly wicked antediluvian world), and there is hope for conquering death and decay through the life, death, and resurrection of Jesus Christ.

The 'Starlight Problem' [February 11] (Gen 1.14-19)

It is believed by many that the biggest challenge to the concept of a young universe is the existence of starlight. It is claimed that even the closest stars to the earth (in the Alpha Centauri system) would not have been visible on the fourth day, since it would have taken over four years for their light to reach earth. And it is probable, notwithstanding the difficulties with red shifted measurements, that tens of thousands of galaxies are visible with telescopes, which may be millions of light years away. It has been estimated that there are over 100B galaxies in the universe, each of which has hundreds of billions of stars—our galaxy, the Milky Way is estimated to have 200-400B stars! How, can any creationist defend the belief that God created all these in a single day and that their light was visible on the earth that very day?

There are a number of possible answers to the 'starlight problem', for which there is varying degrees of evidence. These include:

- The simplest possibility is that God created the light beams connecting the distant stars/galaxies and earth when he created the celestial objects. However, some object that this would mean that God created an image of a non-existent event (e.g., a supernova seen recently, but that is more than 6,000 light-years away from us).
- Light may not travel at a constant speed. It may travel much faster between stars, and still faster between galaxies—that is, light may travel much faster away from 'gravity wells'. However, this suggestion may not allow for light from very distant objects to reach the earth sufficiently quickly to support the belief that creation

occurred about 6,000 years ago.

- The stars/galaxies may not be as far away as is calculated by their redshift; or, in the past, may have been much closer and are now moving away more quickly. However, the stars/galaxies cannot all be within 6,000 light years or there would be too much light energy around us and we would be consumed by the intense heat.
- Light may have travelled very fast (near infinitely fast) in the past, and be slowing down today. When this idea is presented by a Christian it is dismissed as nonsense with the appeal to the constant nature of the speed of light. However, when a lecturer (Joao Magueijo) in theoretical physics at Imperial College, London presents it, it is published in the 'respected' science journals. We noted previously that observations from distant quasars seem to support the idea that the constants may not be constant.
- Time may flow at different rates (e.g., where gravity is less) or may not be 'absolute'. For example, the clocks in GPS satellites orbiting at 20,000 kilometres above earth, run roughly 46,000 nanoseconds (one-billionth of a second) a day faster than identical clocks at ground level, because the gravitational field is thinner.
- There could be a solution found in an application of the General Theory of Relativity. From Earth's perspective, creation may have occurred recently—thus earth could be less than 10,000 years old but the stars could be billions of years old. However, this option appears to contradict the explicit statements of Genesis chapter 1.
- The Anisotropic Synchrony Convention along with a near instantaneous inbound one-way speed of light (but average return speed of *c*) allows for the most distant objects in the universe to be the same age as the earth.

All these explanations have challenges and involve complexities, but at least the list shows that there are possible alternatives to the *assumption* that the universe is billions of years old, which also has many challenges as we have noted in previous meditations.

The Anisotropic Synchrony Convention,⁴ applied within the context of relativity of simultaneity, from the observer's (earth's) perspective, along with the concept that God created stars and galaxies in a functionally mature state, appears to best fit the Biblical account and observable phenomena. Some people object to the application of the Anisotropic Synchrony Convention because they believe that the one-way speed of light must be a constant in every direction from the observer's perspective. But that is an assumption accepted merely by convention, which is not possible to demonstrate by any experiment and is not required within Einstein's Special Relativity model. The Anisotropic Synchrony Convention is as valid as other conventions which physicists choose to use as their standard for explaining the nature of space-time.

Many Christians object to the view that God created the stars and galaxies much as they appear today. They assume that these celestial objects developed through natural processes, over billions of years, and that their inbound light must have been travelling toward earth through additional thousands or millions of years, instead of being instantly observable on earth. However, Jesus turned water into wine (Jn 2.1-11) and fed more than 5,000 with multiplied loaves and fishes (Mt 14.15-21). An oenologist examining the wine would swear that it had been fermented and aged over many years (but, nothing was fermented). A baker examining the bread would tell us that it was baked yesterday (but, no one baked it). An ichthyologist examining the meat would tell us that it came from a two-yearold fish that had been caught three days before. Jesus was not trying to fool anyone by creating wine, fish, or bread with an inferred age. The Bible writers tell us that these items came into existence through the word and power of Jesus. So, it is with the celestial objects. God wasn't fooling us when he created stars and galaxies instantly. In fact, he tells us that he created the universe in a functionally mature state, including stars that were visible on the fourth day of creation. God created all things in a state where they had at least a superficial appearance of history or process behind their formation. Adam was created as a full-grown man, not as a baby or zygote (even a zygote has an implied history). The continent had soil, plants were created bearing seeds and fruit which was ready to eat, the land had drainage systems for rivers, birds could fly, rocks had crystals and isotopes, and plants and animals cooperated in symbiotic relationships.

The claim that the existence of starlight is a problem, is nothing more than a 'red-herring'. We either accept God's

⁴ Jason Lisle, "Anisotropic Synchrony Convention—A Solution to the Distant Starlight Problem", *Answers Research Journal* 3; 2010; pp. 191-207.

word that he created a mature universe and the light from stars was instantly visible, or we are left with a pile of empty conjecture.

Relativistic Time Dilation [February 12] (Gen 1.14-19)

Opponents of the idea that the Bible teaches that the universe is about 6,000 years old often claim that this is impossible since we could not yet see the light of stars and galaxies which are millions of light years away. In the previous meditation, we identified seven possible answers to what has been called the 'starlight problem'. The simplest explanation is what is called the 'mature creation' hypothesis—i.e., that God created the universe as fully functioning. If so, many aspects of creation would have had an inferred age—e.g., Adam appeared as a man, but had not gone through a process of growth from a baby; trees were full grown, bearing fruit, but had not added growth rings during many growing seasons; and rivers ran through their beds which had not been carved by erosion. Likewise, the stars were created with apparent age, and their light was visible on earth shortly after they were created because God created them to provide light in the sky that night.

This 'mature creation' hypothesis, although straightforward and a possible means for how God created, is not acceptable to many, even those who believe that God created the universe. They claim that we can accept that God created Adam as a man with an inferred age, because God tells us that he did this (Gen 2.7). But, since he does not tell us that he created things such as streaming neutrinos from distant celestial objects, it would be deceptive if he had. However, all the entities on earth—from hills and valleys, to soil and marshes, and birds and trees had an inferred age of days or years when they were only a few hours old. So, it is not inconsistent to extrapolate to neutrinos from distant supernova streaming through the earth. We are told that starlight was necessary (Gen 1.14). Likewise, if neutrinos are important for supporting life on earth, in a way we have yet to discover, then radioactive decay or supernovas are not the result of the decay associated with the curse, but rather are in a class of natural systems (e.g., bacteria decomposing leaf mould and clouds dropping rain in the hydrological cycle) which God created in the perfect state.

Regardless of my belief that the 'mature creation' hypothesis, provides a valid possible answer to the purported 'starlight problem', there is another option held by many who believe that the earth was created about 6,000 years ago. It is called *relativistic time dilation*. John Hartnett, who has a Ph. D. in physics, in his book, *Starlight, Time and the New Physics* (updated, 2011), based on work done in the 1990s by an Israeli physicist, Moshe Carmeli. Carmeli's cosmological equations assume a different structure for the universe than the Big Bang, that is consistent with a straightforward reading of the Bible.

This model is consistent with Einstein's theory of relativity. Einstein's theory has been validated through a number of experiments such as by bouncing radar signals off planets and calculating their round-trip travel time, and through observations such as gravitational lensing and the time dilation of clocks on GPS satellites relative to clocks on earth—if time dilation were not taken into account GPS coordinates would drift by as much as 10Km per day!

Relativistic time dilation provides a possible scenario which would allow the earth to be about 6,000 years old (from our time-measurement perspective) and allow for distant galaxies to *appear* to be billions of years old (from our time-measurement perspective). This theory utilizes a new conception of the universe called *space-velocity*, instead of *space-time*, at a cosmological scale. Instead of viewing galaxies as rushing away from one another (i.e., moving through space) the model views space expanding or stretching (Ps 104.2; Is 40.22; Is 42.5; Is 44.24). The galaxies don't move through space, but rather space is expanding rapidly, and the galaxies appear to be moving apart. The new approach applies Einstein's field equations for special and general relativity at a cosmological-scale and *requires* rapid acceleration and accompanying time dilation at the level of the whole universe. This means that even though the universe is very young, clocks on the earth appear to have run much slower (trillions of times more slowly) than hypothetical clocks in distant galaxies. Thus, the universe only appears to be very old because it is so massive.

The concepts of variable time and expanding space are difficult for us to grasp. We think of time as being absolute, based on ticks of a second-hand, and we think of space as being absolute, such as the volume of an empty box. However, if both time and space are relative concepts—and there is no theological reason why we cannot accept that they are—then the theory of relativistic time dilation provides an elegant solution to the claimed 'starlight problem' and also a valid explanation for how the universe can be only 6,000 years old and yet *appear* (based on the calculated distances to the galaxies) to be about 14B years old.

From our perspective, the relativistic time dilation model has other points in its favour. It provides a solid mathematically based challenge to the popular 'big bang' theory, because it does not require the fudge factors called 'dark matter' and 'dark energy'. It views the universe as open—i.e., continuing to expand and never collapsing back on itself—which implies that it had a beginning and is not part of an infinite cycle. It also supports a view that our galaxy and the earth are in the relative centre of a finite bounded universe—which is consistent with the view that God created the physical universe as a home for man. Therefore, we do not need to be ashamed to accept the Bible's teaching that the universe was created in six days, about 6,000 years ago!

God's Orderliness [February 13] (Gen 1.14-18)

In missionary work and cross-cultural evangelism there has always been a tension when determining which parts of an existing culture can be left alone and which parts must be changed, as people receive Christ as saviour; and about what parts are appropriate for evangelists and pastors to adopt from a culture in which they are ministering. There is little debate today about whether the Scriptures should be translated into the native language of the people to whom the Gospel is being presented or that preaching should be presented in a colloquial language. However, this has not always been the case. In the late Middle Ages there were many in the Church who believed that translating the Bible into the common language of the people (e.g., English) and conducting the liturgy in the vernacular undermined the authority of the word of the God and the status of the clergy.

Similar debates revolve around the propriety of a missionary or evangelist wearing the clothing of the cultural group to which he is ministering. For example, Hudson Taylor wore native Chinese clothing even though this was rare among missionaries at that time. Most Christians today would agree that his action was appropriate and effective (1 Cor 9.19-23), and would deem it appropriate for a pastor of a congregation of North American suburbanites to wear business casual clothes during a congregational service. However, where to draw a line in accommodation is not always easy to determine. For example, is it appropriate for an evangelist to biker gangs to get a tattoo, or for a female missionary working among Muslims to wear a *hijab* or *burqa*? Similarly, there are debates around accommodation in translating the Bible—for example, using 'Allah' for the name of God in a translation targeted at Muslims or removing references to the 'Father' and 'Son' in native-language translations in Muslim countries, and using their languages' equivalents of 'Messiah' or 'anointed', because they are offended by the concept that Jesus is the Son of God (Mk 1.1). The debate extends into many other areas, such as the use of business techniques for planning and advertising evangelistic campaigns.

Some current writers dealing with cultural differences suggest that there is a misplaced emphasis in modernism on orderliness in terms of time and space. They suggest that the idea that a public worship service should start on time is largely an invention of the modern world in which "time is money" and efficiency reigns. They suggest that this emphasis is detrimental to ministry in traditional societies which are less concerned about process and more concerned about relationships. They argue that a mechanistic approach to ordering time and teaching seekers, adherents, and converts to be 'on time' is merely an imposition of Western modernity; and that it is wrong for a pastor to teach that arriving late is evidence of an undisciplined life style.

A second area in which modernity's emphasis on order is viewed as an imposition, is in a distinction of spaces. Spatial orderliness is displayed, for example, when stray flowers growing in a grassed lawn are considered to be

weeds and when kitchen drawers contain trays for sorting knives, spoons, and forks, rather than throwing them all into a drawer in a disorganized fashion. It is argued by some people that these kinds of distinctions are detrimental to evangelism in particular target cultures and that spatial distinctions need to be de-emphasized, for example, by not designating a space in a church building as a 'sanctuary', but rather setting it up as a multi-purpose room.

Thus, some people claim that insisting that starting public worship on time and organizing spaces in a church building for different uses is primarily an artifact and imposition of Western society. However, their reaction to orderliness of time and space is really a result of their being influenced by postmodern, and ultimately pagan, thinking, which suggests that there are no universal standards for any area of life and that it is cultural imperialism if a missionary or pastor imposes his views about ordering time and space on cultural groups which think differently about the use of both.

God created over a six-day period and designated a day of rest at the end of his workweek. He created different classes of entities on different days and animals by their kinds. He also established different objects (Sun, Moon, and stars) to measure time and to rule over spatial dimensions (a light and dark part of earth). This indicates that God is a God of order. Orderliness in time and space are not in fact cultural artifacts, but rather exhibits of the nature of God and essential in the universe he created and to man as the image-bearer of God. It is not cultural imperialism for a pastor to exhort his congregation to become more disciplined to ensure that they are on time for worship services or for any engagement in life (Col 4.5). In fact, it is the essence of Divinity to be on time (Rom 5.6; Gal 4.4; Eph 1.10; 1 Tim 6.15). Similarly bringing order out of chaos is not an artifact of modernism, it is a display of Divinity. Christians who order space around them are living out the image-of-God in them. To encourage Christians to be disciplined and to keep ordered spaces (e.g., their desks and offices, kitchens, and storage spaces) is not an imposition of modernity, since God is not a God of confusion but of order (1 Cor 14.33, 40). God's orderliness should be reflected in his creatures who have been redeemed out of disorder and confusion. They should live disciplined lives, which includes ordering both time and space. We should strive to live in orderliness, as God ordained from the beginning.

The Moon [February 14] (Gen 1.16)

There are a number of theories which claim to describe how the earth acquired its moon, including:

- *Coalescence*: The earth and moon were formed at about the same time out of a ring of the nebula dust left circling the sun as it formed. An eddy in the dust stream formed a separate planetary object which became the moon. This theory suffers from not being supported by the basic physics of motion—it is difficult (impossible!) to formulate a mechanism by which the revolution of dust around one object (i.e., the sun) could be converted into rotation (spin) of another object. It is easy to conceive of how an object circling another object might break up into a dust cloud (similar to the rings of Saturn), but not how the dust cloud could form into a new solid object circling the primary object.
- *Cleaving*: The earth began to spin faster, as heavier elements moved toward the core (like when a figure skater speeds up as she pulls in her arms). Then, matter from the earth vibrated loose and was ejected into space. This theory suffers from the same problem as above. Also, the angular momentum of the spin of the earth has not been preserved—the moon does not have anywhere near the same angular momentum as the earth. In addition, this theory cannot explain why the earth is inclined at 23.5 degrees relative to the solar plane, but the moon is inclined only by 5 degrees—if the moon was formed from part of the earth, it should have the same inclination.
- *Collision*: It is claimed, in this widely accepted theory, that a hypothetical planet about the size of Mars, dubbed Theia, collided with the earth on either a direct or glancing trajectory. During the collision, matter was ejected into space, or the stray planet gouged the earth (e.g., forming the Pacific Ocean). The collision left behind, in space, the ejected or gouged out material, which eventually coalesced into the moon. This theory has the same problems as the ones above—how to explain coalescence and the difference in angular momentum.
- *Capture*: The moon was formed elsewhere in the solar system or galaxy, and as it crossed near the earth it was

captured by the earth and began to revolve around the earth. Proponents of this theory cannot provide a legitimate physical model which can explain how a planetoid travelling by the earth could slow down and begin to revolve around the earth in a near circular orbit, or how a planetoid travelling in an elliptical or parabolic orbit could become the earth's satellite. In addition, this model conflicts with recent comparisons of the isotopic composition of the earth and the moon, which indicate that they have essentially identical isotopic ratios of oxygen, titanium, chromium and tungsten. To get around this difficulty, a recent adaptation of this model postulates that two different sized objects collided with the earth and that the earth rotated twice as fast as it does today. The revised model also uses gravitational interaction between the moon and the sun in an attempt to explain how the earth slowed back down to its present-day rate of rotation. This theory might hold together, with enough assumptions, if there was only one moon. However, as we noted in a previous meditation there are many moons in our solar system, and some of these have retrograde motion (i.e., they revolve in opposite directions from their host planets). Thus, extensive 'planet capture' must be assumed throughout the solar system, which compounds the challenges of explaining the existence of moons.

The existence of these different theories, and the increasing complexity of the models, indicates that scientists are grasping for an explanation of the origin of the earth's moon. In reality, their theories, for all of the fancy mathematics, make about as much sense as the claim that the moon is composed of green cheese. When it comes to planetary models, scientists clearly do not adhere to Occam's razor—which postulates that among competing hypotheses, the one which makes the fewest assumptions should be chosen. They reject, without a moment's thought, the simplest explanation of all—God created the moon as a separate object on the fourth day of creation.

Regardless of what scientists claim, it is a fact that God created the moon as a separate, fully formed, object for the benefit of mankind. The moon is critical for the existence of life on the earth. For example:

- The moon creates tides which help transport heat from the equator to the polar regions, which keeps the polar seas from turning into permanent ice; circulate water so that the oceans don't stagnate; and cleanse shorelines.
- The moon's mass creates a stabilizing anchor for the earth, preventing it from tilting too far on its axis due to the attraction of the sun and Jupiter; thus preventing extreme greenhouse-effects, as on Venus, or a permanent ice age, as Mars would experience if it had more water.
- The moon's gravitational pull helps to keep the earth from wobbling erratically, as Mars does, from the gravitational influence of other objects in the solar system. Thus, the earth has a more stable climate than it would have without the moon.
- Without the moon and its gravitational effect, the earth would complete a rotation about every 8 hours instead of in 24 hours—this higher rotational speed would cause powerful and violent winds and make the temperature variations between day and night extreme.

God knew what he was doing when he created the moon as Earth's satellite—to support the earth as a suitable home for mankind.

Laws of Nature Defined in Mathematics [February 15] (Gen 1.18)

God assigned the sun and moon to rule (or, govern) over the day and night. The rule he assigned them does not diminish his providential governance of the universe, nor does it diminish the subordinate authority which he gave to mankind. What was the role of governance he assigned to these light-bearing objects? Their rule appears in the form of their execution of their natural duties—to give light during the day and night, and to maintain order in the solar system (e.g., the planets' revolution around the sun) and on the earth (e.g., the moon's support for the earth by providing tides). As natural servants of God, they are not to be worshipped or venerated. However, many people have repeatedly rejected the Creator to worship the creation (Rom 1.25).

The assignment of a form of rule to the sun and moon bears witness to God's organizing power and implies the existence of laws that God has established to govern the natural behaviour of his creation. The influence of these

laws is found everywhere—from the forces which hold together the smallest components of matter to the behaviour of galactic super-clusters. A primary example is the law of gravity. The earth is held in its orbit by the sun, and the moon's gravitational pull helps to keep the earth from spinning erratically or tipping toward the sun so that one end would be subjected to extreme greenhouse-effects, and the other to a permanent ice age.

When we examine the laws of nature (e.g., the Law of Gravitation or Coulomb's Law or Electric Charge), we quickly discover that they are based on mathematics and that they model how God has chosen ordinarily to govern the universe; not how he must govern it—the laws of nature are *descriptive*, not *prescriptive*. The fact that nature can be described mathematically has been a continuing surprise to those who cannot think beyond their presuppositions of materialistic naturalism. They have difficulty explaining why there is a connection between physical reality and abstract mathematics. The fact that there is, indicates that the universe is more than the sum of its parts and is the product of intelligent thought.

Attributes of God are reflected in mathematics. For example:

- His *infinity* is hinted at by endless number sequences such as found in *pi*.
- His *orderly precision* and *logical* nature are displayed in the order and logic of mathematics, a system to which no human invention can compare. For example, the exponent in Newton's Law of Gravitation ($F = (G * m_1 * m_2) / r^2$) has been studied in numerous experiments and is a perfect 2 (to better than 1 part in a trillion). Also, in every right triangle, the longest side always equals the sum of the squares of the lengths of the other two sides—as expressed in the Pythagorean Theorem ($a^2 + b^2 = c^2$).
- Similarly, his *beauty* can be observed through the formal symmetry and patterns in mathematics. For example, Euler's equation $e^{i\pi} + 1 = 0$ combines the three unusual constants π , e, i and 1 with addition and multiplication to equal zero.
- His *omnipresence* can be seen in the correspondence between nature and mathematics. For example, we can model vocal and instrumental sounds in mathematical terms and reproduce them in our mp3 players using a digital signal processor. Or the circumference of all circles is 2πr, no matter how small or large the circle is. Both of these would be impossible if mathematics were merely an invention of man's mind. Mathematicians did not invent math. For instance, calculus was not *invented* by Newton or Leibniz, it was *discovered* by them. Mathematical reality lies outside of mankind and is not invention or art, it is a study of the order God has put into the entire universe.
- His *unity* is seen in the system of mathematics which has order, unifying principles, rules that make sense, and an amazing interconnectedness. Clearly a deliberateness is evident in mathematics. For example, π is linked to the set of all odd numbers: $\pi/4 = 1 1/3 + 1/5 1/7 + 1/9 1/11 + ...$ and the extended Fibonacci sequence (which is: 0, 1, 1, 2, 3, 5, 8, 13, 21 ...) is precisely the ratio of the side of the regular inscribed decagon (a 10-sided figure) to the radius of a circumscribing circle. The unity of mathematics has been called 'remarkable', 'surprising', 'unexpected', 'mysterious', 'a miracle', and 'astonishing', by those who have no belief in God.
- While God's unity is seen in mathematics, so also is his *diversity* (in a Trinity)—in a single system that can be used to describe human behaviour, calculate stresses on a building foundation, predict hurricane behaviour, and model the revolution of the planets.
- The fact that God is a *communicator* is shown through mathematics' ability to provide complex, specified information such as is evidenced when algorithms based on mathematical equations are used to guide robotic computerized numerically controlled (CNC) machines to repetitively produce refined parts for automobile engines.
- His *power* is demonstrated through what can be accomplished with mathematics—to synchronize traffic flows, describe musical scores that stir the heart, and define monetary systems that allow modern economies to function.
- His *truthfulness* is observed in the constancy of equations such as 2 + 2 = 4. Since all truth is ultimately God's truth, anything which is true reflects God's nature.
- God's *consistency* (unchangeableness) is shown from the fact that the results of calculations applying mathematical equations will never change anywhere in the universe. The fact that even atheists believe in the

consistency of mathematics is evidenced by advocates of SETI (the search for extra-terrestrial intelligence) who expect that someday we will receive a radio signal from outer space that is based on a regular pattern such as counting by binary numbers.

Only people with a Christian worldview can understand that mathematics reflects the logical, ordered, and good mind of God. As one of his forms of thought, God thinks mathematically. So, the existence of mathematics declares to mankind that God is behind the order in the universe. We can count and perform mathematical calculations because we are image-bearers of God (Gen 1:26-27) and think God's thoughts after him.

The Creation of Sea and Air Animals [February 16]

(Gen 1.20-23)

On the fifth day God created living creatures to inhabit the sea and the air. In this passage is the first instance in which any part of his creation is referred to as *living* (Gen 1.20). As we have already noted, plants do not possess life that is of the same order as animals. The differentiation arises since animals, and man, have a soul—an animating principle that is often called 'breath'. This does not mean that man's soul is identical to the souls in the animals. Just as there are classes of physical entities, (e.g., trees differ from rocks), so there are classes of spiritual entities. God's spirit is in a separate class from man's. Likewise, man's soul is in a different class from that of the animals. We will address the nature of man's soul when we consider the creation of man.

What God communicates here about the creation of sea-life and air-life makes it impossible to hold to any view that attempts to reconcile the model of life's development proposed by evolutionists and the Biblical account:

- Life did not spontaneously arise in a primordial ooze, in a deep-sea volcanic hydrothermal vent, or on a clay scaffolding. Life came from the Creator as a distinct attribute of a new created order. One of the serious mistakes that evolutionists make is to believe that the hypothesized conditions for the generation of life existed for millions of years. In fact, their 'ideal' conditions would have lasted only briefly. For example, the sun would have been far too faint through much of its supposed history to sustain life on the earth—the earth would have been a frozen ball. This is called the 'faint young sun paradox'. If life were spontaneously to arise it would have been necessary to appear at a fortuitous moment. It takes far more faith to believe that it happened when a spark of lightning struck a few organic molecules during a brief period of their temporary existence, than that life came fully endowed from the hand of the Creator.
- Birds did not evolve from reptiles. So, *Archaeopteryx* a favourite proto-bird of many evolutionists does not fill a 'gap' between reptiles and birds. Since the discovery of the first *Archaeopteryx* fossil, other fossils which appear to be essentially the same as modern birds, have been found in rock strata which evolutionists would date as considerably older than rock in which *Archaeopteryx* fossils are found. It is certainly a stretch to claim that an ancestor is younger than a descendant. Of course, evolutionists claim that the proto-bird continued to exist after birds developed, instead of simply accepting *Archaeopteryx* as either an extinct dinosaur or bird.
- Sea creatures such as whales and porpoises did not evolve from land-based creatures such as a sheep or a hippopotamus. Sea creatures were created on the fifth day; land-based animals on the sixth day. *Rodhocetus*, a fossil found in Pakistan, is not a 'missing link' between land and sea creatures, as loudly trumpeted by *National Geographic* in 2001. No one has been able to give a credible explanation for how sheep lost their legs and grew flukes, developed enormous lung capacity and a sonar system, lost hair and sweat glands and gained blubber, developed heat exchangers in their fins, moved their nostrils to the top of their heads, changed teeth into baleen filters, and developed nipples for underwater suckling. If we can't explain how all these changes (and more!) happened by chance through evolutionary forces, why should we believe that it actually happened?

God created all the different kinds (Gen 1.21) of birds and other flying creatures such as insects (Dt 14.19–20), bats, and flying reptiles (which are extinct, so we can only *assume* that they were reptiles); and all the different kinds of sea creatures, from crustaceans to sea 'monsters'. He also created multiple instances of each kind (not just a breeding pair); shown by the mention of *swarms* (Gen 1.20, 21). God also mentions the concept of procreation for the first

time. Plants do reproduce (seeds are mentioned earlier in the account; Gen 1.11), but here (Gen 1.22), God specifically blesses the animals (and later man; Gen 1.28) with procreation. Why is this concept mentioned? There seems to be basically a few ways by which God could have created living beings: 1) all of the instances at one time, 2) batches of instances at many times, or 3) a few of the instances out of which more instances would develop. It appears that he created the angelic form of life in its entirety—all angels at once—much like he created all the stars at one time. It does not appear that he used the option of creating multiple batches over time. With animals and man, he used the option of create man as a pair, out of which would develop, through reproduction, all of the humans who would ever live. We will address the reason for this when we consider the creation of man—but we can hint at a reason now: God endowed in mankind's nature a form of creativity through reproduction. God introduced the concept of reproduction with the lower living creatures—the animals. Thus, he put in place a mechanism whereby he could provide for the later growing human population as it expanded around the globe, throughout the millennia. If he had created all instances of animals at once, they would have suffered from population extinction over time. With the blessing of reproduction, God provided a mechanism that allows for constant replenishment.

With regard to God's work of redemption, Paul declares that the depth of the riches and wisdom of God are unsearchable (Rom 11.33). We can say the same thing when we consider his creation of the animals and the care he has taken with them all—from the guppy to the whale, the sparrow to the eagle.

STEM is Dead! [February 17] (Gen 1.20)

A widely accepted definition of 'universe', such as that from *Wikipedia*, states that the universe is, "all of time and space and its contents". Its contents is declared to be "matter and energy". In essence then, the totality of all that makes up the universe is four elements: space, time, energy, and matter (STEM). Key implications of a definition such as this is that everything in space-time is either matter or energy; and there is no other fundamental element which is a constituent of the entities which exist within space-time. Thus, animals and mankind are composed of *only* matter and energy, and nothing else. This worldview is often called materialism, which is based on the belief that everything in nature and all related phenomena are entirely and only the result of matter-energy reactions in space-time. Thus consciousness, feelings, and thoughts are the result of only physical and chemical reactions.

The idea that there are four basic elements which make up the universe is not new. In ancient thought there were four elements—earth, air, fire and water—which were believed to be the simplest essential parts and principles of which everything else was composed. The concept of four physical elements had a correspondence to the early mythologies which came out of the Middle East after the flood. For example, the *Enuma Elish* text (c. 1700 BC) refers to four foundational gods which arose out of chaos: sky, earth, water, and wind. Modern scientists scoff at these naïve views of the underlying components of physical reality. Yet, the ancient thinking, particularly in Greece and India, was more honest than modern materialism. In their models there were actually five elements. This fifth element was called *aether* in Greece and *akasha* in India. It was the quintessence (i.e., 'fifth essence'), and it referred to an element which went beyond the material elements of the universe.

The materialist belief in STEM as the foundation of the universe is *the* naïve view. A belief that all that was, is, or ever will be is STEM, fails to account for a number of key aspects of the entities which exist within the universe. Without these additional aspects being included in the definition of the universe, the universe would be at best an inert, lifeless, agglomeration of particles, and more likely could not exist at all. Without these additional elements, STEM is dead! We will consider only a few of these today.

The belief that STEM is all that exists does not take into account the forces which interact with the constituents of STEM. Four fundamental forces have been identified, and conventionally accepted, as operating in the physical realm: strong nuclear (holds the lowest level particles of matter together via gluons), weak nuclear (causes some

nuclear phenomena), electromagnetic (operates between electrically charged particles), and gravity (operates between objects with mass). The forces are not STEM. For example, gravity causes matter to clump together, but it is not matter or energy. Gravity also has an effect on time in gravitational time dilation, but it is not time. Nor is gravity space, but space apparently cannot exist independent of gravity—applied observations of Einstein's theory of General Relativity suggest that space is a feature of the universe's gravitational field. So, the forces identified in nature are a fifth element of the physical universe, which cannot be explained only as attributes of the STEM elements.

This verse (Gen 1.20) introduces another element of the created universe which is beyond STEM—life. No attempts to explain the existence of life from STEM have been successful; nor will they ever be (see, *Abiogenesis Mythology* [February 18]). What makes something alive (e.g., a worm *vs* a stone, or an ant *vs* a star) cannot be explained in terms of STEM. Life—a spark, a soul, etc.—is not an attribute of STEM and is another element making up the current universe. Living beings can range from viruses to human beings. However, within the spectrum of life there are clearly demarcated levels based on factors such as instinctual reaction to environmental stimuli, rationality, and consciousness. A worldview which claims that all that exists is STEM cannot explain the existence of life, let alone the existence of non-material, but real, entities such as logic and love.

Another element which STEM cannot account for is information. Information is not an inherent attribute of STEM. Information exists independent of STEM, but is manifested in STEM (e.g., in the elegant organization of the organic molecules in DNA). Information is not the result of self-organizing principles within STEM and cannot arise without the presence of an intelligent rational agent (see, *In the Beginning was Information* [January 31]).

Finally, we can consider intelligence and consciousness. Intelligence is not a required attribute of physical life (we do not consider a bacterium to have intelligence), nor is it information (although intelligence cannot operate without information). And, intelligence certainly is not an attribute of STEM. Intelligence is an attribute associated with higher-order living beings—humans, angelic creatures, and God. Likewise, consciousness is associated only with humans, within the temporal-spatial creation.

The universe is more that space, time, energy and matter. Without forces, life, information, intelligence and consciousness STEM is dead!

Abiogenesis Mythology [February 18] (Gen 1.20)

Scientists who reject the Biblical account of creation are unable to explain how life began on earth. In 1953 Stanley Miller, a graduate student at the University of Chicago, created a model, he believed, of the earth's primeval environment by sealing in a glass container methane, ammonia, hydrogen, and water. He then simulated lightning with a spark discharger. A goo formed which included amino acids, which are the basic building blocks of proteins. Speculation ran wild and many people believed that the questions about the origin of life had been answered. Ironically, it was the same year that Watson and Crick deciphered the structure of DNA and discovered that the structure of the information stored within in a cell is far more complex than had ever been imagined.

After Miller's experiment, it was thought that life originated on the earth as pond scum, ~3.5B years ago. However, that theory has become progressively less accepted. Evolutionists now believe that the early earth atmosphere may not have contained methane or ammonia as Miller assumed, and would have been too reactive for organic molecules—destroying them as they formed. So, various alternative theories have been proposed. For example, it has been suggested that life originated from organic molecules that formed on a superstructure of clay or pyrite, in suboceanic hydrothermal vents, in oceanic foam, or in half-a-dozen other ways. Each of these theories has subsequently become as unfashionable as last year's Prada purse. All proposed models for how life began on the

earth, without direct involvement by God, have failed to be convincing. So, it is now popular to speculate that organic molecules, or even functional cells, hitched a ride on meteors or comets and that life originated elsewhere in our solar system or somewhere else in the galaxy. Of course, this myth does not answer the question of how life began. It only pushes the question off-planet—out of sight, out of mind!

Naturalistic speculation continues to believe that life arose by a form of slow and progressive chemical evolution in which simple molecules (e.g., methane (CH₄), ammonia (NH₃), water (H₂O), hydrogen sulfide (H₂S), carbon dioxide (CO₂), and carbon monoxide (CO)) self-organized (through selective pressures) into complex molecular systems. Chemical evolution was followed by biological evolution, which formed the first cells. Yet, more than sixty years after Miller's experiment the question of the origin of life remains a mystery for those who devise models which exclude God as the author of life.

The challenge facing abiogenesis—the belief that life can arise spontaneously from non-living molecules if the ambient conditions are conducive—remains unsurmountable. A few of the issues with this belief are:

- Even when the basic building blocks—amino acids—of complex organic molecules are available they have never spontaneously organized into complex molecules such as DNA, and never will do so. There is nothing inherent in the structure of amino acids which induces them to organize into complex organic molecules.
- DNA cannot form proteins, including other DNA, without the presence of catalytic proteins and enzymes. RNA is a catalytic protein required for the production of DNA, but DNA is required to produce RNA. The two form an irreducibly complex system. RNA is difficult to synthesize in a laboratory under controlled conditions and RNA can be replicated, in the absence of DNA, only with significant guidance from lab assistants. And, every attempt to explain how RNA could spontaneously organize in an uncontrolled, hostile environment has failed. No single molecule exists which can make copies of itself. The only way that copies can be formed is in a synergistic system such as that formed by DNA and RNA.
- No one has been able to provide a reasonable explanation for the origin of the structured information contained in the DNA of *M. genitalium*, one of the simplest of free-living cells (i.e., not a symbiotic parasite, like a virus, which depends on other cells to feed and reproduce). No matter how much scientists may wish to believe it, random accumulations of amino acids will not form the coded information in the 482 genes, of over half a million base pairs, which are contained in this cell's genome. The presence of complex, specified information cannot be explained without the existence of an intelligent communicator.

At this point, the question of how life began remains one of the greatest of unsolved questions in biology. The goal of creating living organic cells from non-organic chemicals is as distant as ever. Even the advanced Kickstarter, crowd-sourced, project called OpenWorm, which is intended to simulate the functioning and interaction of all 959 cells, of which 302 are neurons, of a *C. elegans* nematode is not going to answer the question. Modelling the chemistry of a critter will not find the spark of life which makes a being alive.

Abiogenesis is a myth. Until men are willing to entertain the possibility that the origin of life requires an intelligent agent—God—and is not reproducible by humans or non-living forces, they stand no chance of explaining how life began. However, men would rather continue to believe a lie with the 'hope' that someday an answer will appear, than to accept the fact that God created the living creatures which swarm in the waters.

The Creation of Land Animals [February 19] (Gen 1.24-25)

Anthropologists have observed that people in different cultures will often associate and group objects in different ways. For example, a young man from North American will group a list of objects quite differently from a Masai male from Kenya. The North American will group 'woman' and 'man' together, and 'lion' and 'cow' together. The Masai male will group 'man' and 'lion' together because he views them as rulers within their respective domains, and 'woman' and 'cow' together because of their association with a bride price. We could argue, from our modern

cultural context, that the Masai still lives in a primitive world and that our model of reality is right. However, when we understand the thinking of the Masai male, and why he chooses to group objects as he does, we can see the logic behind his thinking. During the Middle Ages most Europeans would have grouped angels with man and animals, since all are created beings; and would have placed God in a unique class. Today, most Europeans would group angels with God in a class called 'supernatural' and man and animals, as biological entities, in a class called 'natural'. How one classifies entities says more about his worldview than it does about his logic.

The same can be applied to the development of a taxonomy for classifying living entities. Biological taxonomies in the Western tradition originated with the Greek philosophers—Aristotle in particular, who, as part of a larger taxonomic system, grouped animals into classes by their method of reproduction. Later classification schemes utilized morphology (appearance) and behavioural traits. The primary modern developer of a system using these criteria was Linnaeus, in his work *Systema Naturae* (1735). The current, widely accepted, biological taxonomy is similar to that developed by Linnaeus; but it clearly has been influenced by an evolutionary worldview. Since Darwin's theory has become broadly accepted among scientists, the general approach to biological classification has been to reflect the Darwinian principle of common descent—which arranges all beings into a hierarchy of nested classes—often referred to as a 'tree of life'. The schema may appear elegant in a textbook, but is in reality filled with uncertainties—from a question about the number of kingdoms, to placement of entire classes (e.g., placental *vs* marsupial mammals) or specific species (e.g., South African golden moles). Regardless of the difficulties, biologists, when attempting to place every entity into the supposed 'tree', make their choices driven by their worldview, which is heavily influenced by Darwinism.

In the Biblical account we read that God made unique kinds of land-based animals in three main classes: 'livestock', 'creeping things' and 'beasts of earth'. Those who either consciously or unwittingly subscribe to the modern worldview would dismiss this taxonomy as primitive, claiming that it shows no understanding of the realities of biology, since it does not include the animal classes we think of today (e.g., amphibians, reptiles, mammals; or marsupials, placentals; etc.). On God's behalf, we might ask the typical scientist who claims that the classification presented here is irrelevant, "Where were you when [God] created the world?" (as God does of Job; Job 38.4). God had a purpose for classifying the land animals by these three classes, and for communicating it to us through Adam. However, these three classes are not based on an Israelite understanding of the animal kingdom, as most commentators claim, since this account was written more than two thousand years before the Jews and the Mosaic statement of God's law came into existence. Therefore, the way God has classified the land animals is rooted in how he chose to create the classes of land animals by their kinds.

The class called 'livestock' may include all animal kinds which men would eventually domesticate, such as cattle, sheep, horses, camels, llamas, and dogs and cats. But, it could be limited to include only the ceremonially clean animals; a class of animals that was known before the flood (Gen 7.2). If it is intended to include all domesticated animals, then God may be speaking of the nature and disposition of these beasts—they generally now have gentler dispositions than other kinds of animals and can be tamed and placed in the service of mankind. The class called 'creeping things' may include all kinds of animals that glide or slide on the ground (including most amphibians and reptiles). This class of animals is generally repugnant to men (since the curse on the natural world), usually not domesticated—although men may tame them (James 3.7)—and difficult to place in the service of men. This class would later be used as a symbol for uncleanness and sin (Ezk 8.10). The class 'beasts of earth' includes all other kinds of animals, which are neither immediately useful to man or a symbol for evil, but are part of what God considered to be necessary to flesh out all the land ecosystems in his creation.

Regardless of the exact definition of each class, it is clear that God created the kinds within the classes as distinct sub-classes. He also created mankind in a separate act of creation as a unique kind within his own class. The classes and kinds are distinct from each other. They have reproductive boundaries which cannot be crossed, and they cannot be placed into a taxonomy that shows common descent. It may be, therefore, that God deliberately placed the land animals into these three classes to confound the foolishness of the worldly wise—who, ironically worship and serve

the created kinds rather than the Creator (Rom 1.25).

Genetic Code Complexity [February 20]

(Gen 1.20-21, 24-25, 26)

The increasing knowledge we have about the staggering complexity of living systems can lead to only one honest conclusion: it required an incredibly intelligent Creator to design the blueprint for life—the DNA code. It is hard for us to appreciate the amount of information contained within DNA, which defines how to assemble an animal (or man), but also how to assemble the 'machinery' to make cells, how to make the material (molecules) that are needed to make the cells, and how to make a copy of the instructions for the next generation of cells. DNA is not a simple step-by-step recipe for creating a cell. DNA contains a complex program that can sense and react to changes in the environment, command genes to react, and reprogram genetic sequences. DNA also has sophisticated data compression techniques and fault tolerant redundancy systems, and contains metadata (i.e., data about data). Nothing that man has ever invented (including the Internet and the Web) is as complex as what God has defined in DNA. The complexity of the three-dimensional interactions within DNA may never be fully understood by man.

Information scientist Marcel Golay calculated the odds against a self-replicating system (one that stored enough coded information to be able to reproduce itself) arising by chance at 10^{430} . Others have calculated the odds as being even greater. It has been estimated that there is on the order of 10^{130} particles (of electron size) in the universe (however, we will assume 10^{150} (e.g., to give cosmologists the benefit of the doubt that there is dark matter, not yet observed), If we assume that the universe is 200 times older than the ~14B years that cosmologists postulate (i.e., 10^{20} seconds, or 3 trillion years!), and that any particle has 10^{20} events per second, then the total possible number of events, at the electron level, that could have occurred during the life of the universe would be incredibly large, at 10^{190} . However, this falls so far short of the calculated odds against a self-replicating molecule, speaking about a molecule of 200 amino acids (nowhere near sufficient to be a self-replicating molecule), said: "Since we have just twenty possibilities at each place, the number of possibilities is twenty multiplied by itself some two hundred times. This is approximately equal to ... a one followed by 260 zeros ... the great majority of sequences can never have been synthesized at all, at any time. ... An honest man, armed with all the knowledge available to us now, could only state that in some sense, the origin of life appears at the moment to be almost a miracle, so many are the conditions which would have had to have been satisfied to get it going."

Evolutionists respond to these probability calculations by claiming, without a particle of evidence, that the molecules of life self-organize—i.e., amino acids form into self-replicating molecular chains in a similar manner as water molecules form into ice crystals. However, ice crystals do not contain coded information, and they form with a *reduction* of energy. Whereas, to form information-bearing molecules, an *addition* of energy is required which can be stored and utilized by a directing program. For example, a seed has stored energy, and when it begins to grow the coded information in the DNA uses that energy to make cells that utilize additional energy (e.g., photosynthesis converts sunlight and carbon dioxide into organic compounds). The addition of energy to organic compounds, without a directing program and a mechanism for converting energy, results in nothing but a glop of sticky goo.

Evolutionists cannot explain how self-replicating molecules formed without a directing program, or how DNA formed on its own from a soup of self-replicating molecules. They have struggled for decades to provide plausible explanations, but have been stymied by increasingly messy theories. So, they often resort to 'sleight-of-hand' and claim that self-replicating molecules, or even DNA or cells, hitched a ride on an asteroid. They only push their problem of explaining life's origin out of sight. Or, they appeal to magic—DNA exists, so it must have self-organized. However, the genetic code is not 'hardware', it is 'software'. Even if the 'hardware' (i.e., a molecular chain) could be generated by chance there is no way, using only natural processes, to explain how the information encoded in DNA came into existence.

Even if the proponents of evolution could explain the origin of DNA, a complete DNA double helix by itself is useless without a cellular context in which the DNA can be processed. Both the cell and the DNA must exist together to make replication of DNA possible. They are confronted with an instance of what is referred to as an irreducibly complex molecular machine. All parts of these machines must exist simultaneously for a system to function. If any part is missing nothing can work. Michael Behe says that there is "an eerie and complete silence" in the scientific literature about "how these molecular machines—the basis of life—developed." The problems get worse! There is no coherent theory that explains how cells without nuclei evolved into cells with nuclei. And no one has been able to explain, with a believable process (not based on guesses), how single-celled organisms became true multi-celled organisms (not a blob of single-celled organisms). Nor has there ever been found (living, or in the fossil record) any intermediate between single-celled organisms and complex multi-celled plants and animals. The answer is in front of their noses. Information is more than chemistry, and the complexity of DNA and cells demands a designer. God created life!

Cellular 'Machines' [February 21] (Gen 1.20-21, 24-25, 26)

In the previous meditation we noted how complex the DNA genetic code is and concluded that the incredible amount of information contained in DNA could not have originated through unguided natural processes. Information encoded into DNA must have been placed there by an intelligent agent—God. As we step up from complex protein molecules, and particularly the super-molecule DNA, we come to organisms which utilize DNA for reproduction. Viruses are among the simplest of the organisms that utilize DNA, but they can replicate only through a synergistic relationship with a host cell, in which they infect a cell and appropriate its operation for their own purposes. Above the level of viruses are cells, which are organisms that can metabolize, move about, and replicate independently.

Around the time that Darwin proposed the theory of evolution in the mid-19th century, scientists knew of the existence of cells (they were discovered by Robert Hooke in 1665). They also had limited knowledge about components of cells such as the membrane containing the cell's cytoplasm and other components; a nucleus which contains most of the genetic information; and a nucleolus within the nucleus, which we now know transcribes ribosomal RNA. These parts of the cell were visible under the light-based microscopes of the day. However, at that time, Darwin and other scientists had no idea of how complex a cell really is—for example, the DNA double-helix wasn't discovered for about another 100 years. George Lewis, a contemporary of Darwin, wrote about cells and expressed a commonly held view about their simplicity. He referred to the cytoplasm—he used a more general term, protoplasm—as "a jelly-like substance ... destitute of texture ... [and] organs." We now know that cytoplasm is full of complex sub-cellular 'machines'. He also referred to the cell nucleus as being an unnecessary accessory—which we now know is the control centre for the cell and contains the immensely complex program which controls the cell's 'machines'.

The complexity of the chemical processes within a cell are astounding. They do not occur in an undifferentiated manner with randomly colliding protein molecules—like pouring two chemicals into a beaker and stirring. Rather, the processes which occur inside a cell are more complex, and more carefully regimented, than the processes and tools supporting a modern automobile assembly plant—and they are fully automated with no human intervention at any step in the assembly process! Consider, for example, a *few* of the systems, processes, and 'nanomachines' that operate inside a cell:

- *Construction*: Cells can form only from pre-existing cells, using a self-templated self-assembly mechanism that causes a cell wall to elongate to hold and organize the material being produced for the new cell. Then, the cell wall is split and sealed off, using specialized enzymes. Cellular components would be dispersed if there were no cell wall. However, if a fully formed cellular wall existed, the interior components required for cell operation could not form inside the empty shell.
- *Transportation.* Kinesins are miniature 'motorized' protein machines which carry cargo too large to diffuse (e.g., vesicles and mitochondria), from one part of a cell to another. They travel, using a walking-like motion on two 'feet' (called globular heads), along 'highways' (called microtubules) which are temporarily assembled

to provide tracks for the kinesins as they pull their cargo to its destination. The walking motion is controlled by two molecules—one which binds the globular head to the microtubule and the other which flips it free. If a single kinesin is unable to pull its cargo (e.g. because of an obstruction floating in the cell) another kinesin will join the first and the two will pull together. Kinesins can walk about 100 steps per second and they 'know' which direction to travel because the microtubule is polar and the globular heads can bind in only one orientation. When not carrying cargo, kinesins power down into an energy saving mode.

- *Waste Disposal*. Lysosomes are membrane-bound cell organelles found in animal cells (other than in red blood cells) which contain more than fifty types of enzymes. They act like a stomach for a cell and can break down waste materials, worn-out organelles, and cellular debris such as proteins, nucleic acids, carbohydrates, and lipids.
- *Communication*. A cell contains more than twenty signaling mechanisms which transmit information within the cell. For example, receptors in the cell wall respond to external stimuli on the surface, such as a hormone or growth factor chemical signal. The receptors then transfer information to other parts of a cell using transducers and amplifiers.
- *Repair*. Toxic agents (e.g., from bacteria or viruses) or mechanical forces can damage cell membranes. Sensors on a cell's wall engage other proteins to transport material to the breach and to effect repairs.

In addition, cells have mechanisms for supplying energy to the cell (e.g., derived from food consumed by an animal or human), metabolism, controlling cell growth, defense, manufacturing (protein synthesis), reproduction, motility, and signaling other cells in a multicellular entity.

The cell is a wonder of engineering. Humans will never be able to create a system which integrates so many subcomponents into such a small space, uses energy so efficiently, contains such an incredible operating system, includes elegant fault tolerance and repair mechanisms, and can reproduce itself. It is absolutely absurd to believe that the cell arose through the random collision and adhesion of protein molecules. Even allowing for multiple billions of years, such a marvel as the cell could never have come into existence through some, yet unknown, selforganizing principles inherent in matter. If someone ever says, "If there is a God, let him show me that he exists." all we need to do is point to the cell. For in a cell, we see the signature of the God—the intelligent designer who created the universe.

Created Kinds [February 22] (Gen 1.20-25)

Evolutionists, such as Lynn Margulis, claim that all of life on the earth—oak tree and elephant, bird and bacterium shares a common ancestry with every other form. They claim that all plants and animals are descended from a combination of chance events that formed living entities from non-living organic molecules. The evolutionary 'tree of life' is supposed to represent this sequence. Along the way, forms of life supposedly diverged from the trunk to form the variety of life we see today. Some of the 'branches' in the tree died out (became extinct) and are found only in the fossil record, but new branches have always been forming—we just cannot see their arrival very clearly, since evolution occurs so slowly. Thus, a basic tenant of evolution is that genetic variety has *increased* through time—with an associated increase in the information content encoded in the genome.

In contrast, the Bible states that God created unique kinds of animals (and plants). Evolutionists, and even many foolish Christians, provide a caricature of the Bible's statement and claim that the Bible teaches that God created a set of static species during the six-day creation week. Many of these species were killed at the time of the flood and many more have gone extinct since (e.g., during the ice age). This model for how the diversity of life arose is simplistic and false. Rather, the Biblically based model is that God created generic *kinds* of animals with a broad range of genetic diversity. From these *kinds* distinct species quickly developed. Many of these species (and possibly even entire *kinds*) have gone extinct since the flood.

The development of species within kinds is not evolution. Evolution proposes that genetic variety and complexity

have *increased* through time. In contrast, what has actually been happening is that genetic variety has been *decreasing*. For example, consider the 'dog' family (*Canidae*). It is possible that the subfamilies—i.e., *Canini* (dogs, wolves and jackals) and *Vulpini* (foxes) are descended from one original generic 'dog' kind which God created. Alternatively, God may have created a few 'dog' kinds out of which developed the genera and species which we know today. These original kinds had a broad spectrum of genetic variety.

If two of today's animal species can interbreed and produce hybrids which are fertile, they are from the same kind. Likewise, species which can hybridize but do not breed true, are still from the same kind. However, there may be a pair of species (or genera) which cannot hybridize and yet are still descended from a common kind. Their inability to interbreed may be the result of too great a loss of genetic information. In general, related genera as defined in the modern taxonomy classification scheme, and possibly some of the families, constitute the original kinds which God created.

After the flood only two of each kind of animal (except for 'clean' animals) came out of the ark. As these animal pairs reproduced and their progeny quickly spread over the uninhabited earth, some of their descendants would have become isolated in small independent breeding populations—caused by separation of the continental land masses, erection of temporary barriers during the ice age that followed the flood, or by populations inhabiting ecological niches. These populations became genetically differentiated by natural variety within the genome, which reinforced their isolation. For example, a genetic variation in colour or song could have caused one bird not to recognize another. These isolated populations did not interbreed, and became independent species; and over time, as genetic diversity declined, it may have become impossible for them to interbreed. So, the Biblical kinds generated genera and species through a *loss* of genetic information. This information loss (decline) is consistent with the principle of decay that is the result of sin and the curse on the created order (Rom 8.20). Life is not becoming more genetically complex as evolutionists contend, it is becoming *less* complex (with less genetic diversity) even as more species develop.

Interbreeding across the boundaries of the Biblical kinds is not possible. Thus, 'like gives birth to like'—within the limits of kinds (Gen 1.12) and their subdivisions (e.g., modern species). God imposed on the creation an order that has even appears in the fossil record and is the reason why the 'missing links' do not exist. Evolutionists, such as Stephen Jay Gould, have tried to get around the fact that intermediate, cross-kind, exemplars to do not exist by concocting a bolt-on to their fairy tale. They refer to it as 'punctuated equilibria' and claim that evolution occurs in bursts when major environmental changes occur, and the rest of the time species remain stable. They postulate that these bursts occurred over such short periods of time that no evidence accumulated in the fossil record. So, evolutionists are able to have their theory without any evidence to support it! However, there is evidence which contradicts their fantasy, found in the work of human plant and animal breeders. Over four thousand years of guided selection (even with extreme environmental conditions imposed) has not produced a single instance of evolution—increasing genetic complexity or crossing the boundaries of a kind. The most that has occurred is subspecies (i.e., breeds) variation that can usually be undone within two interbred generations, if there has not been a loss of genetic information. Accepting the creation of kinds by God permits us to provide a more coherent model of how species arise than the model proposed by the proponents of evolution.

The Epigenetic Conundrum [February 23] (Gen 1.20-21, 24-25, 26)

Evolution is often defined as changes in inherited characteristics of biological populations over successive generations, caused by processes (e.g., mutation and natural selection) which alter *genetic* DNA. A serious problem with this definition is that it ignores other sources of information which have a fundamental role in animal development and cannot be influenced by changes in genetic DNA. This information is called *epigenetic* ('above' or 'beyond' genetic), and defines heritable traits which are not encoded in DNA.

Three-dimensional animal structure (e.g., placement of a head on a spine, or the type and shape of limbs) is

controlled by information which is not derived from DNA, but is determined during the earliest stages of embryonic development. Epigenetic information is provided by both the unfertilized and fertilized egg cells of the nascent entity. During early embryonic cell division, the internal structure of cells and the mechanics of cell operations determine the structure of the developing animal (or person). For example, the shape and location of microtubule arrays within cells determine the form of cells. One cellular structure called centrosome ('central body'), and its associated microtubule arrays, provides information for directing cell transport mechanisms. When a cell divides the centrosome duplicates itself—but the centrosome structure contains no DNA.

Other epigenetic cellular information which controls the development of a multicellular organism at the embryonic stage, includes the following:

- *Membrane targets* these are pre-existing molecular structures within cells which determine where manufactured RNA molecules will attach.
- *Ion channels* these are openings in cell walls through which electrically charged particles can pass, permitting energy transfer, and having morphological effects (e.g., electrical fields within cells provide spatial coordinates to guide cell development).
- *Sugar molecules* these are arranged on the exterior of cells in complex, specific structures which influence the structural arrangement of adjacent cells and act as a form of communication among different cells.

These information-rich structures, along with others, influence the initial type, form, and development of cells during embryonic growth. Thus, genetically *identical* cells can develop heritable (i.e., passed on to daughter cells during cell division) differences which are not the result of information encoded in the genetic DNA.

The existence of epigenetic information challenges the theory of evolution with a serious conundrum. Information encoded in genes in the form of DNA will have no effect on the early developing form of an animal until after information contained in the cells has already established the basic structure of the animal. This means that no amount of change (through mutation and natural selection) to the genes can ever influence the type and structure of the animal which will develop from an embryo. Genetic mutations and natural selection are the wrong tool for creating new animal forms—as useless a using paint as the forms of a foundation of a building under construction.

Evolutionists have attempted to solve this conundrum by claiming that epigenetic information is also encoded in genetic DNA, and thus the genes influence the development of all aspects of cell division and embryonic development. However, experiments at the epigenetic level demonstrate that epigenetic information is passed from parent to daughter cells without any reference to information encoded in DNA.

Since genetic-centric explanations for the origin, evolution, and transmission of epigenetic information have proven inadequate, evolutionists have pursued another course to address the epigenetic conundrum. They suggest that heritable epigenetic information can be changed through mutation and natural selection—this is supposed to happen in the same way, as they claim, genetic DNA can be enhanced. However, they have absolutely no evidence to support this suggestion and are confronted with intractable problems:

- The structures in which epigenetic information is found are not affected by agents they believe cause useful genetic mutation, such as radiation or chemical agents.
- Any changes to cell structures makes the cells inoperable and leads to sterility or premature death—not the formation of new kinds of animals.
- No evolutionist has ever explained how epigenetic information arose to create the initial cell mechanisms and what processes could have influenced evolutionary change in this information.

When Darwin first proposed speciation by natural selection, he assumed that cells were simple amorphous blobs of a mucus-like substance. Since then, we have learned about the operation and complexity of cells and have discovered that their genetic and epigenetic information content is incredible. The complexity of a single cell is greater than that of a modern metropolis. Cells have transportation 'highways', energy harvesters, waste disposal systems, communication channels, manufacturing facilities, security fences, libraries of information, and mechanisms for locomotion. Nothing which humans have yet built exceeds in complexity and elegance what happens inside of a cell. Proponents of evolution are grasping at a gasping theory!

Evolution's Myths [February 24] (Gen 1.20-21, 24-25, 26)

The theory of evolution is false because it explains nothing, but also because it explains too much. Consider what the theory cannot explain; such as, how:

- *The genetic code arose* (we considered this in previous meditations).
- *Homchirality arose.* Organic compounds of all living organisms consist of molecules of only a single orientation, not their mirror image.
- *Prokaryote cells evolved into eukaryote cells*. The significant differences in metabolism (mostly anaerobic *vs* aerobic), makeup of walls (sugars or peptides *vs* cellulose or chitin), core structure (DNA in cytoplasm *vs* bounded by a nuclear membrane), and reproduction (fission *vs* mitosis or meiosis) make it impossible to chart a path from one to the other.
- *Single-celled organisms became multi-celled organisms*. A bacterium remains a bacterium and does not become anything else when subjected to strongly selective environmental pressures. Viruses possess a genetic mechanism that allows them to systematically alter their form and shuffle their antigen segments in a complex process called re-assortment. Despite these mechanisms, they remain viruses.
- Asexual organisms were able to produce sexual organisms that could successfully reproduce. Only speculation explains how the differences between the X and Y chromosomes arose, and why there are males and females. Even if a viable life form were to arise that was markedly different from its parents what could it mate with?
- *Speciation occurs beyond the existing in-built genetic variation*. Breeding experiments demonstrate the absolute limits to variation, beyond which no change is possible. The supposed 'good' mutations do not provide a solution because, if they exist, they are so rare as to be ineffective as a mechanism. Biological change, producing increased genetic complexity, has never been demonstrated empirically.
- *Natural processes developed similar structures in different animals*. For example, octopuses and squids have similar eyes to humans. Yet, their supposed common ancestor does not have a similar eye structure. Also, hemoglobin and bioluminescence appear sporadically among the animal phyla with no explainable pattern. If evolution is true, we should be able to see where they entered the 'tree of life' and trace their development. It is unbelievable that complex proteins appeared multiple times by chance. Placental and marsupial dogs have essentially indistinguishable skeletons but in their soft anatomy (e.g., reproductive systems) there are significant differences. A designer would re-use design elements, chance would not produce such convergence. Evolution cannot explain convergence.
- *Complex organs developed.* Darwin said, "[I]f it could be demonstrated that any complex organ existed which could not possibly have been formed by numerous, successive, slight modifications, my theory would absolutely break down." (*On the Origin of Species*). No evolutionist has been able to demonstrate these speculative claims: the bird lung evolved from a reptile lung, feathers developed from reptile scales (of a very different substance), the amniotic egg of the reptile developed from the amphibian egg, and whale fins and dolphin flippers developed from sheep legs. They also cannot explain how eyes formed from sightless creatures (and how many different forms of eyes evolved), how a woodpecker developed its ability to smash its head into a tree without getting a headache (or brain hemorrhage), and numerous other examples.
- *Symbiotic relationships developed*. The Tasmanian snow skink eats many things but when the honey-bush blooms it tears off the tough, red petals that enclose the rest of the flower and chews them to get at the nectar. This exposes the reproductive parts of the flowers, allowing pollinating insects' access. Some parasites go through multiple metamorphoses (e.g., malaria). There are hundreds of these relationships that could never have evolved. The best explanation is that God created symbiotic relationships. But evolutionists can't accept this simple explanation.

On the other hand, the theory of evolution is used to explain how everything in biological organisms arises. For

example, in a book entitled *A Natural History of Rape: Biological Bases of Sexual Coercion*, the authors argue that there is some evolutionary basis to rape as, they claim, there is to all aspects of living things. Socio-biologists claim that why we think rationally or irrationally, have maladapted behaviour (e.g., selfishness, rape, murder), or adapted behaviour (e.g., altruism) is the result of evolution. In every scientific paper, which is based on the evolutionary paradigm, the physical attributes of organisms or their behaviour are attributed to evolution. Many supporters of evolution would be happy to attribute homosexuality to genes so that they could defend this behaviour as natural but would be squeamish about defending rape and phenotypic prejudices as natural. But if evolution is true, everything can be attributed to genetics and is natural; there is no room for morality. From the evolutionary mindset, evolution explains everything—so in effect it is a god, or it doesn't explain anything other than what is, is.

No empirical evidence exists for evolution—when defined as: the increase, through time, of the coded information content in the genome. Therefore, the belief that all life is the result of evolutionary natural processes is unsupportable. Believing in evolution is similar to believing in the existence of goblins. It is dysfunctional and can only hinder the advancement of science, such as useful medical discoveries, and destroy the basis of morality.

Evolution is Supported by Consensus, Not Evidence [February 25]

(Gen 1.20-21, 24-25, 26)

The theory of evolution is presented as if it is a fact that is beyond dispute. For example, *Teaching About Evolution* and the Nature of Science⁵ states, "The scientific consensus around evolution is overwhelming." Elsewhere it quotes the *Benchmarks for Science Literacy* report which states that, "the educational goal should be for all children to understand the concept of evolution by natural selection, the evidence and arguments that support it, and its importance in history." Nothing is said about ensuring that students understand the evidence against evolution, because the authors believe that there is none, or none worth considering.

The reason that people who believe in evolution have to appeal to consensus is that it is a myth. There is no empirical evidence which demonstrates that all living species of animals are descended from a common ancestor. Such a statement causes evolutionists to scream 'Foul!', and claim that the evidence supporting evolution is abundant, but those who believe in creation ignore the evidence because of their blind faith in the Bible's teachings. We will not consider, today, the question of whether there is any evidence which supports evolution. Rather, we will focus our attention on a few problems associated with the fact that evolution is upheld by consensus.

- 1. *Consensus can be wrong.* There are numerous examples, in science and in other domains of knowledge, which demonstrate that majority opinion can be wrong. The classic example that demonstrates this, was the belief that the sun revolves around the earth. A recent example is the consensus that ulcers were caused by stress. The proof that at least some ulcers are caused by bacteria was provided in the early 1980s by Robin Warren and Barry Marshall. However, because of the consensus within the scientific community, their evidence was rejected. Marshall drank a beaker of *H. pylori* culture and became ill and developed gastritis. With antibiotics treatment his gastritis was resolved. It wasn't until 1994 that the NIH published an opinion stating that most recurrent duodenal and gastric ulcers were caused by bacteria and that antibiotics should be included in the treatment regime.
- 2. An argument based on consensus applies faulty logic. Logicians include the form of argument, based on majority opinion, among the false forms of logic. An appeal to the majority only speaks to what people believe to be true, not what is in fact true.
- 3. *Consensus is not scientific*. True science does not operate on consensus. It operates on reproducible evidentiary facts. Consensus is appealed to when there is insufficient evidence to support an argument. When empirical evidence supports a conclusion, it is unnecessary to appeal to consensus. Scientists do not say, "Scientific

⁵ National Academy Press, 1998; chapter 5.

consensus supports the belief that the world is 40,000 km in diameter", or "The consensus is that light in a vacuum travels at 300,000 km per second." Consensus claims are used to bolster views which are, at best, unproven.

- 4. *Consensus resists change*. Thomas Kuhn noted, in *The Structure of Scientific Revolutions*, in the "Priority of Paradigms" that scientists contort their models to account for contrary evidence rather than change their basic presuppositional positions. The consensus mentality in the scientific community filters out divergent views through peer reviews and the academic tenure processes. Often, the only way for change to be accepted in some disciplines is when the consensus generation dies out. For example, in 1912 Alfred Wegener proposed that the earth's continents had, at one time, formed a single continent. The idea was dismissed by the majority of geologists as a fringe theory, akin to belief in a flat earth. Fifty years later, evidence showed that the continents were moving apart, and the seafloor was spreading. A younger generation of scientists began to accept Wegener's ideas. Scientists like to claim that they are open minded. However, the majority are as stubborn in their beliefs as a Talibanic ideologue.
- 5. *Consensus can cause harm.* Ignaz Semmelweis, a Hungarian physician working in Vienna in the 1840s, demonstrated that the incidence of puerperal fever in new mothers could be drastically reduced if doctors in obstetrical clinics disinfected their hands with a chlorinated lime solution. His peers refused to believe that their practices had been responsible for many deaths. Rejection of Semmelweis' evidence may have contributed to his being admitted to a hospital for the insane. Joseph Lister, in the late 1860's, finally convinced the medical practice that unsanitary surgical conditions contributed to premature deaths. He instructed surgeons working under his authority to wear clean gloves and wash their hands before and after operations with a carbolic acid solution.

The reason that there is consensus about evolution is not because it is supported by evidence, as evolutionists claim, but because men do not *want* to believe in the Creator God.

The Creation of Man [February 26] (Gen 1.26-27; Gen 2.7; Gen 5.1)

God's week of creative work ended with the creation of man. To this point all of God's activity had been accomplished without an explicit indication of deliberation and through impersonal commands—"let there be". However, when he created man, God changed from command to consultation—"let us make man." The dialogue is among the persons of the Trinity, not with angels or some other created entity (e.g., a man-god, as some cults suggest). The uniqueness of man is implied by this consultation since God says:

- "Let *us* make" The creators, co-equal members of the Godhead, decide together to make man.
- "In *our* image" Man was created in God's image; not that of angels.

The dialogue is specifically between the Father and the Son, through whom everything was created (Heb 1.2; Col 1.16). It is likely true that the earliest readers of this account would not have understood clearly the passage to be speaking of the Trinity (or even of a plurality). However, this only means that it would require additional revelation (with the coming of Jesus) to provide fuller depth to the meaning of the dialogue. This is, in principle, no different from the NT providing insight to the purpose of OT types and prophecies.

With the creation of man, God displayed the personal and social aspects of his nature. This adds weight to the fact that man is the pinnacle of God's creative work—creation progressed from non-living entities, to plants which have a form of life, to living beings with the 'breath of life', to man who has a rational soul and is created in the image of God. Many people do not want to accept the fact that God created the universe for man to inhabit and that man is honoured above everything else (including angels) that God created. We see an undermining of man's honoured position in a number of ways. For example, when men worship created objects such as stars or animals, they diminish man as the object of God's special recognition. Similarly, the worship of angels is wrong (Rev 19.10; Rev 22.9) because they are created beings and, though glorious, are not divine or even image-bearers of God.

Another way in which people undermine the unique position of man above everything else in creation, is through their belief in the presence of extraterrestrial intelligent life in the material universe. For example, the cover of *Popular Science* (Oct., 2011) trumpeted: "The Search for Alien Life – Why We're Closer Than Ever to the Discovery that Will Change Everything". The popularity of comic book characters such as Superman and Thor; and the thousands of science fiction books and hundreds of movies which have dealt with intelligent life in other parts of the Milky Way or in other galaxies also display the common belief that there is nothing special about man—man is one of many intelligent entities throughout the universe. We need to consider why this belief is so pervasive. Any scientist who is honest knows that the factors which had to be in place on the earth to generate life spontaneously are so remotely improbable that it is impossible. So, the real reason that men wishfully search for intelligent life (or any form of life) elsewhere is their hope that they can demonstrate that natural evolutionary forces must exist which can produce life. In essence, SETI (the search for extraterrestrial intelligence) is a desperate attempt to dethrone God and demean man.

The most explicit way in which people undermine the uniqueness of man is by suggesting that mankind developed through an evolutionary process from an ape-like creature—either he developed his rational capacities naturally as he became differentiated from the *australopithecine* or God intervened at a particular point to breathe into a grunting beast the mind of man.

Many in the church have capitulated with the view that man is less than the glory of God's creation. Some argue that 'science' does not support the idea that we can trace all of human ancestry to a single real couple. They base this claim on the presupposition that only accidental mutations could produce the variety found among humans, while ignoring the fact that God endowed Adam and Eve with a breadth of genetic potential that could produce ten times more unique offspring than there are estimated sub-atomic particles in the universe. Others suggest that the belief in a real Adam and Eve is not necessary and that we are to understand the Genesis account as symbolic.

However, in order to have a correct theology it is necessary to believe that God created a single real pair of humans—Adam and Eve—in an instant, on the sixth day of creation; for at least the following reasons:

- The NT genealogy of Jesus (Lk 3.23-38) records a father for every one of Jesus' ancestors except Adam, who is called the son of God. It is highly blasphemous to suggest that the God-man is the descendant of an ape.
- Paul informs the Athenian council that everyone is descended from one man whom God made (Acts 17.26), not from a pool of primates. Thus, God can demand that all men repent and believe in Jesus.
- Jesus declares that Adam and Eve were created at the beginning (Mt 19.4). They must be historical people or Jesus is lying.
- Paul refers to Adam and Eve as real, uniquely created persons (1 Cor 11.8-9; 1 Tim 2.13)—as real as Jesus himself (Rom 5.12-21; 1 Cor 15.22). Paul's message is meaningless if Adam is only a symbol.

Adam and Eve introduced sin and death into the world. If there had been millennia of evolution prior to their appearance, mankind, represented by Adam, cannot be held accountable for the appearance of death.

Non-Ape Man [February 27]

(Gen 1.26-27; Gen 2.7, 21-22; Gen 5.1)

Adam and Eve were created, body and spirit, by immediate and direct acts of God. Adam's body was formed out of the dust of the ground (Gen 2.7; Gen 3.19), and Eve's from Adam's body (Gen 2.21, 22). Neither arose from an animal parentage. In a few verses, the Bible declares to be false the belief that man developed through an evolutionary process from an ape-like creature, as many people dogmatically proclaim today. Even many Christians believe that man developed his rational capacities either naturally as he became differentiated from a pre-hominoid, or God intervened at a particular point in the evolutionary process to breathe into a grunting beast the mind of man.

It is claimed that fossils show the increasing complexity of life through time and provide intermediate examples

along the evolutionary path. From these fossils we are supposed to see a progression from an ape-like creature to man. Over the past two centuries many candidates for a pre-human ancestor to man have been proposed, including Neanderthal. Some of these have been frauds (e.g., conjectured from a pig's tooth). Neanderthal, in the 1920s was claimed to be an ape-like creature on the way to becoming human, but by the 1980s was acknowledged by paleontologists and anthropologists to be near human, based on evidence such as tool making, language, and religious rituals. Today, Neanderthals are considered to have been humans.

A favorite among evolutionists today is *Australopithecus*, for which Richard Leakey and a fossil named Lucy are famous. *Australopithecine* are supposed to be our evolutionary ancestors. However, Leakey himself reported to have discovered in Olduvai Gorge, below *australopithecine* remains, foundations of a circular stone habitation. Such a shelter is normally attributed to man. This means that man existed at the same time as (and before) the creature which is supposed to have been our ancestor! Of course, evolutionists claim that the co-existence of two evolutionary branches is possible, as one gained ascendancy and the other died out. The latest attempt by evolutionists to save the *australopithecine*, or similar ape-like creatures, as our ancestors is to push back their dates by millions of years. In fact, the *australopithecine* may merely be fossilized apes similar to bonobos (pygmy chimpanzees), which are essentially the same size (skeletal frame and brain cavity).

Evolutionists often conjecture from a few bones and teeth (or part of a jaw) the evolutionary sequence of the supposed pre-hominoids and how they lived (e.g., what they ate, if they walked in a certain way, and if they made tools). It makes about as much sense as you or I guessing what is the picture on a 1,000-piece puzzle from a few pieces. If you think I am exaggerating about what evolutionary paleontologists do when they invent their stories of human evolution, I recommend that you do an internet search and read the article by Michael D. Lemonick and Andrea Dorfman, in *Time* (2001-07-23) entitled, *One Giant Step for Mankind—Meet your newfound ancestor, a chimplike forest creature that stood up and walked 5.8 million years ago.* You will see how, from 11 bone pieces, apparently from five different individuals, the discoverers concoct a life history for the creatures.

A disconcerting aspect of the claims for the evolutionary development of man, is that they are based almost entirely on fossilized *bones*. Evolutionists seem to forget some key factors:

- 1. There are very few fossils which are purported to be human ancestors—bone fragments from fewer than 100 samples exist. It is futile to make the grand claim of human evolution on so little 'evidence'.
- 2. A tremendous variety can be found within a single species. For example, full-grown horses can be big (almost 2m tall) and small (.7m tall). We all know of the variety that can occur among dogs, yet they are all dogs. So, the fossil bones of 'pre-hominoids' may be individual variants of apes.
- 3. The majority of an organism's biology resides in its soft anatomy which is not preserved in fossils. So, it is merely guessing to suggest that the 'pre-hominoid' creatures were developing human capacities.

Yet, evolutionists take a few bones and fragments and conjecture a new species and claim them to be missing links! Every fossilized ape-like, or supposedly pre-hominoid, creature will eventually be classified either as an ape or as human. The missing links will always be missing because there are no pre-hominoid ancestors to man. Despite this, the textbooks and the popular media continue to spout the same nonsense about man's supposed ancestors with blaring headlines—note an example, "*Homo Naledi, New Species in Human Lineage, Is Found in South African Cave*" (*New York Times*, 2015-09-10).

Materialistic naturalists entrenched in the modern academies try to attribute all human attitudes and preferences to evolutionary forces; claiming that man responds to inputs from his environment in a computer-like fashion or instinctively like an animal. For example, they claim that girls' preference for pink is a result of early hominoid foraging patterns and that we find poetry beautiful because it stimulates certain parts of our brain. The silliness of all this is patently obvious to anyone not wedded to the religion of Darwinism. These claims have no resemblance to the reality in which human causation is more than passive responses to material stimuli, and they are supported by no empirical evidence which considers the complexity of man—man made to be the highest order among all creatures; man, who is sin-stained but is still the most magnificent creature that came from the hand of God.

The Image-Bearer of God [February 28] (Gen 1.26-27; Gen 5.1)

The *Enki and Ninmah* creation myth, from ancient Sumer, explains why man was created—the gods had grown weary of caring for themselves and they created mankind to be their slaves. Some religions view man as part of the transcendental nature of god. The Genesis account (which precedes all extant religions) presents man as neither slave nor god, but as an image-bearer of God. This designation declares that man is unique from the rest of the creation.

However, it is considerably easier to state that man was created in the image of God and after his likeness, than to define what it means. The first consideration is to determine if the Holy Spirit intended for there to be a significant distinction between the terms 'image' and 'likeness'. Until the time of the Protestant Reformation most interpreters concluded that there is a difference, suggesting that one term referred to the rational capacities and the other to the moral capacities in man. Later interpreters have concluded that the two terms are synonyms, that one is an adjectival modifier of the other (e.g., 'likeness of image'; meaning something like 'nearest resemblance' of God), that the second term intensifies the first (e.g., 'an image which is like us'), or that the second term helps to explain the first. It is probably best not to conclude that there are significant differences between the two terms, but to view them as intensifying one another—man is as close to God as anything created can be.

Second, is to determine what it means for man to be created in the image and likeness of God. This is not an easy matter to resolve. Interpreters take various positions and are emphatic about what is included and excluded from the image of God. For example, most insist that since God is a spirit, it cannot include anything to do with man's body. They suggest that the image of God deals only with the rational and moral dimensions of man. Some even add that man's body was created in the image of the animals. We should be careful not to come to this conclusion—i.e., that the image of God does not include man's body. Man, in his entire being, spirit and body, was created in the image of God. Separating the body from the spirit can open the door to Gnosticism, which holds that the body is inferior to the spiritual dimension of man. Some reasons for including man's body in the 'image of God' are:

- Angels are spiritual beings who have personalities, think rationally, have the ability to communicate, are holy and sinless, are assigned duties of service, and who worship God. Yet angels were not created in the image of God. Therefore, whatever is included within the definition of 'image of God', must be something other than, or more than, what most interpreters conclude is the meaning of 'image of God'.
- The suggestion that only the intellectual, spiritual, and moral attributes of man are included in the 'image' is the result of a misunderstanding of the nature of man. Man's spirit is as far from being innately God-like as is our body. God is eternal and infinite; we are temporal and finite. Also, God is a self-existent being. In contrast man's second-by-second existence, depends on the ever-present breath of God. And, our rational capacities are mere shadows compared with the omniscience of God.
- It is a mistake to say that God does not have a body. He in fact does. Jesus is God and he is in Heaven at this moment with his resurrected body. Paul says that Jesus is the image of the invisible God (Col 1.15). He cannot mean that only in his rational or spiritual dimensions Jesus is the image of God—for in these ways Jesus *is* God, not 'image of God'. Rather as the visible God-*man* he is the image of the invisible God. The incarnation of Jesus, and even more so his post-resurrection glorification, shows the potential of what humanity can be. It is what God ultimately means by 'image and likeness' of God. Adam was the image of God, unblemished, until he sinned. We reach our full potential when we are transformed into that image by the Gospel (Col 3.10; Eph 4.23-24).

To be in the 'image of God' is not so much to possess a set of attributes—such as rationality or a moral consciousness. Rather it is who, or what, we are. To be in the 'image of God' means that we are human. Therefore, we need to determine what it is that makes us human, as distinct from being animals or angels. Since the account in Genesis chapter 1 does not describe the nature of the image of God, we have to infer from the context what might

be included. In the immediate context there appears to be at least three things which distinguish human beings from the rest of creation, they are:

- *Creativity* Man has been endowed with an amazing ability to conceive and create something new. While we cannot create material things out of nothing pre-existing, our abilities in engineering, music, literature, and art make us stand out from all the rest of creation (including the angels).
- Sociality Man is considered to be a son of God (Lk 3.38) and part of the family of God (Acts 17.29). Man was created in two sexes (Gen 1.27) and is given the privilege of forming loving families (Gen 2.24), and through that union to create new life in his own image (Gen 1.28; Gen 5.3).
- *Dominion* Man has been given authority over the rest of creation, including the inanimate entities (Gen 1.28), plants (Gen 2.15, 16), and all animals (Gen 1.26; Gen 2.20); and even over angel-kind (1 Cor 6.3). This dominion allows us to fill and subdue the earth as we act responsibly for, and before, God.

Man is the preeminent exhibition of God's creative wisdom and goodness. We challenge every materialist to explain how a 'bag of chemicals' can have the dignity of man—the image-bearer of God.

Homo Faber [March 1]

(Gen 1.26-27; Gen 4.20-22; Gen 5.1)

In the previous meditation, we noted that God endowed mankind with an amazing ability to conceive of, and to create, new things. The ability of man to create something entirely new is a feature of what it means to be created in the image of God, the great Creator. While we cannot create material things out of nothing pre-existing, our creative abilities make us stand out from all of the rest of creation (including the angels).

We marvel at edifices such as the pyramids, and wonder how the ancient Egyptians were able to cut, move and place the roughly three million massive stones that form a structure such as Great Pyramid at Giza. Similarly, buildings such as the Coliseum in Rome, or the durable aqueducts and ancient highways, which the Romans constructed, impress us. Ironically, the Romans would have been immensely impressed by 100-storey buildings with rapid elevators and by tunnels running 17Kms under the Swiss Alps.

Because of God's general grace, and despite mankind's pervasive sin, men are still able to use their abilities to conceive of something original, that will have value (e.g., a new tool or a way to solve a problem). We can take an abstract thought and give it form, assemble the necessary resources to realize the plan, and act to implement the idea. Our creative capabilities cover the spectrum of human endeavours from art, music, and literature to agriculture, building construction, and manufacturing computers. We are able to transfer patterns from one domain to another and build on the good ideas of others. For example, a robotic arm for picking up electronic parts on an assembly line can be adapted, attached to a moving tractor, and 'taught' to gently pick ripe tomatoes. Another example is the 'internet of things' which is integrating information from many different kinds of devices, processes, and goods. In addition, our ability to create is practically unlimited. We will never run out of good ideas. Naysayers, who think that all the good ideas have already been thought of, do not understand what God did when he endowed mankind with creativity. To the contrary, ideas for improved or new processes and products will continue to appear at an accelerating rate.

Mankind's abilities to imagine new things and his experience creating them, should humble us and make us thankful, rather than cause us to boast and exalt ourselves:

- Our abilities, as amazing as they are, are a gift from God. We would be unable to do anything if God had not given us the 'breath of life' and created us in his image. A chimpanzee or a parrot cannot create new things. They have some degree of 'reasoning' abilities, but they cannot imagine something new and carry out a plan to create it. Among all of God's creatures, humans alone have the ability to create.
- Only mankind was created in the image of God; even angels were not. Although angels are intelligent, rational beings there is nothing in the Bible that indicates that they have been endowed with the creative abilities humans

have. If Satan's capabilities are indicative of what angels can do—since he was an angel before his rebellion then, at best, he is an imitator not an innovator (2 Cor 11.14). As A. W. Pink stated in his essay, *Another Gospel*, Satan is the arch-counterfeiter.

- Even though there is no practical limit to mankind's abilities to innovate, when we instantiate our ideas physically they are constrained by space, time, energy and matter. We can only work with the materials we have been given. In contrast, God thought and spoke the immense and complex universe into existence. In addition, he did this in only six days. Compared with God's creative power our capabilities are less than a fairy fly compared to an elephant.
- In a typical year, GM sells about 10M cars. In the first half of 2014 GM had recalls affecting almost 30M vehicles. I note this not to accuse GM of being a sloppy manufacturer. They were cleaning up a backlog of recalls that year. Rather, what should amaze us is that manufactured goods work at all, and that some can operate continuously without failure for decades. Despite the curse on creation, mankind is able to develop automated manufacturing systems which produce low levels of defects. Yet, in comparison, God created a world that was perfect, and despite the curse, has functioned magnificently for over 6,000 years.
- All that God created was very good (Gen 1.31). In contrast, mankind uses his creative capabilities to fashion things that are beneficial and others that are evil. All that we do is tainted with sin, but much of what men create is done to further sinful ends. For example, few movies are wholesome, most glorify sexual promiscuity and gratuitous violence; products pour out of manufacturing plants to satisfy our culture's desire to appear beautified and to pamper our bodies; and our farms produce far more food than we need, so that we can stuff our pieholes.
- If our capabilities are great now, in the state of mankind under the curse on creation, imagine what they will be like when Jesus has renovated the universe and restored paradise. We will be challenged and energized to create new things for the praise and glory of God, forever.

When I share news with a friend of mine about a technology innovation, he responds and says, "Man is a prince, a fallen prince, but nevertheless, a prince." This is true; man is a princely creator, emulating his kingly father.

Induction and Image [March 2]

(Gen 1.26-27)

The discipline of philosophy, as studied in most universities, faces many challenges, including explaining: the existence of anything, how we know that something exists (ourselves, and things beyond ourselves), the definition of truth, how we come to understand relationships, and what is morality and why a person should obey laws. No philosophy or religion, except Christianity, is able to give a meaningful and complete answer to these questions—thus they continue to challenge each generation of philosophers who reject the living God and his revelation in Scripture.

One topic, in particular, that has confounded non-Christian philosophers is the 'problem of induction'. It is the question of how empirical evidence can be used to derive universal truths; or, how we can generalize about the properties of classes based on observation of particular instances, and how a sequence of past events can be used to presuppose future events. David Hume, for example, noted the problem that everyday reasoning depends on patterns of repeated experience rather than on deductively valid arguments. Bertrand Russell noted that our expectation that the sun will rise tomorrow is one which never comes under suspicion or doubt. Every worldview that is based on anything other than the Bible is challenged to explain repeatability, and either begs the question or rests on an arbitrary *a priori* presupposition.

From a naturalistic perspective, the universe is nothing more than existential random events, and there is no ground for expecting that because particular events have occurred in the past they will continue to occur in the future, or for expecting that because we see many instances of entities, all the entities in that class share the same attributes. For example, if someone believes that we live in a chance universe he has no valid reason for believing that

somewhere in the universe H_2O molecules could not behave differently than they do on the earth. As temperature drops, water might turn into a gas. The advocate for naturalism has no philosophical or logical basis for extrapolating from his limited subjective experience, from experimental data, or from a set of collective historical observations. The observed past cannot be used as proof that events will occur the same way tomorrow. Similarly, noting that one thousand entities have the same attributes is not proof that the thousand-and-first entity, of supposedly the same class, will not be entirely different. Using the observed past, or present, as evidence for how things will be in the future is begging the question—since you cannot prove that the future will be the same as the past by pointing to the *past*.

Men who believe that we live in a universe directed by chance have to accept, irrationally, the concepts of causeand-effect or replication within nature. The only valid reason for assuming cause-and-effect and replication is because we live in a universe created and ordered by God.

You might think that the problem of induction is something that we can leave for the philosophers to argue about and not something that the average person encounters. In fact, from the moment we are born, we are faced with the outworking of this problem. For example, when a baby begins to observe the world, he quickly realizes that his parents are other entities like himself. As he begins to learn a language, he realizes that objects have names and that the attributes of objects and abstract concepts can be defined by words. However, it is only because babies are created as image-bearers of God (Gen 1.26-27) that this is possible. If we were not image-bearers of God, we could not:

- *Know that anything existed other than our minds*. We could only conclude that we are a single instance of raw mind. Everything beyond our minds could be images in an invented dream world, and even our own minds could be someone else's concocted bad dream.
- *Experience anything received by our senses*. Our brains and minds would not know what to do with sensations such as light striking our eyes or a touch on our arm. External stimuli would be nothing more than 'noise'.
- *Learn anything.* We would have to learn everything including basic first principles, but we could not learn anything without knowing basic first principles. It is only because we are born with innate intellectual abilities and knowledge that we can learn new things and reason logically. As an illustration, consider a computer. If you want to use it to write a letter you need software. But that software requires an operating system, which in turn requires BIOS firmware. Without the BIOS your computer would be useless. Our innate and instinctual knowledge is like a BIOS.
- *Conclude that characteristics we see in individuals can be extrapolated to the population as a whole.* For example, we could not infer that all normal people have five fingers on each hand, because we do and everyone we know does.
- *Communicate with one another*. Your thoughts and my thoughts would be entirely random. For example, if I pointed to something sitting in a bowl on a table and called it 'apple', you might conclude that I wanted you to crawl under a bed. Your interpretation of the noise coming from my mouth would be as valid as the meaning I intended to convey.

Because we are all created in the image of God, we think God's thoughts after him. Christians know and believe this. Non-Christians deny it, and yet assume Christian presuppositions in order to think, speak, and act. As image-bearers of God, they cannot avoid using their innate revealed knowledge.

How Smart was Adam? [March 3] (Gen 1.26-27)

It has often been stated that we use only about 10% of our brain capacity over our lifetime. However, this idea has been contested recently by researchers who say that we use virtually all of our brain capacity, most of the time. Nevertheless, the statement raises an interesting question, "How smart was Adam?" If we could have given Adam a culturally neutral IQ test, undoubtedly we would have found that he scored in the 'genius' category, smarter even

than Solomon was. When Adam was created, his mind, brain, and mental abilities were as complete and perfect as God intended them to be. As image-bearers of the omniscient and all-wise God, Adam and Eve would have reflected some of the goodness and power of God's mind. Since God intended for them to have dominion over the creation, he endowed them with the capacity of exploring his creation and adapting it for their use. Also, their capacities were designed to be used by immortal beings—so there had to be more capacity in their brains than is used by a person today, over a lifetime of 70-80 years. After Adam sinned and brought a curse on creation, his abilities were partially incapacitated, compared to what they had been in the perfect state. However, he still would have been at the highest percentile of human capability.

Adam displayed his mental flexibility and creativity when he quickly explored the new creation before him, and named the animal kinds (Gen 2.19). He was also probably the inventor of writing (Gen 5.1), and certainly introduced and developed agricultural and animal husbandry techniques. Also, since he lived for over 900 years, and had a physically robust constitution, what he learned would have been augmented as he extrapolated concepts and patterns from one domain of knowledge and practice to another, and continuously improved concepts and techniques. And, since he believed in the true God, his mind was not darkened by foolish superstitions (Rom 1.21). Anyone meeting Adam would have concluded that he was brilliant.

We can get some idea of the potential of human intellectual capacity when we hear of amazing mental feats; such as individuals who have memorized entire books, can speak ten languages fluently, have four earned Ph. D.s, or can play multiple musical instruments. A window is opened into the depth of human capacity when we hear of child prodigies who can perform intellectual activities (e.g., playing chess or composing music) we normally associate with those who have had years of training. Also, some individuals with brain damage display what is called 'savant syndrome', and are able to draw detailed scenes from their childhood, play musical instruments flawlessly even though they have never been taught to play them, or perform complex arithmetic calculations nearly instantly. These anomalies indicate that there is more capacity in our mind-brain than we normally access and use.

It is also evident that the capacity of the human mind-brain is far beyond what is needed to simply exist or survive. It is over-engineered compared to what is needed to scrape by—e.g., to be hunter-gatherers rather than beings who worship the Creator, write novels, compose symphonies, tunnel under mountains, and send men into space. This is a conundrum, which proponents of evolution cannot adequately address. They cannot provide a reasonable explanation for why a mechanistic brain, needed purely for the purposes of reproduction and survival needs so much extra capacity. From their viewpoint, it is not possible to explain why natural forces would select for significant capacity above a survival minimum. They cannot give any insight into why man's mind-brain has so much more capacity than that of apes or wolves. To say that we, as humans, need more mental abilities or we would not be human is begging the question. The tremendous intellectual resources available to humans, which are underutilized, is a definitive rebuttal to the foolish claim that humans are the end result of an evolutionary process.

We do not have a means of understanding our own intellectual abilities. We live with what we are born with. Even if we are told that our IQ is 100 and another person's is 150, we don't know what that means since we have not experienced an IQ of 150. Adam was in a unique position after he sinned, since he would have known of some diminished abilities and would always have had a nagging feeling that some things he wanted to think about were beyond his range—much as we sometimes have a feeling that we know something (a name or a word) but cannot quite recall it. At times, we also notice limitations in our capacities when we attempt to learn something entirely new, such as different language or advanced mathematical concepts. We struggle as we attempt to grasp a concept or try to lock in new knowledge for permanent recall. As Christians, these limitations that we experience should give us hope rather than discourage us. God has a plan to redeem and re-create the physical universe. It will be more glorious than the first universe and will be forever unblemished by sin. In this new creation, we will be able to use our intellectual capacities to the fullest of God's intention for mankind. We will think, explore, experiment, learn, conceptualize, and create in ways that we cannot even imagine today. Furthermore, these abilities will be available in new bodies that will not be limited by decay, and may exist in a different kind of physical reality—for example, the veil between the spiritual mind and the physical brain may be removed, and we will be more brilliant than Adam was when he came from the hand of his Maker. What a great potential and glorious future we have to look forward to!

Mankind's Two Sexes [March 4] (Gen 1.26-27)

The creation account challenges the popular myths of our culture such as the 'big bang' cosmology and the development of life by evolutionary processes. In the same way, it challenges our culture's cherished beliefs in the realm of anthropology, including about the nature of the human sexes.

These verses (Gen 1.26-27) teach us that man is a single entity that consists of two sexes. While many animal kinds are also made up of male and female sexes, this is not mentioned in the creation account (the first reference is at the flood; Gen 6.19). Since the first notice of sexual differences relates to mankind, this indicates that God wants us to pay attention to the fact that man was created with two sexes. Both sexes were created in the image of God (Gen 5.1)—each sex alone is an image-bearer of God (Gen 5.3)—and both sexes ('them') were given dominion over the rest of creation. Only Christianity, among all religions, has a foundation on which to declare the full natural equality of the sexes.

Even though the two sexes were created equally as image-bearers of God, this does not mean that the sexes have identical roles. The three persons in the Trinity are all equally God, yet they have different roles in creation, providence, and redemption. Thus, having different roles does not diminish a person's essence. The existence of different roles is indicated by the use of the terms 'male' and 'female'. The two sexes are intended to complement and complete each other (Gen 2.20). The inherent distinction within mankind through the different sexual roles implies that other distinctions are present—which are enunciated more fully in Genesis chapters 2 and 3.

The explicit declaration that man consists of two sexes, as part of the original sinless created order, requires that we resist the attempts of our age to blur the distinctions between the sexes. We must not allow ourselves to be bullied by those who demand that we use 'gender neutral' terms. The proper term to use when referring to the two sexes collectively is 'man', and thus we should use the terms 'he' and 'him' (as God does; Gen 1.27) rather than the grammatically incorrect 'they'—as in, for example, "each person should have *their* own notebook." Similarly, we must resist attempts to blur the sexes in other ways such as through cross-dressing (Dt 22.5), hairstyles (1 Cor 11.14-15), or washrooms in public buildings; or demands that women be allowed to participate on male sports teams or must have equal access to military combat roles (Num 1.22; Dt 24.5). Males and females were uniquely created by God. They are not two instances of one type of human, but two separate types. Blurring the distinction between males and females is an idea that comes from the same materialistic naturalists who claim that man and animals are part of an evolutionary continuum and that living entities are nothing more than molecules with legs. The fact that man was created as two sexes also means that there are not three (or more) genders. There are many examples of how modern men, thinking themselves to be wise, are acting foolishly. One example, in the news around the time I wrote this meditation, was Australia's decision to allow a third gender option (of X, for 'indeterminate') on its passports. The wild fad to undergo sex changes that titillates our culture is another indication of how unwilling we are to take God's word seriously.

The use of the term 'man' as representative of both sexes also has profound theological significance. The word for 'man' in the Hebrew is 'adam', which means 'ground' (from which man's body was formed; Gen 2.7). It is the personal name of the first man and can refer to a generic individual person but is also used to include all of mankind. In the latter sense, the term has within it the concept of covenantal representation and accountability. We see Paul expressing this idea when he refers to Jesus as the Last Adam—as the representative of all mankind (1 Cor 15.45-49).

The creation of man with two sexes, and not as an androgynous creature, indicates that he is a sexual being. Human sexuality was blessed (Gen 1.28) at creation, is an essential part of carrying out the mandate to multiply (Gen 1.28),

and is deemed to be a very good thing (Gen 1.31). Angels, in contrast, are not sexual beings (Lk 20.34-36), indicating that God endowed mankind with special privileges—such as an ability to create life (Gen 5.3), emulating his Creator. While animals reproduce sexually, it is not mentioned in the creation account. This implies that human sexuality is of a different sort than animal reproduction—human sexuality is intended as more than a mechanism for procreation. The union of a man and his wife in an inclusive oneness is part of experiencing covenant blessing. The fact that God created only one first man and woman indicates that sexual union is intended to be permanently confined to a single human couple (Gen 2.24)—not to be shared with multiple marriage partners or to be dissolved by divorce (Mt 19.4-6). Of course, it is obvious that homosexual relations are excluded—they are not part of the created order and therefore unnatural (Rom 1.26-27).

When considering the sexual nature of man, it is relevant to note that evolutionists cannot provide an explanation for how the sexes could have evolved (other than through their wild speculations about how changes in the chromosomes might have arisen) and for how mankind's sexual organs could have become so intricately compatible. We have the answer in these verses; God created mankind in two sexes—"male and female he created them."

Gender Roles [March 5] (Gen 1.26-27)

In February 2014 Facebook announced that it had added over 50 new gender options to its social media site so that members could reflect their perceived 'self-identity' more accurately. Some of the options are: *agender* (without a gender), *androgyne* (masculine and feminine at the same time), *cis-gender* (a 'politically correct' way of saying a normal male or female), *pangender* (a little bit of everything in the sexual catalog), and *transgender* (a person assigned a sex at birth, but has self-identified differently). Many in the media hailed this as a demonstration of the company's sensitivity that would allow users to feel accommodated, no matter where they viewed themselves in the 'spectrum of gender'. Contrary to the belief that this change would allow people to "tell their authentic story", it reinforced what Paul says in Romans 1.22, "Claiming to be wise, they became fools." Two ironies must be noted in this trend to identify more than two genders:

- Paul's statement about mankind's professing itself to be wise, but being foolish, is in the context of his observation about idolatry (Rom 1.23, 25)—in the case of Facebook's announcement, everyone is doing what is right in his own eyes (Judges 21.25)—and homosexual lusts (Rom 1.24).
- People who wanted to sign up for a Facebook account had to select a single gender (male or female) first, in order to obtain an account. Only after they had an account could they customize their gender selection and identify how they wanted to be addressed (e.g., as 'him' or 'her'). Despite their attempt to suppress truth, Facebook acknowledged that there really are only two sexes.

God did not create man to have many different genders or to think that his gender was variable. God created mankind with two, and *only* two, sexes—male and female. Since this is what God declares at the time of creation, we need to understand some of its implications.

Notwithstanding the rare abnormality of true hermaphroditism⁶ (which is a result of Adam's sin and its associated consequences), gender confusion is not a genetically derived birth trait, but a deliberate rejection of God's plan for mankind. It is a social construct created by people who do not want to abide by God's provisions and rules.

Although both sexes are fully human and created in the image of God, there are God-ordained differences between them. This is denied by many today who have tried to ignore the differences, but the differences continue to exasperate the equalizers. For example:

⁶ A condition in which an individual is born with ovarian and testicular tissue. Estimates of true hermaphroditism range 1:1,000 to 1:100,000 live births, depending on the definition. It is extremely rare that a hermaphrodite is fertile. There has never been a validated case of a hermaphrodite who was fertile in both sexes.

- Some women have tried to obtain positions on men's professional sports teams. Although they may have good reflexes and dexterity, they do not have the speed, strength, or stamina to make the elite levels in men's sports. Women's records in running and swimming, and other similar sports, remain consistently slower than the records for men. The fact that the Olympics has competitive categories for males and females is an acknowledgement that there are only two sexes and that they are different.
- Since women cannot meet some of the qualifications established for military and emergency services personnel (e.g., to carry a specified weight over a set distance), the standards have been lowered, increasing the level of danger associated with the jobs. Instead, the 'gender-police' should accept the reality that God did not intend for women to be in combat roles (Num 1.2, 3; Dt 20.7-8; Josh 1.14; Nahum 3.13) but, in general, to be married and managing homes when children are present (Ps 113.9; Prov 31.10-31; Titus 2.4-5).
- People influenced by modern feminists insist that academic positions should be equally divided between men and women. Yet, the truth of the innate differences continues to be obvious—by personal choice, fewer women specialize in subjects such as engineering and mathematics. Men and women may have the same mean score on exams in subjects such as mathematics, but there is a much larger deviation in the scores for men than for women. This means that, at the extreme limits, men outnumber women. Thus, there are considerably fewer women who are qualified with Ph. D.s in these disciplines. Forcing gender equality quotas will not provide the highest standards of education and best research results.
- Men and women are also different psychologically and emotionally. Children raised in environments that downplay supposed cultural stereotypes, still display their natural differences. Girls show more interest in people and faces than boys do, and they tend to prefer playing with dolls rather than cars and trucks. Girls also like make-believe games more than boys do; boys prefer to play physical games. Girls like to play one-on-one with another child, whereas boys like to be part of a larger group. These natural tendencies influence how men and women interact with one another after they grow to adulthood. Thus, the roles that they have a tendency to select are the result of early choices, which are constantly reinforced by their innate, God-given, nature.

We need to dispense with the foolishness of the world that teaches that sex differences are deficiencies. Rather, we should acknowledge what God has said in his Word about how he created man—as male and female.

Gender-Inclusive Pronouns [March 6]

(Gen 1.26-27; Gen 5.1-2)

Attempts to create gender-neutral pronouns in English, to refer generically to men and women, is another instance in the category of, "Claiming to be wise, they became fools" (Rom 1.22). One example is the Vancouver school board's decision to allow students to ask teachers and staff to address them by the pronoun of their choice. To "accommodate transgender students" who don't want to use 'he' or 'she', the school board offered as replacements newly coined pronouns, 'xe', 'xem' and 'xyr', which are to be pronounced so that they rhyme with the genderless plurals, 'they', 'them' and 'their'. These pronouns were suggested by the school board's youth pride committee. One national Canadian newspaper reporting on the decision headlined its article with, "Vancouver School Board's idiotic gender policy". At times, even men who are not believers in Christ can spot cultural and moral folly (Rom 1.20).

Vancouver school board's attempt to be 'politically correct' will fail. It has proven difficult to introduce new genderneutral pronouns into English. Some locales have had them develop spontaneously, but not to accommodate the feminist and transgender advocacy agendas. For example, terms such as 'ou', 'yo' and 'hoo' have been used in local dialects, but have never gained even regional acceptance. Over the past 50 years proponents of gender-neutral pronouns have made a number of proposals, including 'zie', 'hir'; 'ey', 'em', 'eir' (the plurals minus 'th'); 've', 'ver', 'vis'; 'ne', 'nis', 'nir; 'hesh' and 'hiser'. However, none of these sets of pronouns has been able to gain acceptance outside of the limited communities in which they were proposed. This general failure can likely be attributed to the lack of unity among supporters of the concept of gender-neutral pronouns, the difficulty of pronouncing the proposed words, and the fact that they sound unnatural and forced when used in spoken English.

It would be better if people would spend their God-given creative talents in more profitable pursuits.

One recent change in English, which has gained broader acceptance, is to break the traditional grammar rule that a pronoun should agree with the gender of the noun it represents. For example, today we often hear people say things like, "Every person should give *their* ..." However, in some instances this use of the plural doesn't work; for example, "Every carpenter brings *their* own tools." In this case the 'their' is too obviously jarring and a person either has to turn the sentence into a plural form or say "his or her" to be inclusive. Another, similar, change is to use the plural 'they' as a singular, as in, "Tell the person where *they* can catch the bus." This change is similar to what has happened as the plural 'you' has subsumed the singular 'thee'.

The rules of grammar are not moral precepts, but conventions for facilitating clear communication. Therefore, language conventions may change naturally over time, without causing us to be unduly concerned about some of the occurrences. For example, the use of a split infinitive is becoming common and even acceptable; in some situations, its use is preferable—consider for instance *Star Trek's* classic line, "To boldly go where no man has gone before." Ironically, using the line would not be acceptable in a TV series today, not because of the split infinitive but because of its supposedly gender-exclusive term 'man'. A 1987 episode of *Star Trek: The Next Generation* was titled 'Where No *One* Has Gone Before'.

The attempt to introduce gender-neutral pronouns, and the increasingly common misuse of the plural forms, 'their' and 'they', to apply to singular persons should concern us—not because language conventions should not change but because they are a direct attack against the created order. God declares in Genesis 1.26-27 that he created man (male *and* female) in his own image. He used the pronoun 'him' (Gen 1.27) and the gender reference 'man' as collective terms for the male and the female. Similarly, in Genesis 5.1-2 Noah records that God "blessed them [Adam and Eve] and named them Man when they were created."

The suggestion that we need gender-neutral pronouns, rather than the gender-inclusive pronouns which God uses, is wrong because:

- Mankind was created first as a man, from which was derived a woman (1 Tim 2.13), thus establishing the unity of mankind. Use of the collectives 'man' and 'him' reinforces this unity.
- God works through covenantal means and the male is God's designated representative for both the male and female. Use of the collectives 'man' and 'him' reinforces the representative nature of the covenant.
- Moral accountability rested with Adam, not Eve, even though she sinned first. Use of the collectives 'man' and 'him' reminds mankind that we are all guilty in Adam.
- God uses gender-neutral pronouns.

We should resist the pressure of this modern foolishness, which feminist and transgender advocates are attempting to force upon us. We should continue to speak and write as God does, using his gender-inclusive pronouns. We should not do this to poke a stick in the eye of our neighbours and co-workers who may think that they are being inclusive and generous by using gender-neutral pronouns. Our motive must not be to offend. Rather, we should use 'he', 'him', and 'his' when referring to a generic person, because to capitulate is to deny that God knows what is best for *man*.

Man's Dominion [March 7] (Gen 1.26, 28)

It is ironic that the seeds of the modern environmentalism movement were sown during the Enlightenment which, as Immanuel Kant claimed in his 1784 essay, was "Mankind's final coming of age, the emancipation of the human consciousness from an immature state of ignorance and error." (*Answering the Question: What Is Enlightenment?*). The irony can be seen in where the path has led, as Western Civilization has pursued its goal of denying man's assigned role as the created image-bearer of God and of declaring man's independent reason and moral autonomy.

The end has not been the elevation of man but his diminution and demeaning. A child of the Enlightenment is the theory of evolution that claims that man is nothing more than a chance blip in a continuum of plant and animal life, with no more rights than a bug. A seminal work for environmentalism is Christopher Stone's essay, *Should Trees Have Standing*? that was published in 1972. This work became a rallying point for the growing environmental movement as it advanced the claim that the voiceless elements in nature should be bestowed with legal rights. As the movement has grown, it has become anti-human, as exemplified by the following statements: "Human beings, as a species, have no more value than slugs." (John Davis, editor of *Earth First! Journal*) and "Phasing out the human race will solve every problem on the earth, social and environmental." (Dave Forman, founder of *Earth First!*)

In contrast to the doctrines of materialistic naturalism, God blessed man by giving him dominion over the created order. This dominion is a key aspect of what it means for man to be the image-bearer of God. It bestows dignity and honour on man. The blessing was given to 'them', both sexes of man and all of mankind, regardless of ethnicity or covenantal status, descended from Adam—i.e., the blessing was given to Adam representing all mankind before the Abrahamic or Mosaic covenants were inaugurated. But, not only is this dominion a blessing, it is a command. God commanded man to subdue the earth and rule over all of the creatures that live in the sea and air, and on land.

What ruling and subduing mean has been debated for centuries; particularly from the mid-20th century. The word translated 'have dominion' in the ESV can also be translated 'rule' and even 'trample'. The word translated 'subdue' can also be translated as 'bring into bondage', 'trample on' and even 'attack'. Obviously, these words must be interpreted within the context in which they are used. In general, the two terms share the idea that man is to subject (as a king does his defeated enemies) the created realm under his feet (Ps 8.5-8). Today, this interpretation makes us cringe. We have been so indoctrinated by a pervasive environmentalism that we cannot interpret the passage without deriving an idea of aggressive cruelty if the words are translated as 'subject'.

Our dominion over creation authorizes us to use the entire inanimate and animate realm for our living and wellbeing. This means that we can eat plants (Gen 1.29) and, since the flood, animal meat (Gen 9.3); use trees for lumber (Gen 6.14) and other plant materials to manufacture products; use oil and coal for fuel and manufacturing feedstock; and dig from the earth metals and minerals for our benefit. However, we must not conclude that man's current use of resources is the way God intended them to be used—the current state is not the ideal state of what should be. Our dominion does not include the right to a wanton destruction or abuse. God clearly intended our dominion to be exercised as responsible caretakers (Gen 2.15) of his creation. We are to use and transform the environment for God's glory and our enjoyment. This means that we are to be stewards and not plunderers; husbands not destroyers; caretakers not despots. In particular, we are not to be destructive, such as by overfishing a stock, slaughtering all representatives in a species (e.g., the rhinoceros), polluting rivers and the air with poisons, denuding hillsides, or mistreating animals.

However, as there is a strong tendency for sinful man to abuse his rights to dominion, there is an equally strong tendency for human governments to overregulate and deprive people of their right and obligation to dominion. Environmentalism has become a religious obligation in a society that has rejected God's laws. In the name of preservation of the earth, ridiculous rules and draconian legislation have been enacted which prevent people from exercising their mandate from God. We do not have space here to enumerate the hundreds (or even a few) of the ways that governments have overstepped their legislative rights and undermined individual responsibility. Rather, we should focus on a few basic principles:

- God cares about the world, which was very good when it came from his hands (Gen 1.31) and created for his glory. We should care for it also.
- Environmentalism is a religion; we are to worship God, not nature.
- The world is no longer good. It has been polluted by man's sin and needs subjection in ways it did not originally (Gen 3.17-18; Gen 9.2).
- We do not need to worry about running out of natural resources. God has endowed the earth sufficiently to

sustain a much larger human population than is present today, at a high standard of living.

- This earth and man's tenure on it are temporary (2 Pt 3.10-12)—we are more than half way between the time of creation and the return of Christ.
- God will replace this tired world with a new one in which his righteous people will dwell forever (2 Pt 3.13). We need to focus on the vision of what will be, not on man's sceptical defeatism.

Population Multiplication [March 8]

(Gen 1.28)

God wanted his planet filled with the pinnacle of creation—man, his image-bearer. Therefore, he blessed mankind with the privilege of producing many progeny after their own image (Gen 5.3). Large families, and a multiplying population, are given to man by God as a blessing (Gen 12.2-3; Gen 17.16; Gen 22.17), not as a curse as many think today.

Besides being a blessing, population multiplication is a command—part of the first command God gave to man. After the flood, the same command was repeated to Noah (Gen 9.1). Just as man rebels against every other requirement of God, so he rebels against this one. The first recorded example of rebellion against this command was displayed by the citizens of the first Babylonian empire who refused to fill the earth as required. Instead, they tried to huddle together around a puny edifice, built to further their vain religious aspirations. In response, God divided them into language (and phenotypic) groups so that they could no longer cooperate and would be scattered around the globe.

Rebellion against the command to multiply continues to this day. In the 19th century, Thomas Malthus pessimistically claimed that population growth caused distress for the lower classes since they tended to breed the most, and this prevented permanent improvements being made in their condition. His views influenced the eugenics movement of the late 19th and early 20th centuries. In the 1950s and 60s, as the environmental movement gained momentum, concerns about overpopulation were raised. Paul Ehrlich voiced alarm in a lecture at the Commonwealth Club in 1967, and went on to write a book entitled, *The Population Bomb*. The Club of Rome (of which Pierre Elliot Trudeau was a member), published in 1972 its famous book, *The Limits To Growth*, which echoed the concerns of Malthus and Ehrlich and claimed that the human population was going to outstrip all the available resources of the earth, and that human societies were destined for a massive collapse.

China's communist leaders were, in turn, influenced by these publications. In 1978, they introduced the one-child policy. Their goal was to alleviate social, economic, and environmental problems. They claim the policy has prevented around 300 million births since it was instituted. What they did not anticipate were the moral, social and economic problems they introduced by this policy—forced abortions, female infanticide, creation of a pool of single men for which there are no spouses, and a rapidly aging population that will have to be sustained by a smaller labour force.

God was not giving a suggestion when he told mankind to multiply. Yet many in the Church today question God and conclude that the command was okay when earth was empty, but that it surely does not apply today. This kind of thinking suggests that God did not anticipate the 'problems' we would have today with large populations. God did actually mean for this command to be followed throughout the entire time that man is on the earth. We must not fall for the rebellious opinions of the doomsayers who continue to push birth control, abortion (a politically correct form of eugenics and genocide), and euthanasia as means of limiting population growth.

God has provided more than sufficient natural resources to meet all of our needs, and the needs of a much larger population than today's. The resources will not run out during the time God intends for us to inhabit this earth, until Christ returns. In addition, even if particular resources become scarce we will find ways to use resources more efficiently or use substitutes. Consider one example: computer monitors or TVs of thirty years ago, compared with today's. Today's provide a superior image, use fewer resources, and require less energy to produce and operate.

The most important resource that God has provided for us is people. With more humans, living under the rule of law based on God's law, in free societies, with minimal government interference, we would see an explosion of ingenuity that would transform the material world. Instead of claiming that China has saved planet earth by preventing 300M births, we should think of all the inventors and problem solvers who have been aborted and prevented from adding creatively to human society.

Without doubt, humans encounter all kinds of problems, from polluted lakes to depleted fishing stocks and clearcut rain forest. However, these problems are *not* caused by a large human population but by human selfishness and unjust regimes. When governments implement policies that ignore God's laws, suppress valid liberties, and oppress society's productive members, we can expect problems like these. To the contrary, population decline, rather than growth, is going to be a serious problem for all of mankind. Countries such as Japan and Russia, and others in Europe, are experiencing shrinking populations. This is going to cause societal unrest and economic stress.

The 'Roe effect', a term coined by James Taranto, an editor of *Wall Street Journal*, suggests that the long-term effect of abortion and similar measures to limit population growth will be an erosion of the political base of those who support limiting population growth, as they abort their children and have smaller families. As Christians, we should find every legitimate means of defunding any form of immoral population control and raise large, God-fearing, families who will continue to live out the mandate given to man at creation to "be fruitful and multiply and fill the earth and subdue it."

God's Provision of Food [March 9] (Gen 1.29-30)

God honoured mankind by giving them a bounty of fruits, grains and vegetables from the plants which he had created for food. The generosity of this provision is shown by the use of the word 'every' (twice) when he speaks of the plants. Although man was excluded from eating the fruit from one particular tree—*the tree of the knowledge of good and evil* (Gen 2.17)—the fruit of every other tree, including the *tree of life* (Gen 2.9), was available for food. In the original perfect creation, before it was cursed as a result of man's sin, the food God provided would have been exquisitely pleasant to eat (Gen 2.9) as well as providing for every dietary need of mankind.

A question that arises from this provision is why God designed man (and the animals) in such a way that he would be required to *eat* food to live. In theory, God could have designed us with the ability to obtain our needed energy in some other way; for example, our skin could have been covered with organic photosynthesis cells or silicon solar cells. However, we would have required a large surface area of cells to generate sufficient energy to perform even basic functions such as maintaining our metabolism. The provision of plant material for food is an efficient way of generating, storing, and transferring energy. Whatever the reason, we know that it is an excellent one, since God is the master designer and all that he made was very good (Gen 1.31).

Mankind and the animals were designed to be, at first, vegetarians. The fact that all living creatures were designed to eat plant material has a number of implications for our understanding of creation:

- The original plant life was sufficient to provide enough for all of our dietary needs in terms of proteins, carbohydrates, fiber, fats, vitamins and minerals. Since Adam's sin and the curse on nature, maintaining health with a pure vegetarian ('vegan') diet that excludes any animal products such as milk and eggs is a challenge and requires considerable discipline.
- Plants are not living entities in the same sense as animals or man. We noted previously (*The Creation of Plants*; Gen 1.11-13) that although plants have many of the characteristics of life, they do not have the same *form* of life as either animals or man because they are not 'living creatures' (Gen 1.20-21, 24), with the 'breath of life' (Gen 1.30). This distinction is important since it implies that animals and man did not evolve from some primitive plant-like multicellular organism, and that biological decomposition (e.g., through digestion) is not death, but part of a biological cycle that is similar to the hydrological cycle.

- No animals were killed before the sin of Adam since no animals, as God originally created them, would have been carnivores. The death of 'living creatures' and carnivorism are the result of the curse that was applied to all of creation (Gen 3.17-18; Gen 9.2). Evolution's model includes the concept of 'eat, or be eaten'; but this is contrary to God's created order. The violent and painful destruction of one creature by another is not a primary 'law of nature', but the result of the curse on creation.
- Some of the animal fossils that have been discovered contain parts of other animals in their stomachs or have evidence of wounds caused by other animals. These fossils must have been formed after Adam's sin, and during the worldwide flood (Gen 7-8). Therefore, the evolutionary claim that the fossil strata are millions of years old cannot be correct.
- Animals that are now carnivores were designed with a latent ability to eat meat that was 'switched on' after the curse, or the constitution of these animals was changed because of the curse on creation.
- At some point after the sin of Adam, man started to eat meat. After the flood, man was given meat as a defined part of his diet (Gen 9.3-4). Some interpreters believe that men before the flood ate meat and were acting wickedly. It is possible that God permitted meat eating after Adam was ejected from the Garden of Eden, since we find Abel raising flocks—of course, he could have used the animals only for their skins and wool, and for sacrifices. In addition, the concept of clean animals had been revealed to the antediluvian patriarchs, such as Noah (Gen 7.2). However, Noah may also have used the animals only for sacrifices and not for his personal food. We will look at why man is now permitted (and required) to eat meat when we consider 9.3.
- The perfect state at creation is the minimum ideal state for the renovated new heavens and earth—the new earth will be at least as magnificent as the original creation. There is debate as to whether or not animals will be present in the everlasting paradise. We cannot be definitive on this, as the Scriptures do not give an explicit answer. However, depending on how one interprets passages in Isaiah (Is 11.6-8; Is 65.25), there may be a hint that animals will be present, and that they will once again be vegetarians. Certainly, if animals are in the new heavens and earth, they will not be carnivorous as there will be no death there (Rev 21.4).

This portion of the creation account also has theological implications. It reminds us that as creatures we are dependent on God who is both the creator and the sustainer of creation. He provides for our daily needs, for which we are to be truly, and always, thankful (Eph 5.4, 20). Jesus reinforces this in his teaching in the *Sermon on the Mount* (Mt 6.11, 25-32), and Paul stresses our dependence on God for our sustenance (Acts 17.24, 25, 28). God will continue to provide for the wellbeing of his people forever (Rev 22.2, 14).

Everything God Created Was Very Good [March 10]

(Gen 1.31)

This verse provides a brief summary view of what occurred during the creation week. It informs us that after God had created man and installed him as the appointed ruler over the temporal-spatial creation, he surveyed what he had made and declared it to be very good. However, it also stands on its own as a powerful statement about God and his creative work.

The opening verse of chapter 1 tells us that God created the universe. The last verse reminds us of the same fact—God is the Creator. As the Creator, he designed and made everything that exists, outside of himself. A few examples will help us understand the wisdom of God who, as the intelligent designer, created all the intricate complexity of the universe:

- We live in a galaxy with billions of stars and planets that work together to support the earth in the most comfortable location to sustain life.
- The human genome (DNA) in one cell contains more coded information than is found in a truckload of books.
- Precise systems support human life, including photosynthesis, an immune system, oxygen transportation by hemoglobin, sexual reproduction, and symbiosis (e.g., gut bacteria that help us digest food).
- The diversity of locomotion systems including flying, hopping, walking swimming, and crawling displays God's design abilities.

• So, also, do the sensory systems of sight, smell, hearing, taste, and touch.

Human computer systems and urban transit networks are complex and require great ingenuity to design and build. But they are as simple as a toy car made of Lego bricks when compared with the magnificent systems God has put in place. It is therefore no wonder that the Psalmist praises God for the many works he made by his wisdom (Ps 104.24).

This verse also tells us that God saw everything that he had made. Everything he made means *everything*. Matter and energy are not eternal—only God is eternal. The universe did not come into existence spontaneously of its own accord—an absurd concept, since *nothing* cannot create anything. Evolution is not the mechanism that God used to bring into existence the non-rational animate life on the planet. Every kind of entity that we see around us—such as stars, rocks, trees and dogs—was a unique creation that came from the mind of God.

In addition, everything that God created was good. During the creation week, God declared (six times) that different created entities were good. Once he had created everything in the universe as an intricately interconnected system he declared it all to be *very* good. It is as if a builder looked at the foundations after the forms had been removed and, on inspection, declared them to be good, and ready for the next stage of construction. At each stage, the various parts of the house are acceptable to his critical eye—even though he is the builder. When it is all done, he stands at the end of the driveway, surveys what he has built, and declares the finished house to be very good. In the case of the created universe, it was good in a number of ways:

- It was a masterpiece of design and engineering. No one could do better. No one has ever been able to improve on the designs God has instantiated in natural systems.
- It was aesthetically pleasing. No artist can paint a canvas that comes close to the beauty of creation—from the balance of a star's planetary system to the grandeur of a mountain pass with a glacier-fed lake.
- It was morally perfect. Nowhere in creation could be found any defect, flaw, pollution, or stain of sin,. There is no room in God's created order for the view that matter is intrinsically evil or that evil has existed eternally. God did not spoil the moral perfection of creation, man did!

Another thing that we learn from this verse is that God finished his work of creating everything on the sixth day. As with the other days, this day had an evening and a morning—i.e., it was an actual 24-hour day. The only valid interpretation of Genesis chapter 1 is that God created everything over the space of six 24-hour days, about 6,000 years ago. Sadly, many Christians compromise with evolutionary cosmology or biology myths and attempt to provide an alternate explanation that contradicts the plain and clear meaning of Scripture.

Finally, we note that God *observed* what he had created. All that he had made was worthy of his infinite contemplation and commendation. His reflection on what he had accomplished is based on the highest good reflecting on the highest wisdom and most mighty power. God has given us an example and, as his image-bearers, we can review our own creative works with satisfaction, as long as we do not allow our reflection to lapse into boastful pride.

The doctrine of creation is a foundation upon which all other doctrines in the Bible rest. If we don't get this doctrine right everything else is open to doubt. For example, if we take the view that Genesis chapter 1 is not recording history as it actually happened, then the truthfulness of God's word throughout the rest of Scripture is suspect. If we don't accept the fact that God created everything in six days, then why should we accept the miracles of the virgin conception or resurrection of Jesus? If we don't accept the truth that everything was created good, and that there was no death before the sin of Adam, then our view of sin, punishment by death, and Christ's redemptive work is going to be off base. Simply, we must accept what God says or we don't believe him.

God's Goodness Manifested in Creation [March 11]

(Gen 1.31)

The ancient gods were capricious. In myths from Sumer and Babylon, to India, and to Greece and Scandinavia the gods grasped for power; lusted after other gods, demigods and mortals; played favourites with mortals; displayed anger over insults; and committed heinous crimes. These gods mimicked human behaviour and did not provide an example of goodness. Thus, people lived under them as children with abusive parents—trying to placate them and win their favour, regardless of the cost—e.g., human sacrifices. The god of Islam (Allah) is also capricious. There are examples of double-mindedness and erratic behaviour recorded in the *Qur'an*, such as: swearing by himself, but also by angels, planets, and Mohammed; being unsure if he created man out of nothing or some pre-existing material; declaring idolatry to be an *unforgivable* crime and at times forgiving idolaters; giving no assurances that he will forgive sin and not indicating how we can know what sin is and how it can be forgiven; and dispensing bizarre forms of justice. Therefore, it is no wonder that Islam does not teach good moral behaviour (as given in the Ten Commandments or the *Sermon on the Mount*) since there is no goodness in the false god of Islam. The suggestion, common today, that God and the god of Islam are the same being is a myth arising from the fuddled thinking of theological liberalism and pluralism, and an insult to the goodness of God.

Although Richard Dawkins, in a well-publicized diatribe, declared God to be a "capriciously malevolent bully", God is not capricious. God is consistently good, holy, just, loving, patient, and gracious. This does not mean that his providential actions in the temporal-spatial realm are identical all the time or that he does not interact directly with his creation in some situations and through secondary means at other times. Rather, it means that his purposes and personality are unchangeable. He is not given to a fickle or unpredictable display of temperamental behaviour. The reality is that it is the materialistic naturalist's position that is "capriciously malevolent". Nature, according to professing atheists such as Dawkins, is ruled by chance and evolutionary processes which are entirely random, unpredictable and brutally remorseless in removing the genetically unfit. In their view, there can be no guarantee that physical processes will operate tomorrow as they do today, and they can give no rationally valid reason for believing that they will behave in the same way in the future as they do now. Their philosophy teaches that reasoning cannot be trusted, since it is only adaptive behaviour. Since reasoning cannot be proven reliable, we have no reason to expect it to be rational, and therefore Dawkins' own position is unreasonable.

God declared his original creation to be very good—before rational creatures (some angels and the first humans) rebelled against his good laws and rule. A good creation can come only from the hand of a good God. Evil does not, and cannot, produce moral or aesthetic goodness. It produces only immorality and ugliness. Because creation came from the hand of the good God, it was good in every way. The goodness of God is manifested in creation in many ways:

- God's goodness is shown through general grace. He provides life and the necessities of physical life, such as food and resources to make clothing and shelter, to all men, even when they do not acknowledge or thank him (Mt 5.45; James 1.17). Shortages are not the result of a failure of God's goodness, but are caused by man's evil desires and selfishness.
- He provides a good moral code for men, which if they could apply would make their lives remarkably better and happier (Ps 19.7; Mt 5.2-12).
- He offers forgiveness to repentant sinners who believe in his good and loving solution to the problem of sin—the substitutionary death of his son on the cross (Rom 5.8; 1 Jn 3.16).
- He promises his people a renewed physical creation in which only moral and aesthetic goodness will be present forever (2 Pt 3.13; Rev 21.3-4).
- He instilled in the created order a reliable consistency so that we do not fearfully face each day with an expectation of irregularity and chaos.

The regularity and reliability of natural processes is something we take for granted today, even in the post-Christian West. However, this is not how men living under the thrall of paganism, pantheism and polytheism understand the world. For them, the world is not regular and reliable, but subject to erratic behaviours of malevolent gods and forces. It was only with the increasing clarity of Christian thought during the Middle Ages about the nature of God's goodness reflected in his creation, that the world began to shift away from being in a constant panic of superstition. This is the reason why science— systematic study of nature's form and processes by stating hypotheses and testing

them with controlled observation and experiment—could only arise in lands where Christian thinking prevailed.

Science did not arise in ancient Sumer, Persia, Greece, China, India, or in the lands controlled by Islam, because all of their thinking was influenced by the belief that nature's gods or forces are capricious. Although technological inventions came from these lands, they were based on pragmatic trial and error, with no development of explanations for why the techniques worked. The development of science was dependent on the concept that God acts in accord with his good nature and is not arbitrary. It is only because the goodness of God is manifested in creation, through his consistent governance of nature, that science has any meaning. To believe that a chance universe can produce scientific thinking is the height of an irrational stupidity.

The Wonder of the God of Creation [March 12]

(Gen 1.1-31)

In July 2013, the Cassini space probe sent back amazing pictures it had taken from the far side of Saturn. In one picture, the sun was eclipsed by Saturn. Saturn's rings appear spectacular with the sun's backlighting. Below the rings is a small blue dot. It is the earth, viewed from a distance of almost 1.5B kilometers. Immediate thoughts on seeing this picture should include:

- How small and insignificant the earth and man appear to be (Ps 8.3-4).
- Yet, how competent man is, to design a craft that can travel so far.
- How beautiful the creation is.
- How amazing the God is who created the universe (Ps 8.1).

The more we explore the universe, the more we discover what an amazing place it is. In the 19th century, when Darwin proposed the theory of evolution, human understanding of cellular structures was very primitive, knowledge of genetics preliminary, and the existence of DNA unknown. This limited knowledge made it appear that the idea of biological evolution (e.g., fish-like creatures evolving into amphibians) could not be too complex or farfetched. However, we have since discovered that the systems operating within a cell (e.g., energy transfer, waste disposal, defense, reproduction, etc.) are more complex than the systems operating in a major city (e.g., transportation, electricity transmission, communications, water and sewage, etc.). Beyond the cell's mechanics is the complexity of its software operating system, which we only began to understand after the double-helix structure was identified in 1953. The instruction set encoded in the DNA of the human genome is astounding. It has been estimated that human DNA stores about 20GB of information. In addition, this information is stored in the incredibly small nucleus of a cell. At the same density (about .2GB per 1 μ m³), all the data on the internet would fit in the volume of a USB data stick! Moreover, every single cell in our bodies has that much information stored in it. The idea that chance events could have 'designed' all the diversity of life, through random processes 'creating' and modifying DNA, is patently preposterous and can only be believed by a fool (Ps 14.1).

When Newton proposed a model for celestial mechanics, the macro operation of the universe appeared to be well understood. However, the model of celestial mechanics was dramatically overturned in the early 20th century, when Albert Einstein published his theories of special relativity (1905) and general relativity (1916)—the universe became stranger than we can imagine. Since then, the commonly accepted model for the micro operation of the universe—atomic physics—has become bizarre, with quarks, leptons, bosons, gluons, strings, and multiple dimensions. An idea popular among many physicists, is that the universe popped into existence one day from a quantum wrinkle in an empty space-time continuum. To anyone with common sense, the notion is absurd. The physicists' attempts to explain how the base fabric of the universe arose out of a true *nothing* can only appeal to someone who is deluded and believes in a universe with nothing for God to do.

Through a series of short reproductive cycles, three generations of Monarch butterfly migrate north. Their final reproductive cycle produces a 'super' generation that flies from their summer residence in Canada to the Michoacán highlands or Baja California, in Mexico, where they spend the winter and then return to Canada to lay eggs on

milkweed plants—the only food their caterpillars eat. It is extremely difficult for evolutionary biologists to explain how this complex reproductive cycle, and similar ones, could have arisen by chance. They also have difficulty explaining how dozens of cooperative and dependent symbiotic relationships among different kinds of animals or plants could have developed. Only the spiritually blind believe the stories concocted by evolutionists to explain the origin of these biological relationships.

An atheist considering the information-laden DNA molecule, the deep layers of the composition of matter, or the complex synergies within natural systems can only respond with a feeble, "It is all a coincidence." He cannot honestly use terms that inject wonder or awe into his observations, because these terms might lead him to confess that the order, beauty, and complexity he sees around him is the product of the great intelligent designer.

When we consider complex, elegant systems designed by humans we are impressed. For example, the degree of foresight that goes into the design and construction of a widebody jet, a high-end sports car, or a smartphone, is amazing. We delight in the stunning design, beauty, and functionality of these systems. Then, our minds turn to consider the brilliance of the engineers and designers who created them. It should be the same with the natural systems of the universe. We should stand in awe when we observe the billions upon billions of stars in the universe, the 'impossibility' of a bumble bee flying, and the spectacular beauty of bird plumage. Then, we should fall on our knees in wonder before the God who created all that we observe—just by speaking. Our minds can conceive and achieve amazing things, as we carry out our mandate as sub-sovereign image bearers of the infinite Creator. However, what God has done in comparison is orders of magnitude greater than what we could ever conceive, let alone achieve. Superlatives fail to do credit to the creative intelligence and power of Almighty God. Thus, we should declare with the angels, "Worthy are you, our Lord and God, to receive glory and honor and power, for you created all things." (Rev 4.11)

"Worthy Are You, Our Lord and God" [March 13] (Gen 1.1-31)

When we read about the events of creation week, as recorded in chapter 1, and then survey the variety and beauty of the creation around us, we must be awed by the intelligence and power of the Creator. Merely by thinking and speaking, he instantly brought into existence every part of the universe—over a paced cycle of six 24-hour days. Even the most intelligent of men cannot create plans for a moderately complex system (e.g., a computer application or a building's HVAC layout) without hours and days of effort, nor can they instantiate their systems without significant labour and the use of tools. It is therefore not surprising that anyone who really understands what God did when he created, must cry out with the angels, "Worthy are you, our Lord and God, to receive glory and honor and power, for you created all things, and by your will they existed and were created." (Rev 4.11)

No one who reads the Bible with any degree of attention can fail to notice how often the writers declare God to be the Creator. This truth appears so often, and is so foundational to many other truths (see, *The Creation Account Referenced in the Rest of the Bible* [January 27]), that we can conclude that the doctrine of creation is the most important doctrine that we can believe. Someone is sure to respond to such an assertion and say, "But surely it is more important that we believe that Jesus died for our sins!" It is essential that men believe that Jesus died on their behalf to pay their debt of sin, and that he arose from the dead on the third day. However, the doctrine of salvation through faith in Christ is dependent on our recognition of our sin. Before we can be saved, we must know what sin is, so that we can repent of it. A man who does not know or believe that he is a sinner does not understand that he must be saved from his sin and its punishment, and does not *want* to be saved. In order to know what sin is, we need God's law (Rom 7.9). But, before there can be laws defining sin, there must be a lawgiver with the right to make laws—i.e., to define right and wrong and to declare specific actions sinful. Taking the logic chain a step further, a lawmaker must have legitimate authority to make laws that apply to his subjects. God's authority over mankind and his right to impose laws on men and women is derived ultimately from his being our Creator. Therefore, without the doctrine of creation, there cannot be authority vested in God; without God's law, there is no sin (Rom 7.7); without sin, there cannot be the need for salvation from sin; without

the need for salvation, there is no need of Christ's death and resurrection. Thus, the foundation for the doctrine of salvation is the doctrine of creation.

Similarly, the doctrine of worship rests on the doctrine of creation. As the angels declare, God is worthy to receive worship because he is the Creator. If we do not establish the doctrine of worship on the doctrine of creation, we can question a command such as that given by Jesus, "You shall worship the Lord your God and him only shall you serve." (Mt 4.10) What right does anyone have to demand worship? Thus, some people suggest that it is selfish for God to desire and command that his creatures worship him (Ps 29.2; Ps 96.8). Such a suggestion is blasphemous. Nevertheless, it can be easily countered in at least two ways, as follows.

The first and basic reason we can give for why God, and only God, is to be worshiped is that he is the Creator. No fabricated god of the false religions is worthy of worship. These gods are projected emanations of the material universe, creatures elevated to a position of deity, demons being honoured perversely, sticks and stones with no life in them declared to be scared, or mere figments of men's imaginations. Once we have laid the foundation for the doctrine of worship on the doctrine of creation and established the fact that God is worthy of our worship because he is the Creator, we can begin to understand why God has the right to define what constitutes acceptable worship (Heb 12.28).

A second reason why God is to be worshiped is that he is good. People believe that it is right to praise certain kinds of other people—e.g., women who serve as nurses in the slums of Bangladesh, citizens who rescue children from burning buildings, philanthropists who donate to malaria eradication, soldiers who save their comrades from enemy fire, engineers who create exciting innovations, athletes who establish world records, or statesmen who negotiate lasting peace treaties. Men have a tendency to create 'saints' of the people who do these kinds of things—that which is 'good' and 'just' in our eyes. While they believe that it is right to praise these people, they begrudge God his right to be worshiped. Yet, God is the ultimate moral and aesthetic good, and does only what is good (benevolent). In addition, since there can be nothing of a greater good than God, he must expect the good in himself to be praised; and we are to praise it. Therefore, he is worthy of all praise.

When his rational creatures come to truly understand who God is, the great and good Creator, there can be only two possible responses:

- *Abject fear* Trembling with loathing and hatred. These creatures know that God is who he says he is, but they do not want to honour him as creator, lawgiver, sovereign governor, and saviour (James 2.19).
- *Adoring fealty* Love for who God is and what he has done, which overflows in praise. If we truly know God in a saving way, we cannot do anything less than pour out our hearts in thanksgiving and wonder.

God Rested [March 14] (Gen 2.1-3)

After a workman has completed his work and surveyed it to ensure that there is nothing left undone, he packs up his tools. After a painter has finished a portrait, he cleans his brushes and puts away his paints. God did something similar. He reviewed all that he had made (Gen 1.31) and then he brought his work of creating to an end. Everything he had planned to do in creation was complete, there was simply nothing left to be done—all was perfect and in its appointed place; nothing could be added to make it more complete. This means that every star had been made and given a name (Ps 147.4), and every kind of tree, flower, and animal had been created. God had no plans to add any other kinds of inanimate or living entity. The fact that God finished the work of creation means that no new kind of entity will ever be made or come into existence in this universe. Therefore, the evolutionary paradigm is false, since it claims that new kinds of life are constantly arising. A Christian should never compromise with the world's views and accept some form of 'theistic' evolution in an attempt to 'reconcile' Scripture with the humanistic theories. Rather, all Christians should declare boldly that God completed his work of creation in six 24-hour days, as he says he did.

However, even though God finished his work of creation, this does not mean that he stopped doing every kind of work. God never ceases from his work of sustaining and governing the creation he has made (Ps 121.3, 4; Jn 5.17; Acts 17.28). If he stopped this kind of work, even for the smallest fraction of a second, the entire universe would instantaneously cease to exist (Col 1.17). Nor does the fact that God had completed the work of creation mean that he would never create anything else. For example, Jesus turned water into wine and multiplied loaves and fishes. These were creative actions of the God-man. However, these acts of creation did not introduce a new *kind* of entity into the created order. Similarly, when conception takes place, God creates a new living being. However, a new life is formed in the image of the parents who are already in existence. No new kind of human (or animal) comes into existence; no new kind of sentient, rational life form ever appears.

Interpreters, who believe that the world and universe are billions of years old and who try to impose a long-ages view on Scripture, have noted that the account does not record an evening and a morning for the seventh day. They claim that this means that the seventh day continues perpetually. Then they infer from this observation that if the seventh day has a long duration, so can the other six days. Then they claim that each day could represent millions, or even billions, of years. To say that this view is a 'stretch' is being kind. It is utter nonsense, because it:

- Ignores the obvious—each creation day is defined to have an evening and a morning, and is therefore a 24-hour day.
- Is based on a desperate attempt to embrace evolutionary cosmology.
- Contradicts Exodus 20.11, which assumes that the seventh day of the creation week was as literal as the days we know of now.
- Charges God with lying, since he says that he created in six days.

Some interpreters suggest that the missing formula ('evening and morning') implies that creation was intended to enjoy a perpetual rest or that it points to an everlasting Sabbath. However, this is reading into the text. God does not bless his everlasting rest, but the seventh day (Gen 2.3)—an actual day of the week—by resting in it. If the fact that the formula is missing from the seventh day has any significance, it indicates that the unique work of creation was complete, and that the seventh day was not a day for creative activity.

The contrast that is placed before us is between the creative work of God and his cessation from creating. He stopped from a form of work and changed his mode of operation into one in which he contemplated the amazing work that had come from his infinitely wise and creative mind. This change of activity is shown by his allocating six days for one type of work (creating *vs* governing or sustaining) and then one day for reflecting on that work. God did not rest because he was tired or needed a break. The rest that God entered into was to reflect on, and enjoy, his "very good" creation. The Hebrew word that is translated as 'rest' (twice in 2-3) is *sabat*, from which we get the derived noun, which is transliterated as *sabbath*. The primary meaning is not the kind of rest we need because we are weary, but rather it means to cease or to desist from an activity. We use the word 'rest' in this way in colloquial English when we say to someone "give it a rest"—we mean for him to stop doing what he has been doing, rather than to go take a nap. In the only other place in Genesis where the word is used (Gen 8.22) it is translated as 'cease'.

Ultimately creation exists for God's glory. Although he is infinitely glorious in himself and needs nothing beyond himself, his rest of contemplation and delight gave him joy and redounded to his glory. He created the universe for his own enjoyment. For example, he took on material form and walked in the garden he had made, in the cool of the day (Gen 3.8). Since mankind's primary purpose is to glorify God (Ps 86.8-10; Rom 11.36; 1 Cor 10.31; Rev 4.11), we also should contemplate and delight in God's work of creation. While we should praise him for the wonder of creation every day (Ps 145.1, 2, 5), we are specifically directed by his example, of his having blessed the seventh day, and by his command to set aside a day to worship him after every six days of work. We will address this requirement in a future meditation.

The Seven-Day Week [March 15] (Gen 2.1-2)

God could have created the entire universe in an instant. Some suggest that he used six days to demonstrate that he is an entirely free agent and can do his own work, in his own way, and in his own time. While this is true, the main reason that he created over a period of six days, and rested on the seventh to contemplate his creative work, was to set an example for mankind. Man's week is a standard derived from God, and our week is to have seven days—with six days for labour and one day for reflecting on God's glory and majesty.

The unbelieving world claims that the seven-day week is nothing more than an artifact of ancient Mesopotamian culture. For most people, the idea that there is a universal or natural law requiring that we cease from our labour, one day in seven, is ludicrous. An article that appeared in the *Economist* (2001-12-20) provides an example of this scepticism when it speaks of the history of the week. The article claims that Mesopotamian stargazers framed, and local warlords imposed, the seven-day week on mankind around the time of Sargon I. The article goes on to raise questions about why such a construct (that cannot be explained by the natural cycles of the earth's revolution around the sun or the moon's revolution around the earth) should have persisted for so long. The explanation provided in the article is that the Sumerians worshipped seven objects in the sky as gods (apparently the sun, moon, Mars, Mercury, Jupiter, Venus, and Saturn) but they did not observe the seventh day as holy. Rather, according to the article, the seventh day was superstitiously considered a day filled with danger and darkness. Thus, men believed that it was risky to do anything on that day, so it became a day of rest. After that, the Hebrews were supposed to have picked up the pattern and to have attributed its origin to the time of creation. From the Middle East, the week of seven days spread throughout the world, and the names of planets/gods continue to be associated with the names of the days (e.g., 'sun day'; 'moon day', 'Saturn's day').

While it is true that the knowledge of the seven-day week came out of the Middle East, the Jews did not copy the Sumerians. It is popular among sceptical unbelievers, particularly in universities, to claim that Genesis was written late in Jewish history. However, as we will see when we look at chapter 10, there is much evidence that the first chapters of Genesis were written well before the time of Abraham. For example, Babylonia is referred to as the land of Cush (later Ethiopia was given this name), Sidon is mentioned but not Tyre (which was founded around the 13th century BC), Sodom and Gomorrah were still existing (they were destroyed in the 21st century BC), and the Hebrew line is discontinued with Peleg (before Eber and Abram were considered important).

Contrary to what the *Economist's* article says, the Jews did not obtain the idea of a seven-day week from the Sumerians; the Sumerians, and all other nations, obtained the account of the institution of the week and the Sabbath (recorded in Genesis chapters 1 and 2) from Shem who received it from Adam and his descendants. The origin of the week, therefore, predates the 'Mesopotamian stargazers'. They may have associated names of gods with the days of the week, but the week was not formed to match the Sumerian pantheon. In addition, it has been suggested that the Sumerians did not have *seven* planets in their cosmology. Apparently, they claimed that our solar system was made up of the sun and eleven planets (including the moon)—for a total of twelve objects—even though not all the objects were visible to the unassisted eye.

Why is there a seven-day week? Because God established it at the time of creation. There have been attempts throughout human history to overrule the seven-day week. Apparently, there were attempts in ancient China, in ancient Egypt, and in some African cultures. During the French Revolution, a ten-day week was established but it did not persist, and the experiment was abandoned within twelve years. The Bolsheviks, in 1917, tried to imitate the French revolutionaries. Again, in 1929 Stalin imposed five-day and six-day weeks on the Soviet Union. He wished to eliminate the seven-day week with its Sabbath because of his hatred of anything that could be attributed to religion. These attempts all failed, and the entire world continues to use the seven-day week. This usage points to the fact that in the definition of the week, we encounter a phenomenon that is not the result of observing the sky, but rather built into the very makeup of man through innate and written revelation.

The extreme anomaly of a seven-day week, which does not fit any natural cycle (year, month, day), clearly points to God's creation ordinance. God sent clear messages when he blessed the Sabbath (Gen 2.3):

• The day he set aside for worship cannot be tied to natural cycles and cannot be mapped to a fixed number of

celestial objects.

- God is fully independent of nature, and his day of worship has no relationship with any pagan system, and certainly not with astrology.
- The week has no inherent meaning if the Sabbath has no special meaning.

All attempts to explain why the week has seven days, without accepting God's creation account and the institution of the Sabbath, will fail. All men know that the seven-day week is from God. They may not wish to observe the Sabbath, but they are faced each Sunday with the start of a new week that declares God's creative work, his salvific work, and his day of rest.

The Sabbath Instituted [March 16]

(Gen 2.2-3)

The Sabbath day was instituted on the seventh day, at the end of the creation week. Although these verses do not mention the Sabbath day specifically (the seventh day is not called the Sabbath until Exodus 16.23), God intended for the seventh day to be the Sabbath since he *sabbathed* (translated 'rested') on the seventh day and he blessed it. In his resting, he contemplated the creative attributes of the Godhead while he appraised what he had done in creation that he declared to be very good (Gen 1.31).

God blessed the seventh day—that particular day, and all seventh days from then on (until the resurrection of Jesus Christ moved the Sabbath to the first day by his resurrection). In blessing that day, he gave it special merit above the other days of the week, and thereby declared it holy. By blessing that day, he set aside the seventh day, of every seven days, as a holy day. It is interesting to note that he had performed great and majestic creative works on the other days of the week, yet he did not bless any of those days. It was only *after* he had completed the amazing display of his power that he blessed a day. That day, the seventh day of the week, had a special meaning above all other days.

The seventh day became a holy day because God ceased from his creative work and *sabbathed* by taking up a different form of activity—meditating on the glory of the work that he had completed. Man was already on the scene at the time God rested, so the day must have been sanctified (set-apart and made holy) for Adam, in God's image, as well as for God. Mankind was created on the sixth day after the animals. Therefore, the seventh day was the first full day that man (Adam and Eve) lived through. Considering the seventh day from that perspective, the Sabbath was actually the first day for man. The *Palestinian Talmud* says, "Man was created on the eve of the Sabbath in order that he might begin life by a religious practice."

At the very edge of time-past, God established the principle of sabbath rest in the order of the universe. Man in Adam, not the Jews in Moses, was given the Sabbath, long before there was any such person as a Jew. The Israelites were required to keep the Sabbath (Ex 16.23) before the Ten Commandments were formally given to Moses (Ex 20.1-17), and they were instructed to *remember* the Sabbath and to keep it holy (Ex 20.8)—implying that it was a required institution, and possibly one that had been neglected during their 400 years of captivity in Egypt. Adam did not need to rest from his labour—at this point labour had not been cursed and was not wearying. Nor was this day of rest (the Sabbath) a time of enforced idleness. Yet, the observance of the day as a holy day was still necessary for man. It was to be set aside for reflection and contemplation on, and for praise and worship of, the great Creator. It would become the special day for man to cease from his work of tending the garden and to spend time worshiping God.

Since Adam was the federal representative of all mankind (Rom 5.12; 1 Cor 15.22), the Sabbath-keeping obligation was established with all mankind. Thus, the Sabbath applies to every man descended from Adam (Ex 20.10; Neh 13.19-21; Is 56.6; Mk 2.23-28). As a creation ordinance, it cannot be designated as a Jewish or Mosaic law. And, as a creation ordinance, it has the same perpetual applicability as do other creation ordinances, such as marriage between one man and one woman (Mt 19.4-5), male headship (1 Tim 2.11-14), and work (Gen 2.15; 2 Thess 3.10).

As work is a standing ordinance, so also, by inference, is the requirement to rest (ceasing from our work to contemplate God's work). As the other creation ordinances have inherent universal ethical obligations built into them, so does the Sabbath, reinforcing the on-going responsibility of man to observe the Sabbath.

It would be later in the history of God's dealings with his covenant people that the Sabbath would take on additional temporal and symbolic dimensions. After man's sin and the curse on creation and work, the Sabbath was to be remembered since it would provide relief for man and beast from the labours of the week (Ex 20.9-11). It became the sign of God's covenant enacted at Sinai (Ex 31.13, 17). It would also become a memorial of the Israelite's redemption from slavery (Dt 5.15), which in turn was a symbol for the everlasting redemption procured by Christ on behalf of his people. As we noted above, man's first full day of existence was on the Sabbath. This may point to the time when the Lord's Day—the Christian Sabbath—would be established on the first day of the week. It may also point to the everlasting Sabbath (Heb 4.9-10) which will begin on a new first 'day'—a day that will never end because time as we know it will have ceased. Man is destined for an everlasting rest contemplating the glory of God.

Today, most non-Christians, and many Christians, do not believe that man is obligated to keep the Sabbath holy by ceasing from the labour of livelihood and dedicating it to worship and contemplation of God's majesty. They have been fooled by interpreters who say that the Sabbath was merely a Jewish ordinance that was abolished by the coming of Christ. What Christ fulfilled with respect to the Sabbath were the ceremonial rituals of the day that had been added during the enactment of the Mosaic covenant and subsequent covenants and the figurative aspects that were associated with the spiritual rest which he would procure. The requirement to keep the Sabbath day holy— now observed on the Lord's Day to commemorate the resurrection—is a creation ordinance that will not be abolished as long as this world exists.

Holiness [March 17] (Gen 2.3)

This verse contains the only reference to something being called holy in all of Genesis. Therefore, we need to pay particular attention to the declaration that God made the seventh day holy. It was possible for God to declare the day holy only because he himself is holy—it is impossible for something defiled or profane to make something else holy. God is infinitely holy. Isaiah had a vision of the LORD and heard one of the seraphim cry out "Holy, holy, holy is the LORD of hosts" (Is 6.3). Some understand this threefold repetition of holiness to be a veiled reference to the Trinity. However, it is probably better to understand it as declaring God to be supremely and completely holy—not the holiest of the holy, but the holiest of the holiest of the holy. In Semitic idiom, repeating a word twice emphasizes the certainty of the thing being stated. For example, "eating you may eat" (Gen 2.16) means "you may surely eat, and "dying you shall die" (Gen 2.17) means "you shall surely die". Thus, the threefold repetition of a word (or of its synonyms) means that the thing being emphasized is even more certain or important (e.g., Jer 22.29; Ezk 21.27).

God is holy, which means that he is:

- Transcendent over creation. He is separated from creation—he is not part of it and not dependent on anything that he has created.
- Completely sinless. He cannot do anything that is evil (Is 5.16); instead he is infinitely good.

Holiness is an *essential* defining attribute of God—that is, it is impossible for God to be anything other than holy, and still be God.

The emphasis on God's holiness cannot be dismissed as an OT doctrine from a different God, of a different era. There is no such thing as an OT God that is different from the NT God—God is God, through all time, across all of his covenantal dealings with mankind. God's holiness is as much a defining attribute now as it was at Mount Sinai. NT writers work within the context of the OT declarations of God's holiness. Yet, a reiteration of God's holiness is far more common in the NT than most people think. Holiness is a central teaching of NT doctrine. For example, the

third person of the Trinity is referred to as the 'Holy Spirit' only three times in the OT, but over 375 times in the NT. The threefold declaration of God's holiness is repeated (Rev 4.8) in the NT. Mary speaks of God's holiness (Lk 1.49) and Jesus affirmed the holiness of God when he taught his disciples to pray that the Father's name might be esteemed for its holiness (Mt 6.9). Paul speaks of God's holiness (Eph 4.24). In addition, Jesus, who is God himself, is asserted to be holy (Lk 1.35; Lk 4.34; Acts 3.14; Acts 4.27, 30; Heb 7.26; Rev 3.7).

God declares certain things holy—they are set apart so that they are forever dedicated to his glory. For example, his law is holy (Rom 7.12). God's law is perpetually holy and cannot be abolished (Mt 5.17-19), although the *form* of its application may change—the OT ceremonial, holiness, and covenantal forms have been replaced with their NT equivalents. The people whom God saves are holy (1 Pt 2.5, 9), and are forever his and nothing can change that relationship (Rom 8.31-39)—although the form of their holiness changes, since they are at first forensically holy (or sanctified) but only at death and glorification achieve complete experiential holiness (Eph 1.4). Therefore, it is the same when God declared the seventh day to be holy. It is forever set aside as holy and nothing can change that as long as time endures. As with the two previous examples, the *form* of the Sabbath has changed. Christians do not observe the Jewish Sabbath—i.e., Saturday. However, the principle of six days of labour followed by a Sabbath day of rest (i.e., the seventh day, after six days of work) is what God declared to be holy. At the transition from the OT ceremonial forms, God changed the holy day of the week so that it is now to be observed on the first day of the week—the Lord's Day, the day of resurrection.

God is holy, and he demands that his people also be holy (Lev 11.44-45; Lev 19.2). This is not an obscure concept from the OT age that some legalistic 'puritans' are imposing on NT believers. The NT writers such as Peter and Paul, the apostle to the *Gentiles*, expect Christians to be holy (Rom 12.1; Eph 4.24; Col 1.22; 1 Pt 1.16). Yet, the concept of holiness is scorned by many in the Church today. They fall for the myth, regurgitated in every generation, that there is no distinction between the profane and the sacred—which treats all days the same, claims that anything we present to God must be acceptable as worship, and pretends that personal purity is not required of Christians.

For us to be holy, it is necessary for us to be like God—not by trying to usurp his authority as Adam and Eve did (Gen 3.5), but by doing what he requires and participating in his holiness. We must be internally holy through spiritual regeneration and must display external holiness through morally correct actions and through observance of the ceremonial acts of holiness endorsed by Jesus. In particular, our ceremonial holiness is displayed by our being washed in baptism and by our observing as holy what God observes as holy—i.e., the Sabbath. By putting aside the noise of commerce, the flurry of entertainment, and the burden of manual labour we can be like Jesus who observed the holy Sabbath faithfully. For Jesus, the Sabbath observance was such a given that it was not open to debate. However, what is important to him is *how* the Sabbath is observed correctly (Mt 12.1-8; Mk 3.4-5).

Assembled Accounts [March 18] (Gen 2.4)

A Hebrew word (*toledoth*) appears for the first time in this verse. This word has interested, and even perplexed, scholars for centuries. It is translated as 'generations' (ESV/KJV), 'account' (NIV/NASB), and 'history' (NKJV). The early Greek translation of the OT uses the word 'genesis' for *toledoth*, from which we derive our title for the entire book. In total, the word is used eleven times in Genesis in the form it appears in Genesis 2.4, and a few other times elsewhere in the OT Scriptures. A related word is used about two dozen times in the OT, where it is translated as 'generations', 'families', 'genealogies, 'descendants' and 'records' (e.g., Ex 6.16; Num 1.20). The ESV's translation 'generations' for *toledoth* raises the question, what does 'generations' mean in the context of Genesis 2.4? It seems that the idea of genealogy or descendants does not make sense in this verse. Other translations attempt to provide an explanation of the meaning of *toledoth* with their alternate renderings, which, while being somewhat less literal, may be pointing in the right direction.

Opinions vary as to whether *toledoth* is used as part of a title for a new section or as a colophon to end a section. We do not need to consider today the evidence for and against these two different primary views. Neither case is

fully convincing since the word, when used in different contexts, appears to support one view or the other. For example, its use in Gen 2.4 and Gen 6.9 seems to fit best as a conclusion; however, some argue that its use in Gen 10:1 supports the idea that it is part of a title for a new section. In some cases, the word seems to refer to the history of the named individual (Gen 6.9; Gen 36.1) and in others to the descendants of the named individual (Gen 5.1; Gen 25.19). Some writers have noted that the use of *toledoth* in 1 Chronicles 26.31 applies to what preceded, whereas in Ruth 4.18 it seems to apply to what follows. Some scholars have suggested that the different usages can be determined by the presence or absence of the word 'and' before *toledoth*. However, it is possible that the word can be used either as a heading or as a conclusion to a section. It therefore may be best to translate it with different words in different contexts. If we are to insist on a single word to translate all occurrences, the word 'account' may serve best as it does not imply genealogical records (as does 'generations') when there are none in the immediate context, and it works well if the word is used in either a heading or in a conclusion.

It may be that the word *toledoth* is being used as an identification marker—indicating the original author or owner of the account—since the word is used only a few times in the context of a genealogical record. If this is the case, it may be giving us important information about the authors (or owners) of the original contents of Genesis. Some writers suggest that Moses used the word *toledoth* as a means of structuring the text of Genesis—some even insist that Genesis is structured into ten sections; yet with eleven occurrences of *toledoth* there would actually be twelve sections. However, the word *toledoth* is probably not a literary device used by Moses to delineate a structure for the book. Rather, the appearance of the word probably identifies either the start or the end of a document preserved in the family line extending to the time of Moses. The significance of the word *toledoth* seems to be that it identifies the original source documents used by Moses when he wrote the book of Genesis under the direction of the Holy Spirit. When Moses assembled these various accounts, from before his own time, into the book of Genesis he left the original authorship markers in the text.

The probable allocation of authorship of the early portions of Genesis, with the *toledoth* serving as part of the conclusion to each section, may be:

- Gen 1.1-2.4 an account of creation, which was delivered to Adam directly from the Creator.
- Gen 2.5-5.1a an account that was recorded personally by Adam, with some of the information being received from God.
- Gen 5.1b-6.9a an account that was recorded by Noah about the state of the world to his day, before the flood.
- Gen 6.9b-10.1a an account written by the sons of Noah—Shem, Ham and Japheth. The three of them bear witness to the account being an accurate record of what had transpired during and immediately after the flood.
- Gen 10.1b-11.10a an account that was recorded by Shem, who lived for 500 years after the flood (Gen 11.11).
- Gen 11.10b-27a an account written primarily by Terah, the father of Abram.

In each case, the persons named with the *toledoth* would have had first-hand knowledge of the events and genealogical records, or would have had access to reliable accounts, possibly handed down in written form. There are hints within the text of each section that they were originally composed by different authors. For example, the proportion of the names used to refer to God varies somewhat in the different sections.

This consideration of the word *toledoth*, and the organization of the earliest part of Genesis, is important because it provides evidence that there were eyewitnesses to the early events of the world's history. The account was not derived from early myths that were purged of their pagan roots, nor was it a late account assembled by Jewish scribes thousands of years after the events. God has never left himself without a witness (Heb 1.1). Even before the flood, God provided Scriptures that included information about his works of creation and providence and of his plans to send the Redeemer of mankind.

Literary Structures in Genesis 1-11 [March 19] (Gen 1-11)

Various writers believe that they have identified literary structures in the text of Genesis 1-11. The following are a

few examples of the types of structures that have been proposed:

- A number of writers have suggested that Genesis chapter 1 is structured around 'days of forming' followed by 'days of filling', in four sets: light was created and light bearing objects were added (Gen 1.3, 14); waters were formed and filled (Gen 1.6, 20); land was formed and filled (Gen 1.9, 24, 26); and finally plants were formed and filled with seeds/fruit (Gen 1.11, 29). This last forming/filling seems contrived. However, those who favour this structure claim that since plants cannot move they are 'places' rather than living beings like the animals.
- Genesis 1.1-2.3 uses the number seven in different ways. It is structured with seven paragraphs; an introduction followed by six days of creation. The first week had seven days. The opening verse has seven Hebrew words, and the second verse has fourteen (2X7) words.
- Some identify a chiasm structure with the outer bracket being "God created" (Gen 1.1; Gen 2.2-3) and an inner bracket being "heavens and earth" (Gen 1.1; Gen 2.1), with the central portion of the chiasm being the forming and filling of the earth (Gen 1.2-31). This places a lot of content at the centre of the chiasm, which makes the identification of this chiasm suspect.
- A major chiastic structure is found in Genesis 1.1-2.25, with a series of nested brackets consisting of: bareness of matter/man (Gen 1:1-3; Gen 2.25), separation of the light/darkness and parents/children (Gen 1.4-5; Gen 2.24), separation of the waters above/below and man/woman (Gen 1.6-8; Gen 2.21-23), separation of dry land/sea and separation of the animals by their kinds (Gen 1.9-10; Gen 2.19-20), filling the earth and Adam's life (Gen 1.11-13; Gen 2.18), filling the sky and the garden (Gen 1.14-19; Gen 2.15-17), filling the water and the garden with water (Gen 1.20-23; Gen 2.10-14), filling the land and the garden (Gen 1.24-25; Gen 2.9), God's place for man (Gen 1.26; Gen 2.8), the creation of man (Gen 1.27; Gen 2.7b), mankind's relationship to the earth (Gen 1.28; Gen 2.7a), provisions for life (Gen 1.29-30; Gen 2.5-6), the heavens and the earth (Gen 1.31; Gen 2.4b), created content (Gen 2.1; Gen 2.4a), creation completed (Gen 2.2a; Gen 2.3c); and God rests (Gen 2.2b; Gen 2.3b). At the centre of this chiasm, God blesses and sanctifies his creation (Gen 2.3a).
- Another localized chiasm is identified in Genesis 1.14-18; with the nested brackets being, division (Gen 1.14a, 18b), signs to rule (Gen 1.14b, 18a), and objects to give light (Gen 1.15, 17); with day and night at the center (16).
- Some suggest textual parallels can been found (e.g., Gen 1.14-19 with Gen 2.8-17; Gen 2.4-6 with 2.18-20, 2.7 with Gen 2.21-22; and Gen 2.8-9 with Gen 2.15-17).
- It has been suggested that the flood account (Gen 6.10-9.19) was structured as a chiasm, many levels deep. Noah (Gen 6.10a; Gen 9.19) serves as the outer nested brackets, enclosing his sons (Gen 6.10b; Gen 9.18b), the ark (Gen 6.14-16; Gen 9.18a), flood announcements (Gen 6.17; Gen 9.11-17), covenant announcements (Gen 6.18-20; Gen 9.8-10), food provisions (Gen 6.21; Gen 9.1-4), commands to enter/leave the ark (Gen 7.1-3; Gen 8.15-17), seven days of waiting (Gen 7.4-10; Gen 8.10-13), entry into the ark and exit of the raven and dove (Gen 7.11-15; Gen 8.7-9), shutting and opening the ark (Gen 7.16; Gen 8.6b); 40 days (Gen 7.17a; Gen 8.6a), waters increasing and decreasing (Gen 7.17b-18; Gen 8.5), mountain tops covered and uncovered (Gen 7.19-20; Gen 8.4-5), 150 days (Gen 7.21-24; Gen 8.3). At the centre, God remembers Noah (Gen 8.1).

It is probable that the search for literary structures in Genesis 1-11 has become a speculative exercise. Therefore, we should consider the possible motives for this type of search. Some writers see in these structures the hand of a single human author and use this as a basis to argue against liberal critics who have chopped up the account into tiny pieces and have proposed that many portions of Genesis 1-11 were cobbled together from four different sources, long after the time of Moses. Others have used some of the identified structures as the basis for an argument that portions of Genesis 1-11 (in particular the creation and flood accounts) are to be understood primarily as literary compositions. Thus, they claim that we do not have to understand the Genesis account to be giving a chronological sequence of historical events (chapters 1 and 2) or actual genealogies (chapters 5 and 11).

We do not need to do a literary analysis to determine which portions of the Genesis 1-11 account have a common author. As we noted in the previous meditation, the Bible names the authors of the various sections. For example, God delivered to Adam the first section (Gen 1.2-2.4) and Adam contributed the next section (Gen 2.5-5.1a). Noah was the author of the third section (Gen 5.1b-6.9a) and Shem the primary author of the next two sections. This

information should guide any attempt to derive a literary structure. For example, the chiasm suggested above for structuring 1.1-2.25, could have been developed by Adam—although some of the suggested brackets appear to be strained. Likewise, another suggested chiasm (Gen 6.10-9.19) could have been deliberate, since it falls within the section (Gen 6.9b-10.1a) credited to the sons of Noah.

God is the ultimate author of Genesis 1-11, and *if* there are meta-level structures, such as chiasms or parallels, we should not be surprised. The parallels we find in the Bible—e.g., Elijah and Elisha with John and Jesus, and the tree of life in the first paradise (Gen 2.9) and in the final paradise (Rev 22.2)—show that God has planned his entire revelation. If these identified structures were intended by God and the human authors, and not imposed by later readers, then we can conclude that God's record of history is artistic.

The LORD God [March 20]

(Gen 2.4)

Throughout Genesis 1.1-2.3, God used the term 'God' (*elohim*) to refer to himself. In this verse, he introduces his personal name 'LORD' (*yahweh*), and the associated word-pair 'LORD God' as a title for himself. Most English translations render the personal name of God as 'LORD' following a tradition in Bible translation which is based on the ancient mistaken Jewish tradition of substituting the word that means 'Lord' [*adonai*] for 'Yahweh' when reading the Scriptures, lest they break the command not to take God's name in vain.

A view about the OT Scriptures (called the *Documentary Hypothesis*) which became popular in the 19th century, proposes that portions of the Pentateuch were written at different times during the history of the Jews (from the 10th c to the 6th c BC) and edited into its final form after the Babylonian Captivity. This view dismisses Moses as the author of the Pentateuch, rejects the belief that Moses used much older pre-existing, non-mythic, source material from which to assemble the contents of Genesis, and denies the fact that the earliest chapters of Genesis were written before the flood. We reject this view as it is entirely speculative, full of inconsistencies, contradicts the reality that the book of Genesis is a unified whole, and ignores the fact that Jesus and the authors of the NT attribute the book to Moses.

Many people have been influenced by this view, even unwittingly, and thus assume that God introduced his personal name to Moses (Ex 3.14) and that the references to the LORD in Genesis were included by Moses as he wrote the book, using terminology for God that was known and popular in his day. Some point to Exodus 6.3 to defend this view. However, insisting that the name 'LORD', for God, was unknown to the patriarchs (Gen 15.4) creates significant difficulties since we would have to claim that God did not use the term to speak of himself (Gen 15.7). The probable explanation of Exodus 6.3 is that God had not communicated the full *meaning* of his personal name to the patriarchs, as he began to do with Moses (Ex 3.14) and would continue to do through his dealings with his covenant people.

The word 'LORD' is a translation of the Hebrew consonants YHWH, which are derived from the root of the verb 'to be' or 'I am' (Ex 3.14)—specifically from the imperfect form—and means 'he who is'. The name YHWH is not derived from the Egyptian, Sumerian, or Babylonian definitions or names for their gods. It is God's unique way of referring to himself, and preceded all man-made religions—particularly since it was used before the flood by God.

When used in conjunction with the word 'God'—as here in the expression 'LORD God'—it can be understood as a title that encompasses the idea of 'the LORD who is God'. The expression defines God in terms of his being the creator, provider, and sustainer (Ps 19.1-6); and by his personal relational nature, as the one who makes a covenant with mankind (Gen 15.7). The introduction of the term 'LORD God' at this point in the narrative provides a transition from the account that records God exercising his creative and providential attributes, to the account that records his interaction, in a personal manner, with the man (and his wife) whom he had created.

It is imperative that we insist that God used the word 'LORD' to describe himself in his witness to the antediluvian world, primarily because the text of Genesis says he did. This text comes ultimately from the hand of God and, under the superintendence of the Holy Spirit, he determined how he would communicate his nature to the world. The depth of the name 'LORD' was not fully revealed to the pre-flood patriarchs (for example, there is not an *explicit* statement of the LORD making a covenant with pre-flood mankind), but the name provided at least hints to a number of concepts about the nature of God, so that the antediluvian world was not without a witness, including:

- *Substantial existence* The use of the verb 'I am' as the root of God's personal name emphasizes the fact that he is a being who exists and is real, in contrast to the non-existence of every god invented by men.
- *Self-existence* His name indicates that he just *is*, as the only one with a necessary existence. He did not come into existence (as in, 'I became'), nor is his existence derived from, or dependent on, any other existing entity. This implies also that he is the ever-living one—i.e., eternal.
- *Sufficient existence* Many languages do not have some terms found in the Bible. For example, not all cultures are familiar with sheep or with wine—so the symbols of the 'lamb of God' and the wine as a covenantal sign for Jesus' shed blood are difficult to translate. However, probably every language ever used includes the verb 'to be' or the expression 'I am'. This ensures that the LORD can be known in every culture.
- *Spirit existence* God is the absolute personality. His personal name includes an 'I'. He is not an 'it' and an abstract prime mover.
- *Significant existence* From God's perspective, names are important. He named Adam and gave him authority to name his wife and the animals. Naming something gives it significance and shapes part of its meaning.
- *Sacred existence* No man-made religion uses the name 'I Am' for one of its gods. In contrast, Islam uses terms for its deity such as *elohim*—the Arabic expression *allah*, 'the god', is a cognate of the singular form of the word *elohim*. God has providentially preserved the universal term 'I Am' for attribution to the one true God. *Yahweh* is truly the *Elohim*!

When Yahweh God Created [March 21]

(Gen 2.4)

This verse has been misapplied by people who try to defend the view that a day in Genesis chapter 1 can refer to a period that is greater than 24-hours. They note that most translations of this verse say 'in the day'. From this they infer that since Genesis 2.4 covers the whole time of creation (i.e., a period of six days) with the word *day*, the word *day* can be applied to a period other than 24-hours, and therefore the word *day* when used in Genesis chapter 1 could be applied to long ages—as in the 'day of the dinosaurs'.

The translation 'in the day' has been the standard translation for thousands of years. The Greek OT (the Septuagint) and the Latin Clementine Vulgate, for example, both have this translation. Wycliffe's early English translation (c. 1390), the Geneva Bible (1599), and the King James Version (1611) all have the same translation. Tyndale's translation (1530) is an exception; he expressed it as 'in the time'. Among the modern translations, widely used by Evangelicals, the NKJV, NASB, and ESV all follow the tradition of the ancient translations and early English translations. The NIV is the exception, in that it translates the Hebrew as 'when'.

Until the mid-19th century, interpreters of Genesis 2.4, if they even addressed the meaning of the expression 'in the day', generally concluded that the writer was using 'day' as a collective of indeterminate time to refer to the actual six days of creation—as in 'David's day'; where the word *day* means 'in his time'. This is supported by Tyndale's translation, as we noted above. No interpreter would have suggested that 'in the day' meant anything other than the six 24-hour days of creation. It has only been since the mid-19th century, when some interpreters began to read long ages into the days of Genesis chapter 1, that Genesis 2.4 has been viewed as supporting the idea that the days in Genesis chapter 1 can mean anything other than actual 24-hour days. Even if *day* in Genesis 2.4 is used in a different way than in Genesis chapter 1, the fact that Genesis chapter 1 carefully defines each day as having an evening and a morning precludes any interpretation other than that the days in Genesis chapter 1 were actual 24-hour days.

Recent linguistic studies indicate that the single Hebrew word (*beyom*) is a compound word—with the preposition 'in' or 'on' preceding the word *yom*, which means 'day'—that has generally been mistranslated. It appears that the word is an idiom and should be translated as 'when', as the NIV translates it. The word, in the exact same form, appears in eight verses in Genesis, and 198 times in the OT. In Genesis it is translated (in the ESV) as 'when' in Genesis 3.5; Genesis 5.1, 2; and Genesis 30.33. In Genesis 2.17 it is translated as 'in the day'. However, this presents two problems: 1) it is inconsistent with the translation of Genesis 3.5, and 2) it is difficult to explain what God meant when he said that Adam would die 'in the day' in which he ate from the fruit, since Adam did not die on *that* day. Most interpreters get around this problem by saying that Adam died spiritually (i.e., being separated from God) on the day he sinned, and then his physical death followed much later. If Genesis 2.17 is translated with 'when' there is no explicit time given for when Adam would die—and all we need to state is that the process of decay leading to eventual physical death was initiated. The other two instances of the word *beyom* are in Genesis 21.8 and Genesis 35.3. Both make sense when they are translated with 'when'; in fact, Genesis 35.3 is clearer when translated with 'when': "the one who answers me when I am in distress.'

Genesis 2.4 includes the first of the Biblical *toledoths* (ESV: 'generations'; but more accurately 'account'), and marks the conclusion of the creation narrative. It provides a magnificent, concise, summary statement of God's work over the creation week. To emphasize the statement as a conclusion it is cast in the form of a chiastic parallel, a formal poetic structure that is used often in the Biblical texts. This structure supports the translation 'when', as can be seen when the verse is laid out as follows:

This is the account of the heavens and the earth when they were created when Yahweh God made the earth and the heavens

In this form we can see that the second and fifth lines parallel one another, as do the third and fourth. The reversal of the order of 'heavens and earth' in the fifth line emphasizes the chiastic structure which progresses into the middle where the key idea is expressed, and then progresses out in the reverse order. You may want to compare this instance of a chiasm with other examples found in Scripture (Ps 124.7; Prov 18.20; Is 6.10; Mt 19.30). The use of 'when' in the third line gives a context for how we should translate the fourth line, and requires that we translate *beyom* in the idiomatic form 'when', rather than in the woodenly literal form 'in day'.

There is more that could be said about the grammatical structure of this verse, and which supports the translation 'when', but we do not need to consider linguistic technicalities at this time. It is sufficient for us to conclude this meditation with the observation that Genesis 2.4 does not provide any support for those who desperately wish to undermine the straightforward interpretation of Genesis chapter 1, which indicates that the great Creator completed his work of creation over six 24-hour days.

Flashback – Preparing the World for Man in the Garden [March 22] (Gen 2.5-6)

These verses are not easy to understand, and among the most difficult that we have encountered thus far in Genesis. However, there is nothing very difficult in translating the actual words—in fact they are quite straightforward, even though some can be translated into English by a number of different words (e.g., 'mist', 'spring' or 'stream'; 'land' or 'earth'; 'plant', 'bush' or 'shrub'). Rather, the challenge lies in how to place what is stated here within the sequence of the creation account recorded in Genesis chapter 1. Some interpreters suggest that the verses speak of the situation relating to a specific area of land where God made the Garden of Eden, after the six days of creation. Others suggest that they deal with the creation of all vegetation with which God covered the entire continental land mass on the third day (Gen 1.11-12). Both views appear to be possible. Some, reaching a very different conclusion, claim that these verses (and much of chapter 2) provide an alternate (and even contradictory) creation account that Moses attempted to blend with the account in Genesis chapter 1. They claim that these verses state that plants were created after it had rained for the first time, and even after man had been created. We reject every suggestion that

there are two independent creation accounts or that these verses contradict Genesis chapter 1.

Genesis chapter 1 recounted, in a sweeping panorama, how God created everything in the universe, including man. Genesis chapter 2 is a complementary account that narrows the focus to some of the details related to the creation of man and the Garden of Eden as man's specific abode. Therefore, the interpretation of these two verses should be understood in that context.

A common logical fallacy is to conclude that if two events occur together there is a cause-and-effect relationship between them. The converse of this fallacy is often stated as, "correlation does not necessarily imply causation". Applying this principle, we are not to conclude that the reason no plants had yet appeared on the earth (land) was that it had not rained. In this statement, God is not providing a necessary condition for the appearance of the plants, e.g., that they could not grow without rain. If that were the case, then we would also have to conclude that another reason why there were no plants was that man had not yet been created who could work the ground. The lack of rain is not the reason for their being no plants, because there was a mist (or springs) that watered the entire surface of the ground, which could provide moisture to the plants (Gen 2.6). In addition, we know from Genesis chapter 1 that plants were created on the third day and man on the sixth day. Rather, we are informed of the general timeframe and context in which the Garden of Eden and man were created. The straightforward way to understand these verses seems to be as follows: God begins by reflecting on the transition between the second and third days of creation. The dry land had appeared but there was not yet vegetation (and it had not rained yet and man hadn't been created vet). God may mention the ground (*adama*) because man (*adam*) was to be provided with a body formed from it. He mentions the plants because it was the plants which man would be commissioned to tend (work and keep; Gen 2.15) in the garden and which man would use for food. It is in this context that God planted the Garden of Eden (Gen 2.8-9) and made man, who inhabited the garden.

A question, often raised by verse 6, is whether it had rained prior to the flood. Some interpreters conclude from the word 'mist' that the antediluvian world was covered by a heavy vapour canopy and that at the time of Noah not only was there no concept of a flood but also the idea of rain could not be imagined. They then claim that this vapour canopy condensed for the first time into rain before the flood and that this mist is the source of the rain that flooded the earth. This is probably not what we are intended to understand from verse 6. The word 'mist' may not be the best translation ('spring' or 'stream' may be better). Also, the idea that a vapour canopy was present creates too many issues that would require a major reworking of the physical systems as we know them today, such as: 1) The sun, moon, and stars would not have been visible for the first 1,656 years of the world, defeating their purpose as signs (Gen 1.14). 2) A heavy vapour canopy would have generated a greenhouse effect that would have boiled to death life on the earth. 3) There would have been no hydrological cycle to supply rivers (Gen 2.10). 4) The atmosphere could not have supported the massive amount of water required to provide rain for forty days (Gen 7.12). [We will address the question of where all the extra water came from, when we study Genesis chapter 7.] Genesis 2.5 only tells us that it had not rained at the time God created the vegetation; and possibly, that it had not rained before the sixth day when he created man.

We should note from these verses God's special provisions for mankind. He mentions the lifeless world (no plants, rain, or man) to set the stage for the magnificent drama that he will unfold as he brings to life a paradise where he can place man, the crowning glory of creation. Both God's unique creative work and his ongoing governance of the universe are referenced—the creative acts are seen by the allusion to the Genesis chapter 1 account, and his works of providence are understood by the mention of his being the cause of rain (Gen 2.5; Amos 4.7). Again, we are reminded that God is not an abstract force or an uninvolved entity which somehow got things going and left them to unfold by some supposed 'natural laws'. Rather, God is the personal, active, agent who created all things and who sustains all things by the power of his Word.

Man is a Living Being [March 23] (Gen 2.7)

In Genesis 1.26-27 we are informed that God created man in his image and as two sexes. Now we are told that man was created with two components—body and spirit. God used dust from the ground, not an already existing form of life, when he created man's body. We take God at his word and believe that the Biblical account provides a direct record of what actually happened. This means that God did not use the body of an animal into which he breathed intelligence or a human spirit; nor is man descended from some ape-like creature. No rationalization can explain how man can be both the product of a unique creative act of God and the result of an evolutionary process. One or the other claim must be false. Nor will we relegate this statement to myth or moral allegory because some supposed scientists do not happen to agree with it. God tells us plainly how he created man's body from the substance of the earth—forming it as a potter does a clay pot.

A common logical fallacy is to infer that what is true of a part is true of the whole. Because man has an animal-like body does not mean that he is an animal. Man's body is animal-like because we have been designed to live in the same natural realm as animals. God could have made man's body with some other composition. For example, some science fiction writers explore the idea of physical life being based on silicon rather than on carbon. However, then we would not be able to use carbon-based plant and animal material for food. God also re-used his brilliant component designs when he made man—for example, we have legs and hands because they are more versatile than wheels and calipers. But, neither the fact that our bodies are carbon-based nor the fact that they have similar design elements to animals, makes man an animal.

While our bodies are similar to those of animals, our spirits are not. It is true that animals have a 'breath of life' animating them—they, however, were not created in the image of God. Man's spirit is *similar* to that of the angels—for example, it is immortal (once created, human spirits do not cease to exist), rational, and able to experience emotions such as joy. However, angels were not created in the image of God, only man was—so it is probable that our spirits are in some ways different from angelic spirits (one aspect of the difference may be that our spirits were specifically designed by God to be associated with our physical bodies). Some writers (e.g., Augustine) suggest that man is body and spirit to be the mean between the angels and the beasts. Others suggest that man is body and spirit at the same time to humble him (by reminding him he is of the earth) and to exalt him ("to distinguish him by a mark of excellence from the brute beasts"). We must be careful what we propose with respect to man's body and spirit or we might be caught in a trap that considers the body of man to be inferior to his spiritual dimension, and sees the spirit as more admirable than the body. This could lead to invalid (Gnostic) thinking, which views the body as not only inferior but also evil. At creation, Adam, body and spirit, was very good, a delight to the Creator, and an honour to be cherished. Man is more than the parts that make him up. He is neither animal nor angel—he is man, the pinnacle of God's creative work.

Some writers state that man was not created in an instant but formed by God in stages, as he took special care to shape him for a place of honour—thus distinguishing him from the animals, which were created instantaneously. Some even claim that the process had three steps: creation of an inanimate body, animation with a principle of life, and endowment with rational faculties. Others (e.g., Berkhof) object to the idea that God is describing a process in which the body was created earlier than the spirit. They believe that in an instant, as the body of man arose from the dust, God brought it to life by supplying it with breath. However, the account appears to present a temporal sequence. The Hebrew text supports this conclusion. Throughout the creation account (starting at Genesis 1.2), the '*waw*-consecutive' is used—i.e., the word 'and' (*waw*) appears many times and can be translated as 'then' (as it is in the first word of Genesis 7.1, in the ESV). Reading the account in a straightforward way, we see that God first formed the body of man, and then at the end of the process he breathed into man a spirit of life—some suggest 'kissed' man into life, since the word 'breathed' is warmly personal (compare with Jn 20.22).

Man does not consist of three parts (as many wrongly interpret 1 Thess 5.23): spirit, soul and body. Those who hold to this view consider the soul and spirit to be separate components of man requiring differentiation—for example, one is the animating principle and the other the rational dimension. The Hebrew word (*nephesh*) used here (often translated as 'soul'), should best be translated as 'being' (as in the NIV) or 'person'. We can think of the soul (sometimes used as a synonym for 'spirit') as a reference to man's entire being—the combination of body and spirit

making up a living being.

Man does not possess a body or a spirit, as he possesses a pair of shoes; he is not a spirit that has a body or a body with a spirit. Man is a unity of physical and spiritual components, which can only exist to their fullest when they are united. Thus, death, which is a separation of two things that should not be separated (God and man, body and spirit), destroys this unity. This is one of the reasons why we, as believers in Jesus, look forward to the resurrection. It is only then that we will be the living beings that God intended for mankind to be—possessing eternal life that is both physical and spiritual.

Body of Wonder [March 24] (Gen 2.7)

God formed Adam's body using chemical elements taken from the dust of the ground (e.g., oxygen, 65% of mass; carbon, 18%; hydrogen, 10%; nitrogen, 3%; calcium, 1.5%; phosphorus, 1%; and a dozen-plus other elements making up the final 1.5%). When we consider the human body from this perspective it may appear to be not much more than a few common elements, with a touch of 'salt'. Yet, when we consider it as a living entity, after God breathed into it the spirit of life, we marvel at the engineering feat God accomplished when he created the body's major systems, which are:

- The *nervous system* consists of the brain, spinal cord, and peripheral nerves connected to sensory receptors for vision, hearing, taste, smell, and touch. It controls other systems via a communication network.
- The *musculoskeletal system* consists of the bones, ligaments, tendons, cartilage, and attached muscles. It gives the body structure and the ability to move. In addition, bones produce blood cells and store calcium and phosphate required for repairs.
- The *cardiovascular system* consists of the heart, arteries, veins, and capillaries that circulate blood to transport oxygen, energy, nutrients, waste products, immune cells, and signalling molecules (i.e., hormones).
- The *respiratory system* includes the nose, lungs and connecting 'pipes'. This system brings in oxygen and expels carbon dioxide and water.
- The *digestive system* includes the mouth, stomach, and intestinal tract, and all the 'pipes' connecting them. It includes organs such as the liver, pancreas, and gallbladder, and the salivary glands. It converts food into molecules for distribution, and excretes the unused residue.
- The *integumentary system* consists of the skin, hair, nails, sweat glands and sebaceous glands. The skin covers and protects the interior organs, and serves as a major sensory interface with the outside world.
- The *urinary system* includes the kidneys, bladder, and urethra. It purifies water, removes excess water from the blood, and carries off waste molecules and excess ions.
- The *reproductive system* includes the gonads and external sex organs.
- The *immune system* includes white blood cells and the thymus and lymph nodes. It differentiates between the body's own cells and alien cells and substances, and neutralizes or destroys them, using antibodies.
- The *endocrine system* consists of glands (e.g., pituitary, thyroid, adrenals, pancreas, and gonads) which produce hormones, which serve as signals sent through the body to control a range of conditions and states.

Each body system alone is highly complex and functions with high integrity. However, even more amazing is how the entire suite of systems work together seamlessly. A higher-level program coordinates the operation of all the systems. No integrated suite of systems designed by men is more complex than the systems that work together in the human body.

In addition to the integration of these systems, God engineered in the human body many optimal design features, including:

- *Bi-pedal motion.* We can walk on flat surfaces and uneven terrain, and climb stairs. Robot designers have not designed a more efficient system of locomotion.
- Auto repair. The body can suffer considerable damage and a number of systems work together to correct the

damage—e.g., bone knitting, and muscle growth. Computer engineers can only dream of having such self-repairing systems.

- *Durability*. It is rare that a manufactured device (e.g., an appliance) will continue to operate without interruption for decades. Yet organs in the body (e.g., the heart) can operate for 80+ years without failure.
- *3D Perception*. Our hearing and visual systems operate in three dimensions. With binocular vision, we obtain depth cues; and with sound localization, we can obtain directional information. We can do instant calculations based on this information (e.g., to avoid an approaching automobile) which robot designers cannot yet emulate.
- *Resilient skin.* Skin is tough enough to withstand hours of pounding on electronic keyboards yet sensitive enough to feel the presence of a single hair. It can be abused to the point of blistering but will regenerate within a few days. It is a semi-impermeable membrane, which holds in body water, yet can let water flow out to help regulate body temperature.
- *Blood clotting*. The ability of blood to clot is essential so that our bodies are not drained of blood and a wound can begin to heal. However, we do not want blood to clot while it is flowing in our veins or we will experience a pulmonary embolism that can kill us. The fine-tuning of the clotting system in the endothelium lining of blood vessels puts the best data correction algorithms to shame.

It is absurd for anyone to claim that the human body is the by-product of millions of years' worth of random evolutionary processes. This thinking is the result of a foolish heart, which denies the existence of God. The Psalmist had a limited understanding of the body compared with what we know about it today, yet he declared, "I praise you, for I am fearfully and wonderfully made." (Ps 139.14) When we consider the wonders of the human body, we should be humbled and praise the greatest engineer—God the Creator.

Immortality [March 25] (Gen 2.7)

When we considered the topic of man as the image-bearer of God (Gen 1.26-27), we noted that most definitions of what is included in the term 'image' usually list only the rational and moral dimensions of man. Rarely are other aspects of man considered, such as his entire being (body and spirit) that was declared to be made in the image of God and a reflection of God-likeness; or attributes such as creativity, sociality, and sovereignty (or dominion) over the rest of creation. Another dimension of man which should be included within the definition of image-bearing is immortality.

Usually immortality is considered to be a unique attribute of God, along with other attributes such as his being infinite, omniscient, and omnipotent. However, immortality is not only an attribute of God; it is an attribute of mankind. Of course, our immortality is a derived, or communicated, immortality that does not even approximate God's eternalness. We have knowledge, but it is finite and not equivalent to God's omniscience; we have power (abilities) but it is finite and not equivalent to God's omnipotence. In the same way, our immortality is finite.

Stating that our immortality is finite may sound like an oxymoron. However, God's immortality is of a different order than our derived immortality. God is self-existent and his eternalness is an essential attribute of his existence— he exists entirely outside of time and cannot have a beginning or an end. He could not be God if he were not eternal. This is one reason why the concept of a created god (e.g., as the Jehovah's Witnesses claim about Jesus) is a spurious concept—by definition God cannot be a created entity. In contrast, our immortality is a limited form of eternalness. Our immortality had a beginning—i.e., we came into existence—however it has no end, and we will continue to exist forever.

The created angels also have immortality. They were created during the week of creation and will continue to exist forever. The angels who rebelled against God were not annihilated and did not cease to exist. Rather, they continue to exist forever; however, in a state of everlasting hatred and enmity against God. So, in a similar way, human beings are immortal. The spiritual aspect of our being was not destroyed when Adam sinned, nor are we, as

individuals, destroyed when we sin against God. However, our immortality was radically affected by the entrance of sin into the world. As sin warped other aspects of our being—our rational and intellectual capacities were diminished and our physical bodies began to decay—it warped our immortality. Punishment for sin was (and is) not annihilation, but rather separation of those things which, by design and intent, should not be separated: first separation from God so that we are no longer in communion with him, then separation of our bodies and spirits in physical death, and finally everlasting separation for those who have not received eternal life through Jesus.

Animals do not have rational spirits and are not image-bearers of God. Thus, they do not have a derived immortal spirit from God. Their animating principle is aligned entirely with their physical existence. When animals die, it is not the result of the *separation* of the body and spirit, but rather due to God's removal of the animating principle (a non-immortal form of 'spirit'). In contrast, human beings do not cease to exist, because:

- The spirit, which is breathed into man at his creation, includes a sharing in the Holy Spirit's 'energy', which cannot be revoked.
- Mankind was created to be immortal—to live in communion with God forever. Adam's sin did not obliterate that intent, only corrupted it.
- If a man ceased to exist, it would be a contradiction of the principle of image-bearing—i.e., we would not actually be in the likeness of God.
- Man's spirit is *spirit*, and cannot cease to exist when it becomes separated from its *body* (i.e., at physical death). This would make the spirit only an extension of body and not a distinct aspect of man—this does not mean that a mind-body connection does not exist.

Therefore, the spiritual dimension of man continues to exist even when separated from a body for a time. And, at the resurrection all men will be given new bodies (Acts 24.15)—believers in Jesus will be given spiritual (but still physical bodies; 1 Cor 15.42-43) fit for the restored paradise, with which they will enjoy eternal life forever; and unbelievers will be given bodies in which they will suffer decay and pain forever.

Most men claim that they would like to be immortal. For example, legends speak of the search for a Fountain of Youth or similar source of healing waters, and a number of novels and movies deal with the quest for an elixir or magical potion that will rejuvenate the body or stop physical decay. There is an irony in man's quest for immortality. We are already immortal! Anyone who has rejected Jesus as Lord and Saviour will continue to have an perpetual physical existence. However, that existence will be bare existence in a state of everlasting death—separation from fellowship with God, continual denial of responsibility and blaming God, and endless pain and suffering. For the believer, eternal life is more than a simple timeless existence. It is union with, and participation in, God through Christ as mediator; fellowship with God; substantial existence in glorious new bodies that can never grow old; and unlimited access to the glories of the new heavens and earth.

The Breath of Life [March 26]

(Gen 2.7)

What is life? Or, what does it mean for something to be alive? We began to consider this subject in previous meditations and noted that generally we identify something as alive if it has processes for metabolism, maintaining homeostasis, growth, stimuli response, communication, and reproduction. Dictionary definitions of 'life' add statements such as "exhibiting motion", "full of vigour", "marked by energy", "being conscious", or "having a non-material vitalizing principle". These definitions are inadequate since, as we noted, God is alive (Ps 42.2) and most of these definitions of 'life' apply only to *biological* life. In addition, motion does not mean life is present since cars have motion and are not alive. The presence of energy is not a necessary condition for life since human spirits, angels, and God are alive and yet are not marked by energy. The ability to communicate does not necessarily imply the presence of life, since computers are said to communicate with one another. Also, a self-sustaining process does not define life since angels, who live outside of our time, are not subject to processes (at least as we know them).

We seem just to know when something is alive—it is innate knowledge with which we have been endowed by God.

However, at the edges it is sometimes difficult to determine if something is alive. For example, are plants, seeds, and viruses alive? We need to distinguish between different types of biological life. A virus may not be alive (they are replicators that do not metabolize). Plants, while having some of the characteristics of life, and being composed of the same organic building blocks, do not have the same *form* of life as either animals or man. God does not refer to plants as being 'living creatures' as he does animals (Gen 1.20-21, 24) and man (Gen 2.7). Even though plants have a form of biological life, they do not have the spirit (or breath) of life in them as do animals and man (Gen 1.30; Gen 2.7). Also, plants do not have consciousness. The problem of defining life become more of a challenge when we consider a person who is in an extreme 'vegetative state', on life support, and with no natural heart beat and no brain waves. Yet, even with no 'vital signs', he may still be alive if his spirit has not departed his body.

Organic molecules masterfully formed into all the components of a body will not come alive. Even providing a spark of energy (e.g., from lightening or a generator) will not bring the body to life. It takes something more. Therefore, materialistic or purely biological definitions of life are inadequate since they ignore the presence of the spirit (the 'breath of life'). Without the 'breath of life', man is nothing more than a pile of chemicals worth a few dollars; although your skin might be worth more, sold at the going rate for leather.

At its lowest level, life is an animating principle provided by God. He endows viruses, bacteria, algae, fungi, and plants with various forms of life. At a higher level, he provides animals with the 'breath of life'—one type of spirit, which is not rational and, probably, not immortal. Angels have life as immortal spirits (Lk 24.39 with Mt 8.16; Eph 6.12; Heb 1.7, 13-14), which were designed to exist without a physical connection. Man also has the 'breath of life', but has a different form of spirit life than animals (since man's spirit is immortal) and angels (since man's spirit was designed by God to co-exist with a physical body).

The implications of this consideration of the nature of life are profound:

- Matter and energy cannot generate life. The proposed evolutionary origin of life is impossible since life cannot arise from matter and energy alone.
- However, a living spirit being can create matter—God created all matter.
- The material dimension of living beings cannot exist without a spirit. Physical death occurs when the spiritual animating principle is removed.
- A spirit can exist on its own (God and angels), but can also be joined intimately with a physical component, as in man (we will explore this further in our next meditation: *Mind and Brain* (part 1 of 2) [March 27].
- The existence of the spiritual animating principle cannot be demonstrated through observation or experiment. You cannot capture 'the breath of life' in a test tube and subject it to study. We accept the reality of the spirit in living beings, on faith, because God tells us it exists.
- Men cannot create life. Thousands of men have tried for over 50 years to understand the mysteries of life and have tried to create it from chemicals and have failed—they will always fail, since life comes from God alone.
- Artificial 'intelligence' is *not* life. Some computer scientists (particularly, among 'transhumanists') believe that given enough time and advanced technology (e.g., neural or quantum computers) it will be possible to create artificial life. However, as they have discovered through thousands of person-years' worth of research, *intelligent* life is not fast information retrieval, executing programmed instructions, 'learning' by trial and error, or executing 'fuzzy logic'; it includes things like applying common sense and creativity, which computers will never be able to do.
- It is meaningless to speak of morality if man is nothing more than a biological machine. Anything goes if man has no more significance than a car. Sadly, many people treat their cars with more respect than they do other humans, who are living beings with the breath of life from God.
- A spiritual realm exists. Therefore, there must be an explanation for how human spirits came into existence. Logically, there must be a person who created the spirits. Inevitably, this leads to the Creator who holds men accountable—a scary thought for today's average hedonistic pagan.

Mind and Brain (part 1 of 2) [March 27]

(Gen 2.7)

Philosophers, from the days of the ancient Greeks, have debated the nature of the mind-brain connection and proposed a variety of dualistic and monistic approaches for solving the dilemma, including mind-substance, psychophysical parallelism, subjective idealism, and materialistic determinism. The prevailing view among many philosophers and scientists today is that consciousness, thinking, memory, and other attributes of the mind have an exclusively biological foundation. They claim that a mind is a manifestation of electro-chemical processes rather than a manifestation of spirit or spirit-body. For example, the famous biologist Francis Crick (known for his codiscovery of the DNA structure) stated (in *The Astonishing Hypothesis*) that your joys, sorrows, memories, ambitions, and sense of personal identity and free will are no more than the behaviour of a vast assembly of nerve cells and their associated molecules. In the thinking of most neuroscientists, matter can affect mind, but mind cannot affect matter—they claim that mind over matter is a violation of the 'laws' of physics. However, this cannot be proved nor is there anything about physics that precludes the non-material from affecting the material. Their thinking leads to the conclusion that human minds can be subjected to empirical study merely by recording and analyzing patterns of nerve impulses from the brain.

We have always known that brain damage can affect the mind—for example: someone suffering from a stroke or from some other form of brain damage may experience a severe incapacitation of his memory, communication, or conceptual faculties. Similarly, we know that chemical stimulation of the brain with hallucinogenic drugs causes a user to see Alice-in-Wonderland images. Recent studies of the human mind-brain phenomenon have indicated that there is a significant correlation between the mind and brain and that what the mind is processing is reflected in the brain. For example:

- Advanced systems allow people to control machines with brain signals read through electrodes taped to their scalps. As they think about executing a task, they can perform tasks such as moving objects on a computer screen. From one perspective, this is not too revolutionary since we control our biological components (e.g., our arms) by thinking. However, this technology will eventually allow severely disabled people to interact with their environment and allow others to extend their abilities—e.g., to control directly heavy-lifting machines by thinking.
- A team of researchers at the Max Planck Institute conducted experiments with 'lucid dreamers'—sleepers who are aware that they are dreaming. Some people are able to control their dreams as if they were awake. The research team used a near-infra-red spectroscopy scanner to observe brain activity and was able to observe what the people were dreaming.
- Studies at UC Berkeley, demonstrated that it is possible to scan an awake person's brain and obtain a surprisingly accurate image, in full-motion colour, of what he is 'seeing' in his mind.

These examples of 'mind-reading' will have ethical ramifications as they become more technically advanced—for example, police states may try to use the technology to spy on their citizens. However, that is not an immediate concern we should have. The more fundamental issue raised by these experiments is that they are influenced by, and reinforce, the belief that man is nothing more than a biological machine.

God is spirit (Jn 4.24) and he has a mind, intellect, volition, and emotions. Angels are spirits and they are intelligent creatures. Man, in the disembodied state, retains memory and intelligence. So, whatever the connection between the human mind and brain is, it is not *required* that a brain be present in order for a mind to function. This does not necessarily mean that man is a duality (i.e., a spirit-mind and physical-brain), any more than to say that a man is a duality because he has both hands and feet. Rather, when a man's body is missing (i.e., the man is dead), he is missing a component of his being as a person who has had a leg amputated is missing a component of his body.

It is possible to measure the behaviour of nerve cells with electronic sensing equipment, but that does not mean that it will ever be possible to use instruments to probe emotions, mine memories, and measure volition. Man is more than physical signals. Human conceptual thoughts and decision-making, which can incorporate brain operations (e.g., processing sounds or smells), are distinct, non-material, operations. We must challenge every attempt to define

human psychology in ways which ignore the reality that man's mind is more than physical processes. Without the acknowledgement of this truth, human purpose, responsibility of action, and moral accountability are illusionary; man has no more dignity than a lump of coal; killing a human being (born or unborn) has no more significance that eating roast pork; and enslaving a person is as legitimate as harnessing a horse to a wagon.

Nothing in the known physical universe is more complex than the human brain, with over 100 billion nerve cells, wired with even more connections. No current computer compares with the complexity of the human brain—all stored within a 1.5-liter skull. But, this complexity is nothing when compared to our mind-brain connection! The human mind-brain is a mystery for which no one has been able to provide an explanation. To claim that we can understand the mind by mapping the brain is to proclaim nonsense as truth.

Mind and Brain (part 2 of 2) [March 28] (Gen 2.7)

The possibility of whole brain emulation has become a pop culture fantasy. The May 2014 edition of *Popular Science* included an article, "The Master Code", which discussed the possibility of humans living past physical death, elevated to another plane of existence through transcription into silicon—i.e., by mapping their brains as computerized data. Around the same time, the movie *Transcendence* was released, in which Dr. Will Caster (Johnny Depp) uploads a copy of his brain into a computer before he dies. However, the concept of whole brain emulation is not recent. It has often been a subject of science fiction. The original *Star Trek* TV series indirectly alluded to the concept with its famous teleportation device—we have all likely heard the statement, "Beam me up, Scotty!"

The concept underlying brain emulation in a computer is based on systems that are used regularly in the computer industry. Processors, which are no longer manufactured, can be made continuously available by emulating their hardware circuits with software. This permits programs written for obsolete hardware, such as for game consoles (e.g., Nintendo 64), to continue to operate indefinitely. This technique also allows the hardware for ATM machines and air-traffic-control systems to be upgraded without having to rewrite the application software. Similarly, developers of applications for Android phones can use Android emulators, running on a Microsoft Windows platform, to develop and test software targeted for the smartphones.

These forms of emulation have led researchers to believe that the human brain could also be emulated in a computer. They believe that physical patterns of axons and dendrites connecting neurons within an individual's brain could be duplicated through software; and that the computer could then produce the same electrical outputs that the human brain does; for example, to move an electronic robotic finger or use an artificial mouth to shape words.

Most people who address the subject of human emulation ask questions about the technological feasibility of such schemes. For example, an analysis of the feasibility of *Star Trek* teleportation determines what technology would be required to map the information content of every cell of a person, including in the brain, transmit a digitized signal with the data map, and reconstitute the person, molecule by molecule, in a different location. The computing power and amount of electricity required just to create the mapping, and the bandwidth required to transmit the information from earth to an orbiting spaceship are far beyond available technology. We might assume that we were only going to map the DNA in the cells in a human brain and the connections among them and transmit that information to a computer for emulation. It has been estimated that there are more than 100B cells, including 85B neurons, in a human brain—scientists have not yet been able to map the brain of a worm, with about 300 neurons. The technology required to map all the detail in the cells and circuits of a human brain does not exist today. Even if it did, the computing power required to create an information map is astounding. It would take the fastest computer in the world today over a thousand years just to create the mapping. Also, the world's largest supercomputer would not be powerful enough to run an emulation of a human brain in real-time. The availability of technology required to map and emulate the physical details of a human brain is probably many decades away, if it will ever be available.

Some analysts go further and ask the question, should we map the detailed circuits of a human brain with the

intention of emulating the brain as digital data? The movie *Transcendence* explores the consequences, as the uploaded version of Dr. Caster's brain turns a thirst for knowledge into a "seemingly omnipresent quest for power".

However, the right question to ask is not about the technical feasibility of whole brain emulation. Nor, is it necessary to consider the moral implications of such a proposal. The reason is that the scientists proposing such a program have not asked the right question. The correct question is, would a brain emulation inside a computer even work—would it be conscious?

The *Popular Science* article states, "Many neuroscientist believe the essence of who we are—our memories, emotions, personalities, predilections, even our consciousness—lies in those patterns ... There is no magic inside our skull, it's just neurons firing." Similarly, a character in the movie, *Transcendence*, states that the mind is, "a pattern of electrical signals". The problem with these statements is that materialistic naturalists assume that all that is necessary is to duplicate, inside a computer, the pattern of electrical signals encoded in the 'lump of meat' contained in a human skull. Their faulty assumption is that there is no spirit realm and that man is not a spirit-body. A mind is not a brain—a functioning human brain cannot exist without a mind, but a mind can exist without a brain (e.g., God, angels, and humans in disembodied form all have minds without brains). Once the spiritual component of a man is separated from his body (i.e., he dies), the circuits in his brain cease to function. This is not an arcane matter for philosophers or theologians to address; it has direct practical implications. A pursuit of brain emulation demonstrates how a faulty view of man, which rejects Biblical truth, denies reality and wastes resources.

The Garden of Eden [March 29] (Gen 2.8-9)

The garden, which God prepared as an initial home for Adam and Eve, was located in a region of the pre-flood continental land mass called Eden. Most commentators (including Calvin) assume that the writer of this section of Genesis was locating the garden to the east of Canaan, in an extensive region of northern Mesopotamia somewhere in the general vicinity of the source of the Tigris and Euphrates rivers. Commentators who wrote before the late-18th century may be excused for holding this view. While they may have believed that a worldwide flood had occurred, they had no clear understanding of the devastation such a flood would have caused, and would have assumed that the geography of the Middle East today is similar to that of the pre-flood world. However, with the vast amount of evidence available today (e.g., in the sedimentary geological strata) we know that the flood was a cataclysm beyond any other disaster the world has ever experienced. The pre-flood geography cannot be identified in the post-flood geography. [We will consider the specific topic of the location of Eden in a future meditation.]

We need to remember that this portion of Genesis was not *written* by Moses. Of course, he incorporated it into Genesis when he assembled all the relevant historical records up to his day. This account was communicated by God to Adam. So, 'in the east' must be interpreted in the context of an antediluvian audience. When Adam was expelled from the garden, he was driven to the east, since the gate of the garden was at the eastern end of the garden (Gen 3.24). The garden was situated at a relatively high altitude on the continental land mass since it was near the source of the four major rivers that flowed out of Eden, and through the pre-flood continent (Gen 2.10). Adam and Eve, therefore, probably travelled eastward, moving to a lower altitude, toward the seacoast, when they left the garden. This means that after the sin of Adam and Eve, the garden was to their *west*. The expression 'in the east' does not refer to a location relative to that of Adam and Eve (or the Jews!) but to where the garden was situated in Eden—i.e., in the eastern portion of that large region.

The garden was Adam and Eve's initial home, but not necessarily intended to be all mankind's permanent home, since they were expected to multiply and expand out of the garden and fill the earth (Gen 1.28). While the garden was designed with Adam in mind, it was not exclusively for man's use, since it appears that God himself used the garden for his own enjoyment (Gen 3.8). It may be that the garden was to be the meeting place between God and man—as a sanctuary. The presence of the two trees—tree of life and the tree of the knowledge of good and evil—in the midst of the garden indicates that the garden had additional significance other than being a home for our first

parents. The garden was the place where men would assemble to worship—i.e., the first tabernacle, temple, or church—with man serving in the garden as priests to maintain the holy place (Gen 2.15) and to offer up continual sacrifices of thanksgiving and praise to their Creator.

God spared nothing in preparing the initial home for mankind. The garden was specially endowed with all forms of beautiful trees, bearing tasty fruit. As kings appointed over God's creation, Adam and Eve were given a royal garden—a paradise—to dwell in and to care for. Although the garden is not called, in these verses, a *paradise*, the term appears elsewhere in Scripture (Neh 2.8; Eccl 2.5; Song 4.13) and refers to royal parklands. The earliest translation of the OT into Greek (the Septuagint) uses the word *paradeisos* to translate the Hebrew word that we translate as 'garden' (Gen 2.8). The translators inferred that God had given to mankind an abode that resembled a royal park. Jesus (Lk 23.43), Paul (2 Cor 12.3), and John (Rev 2.7) validate this interpretation with their use of the term *paradise* to refer to heaven. John's usage is particularly relevant since the tree of life is found in paradise.

As a paradise, the garden was perfectly suited to mankind's needs. In it grew all the food that man would need for perfect health and a great variety so that they would never become bored with it. It had an ideal climate in which they would not feel any discomfort when naked (Gen 2.25). There were no dangerous animals or plants. The animals would have been friendlier companions than the pets we have today. Adam and Eve's labour would have been stimulating but not exhausting. Beyond the borders of the garden was a land filled with pure gold, bdellium (an aromatic gum), and onyx stones (Gen 2.12) which they could have used to apply their creative skills. And, every Sabbath they would have been able to meet face-to-face with God, in the Garden sanctuary and revel in his glory and goodness.

In every respect the garden, and the surrounding region of Eden, is what men in their created nature desire and seek, but cannot find in this sin-stained realm. Adam and Eve can offer no excuse for lusting after the forbidden fruit. It was not out of wasting deprivation but because of wanton desire that they displayed a wicked dissatisfaction with what God had provided for them. But the destruction of this beauty is not the end of the story. Some OT prophets use images of this garden scene as a sign of the Messiah's realm and of mankind's salvation (Is 51.3; Ezk 36.35). The vision which John received (Rev 21.1-27) carries the image to its completion when it describes the new heavens and earth and the city of Jerusalem with a garden in its midst. God's intention is that his saved people will live in a restored paradise forever.

The Covenant of Creation [March 30]

(Gen 2.9, 16-17)

Genesis does not state explicitly that God made a covenant with Adam. However, it is not necessary that the relationship between God and Adam be named as a covenant to exist as one. In addition, the Bible refers elsewhere to the existence of the covenant between God and Adam (Is 24.4-6; Hos 6.7).

Using a model adapted from Meredith Kline's work on Deuteronomy, *Treaty of the Great King*, we find some key elements of a covenant in Genesis chapters 1 and 2, as follows:

PREAMBLE	
The Great King (Suzerain) named	Gen 1:1
Covenant initiated by the Great King	Gen 1:3 (etc.): "and God said";
	Gen 1.26-30
Great King's presence with the vassal	Gen 2.15-16 (with Gen 3.8)
The vassal to rule under the Great King	Gen 1.26-27
Title, designation	Gen 2.4; possibly Gen 1.1a
HISTORICAL BACKGROUND	Gen 1.1-2.14
TREATY RESPONSIBILITIES	

Duties, obligations	Gen 1.28; Gen 2.15-17
Blessings (eternal life, responsibilities)	Gen 1.28-29; Gen 2.15, 22-25
Curses, penalty for transgression	Gen 2.17 (with Gen 3.16-19)
(death)	
RATIFICATION CEREMONY	
Promise, oath: "for in the day that you	Gen 2.17
eat of it you shall surely die"	
Names given, changed	Gen 2.7; Gen 3.20
Eating a meal from the tree of life	Gen 2.9, 16 (with Rev 22.2, 19)
WITNESS	
Sacramental signs/seals:	
The Sabbath	Gen 2.2-3;
Tree of life	Gen 2.9 (with Gen 3.22-24)
Descendants, heirs	Gen 1.28 (with Gen 17.6)
Duration, time element	Gen 2.17

Based on this analysis, it is reasonable to conclude that God made a covenant with Adam. The tree of life acted as a sacramental sign and seal to remind man daily that life comes from God. It also had the dimension of a covenant ratifying meal. If it did not have this role, it is not clear what purpose it had. When Adam sinned, he forfeited the promise of eternal life and was barred from the sign. The Sabbath was also a sign and seal of the covenant, but its role would change after Adam's sin to include a redemptive dimension.

The fact that Adam was not consulted does not mean that no covenant was enacted. The covenants which God makes with mankind are not equivalent to human contracts—God and man are not equals. Even in the named covenants we do not find God consulting with man before he enacts each covenant. The covenants God makes with mere-human representatives are of the nature of sovereign dispositions imposed upon man. God simply announces the terms of the covenant, and demands that man agree. In the Covenant of Creation, God announced the terms and Adam immediately accepted them since he was in a perfect state, and his will was in complete conformity to the will of God.

All mankind was represented by Adam (Rom 5.12-21; 1 Cor 15.22) and held accountable for his first sin. Without a covenant being in place between God and man, with Adam as the human representative, it is difficult to explain how we can otherwise be held accountable for Adam's sin. The existence of a covenant between God and Adam clarifies the responsibility of Adam and the applicability of his first sin to us.

The Covenant of Creation, having been made with the first man, applies to all whom he represented—all mankind as the fulfillment of the covenant by Jesus, the Last Adam (1 Cor 15.45), applies to all whom he represented—all who believe (1 Cor 15.22; Jn 17.9). Therefore:

- Mankind's obligation of obedience to God is perpetual and still in force.
- Mankind's breaking the covenant did not annul it. Only God, as the author of the covenant, could annul it.
- The curses (Gen 3.16-19) resulting from the breach of the covenant still affect all mankind.
- The promises and blessings of the covenant have not been withdrawn (compare Gen 1.28-29 with Gen 8.20-9.7), but they are applied only to those who keep the covenant—either directly or through a mediator.
- Christ came to fulfill the law—not only the laws given through Moses but the law as it is revealed by God's character and as it was communicated to Adam. What Adam did not do—obey perfectly—Christ did.
- The Sabbath, a seal of the Covenant of Creation, remains in force (Heb 4.9). It is the only seal of the covenant between God and man that is a constant through all of the covenant administrations.
- The tree of life, a sign of the Covenant of Creation, will be in heaven; and those who, in Christ, are restored covenant keepers will partake of the sign of the covenant in eternity (Rev 22.2, 19).

Man's existence on the earth began in a covenantal relationship with God. Life before God is portrayed throughout Scripture as being rooted in a covenant. Man is either a covenant keeper or a covenant breaker. The Covenant of Creation is not incidental to the history of redemption; it is an essential element in God's dealings with mankind.

The Covenant of Creation is Founded on Grace [March 31] (Gen 2.9, 16-17)

In the previous meditation, we established that God made a covenant with Adam, who represented *all* of mankind. Today we will consider how the Covenant of Creation is different from and also the same as the other covenant administrations between God and man.

Some people believe that each covenant administration is to be understood as distinct and that there is no essential connection among them, and that God's dealings with men from one age to the next are distinctly different. Others believe that the OT covenants are in one class and the New Covenant in a separate class. They say that God dealt with men according to law in the OT and now deals with men according to grace. Thus, the older covenants failed and had to be replaced with a new covenant. Others believe that *most* of the covenants (e.g., Abrahamic, Mosaic, Davidic, and New) are restatements of a common covenant. Each restatement adds elements, unfolding God's redemptive plan through history. However, they argue that the covenant made with Adam is in a distinct class since Adam was in a sinless state and the covenant was based on obedience alone, and not on grace. Those who hold to this view call this covenant a 'covenant of works'. They argue that the covenants based on grace became necessary only because of the sin of Adam.

Nowhere in Scripture is the covenant made with Adam called a 'covenant of works'. This term is used by theologians to make a distinction among the various administrations of covenants made between God and mankind. The use of theological terms has been useful and important during the history of the Church for clarifying relationships described in Scripture and for settling doctrinal controversy. Therefore, it is not wrong, and in fact is good, to use a theological term when it is useful for making distinctions between truth and error. However, it is important that a term clearly communicate the distinctions that are necessary and that it does not make distinctions that are unnecessary.

The term 'covenant of works', when used carefully, helps to distinguish, and to classify, this particular covenant administration by what appears to be its primary attribute—obedience. However, the term 'covenant of works' could be misleading, because it emphasizes one aspect of the covenant—and possibly over emphasizes it so that people might think that Adam could have obeyed God without the power of God's sustaining grace. The covenant made with Adam has similar attributes as the other covenants enacted in the Bible, for example:

- It was made with Adam to remind him that he was a servant of the Great King (Gen 1.26), but also to confirm that he was a son in God's household (Lk 3.38). Other covenants include the same relationships with God (Ex 6.7; Num 12.7; Ps 2.2, 7; 2 Cor 6.18).
- It teaches man, through Adam, that he is under God's divine providence and that he must rely on God, and not on himself, for all things.
- The condition of obedience is found in all covenant administrations (Gen 17.9; Dt 4.1; Mt 5.17-48; Jn 14.15; Heb 10.7). To single out obedience through works in the covenant made with Adam may lead to the identification of a distinction when there appears to be no substantive difference in the requirement for obedience found in all the covenant administrations.
- The other covenant administrations also offer life (Gen 2.16-17; Dt 30.15-20), which may be obtained through continual obedience to the covenant.
- Man, on his own, cannot obey God. Adam could continue obeying only as long as God gave him persevering strength. Even Jesus could do only what the Father willed (Jn 5.19; Jn 6.57; Jn 12.50; Jn 14.31). The obedience of Jesus, in his human nature, was dependent on the Divine will.

However, the administration of grace was applied differently for Adam than it is for those whom Christ represents after Adam's sin. Adam had a personal righteousness whereas those represented by Christ have an imputed righteousness. Also, the grace given to Adam in the garden was not perpetually sustaining. The grace given to believers is—a believer cannot lose his salvation (Rom 8.35-39). Nevertheless, the covenant made with Adam was as much an administration of God's grace as is any of the other covenant administrations found in the Bible.

Christ fulfilled not only the Davidic and Mosaic covenants (and all the other explicit OT covenants) but, as the Last Adam, he also fulfilled the covenant made with Adam through perfect obedience. This demonstrates that God had planned from eternity that Christ would keep all the covenants on man's behalf. All the covenant administrations are earthly manifestations of the Eternal Covenant (Heb 13.20) made between Christ and the Father. All the covenants are administrations of God's grace through Christ. The Covenant of Creation is one of the instances of the overarching Covenant of Grace provided by God for the provision of perfect obedience, through Christ, on man's behalf. There is essentially only one covenant between God and man with Christ as the ultimate mediator. There have been a number of administrations of the covenant and a number of earthly typical human representatives including Noah, Abraham, Moses, and David. Adam was the first human representative of the first enactment of a covenant made between God and man. Therefore:

- Man is under a perpetual covenant obligation to God.
- The obligations of the covenant made with Adam in the Covenant of Creation continue to apply to all mankind. But, as Adam demonstrated, mankind could not keep the covenant obligations until the Last Adam fulfilled them on our behalf.

Why God Uses Covenants [April 1]

(Gen 2.9, 16-17)

God describes his relationship with mankind in various forms, in the Bible: creator-creature, father-son, root-branch, husband-wife, king-subject, etc. Each of these relationships brings out different aspects of God's character and his providential care for mankind in general, and of his particular love for the elect. We have seen, in our previous two meditations, that God also uses a covenant to define his relationship with mankind and that he enacted a covenant with Adam, who represented all mankind.

Later covenants in the Bible, particularly the covenant made with Israel, with Moses as its mediator as documented in Deuteronomy, are structured in a covenant-treaty form that is similar to that which was used throughout the ancient Middle East (around 2000 BC). This raises a question: Was this model for covenant administration invented by men and adapted by God for his purposes; or, was it introduced by God and adapted by men?

God made covenants with Adam and Noah (Gen 9.9) before the covenant treaty model could have developed. As we noted the covenant that God enacted with Adam has most of the elements found in the covenantal form of Deuteronomy. Since God made this covenant with Adam before the flood, this covenant cannot have been influenced by the human form of making covenants in use around 2000 BC. Therefore, we must conclude that God introduced a form of covenant making that men later adopted and modified.

By the time God made the covenant with Moses, a complex covenant model had developed in the Middle East. At that point, God used that form as the basis for his covenant with Moses. We cannot consider, here, why God adopted that form, at that time. We can only note that God uses means invented by men to fulfill his providential administrations. For example, the writers of the Bible used written narrative and poetic forms similar to those used in their cultural contexts (e.g., chronologies, proverbs, thought parallels, acrostics, wordplays, chiasms). Civil leaders, at God's direction, published laws on tablets and pillars, and used scepters and crowns as symbols of permanence and authority like the nations around them. God used the human form of government organized around a king, removing the pagan aspects, to fulfill his purposes through Israel. In these instances, God adopted the forms invented by sinful men—even pagans—to communicate his purposes to mankind. However, God prepared these institutions and artifacts in human societies under his providential governance so that they were available for his

direct use at the appropriate time. For example, he used the Roman census at the time of the birth of Christ to direct Joseph and Mary to their ancestral home; and used the Roman instrument of torture and execution (the cross) as the means of procuring redemption for his people, thus fulfilling a prophecy made over 1,000 years before Rome became a nation (Dt 21.23; Gal 3.13).

Even though the Bible does not state the reasons why God uses a covenant to administer his relationship with mankind, we may suggest at least the following reasons:

- *It is consistent with his nature*. As a triune God, there is a multi-faceted relationship among the members of the Trinity and a self-imposed hierarchy with authorities and responsibilities (i.e., the Father sent the Son, the Son obeyed, and the Holy Spirit is sent by the Father and the Son). God exists in a covenantal relationship within himself (Heb 13.20), and he uses a covenantal relationship between himself and mankind as an extension of his nature to the image-bearer he has created. This implies that mankind is bound to God by the same obligatory relationship as God binds himself within the Trinity.
- *It provides accountabilities.* The nature of a covenant provides explicit accountabilities, with defined responsibilities. Obligations are imposed on both the superior and subordinate parties in the relationship, with associated penalties if the obligations are not fulfilled. God, as the supreme monarch, has placed mankind over the rest of creation as a subject lord (Gen 1.28-30) and has required obedience to the laws of the realm and payment of tribute from our time and income.
- *It is legally binding*. God is a God of law who communicates his laws to those who dwell within his dominion. A covenantal relationship provides a basis for structuring that legal relationship formally.
- *It binds man to God.* A covenant formally binds man to God in terms of his being a subject of the Creator-King. It reinforces God's ownership and sovereignty rights over man.
- It provides clear lines of demarcation, a covenant:
 - Demonstrates that God is a covenant keeper and man is a covenant breaker. God never fails to keep his promises; man consistently breaks the obligations of the Covenant.
 - Identifies the Covenant mediators. The first Adam failed to keep his Covenant obligations, and all men since Adam (born through natural generation) have failed to keep the covenant. Jesus as the Last Adam fulfilled perfectly the Covenant obligations placed on man.
 - Provides a means of visibly distinguishing between those who are participants in the Kingdom of Grace from those who are not. This is accomplished through the administration of the covenant signs (e.g., access or restriction to the tree of life, in Adam's case; Gen 3.22-24).

Where was the Garden of Eden? [April 2] (Gen 2.10-14)

Many people assume that we can use these verses to identify the location of the Garden of Eden. However, it has proven difficult to identify the location of two of the four rivers (Pishon and Gihon), or to associate the regions (i.e., Eden, Havilah, Cush, and Assyria) with the known geography of the Middle East. Various locations have been suggested for the location of the garden, from the mountains of Turkey to lower Mesopotamia, in the Persian-Arabian Gulf area. Some even suggest that these verses *require* that we must reject this account as a report about the actual geography of the regions around the garden or reject the truth that there was a worldwide flood, since the geology of the region (apparently) does not display the effects of a devastating flood.

Such views are based on faulty logic (e.g., presenting an invalid dilemma) and assumptions. For example, it is assumed that Moses composed the early chapters of Genesis, and wrote them from his own perspective. We have seen previously that Moses used source material—in this case handed down from before the flood—to compile Genesis in its final form. This does not mean that Moses cannot be called the author of Genesis. As a comparison, Luke used source material for his Gospel since he was not an eyewitness to any of the events, and yet he is credited with being the author of the Gospel. The human author of Genesis chapter 2 was Adam and the audience for the account was not the early Israelite community, but the contemporaries of Adam and Eve.

It is also assumed, by almost every commentator, that two of the rivers (the Tigris and the Euphrates) are the same rivers which flow through Iraq today. However, it is possible, and likely, that after the flood, Noah and his sons attempted to maintain some degree of continuity from their antediluvian world in their postdiluvian situation by using names for rivers and locales that were familiar to them. This could have been the case, especially if the geographic features reminded them of the pre-flood geography. This is not an unheard of phenomenon. For example, in Ontario one finds a London, Cambridge, Waterloo and a Thames, and dozens of other towns and geographic features named after the settlers' places of origin in Europe. In addition, there are a number of examples in the Bible of names of places being used for two geographic locations, and in some instances for three; for example: Eden (Gen 2.10; Ezk 27.23), Cush (Gen 2.13; Ezk 29.10), Asshur (Gen 10.11; Gen 25.18) Kadesh (Josh 12.22; Josh 15.23; Josh 20.7; Josh 21.28 [compare 1 Chron 6.72]), Goshen (Gen 47.6; Josh 10.41; Josh 15.51), and Zanoah (Josh 15.34; Josh 15.56; 1 Chron 4.18; Neh 3.13; Neh 11.30).

Of the eight location names mentioned in these verses (Gen 2.10-14), at least three (Eden, Cush, and Asshur) are used for at least two geographic locations. This implies that they were not *necessarily* specific to one locale. Furthermore, all eight of the names are based on generic terms, which could be applied to many pre-flood and postflood geographic features and locales:

- Eden may signify either a place; steppe, or fertile plain; or pleasure.
- **Pishon** (or Pison, Pihon) may mean "the gusher", "to cascade" or "dispersive" (from a root meaning "to spread").
- Havilah appears to come from a West-Semitic root meaning "sand", and thus refers to the "land of sand".
- Gihon derives from a root meaning "to bubble".
- Cush appears to mean "dark-coloured", or perhaps an "assembly of people brought together".
- **Tigris** is the Greek equivalent of the Persian *Tigras*. However, it is an imposed translation. The word used in the Hebrew means "arrow" and signifies a "dart", or "swiftness".
- Asshur is derived from a root that can take meanings such as "good", "gracious", "happiness", "blessedness", or "straight".
- Euphrates is another imposed translation. It comes from a word that means "good and fertile stream".

It is clear that the geographic names used in Genesis chapter 2 are so generic that they could be used in many contexts.

There is nothing in contemporary Middle Eastern geography that corresponds to the description in these verses. There is no single river that branches into four rivers. Much of the geography from Moses' day is still identifiable. If the Pishon and Gihon were rivers in his day, then we would expect to find other historical references to them, or at least be able to identify their location more easily. The fact that commentators often suggest dry *wadis* as potential locations, indicates that they are looking in the wrong place. Elsewhere in the Bible, the regions of Havilah and Cush are located a considerable distance from the region in which Eden is located in these verses. In addition, the current Tigris does not run along the east of the territory of Asshur (Assyria); it flows to the west of the fertile and densely populated portion of Assyria.

Of the eight geographic locations, only three (Tigris, Asshur, Euphrates) are easy to locate today, and then only if the names are interpreted in a particular way (e.g., reading Asshur as a city rather than as a territory); and if it is assumed that the account was written for an audience at the time of Moses. Rather, we should conclude that the geographic features described in this account were destroyed by drastic rearrangements during the flood and that no pre-flood geographical feature could be recognized today. As Peter says, "the world that then existed was deluged with water and perished." (2 Pt 3.6)

A River Flowed Out of Eden [April 3]

(Gen 2.10-14)

Before we consider the lessons that we can derive from these verses, we should lay down some 'ground rules' as an interpretive context:

- 1. The land that God originally created (Gen 1.9-10) consisted primarily of a single continent (see, *The Creation* of the Land [January 29]).
- 2. These verses (Gen 2.10-14) refer to the state of the earth when it was created, before sin was brought into the world by Adam.
- 3. This account was written initially for a pre-flood audience and, therefore, not from the perspective of Jews at the time of Moses, who would soon be living in Canaan. Therefore, whatever is being communicated in this section had a primary relevance for the pre-flood audience.
- 4. As we considered in the previous meditation, earth's topography was changed dramatically by the flood. Therefore, the location of the region of Eden and of the garden in Eden cannot be determined today from this account; the account is not provided to guide research teams, viewing infrared satellite images, to locate two hidden rivers.
- 5. God intended the antediluvian readers of this account to learn from it. However, he also expects us to learn from it, since all Scripture is profitable for teaching (2 Tim 3.16-17). Thus, what can we learn from it?

The Garden of Eden was watered by a river. We are not told whether the river ran through the garden or if the garden was on a bank of the river. However, the river brought water to the garden to replenish the water table to ensure that the trees were well watered. This does not mean that there was no rain in the garden, and no rain before the flood, as some suggest. The river provided additional water for healthy tree growth and for other types of plant life, such as in freshwater marshes. God may be telling us about this river because he wishes to indicate that the garden was well appointed with beauty while being equipped to sustain life. We all know how pleasant it is today to walk in a park beside a river. It must have been exquisitely pleasant in the sinless state, with the original variety of plants and animals that God had created. God spared nothing in making the garden an initial home and sanctuary for man.

The river that flowed out of Eden and past (or through) the garden, then divided into four rivers. It seems that this river had its point of origin in the highlands of the original continent that God had created. The four rivers then probably traversed the entire continent. This may indicate that the Garden of Eden was located at a relatively high altitude, near the continental divide, and somewhat centrally within the original continent. After the sin of Adam, and as the population began to increase, earth's inhabitants would have settled on the plains, in the valleys, and on the seacoasts of the original continent. In this description of the location of the Garden of Eden (near the confluence of the four rivers), God reminds the pre-flood inhabitants of the world, that at the centre of their world was a *paradise lost*. This geographic description thus has an evangelistic message: "God is in the midst of the land but, because of your sin, you have lost fellowship with him. The garden still exists as a sign that, if you believe in the coming redeemer (Gen 3.15) and repent of your sins, you will have access to the everlasting paradise." The closed-off Garden of Eden (Gen 3.24) stood for 1,656 years as a reminder to mankind of the disaster sin had wrought and why a redeemer was required.

The entire continent was also well watered, by the four rivers that came out of Eden—they were probably continentspanning rivers of the magnitude of the Amazon or the Mississippi, not branch streams, or parallel channels or canals, as some suggest. These rivers wound through the major regions of the original continent. We are informed that these regions were also exceedingly fertile, and that they were endowed with plants, which produced useful materials (such as gums), and with rich minerals, which could be used for the execution of human industry. God initially endowed the world to support a large population (Gen 1.28) and, as mankind multiplied and moved away from the Garden of Eden, he would have found all that he needed to sustain life and undertake creative pursuits. This passage, again, is more than a geography lesson, since it reminds mankind that God is the provider and sustainer, and that we are to give thanks to him for all of his general gracious provisions.

The Garden of Eden was not a mythical place like Atlantis, the Kingdom of Prester John, or Shangri-La. It stood at the geographic and cultural centre of the lost world. Its location was known to the population of the pre-flood age,

if they wished to enquire about it; and God documented its location in his Word in precise form so that there could be no legitimate denial of its existence. In the new heavens and earth there will be a city with a garden in its midst watered by a river flowing from God's throne, beside which will grow the tree of life (Rev 22.1-2). The city is described as being glorious and adorned with gold and precious stones (Rev 21.9-21), reminiscent of the description of Eden and the adjacent regions in the antediluvian world. Therefore, this account has a third evangelistic purpose, which is to point to *paradise regained*. Eden contained a magnificent garden, was the sanctuary for worshiping the One in the midst of the garden, and had the tree of life in its midst. The everlasting Eden, the New Jerusalem, will far surpass in glory the first Eden. In the old world, Eden and the garden were the source of life (mankind and the rivers flowed out from there), not the destination. In the new world, the garden is the destination into which all believers will flow.

Man was Created to Work [April 4] (Gen 2.15)

It is ironic that many people today work so that they will not need to work—they work for the weekend or for retirement, when they can stop working. Others work hard at not working—they concoct schemes to milk and bilk charities or government welfare systems. As with everything good that God created, men find ways to pervert work. Work is innately a good thing, since God himself works—by creating and then by providentially governing and sustaining creation. In his whole being, man was created to work—he was given a mind to work from, a body to work with, and a world to work on.

The appointment of work for man is not the result of sin and the curse on sin; mankind in paradise was not exempt from work. Productive work was given to man as a mandate and as a blessing, not something to be avoided or shunned. In the state of perfection work, and particularly the physical labour mentioned in this verse, was challenging and delightful without being wearying. Man was not created to be idle. This is why we innately despise the 'idle rich' (the ancient aristocrat and the modern playboy), while at the same time envying them because of our souls' propensity to sin.

Consuming without contributing, partaking without producing, and eating and drinking without earning and diligence, are contrary to the created nature of man and to the eighth commandment. We need to work, because:

- God appointed productive employment as part of our created nature.
- Life without a productive purpose becomes life without meaning.
- We must provide for our own and family's needs (2 Thess 3.10; 1 Tim 5.8).
- Providing for the needs of others extends our focus beyond self.
- We gain true pleasure from doing a job well, for the glory of God.
- Without cultivation, the natural world would run wild. Even before the sin of Adam, man was to keep (cultivate) the garden; now it is even more needed because of the decay man introduced through his sin (Rom 8.22).
- It demonstrates that we are sub-sovereigns over the creation (Gen 1.26).

God's intention at the time of creation was for mankind to be employed in meaningful, productive, work. Governments, corporations, and labour unions steeped in the swill of sin conspire to frustrate God's purposes. For example: minimum wage laws make employers not want to hire the unskilled; the able bodied are compensated for not working with unemployment 'insurance' and welfare disbursements, while jobs go unfilled and produce lies unharvested on farms because potential workers prefer to collect 'entitlements'; restrictive laws and labour contracts make it so difficult for firms to change workers' jobs that they automate functions rather than hire workers; manufacturers dissect jobs into highly specialized, dull, repetitive steps to increase productivity; corporations expect dedication from their employees, yet treat them as commodities which can be laid off at the whiff of an economic downturn, and make no investment to retrain them with new skills; unions, with their closed-shop agreements, make it difficult for companies to hire novices; and unions and governments collude in restricting employment to those who carry particular credentials. All of these, and more, undermine God's mandate for man to work productively

for his own good and to glorify his God.

The work that Adam was assigned was to cultivate the garden. From his efforts, he would be able to partake of the fruit and crops that the garden would yield. He and his descendants were to manage the garden so that its resources would not be neglected, dissipated, or spoiled but rather made to flourish. This mandate remains ours. Through diligent husbandry, we are to establish order and productivity in the physical realm that God has placed under our care. The word translated 'work' is applied elsewhere to tilling the soil. This is a significant consideration for our 'enlightened' age. The work that man was originally assigned to do included physical labour. This type of work is scorned today. If a person does not have a university degree or does not work in a profession, with a computer, or with his 'mind' he is considered by our society to be doing something less significant. Again, we have turned God's good order upside down. Christians have believed the same myth. In the Church, someone who works fulltime in preaching or missionary endeavours is considered to be more important than someone who works as an auto mechanic or construction worker. Yet, it was physical labour, given to man in the state of innocence, that was deemed by God to be the most meaningful and fulfilling form of work. When we understand God's design for man we realize that the sense of accomplishment that we receive from setting out a row of seedlings, completing a fine brick wall, or installing a well-made cabinet easily exceeds the financial rewards which the world associates with many jobs that often lead to stress, frustration and burn-out.

It is interesting that the Hebrew word translated as 'put' comes from the same root as 'rest' (i.e., to rest on something). God rested, or established, man in his work of physical labour. Although physical labour would be cursed later (Gen 3.17), being made painful and difficult, it is still what man was designed for and will find most rewarding. The ideal form of work seems to be that which permits us to labour with our hands and exercises our minds as we bring order and beauty into this sin-stained world. Only when we balance this labour with a weekly Sabbath for physical rest and worship can we fully satisfy our created nature. When we reach heaven, work will be restored to the blessing it is—since man was created to work.

God Provides Food for Mankind [April 5] (Gen 2.16)

When your car needs fuel, you select a gasoline station because of its loyalty program or its proximity to your route, run your credit card through the reader, and begin to fill the tank. You may think about the grade of gasoline if you have a high performance engine, but otherwise the only other thing that you usually consider about the gasoline buying experience is that the price has increased since the last time you filled your tank. You never think to ask if your car enjoyed being refueled.

Our approach to fueling a vehicle is purely utilitarian. Imagine if God had designed man to operate under the same principle. We would not consume food in the manner we do. Rather, every 24 hours, we would open a small door in the side of our abdomen remove a spent energy cube, and insert a new one to provide the power needed to operate our bodies. Any thought of preparing, consuming, and digesting food would be appalling.

However, God did not design man along a utilitarian model, like our fueling cars. Rather, he provided us with a number of senses which make the eating experience pleasurable. For example, our tactile senses can first be engaged when we peel and slice a banana and mix it in a bowl with different kinds of fresh berries. Then, as we dribble fresh cream over the fruit, we enjoy the visual presentation, which appeals to our sense of beauty much more than if we were served a bowl of grey mush. When we bring a spoonful of our prepared treat to our lips, we smell the freshness of the fruit and then taste the bursts of the different flavours as we begin to eat.

When God created the universe, one of his key considerations was to form it as a habitable place which would be a delight and enjoyment for mankind. God's intention was that mankind would be blessed both materially and spiritually, so that he would be immensely happy. He gave Adam a paradise, the garden, which was perfectly suited to his needs. In it, grew different kinds of trees from which he could obtain all the food that he could ever need for

perfect health. But there was also a great variety so that he would never become bored with his diet.

God's provision of a diverse variety of foods, with their associated pleasant sensual experiences, is indicative of his general approach for providing us with all manner of good things. We live in a spectacular universe filled with incredible experiences—a deep red rose in a vase placed on a linen runner draped over an oak table, the purr of a kitten resting on our lap, the aurora borealis painting the night sky, a loving kiss to the lips, a breeze wafting off the lake in the evening, or the aroma of fresh coffee percolating downstairs. God is not a curmudgeon or niggardly. He delights in providing his creatures with pleasant experiences and with giving them true happiness. The reason that people are not happy today, and do not find real enjoyment in life, is not God's fault. He truly desires mankind, the pinnacle of his creation, to be happy and gives us only good gifts (James 1.17). The problem of unhappiness lies entirely with us, since we have rejected his perfect ways.

However, men have found ways to abuse every good, lawful, and enjoyable experience in life. We need to consider only one example—food. There are numerous 'reality' shows on TV which deal with food. A review of the Food Network channel's offerings identifies over 100 shows with names like: Ace of Cakes, Barefoot Contessa, Cooking for Real, Dessert First, Extreme Chef, Glutton for Punishment, Iron Chef, My Life in Food, Sugar Rush, and Worst Cooks in America. If we think that North Americans are obsessed with sex, we should have a second thought they are even more obsessed with food! The amount of obesity in North America is indicative of the large number of gourmands expanding around us.

We are excessively fond of eating and drinking. However, this is not a new phenomenon. Mankind's problems related to food began in the garden, when Eve saw a fruit that was good for food and a delight to her eyes, and ate (Gen 3.6). The antediluvians were consumed with eating and drinking and gave no thought to God or judgement (Mt 24.37-38). After the flood, Esau despised his birthright to fill his belly (Heb 12.16). Isaiah speaks of the situation in Jerusalem; when people should have been mourning in sackcloth, they were feasting and drinking, and they declared: "Let us eat and drink, for tomorrow we die." (Is 22.13). We don't have room to consider the abuses at Greek and Roman feasts or the soirees and balls of the nobility during the Middle Ages.

When we think about God's provision of food for man, we should seriously consider the following:

- Food is a gracious gift from God. At least a dozen times the Psalms praise God for providing food for his creatures, including man.
- God intends for us to enjoy eating food (Acts 14.17). We must never be ashamed of enjoying the pleasure of eating a good meal.
- We must give God thanks for our food—Jesus provides an example (Mt 14.19; Lk 24.30).
- Because of Adam's sin, men have a perverse inclination to abuse food, along with all the good things from God. Therefore, we must use and enjoy our food in moderation (Prov 23.20-21; 1 Cor 6.12-13; Gal 5.21).

God, the Lawgiver [April 6] (Gen 2.16-17)

In Genesis 1.28 there is an element of a command, in the blessing God gave to Adam when he told him to be fruitful and multiply. Here (Gen 2.16-17), is the first direct command *against* a particular action. In this case, Adam was told not to eat from the tree of the knowledge of good and evil. This tree may have been one in a class—and man may have had access to the others in the class. Or, it may have been a unique tree with no other instances in existence. Regardless, there was probably nothing that appeared particularly different about this tree. It was pleasant to look at and its fruit would have looked tasty (Gen 3.6), but no more so than any of the other trees in God's good creation. There was nothing intrinsic in the tree that set it apart from other trees, or that gave it magical power to endow one who ate its fruit with extraordinary knowledge. Rather, what set it apart was the fact that God had circumscribed access to it. It held a special place simply because God said, "Don't eat!"

It is impossible to conclude that the command was in any way unfair. God had given man access to every other tree in the garden (including the tree of life). Access to only this one tree, out of probably hundreds, was restricted. Yet, as we know, Adam and Eve were dissatisfied with being prohibited from eating fruit from this one tree. God was more than fair, and regardless he had every right to impose this restriction on man. We will consider some of the reasons why God gave this command in a future meditation. At minimum, we can say that God imposed this restriction to demonstrate his ownership over creation and sovereignty over man.

The idea that God has a right, and the authority, to dictate commands to man cannot be demonstrated from empirical study, experiment, or research. No one can demonstrate from anything in the known, physical, universe that God has a right to command man to do anything. Since it cannot be proven, it must be accepted as a fundamental first principle, that man knows innately.

We can give arguments that, by analogy, demonstrate the reasonableness of God being entirely within his right when he dictates to man this command, or any command. For example, we could say (using the argument presented by the prophets and Paul) that if a man made an object such as a ceramic vase he could do with it as he saw fit—for example, decorate it or smash it. Some do not find this argument convincing since a vase is an inanimate object with no rationality. Another argument might be that parents have a right to give their children prohibitions. However, some people would argue otherwise, and claim that children have a right to act against the will of their parents—we see this, for example, when they claim that a child should be permitted to have an abortion, even if her parents are against it. A more convincing analogy might be if we were able to create a truly sentient, rational being such as robots like Johnny 5, R2D2, C3P0, BB8, HAL, or Data. Most people would agree that in that case the creator would have a right to define the boundaries within which that creature could operate—for example, like the *Three Laws of Robotics* devised by the science fiction writer Isaac Asimov.

Since it cannot be *proved*, with a purely logical argument, that God has a right to dictate or define parameters governing man's behaviour—we end up in a circular argument; God has a right because he is God. The natural reaction of sinful man is to respond and challenge God's right. Men want to believe that they are absolutely autonomous and that they should be allowed to do anything they wish; and that others should not impose laws upon them. Where laws are created and accepted among sinful men, it is because men prefer a degree of conformity instead of the utter chaos that results when everyone does his own thing. It is not that they necessarily believe that they must obey the laws or that they agree that others have a right to impose laws on them; but it is because they want the peace and prosperity that is brought about by a certain degree of adherence to laws.

Today's popular view is that since we live in a multicultural society we must not impose God's (i.e., Biblical or Christian) laws on others in our society. Of course, pluralism does not work. When two opinions about what is morally right collide, there must be an absolute means for arbitrating between them. Sadly, many Christians have swallowed the myth of moral neutrality and make ridiculous statements such as, "The task of the state is not to legislate morality." Or, "The state may not define rules for virtuous living in society." Yet they expect others to obey the laws and live in accordance with the rules the state defines. Our retort can only be, "What do laws of the state legislate, immorality?" This moral fluidity is espoused by those who claim to be tolerant, and who believe that Christians are intolerant and that living under Biblical law would be tyrannical. What men are actually saying is that they will accept any law that does not conflict with their 'right' to live as they please. Since God's law restricts their sinful behaviour, they are intolerant toward it. They will not have God and his laws to rule over them (Lk 19.14).

These verses teach us that:

- The ultimate source of law, for all of mankind (through all time, in all nations), is God himself—his commands, as recorded in the Bible.
- Sin is either failing to do what God has told us to do, or doing what he has told us not to do.

The Universal Applicability of God's Law [April 7]

(Gen 2.16-17)

Christians have historically claimed that the Ten Commandments are God's law, presented in a summary form. However, most people today will say things like, "The Ten Commandments may be *your* moral standard, but there are other systems of morality that are equally valid." Or, "Governments cannot impose the Ten Commandments on society today; they are just a Christian view of morality, and not even fully accepted among Christians." Or, "We have to let all moral systems co-exist in our pluralistic society; we cannot impose your views about morality on those who don't accept them." Essentially, what they are saying is that the laws of God do not apply to all men, through all time, in all nations.

Can the single command from God, recorded in Genesis 2.16-17, give us any direction for determining whether Christians have been correct when they have said that God's laws are universally applicable to all mankind?

Verse 16 says that "the Lord God commanded *the man*". At this point in the retrospective account of the creation of mankind, Eve had not been created. The command was given to Adam before Eve was made (Gen 2.22). Yet, Eve knew that the obligation to obey this command applied to her as much as it did to her husband (Gen 3.3); although she added, incorrectly, a prohibition about touching the tree. This prohibition against eating the fruit would also have extended to any children Adam and Eve might have produced in the garden if they had not sinned. It applied to all the children they produced after they were expelled from the garden—Cain and Abel and all their siblings and descendants were prohibited from eating from the tree of the knowledge of good and evil; and from the tree of life since Adam and Eve had sinned. All mankind before the flood was prevented from eating from either tree by the angels who guarded the entry to the garden (Gen 3.24). If the Garden of Eden had not been destroyed during the flood, this prohibition against eating from the tree of the knowledge of good and evil would have remained in force to this day, and would apply to everyone on earth. Adam stood in a representative position with respect to all mankind. This is the reason that the command not to eat the fruit applied to all his, and Eve's, children.

Any command given to Adam in his federal or representative capacity is universally applicable to all mankind, through all following generations. One might ask, "But, how does the fact that Adam's descendants were not to eat from a particular tree include the demand to obey the Ten Commandments?" There are a number of ways to answer this question, including:

- 1. God is the Creator and sovereign of the universe who established how his universe should operate. As he gave the natural world boundaries (what we often call 'laws of nature') so he also prescribed moral boundaries for mankind, giving his rational creatures moral responsibility.
- 2. The essential standard for the operation of the universe does not change through time, because God is unchangeable (Mal 3.6). Any commands he issued at one time will be consistent with those issued at other times.
- 3. The antediluvian world was required to obey God's law and was judged according to that standard (Gen 6.5), which cannot differ from the Ten Commandments or God is not consistent in his demands upon mankind.
- 4. Almost all of the Ten Commandments are included in the command not to eat the fruit from the tree, or in the implied aspects of their breach of this command. For example, Adam and Eve broke the commands as they:
 - 1^{st} Placed their own will above God's will, putting it before God.
 - 2^{nd} Made the tree into their idol.
 - 3rd Blasphemed God by agreeing with Satan's falsehood in which he called God a liar (Gen 3.4).
 - 4th They likely broke the Sabbath command by consorting with sin on that day.
 - 5^{th} Did not honour their Creator-Father.
 - 6^{th} Murdered themselves and all of their progeny by introducing physical and everlasting death.
 - 7th They committed spiritual adultery (Jer 3.6-9; Hos 1.2-3; Rev 2.22)
 - 8th Stole God's property by eating fruit from the only tree that he had withheld from them.
 - 9th Lied about what God had told them they could not do (Gen 3.3).
 - 10^{th} Coveted what they could not have (Gen 3.6).

- 5. The essence of the Ten Commandments was known to the patriarchs and to their neighbours, prior to God's delivering the law on Mt. Sinai; indicating that they have an application beyond the Jewish audience which received them written on stone tablets. We will consider this universal knowledge of the Ten Commandments as a separate topic, in a future meditation.
- 6. When a person breaks any of the Ten Commandments, he is guilty of breaking the whole law (James 2.10-11), sins with Adam, and needs to have the atonement provided by Jesus (1 Cor 15.22).
- 7. There is one eternal law (with some variation in its continuing application), summarized in the Ten Commandments; and one Redeemer for those who repent of sinning against this law.

If the law of God is not applicable to all mankind, then it does not make any difference how we interpret the Bible or view the Ten Commandments—all morality is relative and subjective, and the Ten Commandments cannot be considered normative even for Christians. However, if God's law is universally applicable to all men, there are profound implications. We will consider some of these implications in our next meditation.

Implications of the Universal Applicability of God's Law [April 8] (Gen 2.16-17)

Pernicious lies promulgated by Satan, that the Church has been duped into accepting, are that law is derived from social contract or based on tradition, or that we must permit a pluralism of laws from different cultures to co-exist. These verses teach that God's law is universally applicable to all mankind, through all time, in all nations. This conclusion has profound implications—some of which are as follows.

- 1. God's law is communicated explicitly in the Bible. Therefore, we must strive to understand what God says to us when he gives us commands. There can be no excuse for sloppy interpretation or a misguided application of God's law since the principles underlying his law must be applied universally. For example, if it is determined that capital punishment is a command of God, and that it is to be applied to all murderers, then we must carry it out. Conversely, if it is determined that capital punishment was not intended to be a universal principle, then we must fight to see it abolished in all those 'barbaric' countries where it is still practiced.
- 2. Since God's law applies to all men, governments are required to enforce the law of God and, by logical extension, the laws of the nations are to be applications of God's law. There cannot be two absolutes. Since God's commands are absolute, then all of man's commands must be:
 - *Derivative*: It must be possible to demonstrate that any specific human law is a *direct* application of one, of the Ten Commandments and follows the example of case laws in Leviticus and Deuteronomy. For example, restitution in tort cases (as a penalty for a breach of the eighth Commandment) should apply a threefold or fourfold repayment model (Ex 22.1); speed limits on highways should be enforced as an application of the sixth Commandment and of our duty to use instruments with care (Dt 19.5-6); fences around construction sites can be required as another application of the sixth Commandment and of the case law requiring parapets on flat roofs (Dt 22.8).
 - *Consistent*: No human law may be contrary or contradictory to God's law—for example, taking property by expropriation, without just cause and just compensation; inflating currency, which is a form of theft and the creation of an unjust measure (Dt 25.13-15); or permitting Sunday shopping and the 'marriage' of homosexuals.
 - *Subordinate*: No human law can be of greater importance than God's law—for example, requiring Christian universities to accept professed atheists into their faculty or executive ranks if they want to be recognized; or allowing a mother's 'right' to abortion to trump the father's right over a child or a child's right to life.
 - *An application*: The previous point can be restated in the inverse: since governments are to enforce God's law, they are not to create new laws which are not applications of God's law:
 - When men create new laws, the implication is that God has not given us enough information about how we are to live in his world.
 - Legislatures should not make laws that are not applications of God's law. However, when they do, we are required to obey their laws (Rom 13.5-7; Titus 3.1), unless they are directly contrary to God's law.

For example, if the government operates a retirement plan and requires us to pay into it, we are to do so even though the government has overstepped its God-given mandate by operating a retirement plan.

- We are not required to obey human laws that are directly contrary to God's law (Acts 4.19-20; Acts 5.29)—for example, a nurse is to refuse a command to participate in an abortion.
- 3. False (i.e., non-Christian) religious systems, including their moral constructs, teachings, and ritual practices, cannot be permitted. By logical extension, those who publicly teach and practice the ritual observances of these systems are to be stopped (but with discretion and gentleness). This is an idea that causes difficulty for most Christians today. They feel that somehow it is okay for a state to make a law against murder, but it is not right for the state to make a law prohibiting the worship of Allah. They believe that this is a private matter that does not belong in the laws of any modern nation. Ironically, the proponents of Islam know that this dichotomous model cannot work and prohibit the practice of Christianity. Our allowing the practice of Islam in the West does not make us more enlightened, it only shows that we do not take God's law seriously.
- 4. The God-given role of the civil magistrate is to punish those who do not obey God's laws (Rom 13.1-4). The Bible says nothing about the state usurping the God-given duties of the family and the Church (e.g., in areas such as education, health care, welfare, and economics). If it cannot be demonstrated *clearly* from the Bible that the State has been assigned a particular role, then when it takes on that role, or we permit or encourage it to take on that role, we are going against the Bible's teachings and God's law. The limited role of government is to enforce God's law.
- 5. The first prohibitive command to man was given in the context of tremendous blessing (access to all the other produce of the garden), with the assurance of everlasting life if the command was obeyed (symbolized by access to the tree of life). God's law is not oppressive or harsh but a positive expression of his character and given to man as a blessing. Christians must not be embarrassed by God's law, but rather proclaim it as the standard for all nations.

Universal, Innate Knowledge of God's Moral Law [April 9] (Gen 2.16-17)

God's law is universally applicable to all mankind, in all places, in all generations. As creatures and image-bearers of God, men know innately the essential requirements of the law, summarized in the Ten Commandments, and that they are accountable before God for keeping those commands. Natural Law Theory, as developed by many philosophers including Aristotle and, more recently, Aquinas argue that a common set of laws can be deduced by reason from human nature. However, when we are confronted by the insurmountable differences among human legal systems (e.g., English Common Law vs Sharia Islamic Law or Tribal Custom Law) and the subjective morality prevalent today, we must question if it is possible to argue persuasively that men can, through rational discourse, develop a single comprehensive set of laws. The reality is that they cannot, since men reject revealed truth and suppress their knowledge of God's law (Rom 1.18-19). However, this does not mean that there is no innate knowledge of God's requirements. Paul tells us that there is (Rom 1.32; Rom 2.14-15). Men know God's requirements, but they choose to ignore them and entrench in their legal systems laws that are contrary to God's law, in an attempt to provide a justification for their sinful actions. For example, men know that God alone is to be worshiped, but they introduce all manner of idolatrous practices (Rom 1.20-23); that sexual relations are to be limited to marriage between one man and one woman, but pervert marriage in an attempt to justify homosexual liaisons (Rom 1.24-27); and that breaches of Gods law are sin, but practice and revel in sinful actions (Rom 1.28-31).

God's law, as summarized in the Ten Commandments, was known to the world's antediluvian inhabitants and to the postdiluvian patriarchs before the delivery of the Ten Commandments on Mt. Sinai. Consider the following:

- 1st The patriarchs knew that idolatry was prohibited (Gen 35.2, 4), and from the earliest days that they were to worship God (Gen 4.26).
- 2nd Cain and Abel and their descendants knew that proper worship consisted of what God had prescribed (Gen 4.3-7; Gen 7.2, 8; Gen 8.20-21).

- 3rd The patriarchs revered the name of God as sacred and, therefore, not to be misused (Gen 4.26; Gen 12.8; Gen 13.4; Gen 21.33).
- 4th The Sabbath was instituted on the seventh day of creation (Gen 2.3).
- 5th The patriarchs understood the importance of honouring their parents and being obedient to them (Gen 28.7; Gen 9.20-27; Gen 49.29 with Gen 50.13).
- 6th Cain and Lamech were fully aware that murder is a grievous sin (Gen 4.10-16, 23-24), and Noah was informed that it is a capital crime (Gen 9.6).
- 7th Men knew that marriage is to be between one man and one woman (Gen 2.24). Men knew that adultery was a breach of the marriage covenant and a wrong to be avoided (Gen 12.17-19; Gen 20.3-7; Gen 39.7-8); and that homosexual acts were a breach of God's law (Gen 19.7)
- 8th Adam and Eve knew that it was wrong to take another's possessions (Gen 2.17; Gen 3.11). Jacob understood the concept of personal property and of stealing (Gen 30.33); also, Laban accused Jacob of theft (Gen 31.30).
- 9th Lying was understood to be a sin (Gen 3.3-4; Gen 12.18; Gen 18.15; Job 27.4).
- 10th Adam and Eve knew that they should not have coveted the tree in the garden from which they were not to eat the fruit (Gen 3.6).

All of the Ten Commandments were known to the patriarchs and to their neighbours, prior to God's delivering the law on Mt. Sinai; indicating that they have an explicit application beyond the Jewish audience which received them written on stone tablets. Knowledge of the Ten Commandments is innate and has been reinforced through special revelation through numerous examples of their application, given in the Bible.

The Bible clearly teaches that all of mankind is expected to obey God's law and is held accountable for disobedience. For example:

- God punished the antediluvian world for breaking his law (Gen 6.5-7).
- A blasphemer of the true God, whether a native-born Jew or an alien was to be punished with death (Lev 24.13-16).
- Nehemiah, as a Persian civil magistrate, prohibited non-Jews from carrying out commercial activities on the Sabbath (Neh 13.19-22).
- The kings of the earth, and the nations they rule, are to be subject to the Christ (Ps 2.1-12; Ps 33.8), who will judge them (Ps 67.4; Ps 96.10; Ps 98.9) according to his law.
- Jonah told the Ninevites that their ways were evil because they were breaking God's law (Jonah 3.1-10).
- John accused Herod of committing adultery (Mt 14.3-5), showing that God's law applied to an Edomite king and not only to the Jews.
- Preaching the Gospel is to inform all people of their sin—they have broken God's law—and of the solution for sin in Christ (Mt 24.14; Mt 28.19-20).
- God commands all men to repent of breaking his law (Acts 17.30).
- Civil magistrates the world-over are to punish wrongdoers. Since their authority comes from God, their standard for judging must also come from God (Rom 13.1-5; 1 Pt 2.13-14). The definition for wrongdoing is God's law, as given in the Bible, not the teachings of Hammurabi, Buddha, Krishna, or Mohammed.

The Bible does not come even remotely close to teaching that the law of God is not applicable to every man, woman, and child throughout all of history. All men will be judged by the standard of the Ten Commandments. We must proclaim them and live by them.

Negative-Action Commands [April 10] (Gen 2.16-17)

Thus far we have learned from these two verses that God is the ultimate source of law; that his law is universally applicable to all mankind (through all time, in all nations); and that his commands, given in the Bible, are to be the

basis for all of human law, which must be derived from, and consistent with, the law of God. We also learn about the general *form* that the derived laws should have when instituted by men. God has given here, and in other places in Scripture, a model for how laws should be formulated.

This command was given with respect to a specific physical action of man—eating a piece of fruit from a particular tree. It was also given in the negative form—i.e., God commanded Adam *not* to eat the fruit. The command did not deal with Adam's thoughts, attitudes or feelings. He could have given Adam a command such as: "Do not be proud". Instead, he gave a command related to a specific action. God certainly does give commands that deal with our thoughts, attitudes, or feelings—for example, the tenth Commandment says "You shall not covet ..."; and Jesus in the *Sermon on the Mount* deals extensively with sins of the heart. God also gives commands in the positive form (i.e., to *do* something), such as the fifth Commandment which requires that we honour our parents. Also, some commands combine negative and positive injunctions, such as the fourth Commandment, which enjoins us to keep the Sabbath holy and then speaks against performing certain actions on the Sabbath. However, most of the laws that God delivers deal with outward, visible actions and are stated in the negative form. It is worthwhile for us to consider why God formulates this initial requirement for mankind, and most commands, as negative-action commands.

If God had told Adam and Eve not to be proud (i.e., dealing with an attitude), they could have resorted to a ruse when confronted by God with their sin and said, "But God, how do you know that we sinned? We really didn't plan to be proud. The idea crossed our minds, and then we dismissed it." God knew that man would deny responsibility for his actions. Right after man sinned he was fully polluted as a sinner and his sinful nature became what we see in any young child. Confront a child with a sin (e.g. a lie or having hit another child) and he will immediately deny it. Sometimes it is difficult for parents to get evidence to prove that their child has done wrong. For example, they are sure that he is lying, but cannot prove it. The proof isn't necessary for the parent, or for God, but it is necessary to confront the sinner and bring him to confess his action. Since God gives mostly concrete negative-action commands, it is relatively clear and simple to demonstrate when a command has been broken. In Adam and Eve's case, the evidence would have been the missing bites in the fruit, a pit lying on the ground, and fruit juice dribbling down their chins. God could point to this evidence and say: 'What do you mean, "I didn't eat the fruit," what is this?' Since God requires men-civil magistrates, parents, and church officers-to judge according to his commands, he generally gives his commands in a form which makes it unnecessary for the one making the judgement to know anything about the thoughts, attitudes or feelings of those who disobey his commands. God alone can know the hearts of men (Gen 6.5; Dan 2.22; Lk 8.17). However, no human court can determine if a man has coveted someone else's possessions or honoured his parents; but it certainly can determine if the person has stolen money or murdered someone.

In addition, since God structures man's obligations primarily as negative-action commands, he provides a model for how human laws should be structured. For example, it is impossible for human laws to legislate and enforce honest behaviour, equality of outcome, or compassion through *positive* commands (e.g., "love your neighbour" or "be fair"). We could never determine if someone was keeping this kind of law since we could never know if his heart was right. Therefore, human laws need to deal with 'do nots' rather than with 'dos'. If a law says, "Do not dilute milk with water." we can identify this as an application of the eighth Commandment and of the case law that speaks against using false weights and measures (Lev 19.35). However, it is not possible to use positive commands to enforce behaviour without creating a labyrinth of subjective interpretation such as a law that says, "Women and men shall be paid equal wages for equivalent work."

God's use of negative-action commands also teaches of the danger of making laws which legislate harsher penalties for 'hate crimes' where a person's motives must be inferred—for example, if a person apparently caused harm to another person *because* of his sexual preferences, religious practices, or colour of his skin. Laws, and associated punishments, exist which can be applied when someone harms someone else. Why is beating up or murdering someone because you don't like his sexual preferences, religion, or skin colour worse than carrying out the same actions because you don't like him as a person or because you are psychopath?

Our legislators and judges need to consider carefully every law which they create to ensure that it is consistent with God's requirements; enforceable; and stated in the form of a negative-action command, so that a breach can be determined easily. Laws enacted by human governments should deal only with direct violations of God's law that are overt and visible such as theft, murder, blasphemy, failing to stop at a red light, or abusively beating a horse.

Obedience Test [April 11] (Gen 2.16-17)

Adam was presented with a great test of obedience. The greatness of the test lay not in the challenge but in the consequences, not in the difficulty but in what developed. The obedience tests presented to Jesus and Abraham were far more difficult—Adam couldn't have been hungry, Jesus had fasted forty days; Adam didn't have to give up anything, Abraham was asked to sacrifice his son of the promise and Jesus, as the Son of the Promise, had to sacrifice himself. Adam was given, what appears to be, a rather innocuous and simple test. Eating a piece of fruit wouldn't harm anyone—the tree was good, there was nothing bad (e.g., poisonous) about it; taking the fruit would not have deprived the owner of anything, since the garden was filled with more fruit than any person could eat, and a single fruit from the forbidden tree would have otherwise fallen to the ground and been recycled into soil nutrients.

The key question that arises is, why did God present this test to mankind? There are likely, at least, three reasons: 1) to document God's sovereignty as the lawgiver, 2) to define holiness, and 3) to demonstrate man's responsibility as God's creature. We have already considered God as the lawgiver and the universality of his law, in a number of previous meditations. Today we will address the nature of the obedience test and focus on the last two reasons for why God set the test before mankind; however, we will defer the specific topic of the 'freedom' of man's will until our next meditation.

Since the Middle Ages, some have argued that the temptation had sexual undercurrents and that the knowledge to be gained was sexual experience. As an example, Milton, in *Paradise Lost*, makes this connection. This view is also found in many modern popular, mythical, presentations of Adam and Eve's sin. However, this view implies that the sexual act in marriage, which God ordained in the state of innocence (Gen 1.22; Gen 2.24), is in itself immoral. Others have suggested that the knowledge to be gained was the ability to discern between good and evil. However, this idea suggests that in the state of moral perfection one cannot have an understanding of obedience and disobedience. God himself is perfect, and has no personal experience of sin, yet he can fully discern between obedience and disobedience. Adam and Eve were innately endowed with a knowledge of God's law, and they knew what it meant to disobey God. They were in a state of moral innocence not moral ignorance. It seems that the test was to determine if Adam and Eve would be content to allow God to define right and wrong (Gen 3.22) or if they would attempt to usurp his authority.

The key dimensions of Adam's obedience test were:

- *Absolutes* Sin (or 'dysfunction') is always defined by the world by how much damage it does to a person, property, institution, or political entity. The more the damage the greater the 'sin'. However, God does not define sin by damage to created things or man's inventions; he defines it relative to his commands which are derived from his perfect, holy, will. Adam knew God's law by nature and had an aversion to breaking it. Therefore, his test related to one thing—would he take what was forbidden by God?
- *Autonomy* The test was to establish whether man would recognize God as God. Obeying or defying God's command would determine if man thought he was wiser than his Creator, whether he would trust the word of God or his own understanding, and if he would act autonomously.
- *Attachment* God wanted his noble creation to act nobly by obeying out of a personal attachment to his Creator, based on respect and love. The prohibition on the fruit was a test of that attachment.
- *Acquisition* The acquisition of the 'knowledge of good and evil' is viewed by many as an advancement for mankind. They believe that without the experience of rebellion against God's law, man would be less than truly man. Whereas, in truth, man becomes a brute beast when he attempts to acquire knowledge of good and evil on

his own terms.

- *Acknowledgement* Wisdom gained by "the fear the Lord" (Prov 1.7) is true wisdom. Experience gained through autonomy is foolishness. The right rule for living well is to acknowledge God and his law as sovereign.
- *Abjectness* The outward action of eating the fruit was minuscule—as small as could be imagined. But sin's consequences are not measured by their direct effect on a man or his property. Adam not only acted as an arbiter or judge of good and evil for himself, but as the representative of mankind. Sin came to rule over all of mankind, physical death came upon all people, and everlasting death came to many. The seriousness of Adam's action was earth shaking and the consequences astounding.
- *Approval* As with all instances of God's covenant with man, there was both a curse and an implied blessing associated with the stipulation. There was to be only one test. If Adam had resisted the temptation to take the fruit he would have been approved by God and not have tasted death.

The tree of the knowledge of good and evil was identified by God to serve as the test of obedience for our first parents; whether they would do good or evil, whether they would be declared good or bad. Their test was to attain true freedom, which lies in obedience to God's commands. Their failure to obey, and their attempt to learn by experience the difference between good and evil, introduced a false liberty that has bound mankind to sin and Satan for more than 6,000 years.

Man's Moral Responsibility [April 12] (Gen 2.16-17)

One reason why God prohibited Adam from eating the fruit from the tree of the knowledge of good and evil was to demonstrate that man, as the only rational creature in the material universe, has been endowed with moral responsibility. Like animals, man is 'programmed' to respond instinctively to external stimuli—for example, we jump when we hear a loud noise and seek a drink when thirsty. However, man is different from other living creatures, since he alone has been endowed with the ability to act without external stimuli. For example, man can form an idea in his mind and then construct something from that idea or carry out a series of actions based on that idea. Man can also evaluate various alternatives and act with rational self-determination on a course of action. No animal can do either of these things.

God created man with the ability to act responsibly, and therefore holds him accountable for his actions. The prohibition given in the garden was not a slight against man, nor was it intended to limit his happiness. Rather, the prohibition actually honoured man, since it recognized that he is a prince, endowed with dignity, who can weigh options and make choices. Notice that God addressed Adam as an individual, recognizing his significance as a privileged person who can participate in a dialogue with his Creator. Without the prohibition, there could have been no way to give man responsibility to make decisions and hold him accountable for his actions. Responsibility has no meaning if there are no prohibitions and no boundaries of any kind.

A question arises from the above considerations: does man have a free will? We know innately that we are not automatons that have been programmed, the way that we might program a computer. So, our immediate response to the question is to conclude that man does have a free will. It is interesting to see how our thinking can be influenced by that presupposition. For example, the ESV translates verse 16 as "You may surely eat..." In contrast, all other major English translations have "freely eat", or similar. They all emphasize the idea of man's freedom to act. The Hebrew states, "eating you may eat", and the wording which uses 'surely' is a more accurate way to translate the Hebrew idiom (compare 'you shall surely die' as the translation for 'dying you shall die', in verse 17). We are so inclined to accept the idea that man has a free will that even most of our Bible translations are influenced by the view.

Before we progress further, we need to consider key truths that are clearly taught in Scripture, which appear to contradict one another:

- God sovereignly plans all events including every thought, word, and action of all men (Ps 139.4, 16; Prov 16.33; Acts 13.48; Rom 8.29-30; Rom 9.1-29). The logical extrapolation is that God knows precisely what will happen in the future. This is not because he looks into the future to see the free actions of men but because he has planned the actions of every entity in all of creation, including the actions of rational and responsible men.
- Men are fully and really responsible for their actions (Ezk 18.1-32; Rom 6.23).
- Human actions are attributed to God's decrees and to human volition at the same time (Gen 50.19-20; Ex 8.32 with 9.12; Acts 2.23; Acts 4.27-28), without the Bible ever attempting to explain how this can be possible.

These statements appear to present an unsolvable paradox. However, there is no logical contradiction between God's sovereign providence and mankind's responsibility. There is only our confusion and doubt resulting from our finite minds being unable to grasp the possibility of the two co-existing.

Many people object to God's sovereignty and predestination and claim that if God has laid out the future in precise detail there cannot be room for human volition and God cannot hold man accountable for his actions. Paul's answer to this claim is simple: do not question God! (Rom 9.19-20)

Many philosophers and theologians attempt to reconcile God's providential will and human free will. They use a continuum of Aristotelian causation, claim that our freedom is found in the area of second causes, or state that God decrees man's free actions. Most attempts to reconcile them bog down in definitions based on semantics or convoluted conditions. They either limit God's absolute sovereignty (e.g., 'open theism') by giving man autonomy as master of his own destiny, or they turn man into a mere puppet and end up proposing some form of fatalism.

Man does *not* have a free will, and the Bible does not teach that he does. Prior to Adam's sin of eating the forbidden fruit, he was bound by God's law (in particular the command not to eat the fruit), by his created nature, and by God's sovereign providential decrees. All men, since Adam's first sin, clearly do not have free wills. They are bound to sin and Satan (Jn 8.34; Rom 6.16), and cannot act contrary to their sinful nature and choose to believe and repent. Christians also do not have free wills (Rom 6.17-18). They cannot act contrary to God's eternal decrees and cannot choose to obey God (Rom 7.14, 25) without the Holy Spirit empowering them. God is the only volitionally free entity. Nevertheless, man makes real choices and is fully accountable for his actions. Instead of trying to explain something that we cannot understand, it is better for us to accept, on faith, these truths from God. We are to believe in God's sovereignty and man's responsibility in the same way that we are to believe, what seems to us to be impossible, that Jesus is both God and man.

The Threat of Death [April 13] (Gen 2.17)

Sin—disobedience to God's law—must be punished: "The soul who sins shall die." (Ezk 18.20) This is a principle derived from God's holy character, and one that is intrinsic to the nature of the created realm. God spelled out this principle when he made a covenant with Adam. Adam was warned that if he broke the prohibition against eating from the tree of the knowledge of good and evil he would be punished and, in particular, punished by death.

Why is it necessary that sin be punished? If there are no consequences for a breach of a command, then the command is meaningless. We know this from experience. When a parent warns a child to behave and says that there will be consequences but does not follow through, the child quickly learns that the commands and warnings are meaningless and he becomes incorrigible. Our society is filled with moral wimps who want to do away with punishment of every kind. They say it is wrong for a parent to discipline a child and that he should be left to develop his own will; and that it is wrong for a society to punish a criminal who is a victim of circumstances such as discrimination or poverty. God does not accept our 'modern' foolish views about punishment.

It is clear from this threat that the purpose of punishment is not primarily to reform a sinner or to warn others. One cannot be reformed by death! And there was no one else around who could take warning from Adam and Eve's

particular sin and punishment (although, we certainly learn that God considers breaches of his law to be serious). While reformation and warning are secondary reasons for punishment, the primary reason is for justice—sin deserves to be punished, and must be punished. God's justice requires that a breach of his commands be recompensed. A clear teaching throughout the Bible is that restorative justice is the underlying reason for punishment. Crimes cause damages and injuries that must be repaid; the party performing the crime must repay, and the party hurt must be repaid.

It may seem that the degree of threatened punishment is not commensurate with the nature of the crime—it appears to be far heavier than the specific sin. However, as we will see (*Interconnected Sins*; Gen 3.6), Adam broke most of the Ten Commandments when he ate the fruit. In particular, he committed a form of murder. By attempting to usurp God's authority and claiming to have an autonomously free will, he dismissed God and his command, implied that God was of no significance, and effectively committed *theocide*—God murder. Murder is a capital crime and capital crimes deserve death.

The penalty for Adam's crime was to be death. Yet, he appears not to have died upon eating the fruit. Thus, some interpreters argue that since the text (according to many translations) says "in the *day* that you eat", the form of death that God spoke of was obviously spiritual death—i.e., alienation from God because of sin (Eph 2.1). However, as we noted (Gen 2.4), the expression 'in the day' is a Hebrew idiom that should be translated 'when'—which does not require that a specific time be implied, nor does it require absolute immediacy. Adam eventually died physically as a result of his eating the fruit (Gen 5.5). Death is a separation of two things which should not be separated (e.g., God and man, body and spirit), and that destroys an essential unity. It is also the opposite of many of the good things that God put in place in his perfect creation—Adam had been created with a physical constitution that could have lived forever, but his body immediately became subject to disease and decay; life in the garden had been full of peace and joy, but from then on his existence was fraught with discord and terror. The death that Adam would introduce consists of three stages: spiritual death, deterioration leading to physical death, and everlasting death. Not only would he personally die, but he would also bring death upon all mankind whom he represented (Rom 5.12), and upon the other living creatures with the breath of life. In addition, he would cause the entire universe to begin an, apparently, irreversible decay (Gen 3.17-19; Rom 8.20-22).

The death that Adam introduced appears to be unconquerable—despite many hopes and predictions that aging and death will be overcome by some future scientific discovery. And, since men cannot explain why death is present in the world, without accepting the Biblical account, they claim that it is natural—a part of life's process, and not an enemy. Nevertheless, in their honest moments, they know that death is not natural and not how things should be. They know personally what alienation from God entails and the hopelessness that it engenders (Eph 2.12). In addition, from their earliest days they have some understanding of what death is because they experienced as children the death of their pet goldfish or hamster, or one of their relatives died. All men have observed the process of death and have a sense of what it means to die, even though they have not yet experienced it personally. So, they, generally, try to avoid death as long as they can.

Adam could not have fully understood what the threat of death meant, since he had no experience of death. However, the fact that the full consequences of the threat of death was not within his experience did not provide an excuse for his sin. Men today are in a similar situation because they cannot understand the seriousness of the threat of everlasting death. This does not give them a warrant for ignoring the warning from God and refusing to repent, obey him, and believe in Jesus Christ who conquered death through his resurrection.

Causal Conditionals [April 14] (Gen 2.17)

A construct used in computer programming is an IF-THEN-ELSE statement. If the stated condition is true, then the computer takes a specific action; otherwise, if the condition is not true, then another equally specific action follows. For example, a program might have the following: IF X = "Y", THEN PRINT "Hello", ELSE PRINT "Goodbye".

The logic is unassailable. If such a conditional statement is not set up correctly, the computer program does not work. This programming construct with its predicate, consequent, and alternative is based on a logic statement called a causal conditional. This verse (Gen 2.17) can be understood as a causal conditional and as an IF-THEN-ELSE statement—if mankind was disobedient they would die; but if they were obedient, then the implied outcome is the opposite, they would live.

The causal conditional in logic is not an artifact of Western thought (e.g., from Aristotle) or even Hebraic traditions, as some suggest. It is based on the universally understood principles of logic with which mankind was innately endowed at creation and, ultimately, has its origin in the mind of God—God is the ultimate logician. Buddhist, and similar Eastern, 'logic' is not an alternative to classic logic; it is nonsense based on man's confused thoughts resulting from the rejection of the true God (Rom 1.21-22).

The basic operations of arithmetic are presumed and utilized in the Bible, such as the additive identity, associative law, multiplicative identity, reflexive law, etc. (e.g., Gen 5.3-5; Gen 18.24-32; Lev 27.23, 27; 1 Ki 6.37-38; 1 Ki 7.23-26; Mt 12.41-47; Mt 17.24-27; Lk 12.52). Likewise, the foundational principles of logic are assumed in the Bible. For example, the Bible opens (Gen 1:1) with a statement that presumes a fundamental logical construct, the 'law of contradiction' (i.e., A is not non-A). As a result of God's being the source of logic, there are many causal conditional statements found throughout Scripture (e.g., 2 Chron 7.14; Prov 26.27; Eccl 10.18; Eccl 11.3; Rom 6.1; Heb 2.1-3a; James 2.1-13). Some are given in the complete form of an IF-THEN-ELSE statement with both outcomes stated (e.g., Gen 4.7), but most only imply the ELSE condition.

The causal conditionals stated in Scripture relate to different dimensions of life—temporal-spatial and human physical, psychological, relational, and moral. In this verse, the consequences affect the entire human condition. If they ate the fruit they would die physically and spiritually, their relationship with God would be ruined as would be their relationship as husband and wife, and the universe would become polluted with sin and be under the curse which would afflict the entire created realm. Conversely (else), if they refrained from eating the fruit, they would not die, maintain peace and harmony in all their relationships, and live forever in a sinless state.

In all of God's covenantal dealings with mankind, the same type of causal conditionals can be found. For example, in the covenant enacted on Mt. Sinai God lays out the blessings and curses associated with the covenant (Dt 30.1-20)—blessings if the covenant conditions are met, curses if the covenant is broken. The New Covenant causal conditionals include:

- Belief in Jesus, which results in eternal life vs unbelief which results in everlasting condemnation (Jn 3.16-18).
- Obedience to God's law, which gives evidence of a love for Jesus (Jn 14.15) *vs* disobedience, which displays a hatred for him (Mt 6.24; Jn 7.7).

God is entirely consistent in his logic and the dispensing of his judgement and rewards. If we are obedient, then we will be blessed; else, if we are disobedient, we will be cursed. There are no exceptions to this rule. There is another important causal conditional: the only way we can believe in Jesus and obey God's law is when we have been indwelt by the Holy Spirit, who is given to us as a gift (Acts 2.38).

The modern pagan world does not like causal conditionals in morality or religion. They expect causal conditionals to be applied consistently in all areas of life except in the area which deals with their responsibilities before God. For example, they expect the bank to pay them interest on their savings, but do not expect God to demand interest on their lives. In the area of morality, they prefer 'woolly' thinking that permits them, by rationalization, to continue unhealthy or wicked practices without expecting to suffer adverse consequences. For example, they don't want to believe that heavy smoking and drinking or over-eating will hurt their bodies. Likewise, they do not want to hear anyone tell them that promiscuous sexual practices will result in disease and infertility. And, they most certainly do not want to be told that a holy life requires moderation and abstinence. Similarly, they do not *want*—it is primarily a matter of the will not of knowledge—to acknowledge that all of their works-based religions are despicable before God and that rejection of Jesus as the God-man, who died on the cross to save sinners, will result in their being sent to Hell. The situation in the Church is not much better than in the world at large. Professing Christians are almost

as unwilling to accept that they are accountable before God for their actions.

Writing computer programs with the IF-THEN-ELSE conditional teaches a person how important exactness in logic is. This same exactness should be found in law, science, political science, economics, etc. But sadly, it is often missing—'fuzzy' logic reigns.

Man is Relational [April 15] (Gen 2.18)

God is a tri-unity—in his essential being there are three persons who equally share the attributes of divinity. These three persons are eternally coordinated in their mutual will (Mt 26.42) and shared love (Jn 15.9; Jn 17.24). Thus, God as a kind of entity (although with only one instance) is relational, with the persons within the kind having relationships with one another. The angels, as a kind of created rational being, have others of the same kind with whom they can interact and share their service and rejoicing. Similarly, animal kinds were created with more than one instance within each kind. Man, as initially created, was a single instance within the created kind. While he could have relationships with his creator and with the animals, these relationships would not be the same as that which could be shared with others within a kind.

Many commentators state that even though the created universe was declared to be very good, there was one thing in it that was not good—the aloneness of man. However, they have missed the order in God's account of creation. God declared many of the individual components of creation to be individually good (Gen 1.4, 10, etc.), but he declared all of creation to be very good (Gen 1.31) only *after* he had created mankind—male and female (Gen 1.27). The account of the creation of Adam and Eve in chapter 2 is a retrospective account, providing detail that was not given in the summary account in chapter 1.

Regardless, the fact is that man was created to be relational, as an image-bearer of his creator. Man can have relationships with God—for example, we are to love God (Dt 6.5) and communicate with him through prayer. Man can also have relationships with animals—for example, many people have pets that they have named, talk to, and play with. However, even in the perfect state in the Garden of Eden, man needed to have a relationship with one of his own kind. God has made us to need other people; even fellowship with himself is not enough to meet our needs. Men cannot be fully confirmed as human beings unless they exchange information through conversation with other people and show love to others within their kind.

We know that most people who are confined in total isolation from others—such as being marooned on a tropical island—start to go mad. Similarly, when older folks lose a dear spouse and are left alone, with no one paying attention to them, they often begin to waste away. Men are designed by God for interaction and relationships and not for solitude. Adam's paradise would have quickly become a prison and his happiness a hell, if he had been left by God to be permanently alone. This reality, based on the created order, teaches us of how dysfunctional and sinful it is for people to try to isolate themselves from others—either because they claim that they do not need other people, or because they are misanthropes. Community is God's creation.

God has endowed us with a basic need to be with others in communion and fellowship and for mutual support. Even Jesus had a need for companionship (Mk 3.14; Mk 14.33-34), which shows that this innate need is not sinful. However, men find ways to twist and pervert this basic instinct for closeness. When they become overwhelmed by their need, they do not go about meeting it in a proper manner. They direct their attentions to fellow humans in perverse ways such as seeking intimacy in sexual liaisons outside of marriage or in same-sex relations.

One of God's provisions for Adam's basic need was to give him Eve as a partner. It is God's intention that men and women, in marriage, provide each other with community. Certainly, sexual intimacy is part of meeting the basic need for closeness. However, marriage is not merely a sexual relationship. It is to be a sharing on spiritual, intellectual and emotional levels. The best marriages will be those in which the spouses are the best of friends and

share more than a bed. It is important that husbands and wives work together on fulfilling one another's relational needs. This is one of the reasons why it is inappropriate for people to reject marriage if they have an opportunity to marry (1 Tim 5.14); for example, thinking that they will be happier without having to share their lives with a spouse. In addition, it is certainly wrong for a church to forbid marriage of any of its officers or members (1 Tim 4.3).

Men and women find ways to meet their relationship needs by joining clubs and organizations. The sense of identity that they receive from belonging to a greater cause is important for their wellbeing. God understands this aspect of our nature and it is one reason why he organized the Church as a community. The Church brings people together from all nations and engenders a spirit of mutual love and communication. God could have designed his redemptive strategy around individuals and devised means of bringing isolated persons into his kingdom. Rather, he chose to do it through the social structure of the Church—people invite their unbelieving friends to Church. Since the Church is one of the means that God has instituted to meet man's relational needs it is wrong for professing Christians to isolate themselves from the Church—even if they have been hurt by the stupid actions of others. It is imperative that those who claim to be part of the family of God, and brothers and sisters of Jesus, come into the assembly of the saints regularly and join in fellowship with like-minded believers in worship, and participate in the Lord's Supper and in congregational activities such as luncheons, picnics, and social events.

Naming the Animals [April 16] (Gen 2.19-20)

Parents sometimes struggle to find the right name for a newborn child. They may have picked out favourite names before the child was born, but they usually do not finalize the name they give to the child, until after he or she has left the womb. They often say, "We won't know what the right name is until we see him/her." Then, on seeing the baby, they have a feeling that a particular name is the right one. This behaviour exhibited by parents is similar to what we find Adam doing before lunch on the first day of his existence. God brought selected animals to him so that he could give them names. This was the first work that God assigned to Adam after his creation.

Many people who read this account scoff at it, saying that it would be impossible for Adam to have named all the animals in a day, let alone part of a day—since Eve was created later on the same day (Gen 1.26-27, 31). However, the account does not say that Adam named millions of *species*, but that he named the beasts of the field and birds. Since these would have been generic kinds (Gen 1.21, 25), which were not yet differentiated into species, his work was considerably less than the scoffers claim. Some species may have gone extinct during the flood, but we can calculate an order-of-magnitude for the number of original kinds, based on today's estimated number of species (<5,000 mammals and <10,000 birds). Assuming that each kind has produced 20 different species (probably a low estimate, considering that there are more than 35 species of cats, likely descended from one kind-pair), at most Adam named 750 *kinds*. His naming activity probably included a few hundred kinds; taking 4-5 hours of work. Others scoff at the idea that the animals would have paraded themselves before Adam. The animals, at this point, were entirely tame and would have had a natural instinct to come to the man who was appointed as their lord. Adam likely went on, later, to give names to many of the plants, other animals, and geographic features in Eden.

As we noted in previous meditations, man was created to work (Gen 2.15) and to have dominion over the animals (Gen 1.26, 28). By bringing these animals to Adam, God provided a living illustration of the mandate that he had given to man. Adam's naming the animals demonstrated his derived authority over the animals and conferred honour upon him, because naming is an act of:

- *Authority* (Ps 147.4; Dan 1.7) Probably in every society naming of children is the responsibility and privilege of parents. Instinctively we know this is right and acknowledge parents' authority over their children, by recognizing the names they confer on the children. Even young children demonstrate that they recognize this principle when they name their dolls. By presenting themselves before Adam to be named, the animals acknowledged his authority over them and paid him homage.
- *Creativity* With names and applied logic we create worlds from our imaginations. We give names to new entities—objects or concepts. Discoverers of new lands, stars or comets, species of frogs, or elements in the

periodic table add their stamp of priority by naming the entities they have discovered. Similarly, philosophers, logicians, mathematicians, scientists, and theologians all establish names to bring order out of chaos.

- *Knowledge* Naming presupposes knowledge of the entity being named. In order for Adam to give the animals meaningful names and not just collections of random syllables he would have needed to know something about their nature. As he gave them names, he would have had to exercise his newly given intellectual powers of reflection and abstraction and call on the knowledge given to him as part of his initial constitution.
- *Learning* We also learn through naming. When we acquire a language, the first thing we learn is the names of objects and then we go on to grasp names for abstract concepts. Adam showed his intelligence and that he was a quick learner. At first, he would likely have considered each of the animal-kinds as they passed by and declared their names. He might even have used humour in some cases. By the end of the day, after he was introduced to his wife, his naming skills and understanding show a significant level of sophistication. He used poetic parallelism, a play on words and metaphor, and he defined a relationship between man and woman through the name 'woman' (Gen 2.23).
- *Significance* Throughout Scripture, names are important. God names his people with prophetic significance and changes their names to establish new relationships with them. What Adam called the animals that was their names. The power that Adam was given to name the animals still resides with mankind. Every time we name something, we endow it with a significance—it is no longer a nameless *it*.

The process of naming the animals had an additional purpose. This activity took place after God had declared the fact that Adam was alone, with no second instance within his kind and no partner with whom to converse and to share his experiences of life. God had declared that aloneness to be 'not good'. As the land-based animals filed by Adam to be considered by him, he was effectively conducing a form of 'speed dating' and would have quickly realized that he was of a different kind from any of the animals—not only were they subservient to him, they were also not his equal in intellectual and rational capacities. As the naming activity progressed, Adam may have had an increased sense of being alone. God showed him that the animals were not his equal and prepared him to receive his custom-made partner.

Language Processing – a Precursor of Naming [April 17] (Gen 2.19-20a)

In order for Adam to have named the animals he needed tools with which to work: intelligence and understanding to discern the characteristics of the animals, logic and reason to extrapolate from the animals' attributes to a symbolic representation as expressed in a name, a language with which to provide the names, and organs of communication (i.e., eyes, ears, mouth) with which to examine the animals and to verbalize the names he assigned to them. Therefore, the act of naming the animals implies that fully complete and complex operational systems were in place. Adam had these operational systems—having arrived from the hand of his Creator endowed with a functioning body with sensory organs, rationality and intelligence, creativity, and the ability to process language and communicate with God. Adam was not the product of a long and gradual process of evolution; he arrived fully formed and fully functional on the sixth day of creation.

According to a commonly accepted belief, human language processing developed from the use of grunts and other noises made by early *Hominidae* creatures⁷. However, careful analysis of this explanation for the origin of language processing indicates that it is faced with challenges. For example:

- *Humans could not process an emerging language if they did not know how to process one*. A theory that assumes a *tabula rasa* (blank slate) for the emergence of a language runs into the classic 'boot-up' problem—i.e., we need the ability to parse language in order to learn or to use a language.
- Our supposed ancestors would have had to agree on the meaning of sounds. It might be possible to argue that

⁷ For an example this hypothesis, refer to: Will Durant's <u>Our Oriental Heritage</u> (The story of Civilization), chapter 5 ("The Mental Elements of Civilization"), where he speculates about how an early human ancestor formulated the first word to define a group of entities and admits that "all origins are guesses".

the word 'Run!' would be interpreted over time by survivors as "Make a hasty exit before the lion gets you." However, it is more difficult to explain how the meaning of words such as 'life', 'love' and 'God' can be communicated from one person to another without a pre-existing ability to process language.

- *Language grammars are complex*. Languages require a complete syntax of verbs, nouns, prepositions, and so on, before they can be useful. A language cannot be formed of nouns only or verbs only. As one resource states, "language mastery can be no simple matter. Modern linguistic theories have shown that human languages are vastly complex objects ... Clearly, there is something very special about the brains of human beings that enables them to master a natural language."⁸
- Approximately a dozen language families exist, each with fundamentally different structures. In theory, it might appear that the ability to process *one* language could have evolved from our supposed ancestors' grunts and squeals. But to suggest that evolution produced many independent methods for processing language appears suspect.
- *Creating AI language processors is a challenge*. As computer scientists and linguists have discovered over the past 50 years, the ability to create artificial intelligence (AI) systems that can process languages has required the application of considerable research, experimentation, and design effort.

Therefore, it is difficult to believe that the capability to process language evolved through natural selection acting upon accidental mutations, rather than being the product of an intelligent designer. In rejecting the idea that intelligence is required to create a language processor, evolutionists claim that the emergence of language processing occurred in human pre-history so there cannot be any historical evidence for its emergence. They also would likely admit that no comparable emergence of language processing (as distinct from new languages) is observed today—it was a one-time event in pre-human evolution. This is a way of espousing evolution without having to demonstrate that it occurs. Evolutionists accuse Creationists of believing in myths created by ancient civilizations (e.g., the Sumerians) and recorded by wandering tribes of goat herders. However, contrary to this claim, the Bible provides the only historical record of how man came into existence and where the ability to process languages came from. This record was communicated by the Creator to the first man, Adam, who wrote it down so that all of his descendants would know the truth. It is evolutionists who have concocted fairy tales, not the Creationists.

Since Adam was created with the ability to utilize a fully formed language, we could wonder what that language was and if it still exists today. Some might argue that, after the events at the Tower of Babel (Gen 11.1-9) and the confusion of language, it is not possible to determine what the language of Eden was. However, whatever language was spoken in Eden was also spoken by Noah and his sons, and their immediate descendants. It is possible that one of the ancient languages of the Middle East (e.g., Sumerian) is the prototypical language. Alternatively, Hebrew (or a proto-Semitic cognate) may be the original language. Man also had the ability to use writing prior to the flood (see, *The Origin of Writing* [July 10]), since God wished the record of creation to be preserved and not to be subject to the vagaries of oral transmission. The original documents (or copies) which contained the accounts from which Moses wrote the early chapters of Genesis were brought through the flood in the ark. Unless a person who was bilingual translated those documents immediately after the confusion of languages at Babel, the contents had to be readable by Moses—he was certainly educated and may have known multiple languages. However, the inclusion of key words (particularly names) with double meanings (e.g., adam as 'man' and 'ground') throughout the early chapters of Genesis (especially in chapter 5) may indicate that Hebrew was the original language. Regardless, the fact that Adam could name the animals was only possible because he was created in the image of God. The existence of the *language of naming* is irrefutable proof that Adam was created as a fully formed, intelligent creature, with an innate ability to process language.

> Good Civil Government [April 18] (Gen 2.19-20a)

⁸ Innateness and Language (Stanford Encyclopedia of Philosophy).

Thomas Paine, an American revolutionary leader, said in his book *Common Sense*, "Society in every state is a blessing, but government even in its best state is but a necessary evil; in its worst state an intolerable one; for when we suffer, or are exposed to the same miseries by a government, which we might expect in a country without government, our calamity is heightened by reflecting that we furnish the means by which we suffer." Thomas Paine was a Deist and no friend of Christianity or of the Bible, so we should not expect to find that his views would be consistent with God's thinking. Yet, many Bible expositors seem to hold, at least implicitly, a similar view as Paine. If they are asked when and why God instituted human civil government, they say that human civil government was instituted after the flood when God delegated capital punishment to men (Gen 9.6), and that the purpose of civil government is to restrain and punish evil.

There is no doubt that *a* purpose of civil government, since Adam sinned and certainly since the flood, is to use its power of coercion to restrain and punish evil (Rom 13.1-7). However, this is not the only purpose of civil government. Civil government also has the role of providing regulations and standards for the smooth functioning of society. The government may have to establish sanctions and punishments associated with those regulations, because of the human tendency to rebel against all authority, but the regulations themselves may not be required because of sin.

Assume that Adam and Eve had not sinned and that they had been fruitful and filled the earth with their sinless progeny. Over time, people would have moved to various parts of the original continent and would have had to define means for coordinating their activities to avoid suboptimal outcomes. For example, each time zone covers a distance of over 1,500 Km. The sun rises and sets an hour earlier at the eastern edge of a time zone than at the western edge. Creating a standard, that clocks will be set to the middle of the time zone, would allow people to assemble for worship at the right time. Likewise, a stonemason building a house, even in a sinless world, would likely have preferred to be compensated with some form of currency (e.g., gold or silver coins) rather than having to carry home a bushel of apples every day. So, for the purposes of coordination and communication the citizens of a paradise would have agreed on the value of a medium of exchange. Another example is the need for the establishment of standards for measurement. A carpenter working with a remote lumberjack would have had to communicate the size of the roof beams that he would need to install in his barn using an agreed standard. In fact, such a standard did exist before the flood. God gave Noah directions for building the ark based on dimensions which used the cubit as a standard (Gen 6.15). To be of any use, the cubit had to be a standard size, and was likely standardized on the length of the forearm of Adam, the first man. Today governments (actually, an international organization sponsored by many governments) define the meter and the kilogram so that we can work together cooperatively.

The institution of human civil government was first formally administered at this point—Adam naming the animals—during the creation week, in a sinless state, not after sin had entered the world. Adam had been given delegated authority as a king over God's creation (Gen 1.26). The animals were brought to him so that he could name them. When he assigned names to them, those were their names for all time (at least until the confusion of languages at Babel). Eve would have learned the names from Adam, as would all of their children. Naming entities is an example of exercising authority, but it is also an example of facilitating communication and coordination. When Adam asked his sons to bring in the sheep for shearing, they would not have run off and brought the angora rabbits. So, Adam, as the first king, *before* sin entered the world, exercised the role of administering good civil government.

The establishment of government standards does not necessarily also require the coercive use of sanctions and punishment. In general, even in our sinful state, we agree to use standard definitions for many things—for example, the dimensions of construction materials—and cooperate because the natural consequence of not cooperating become readily apparent—shortened sheets of flooring plywood would not fit on standard joist spacing. By agreeing to use these standards, we benefit and do not have to resort to the inefficiencies of unique and custom situations.

In a sinless state, the citizens of the world would have complied with the administration of the standards happily, as being beneficial and not coercive. So, it is with God's law. God's law is beneficial and good for man, not a burden and hardship, as rebellious libertines would have us believe. In the restored paradise, redeemed mankind will cooperate in their endeavours through the administration of good civil government—for example, heavenly choirs will use an agreed-upon standard for musical notation.

Governmental authority is not derived from the people, but from God. It is needed primarily because we are not omniscient, not because we are sinful. Government is *not* a 'necessary evil', it is a necessary good and a blessing from God that he instituted at creation.

Man and Woman – Fit Helpers [April 19] (Gen 2.18-20)

The animals were brought to Adam so that he could name them and exercise his dominion over them. In this process it would have become evident to him that the animals were not the same kind of creature that he was. For example, he would have discovered that he could not communicate with them as he could with God [we will deal with the talking serpent when we study chapter 3] and that the animals did not have the rational capacities which he had. At this point he might have begun to wonder about his being the only one of his kind and to wish for companionship with one like himself. Even Jesus had a need for companionship (Mk 3.14; Mk 14.33, 34), which shows that this innate need is not sinful. So, at this point, God may have declared to Adam that it was not good for him to be alone, in order to prepare him for the arrival of the woman who would be different from the animals, of his kind, and uniquely suited to meet his relational, and other, needs.

God declared that the creature whom he would make would be a helper for Adam. The word 'helper' (or 'help') has been the standard translation of the Hebrew word since Wycliffe completed his English translation of the Bible around 1390. The English word 'help' may be misinterpreted to mean something like a servant—as in, "The help will prepare the dinner." However, it is translated from a Hebrew word that means one who provides aid and support. God uses the word to refer to his role in aiding his people (Ex 18.4; Ps 20.2; Ps 121.1-2; Ps 124.8), so it clearly cannot be inferred that the help that the woman would provide to the man was in any way demeaning or that the woman was less than the man in terms of her created nature or role. When we considered *Mankind's Two Sexes* [March 4](Gen 1.26-27) we noted that both sexes were created in the image of God and that both sexes were given dominion over the rest of creation. Only Christianity, among all religions, has a foundation on which to declare the full natural equality of the sexes. However, this does not mean that the sexes have identical roles. The three persons in the Trinity are all equally God, yet they have different roles in creation, providence, and redemption. Thus, having different roles does not diminish one's essence.

The woman was created to be a helper 'fit' for the man. This, however, is not a one-way street. The Hebrew word that is translated 'fit' can be translated as 'before', 'opposite' or 'corresponding to' in different contexts. It is used in a similar way that John uses the Greek word 'with' or 'before' (Jn 1.1) to express the relationship between the Father and the Son. The relationship between the man and the woman is bi-directional. Both are suitable partners for the other. They mutually supply what is lacking in the other in terms of relationships, gifts, skills, duties, and attitudes. Neither the man nor the woman is complete without the other; neither can fulfill God's mandate for mankind without the other exercising his or her God-defined role.

The fact that God provided the woman to complement the man demonstrates that homosexual relationships do not accord with the natural order which God has defined for mankind. Even the basic physiology of men and women proves the point—two men, or two women, cannot be *before* one another in a mutual physical relationship. The creation of mankind as two complementary sexes also shows that it is not proper for men and women to *prefer* single-sex friendships over married partnerships, even where they do not have a sexual dimension. For example, men whose primary interest is to play, or watch, sports with the 'boys' have a one-dimensional view of human relationships and are living as perpetual children. Similarly, women who don't want the hassles of living with a

husband and only want to spend time in the company of their cats or other women to gossip, shop, or work on a craft are selfish and rebellious against God's creation mandate—to be a fit helper for a husband. Men and women ordinarily need to come together in a marriage relationship or they will be incomplete throughout their earthly lives. In our culture, where marriage is increasingly viewed with disdain, Christians need to stand out as those who believe in marriage as the best support to meet man's and woman's needs.

When we enquire into the way in which men and women were intended to be mutual helps, we find it to be a difficult subject because God did not define the respective roles for men and women before sin entered into the world. Anything that we conclude will be tainted by the fact that we think and act in the context of a post-curse world. For example, some suggest that the man was given the leadership role before they sinned. Paul seems to support this interpretation (1 Cor 11.3, 9). However, others take a different view, saying that submission of the woman to the man does not come until after they had sinned (Gen 3.16). Nevertheless, it seems proper to conclude that by nature men and women have different roles of providing and nurturing. And, together, in marriage, they are to provide to the other, physical, social, psychological, and intellectual support. Clearly God intended men and women to find physical pleasure in one another. Adam would have marvelled at the beauty of his naked wife when she was brought to him, and Eve would have been thrilled with her handsome husband. They would have enjoyed immensely fulfilling God's mandate to multiply. But the fact that they were to be a mutual help also means that a husband and wife should be friends who share more than a refrigerator and a bed. They are to complement and encourage one another, care for and love each other, call out the best in each other, and work together as they glorify God while exercising their dominion over the rest of creation.

The Creation of Man's Partner [April 20] (Gen 2.21-22)

Some commentators refer to this account of the creation of Eve from one of Adam's ribs with words such as "a charming tale". Or they suggest that it was influenced by Middle Eastern creation myths, rather than accepting it as the original, and that Sumerian and Babylonian myths are perverse derivatives of the Biblical record. Without question, there are many people who think that this account is ridiculous. However, those today who dismiss it as merely a story are often the same ones who would suggest that man (and all of life on the earth) evolved by chance from a 'protein soup' in a warm, ancient ocean. Their rejection of this historical record, from the mouth of God, and their acceptance of the myths of evolution reinforces our belief that God had an explicit purpose for creating the woman from Adam's rib and for ensuring that we would know about his creative act.

The account uses the word 'built' (see, Gen 4.17) in the original, which has been translated as 'made' (ESV, NIV) and 'fashioned' (NASB). The creation of Eve was the uniquely special final act of God's creative work. And, her origination from the rib of Adam has profound biological, moral, and spiritual significance. The biological unity of mankind relates to our derived moral accountability before God. Mankind was not created as multiple distinct entities as were the angels and animals. Nor was mankind created with both sexes at one time, as were the animals. Mankind was created first as a man, from which was derived a woman (1 Tim 2.13), thus establishing the unity of mankind. The woman had to be created from the man in order for there to be moral accountability in Adam, who represented all mankind. In the same way, Jesus had to be born of Adam's line (Lk 3.23-38), and could not be created as a unique man-like creature. In Adam's sin all whom he represented died, and in Christ all whom he represents are made alive (1 Cor 15.22).

It is interesting that evolutionists speak of a 'primordial Eve'. They generally mean the most recent common ancestor of all humans alive today. They assume that an 'Eve' must have come first. However, the chromosomes (called X and Y) which determine sex in humans are derived from the male. Chromosomes are aggregates of genes that provide coded information which can be inherited. They are composed of DNA strings and proteins and are located in the nucleus of our cells. Females have XX chromosomes and males have XY chromosomes. A mother contributes an X chromosome to every child. However, the father may contribute an X or a Y chromosome. Therefore, it is the father that determines the sex of a child. The nature of mankind's genetic makeup indicates that

the male had to come first, otherwise there could not be a female human being; thus, reinforcing the truth of the Biblical account.

God's forming the woman from a part of the man focuses on the constitution of men and women-they are of one essence, in terms of their physical (Eve was a modified genetic clone of Adam) and spiritual personhood. Thus, men and women maintain a unity that is unique among all of God's creatures. Regardless of their physical differences and the different roles which they are assigned by God, nothing can change this essential equality before God.

God used one of man's ribs to provide the basic genetic material from which he formed the woman. The fact that he used a rib rather than some other part has been the subject of speculation and debate. For example, some ancient Jewish commentators gave various fanciful reasons for why God didn't use an ear or other part of the man's body. The best explanation may be along the lines that God chose something near the heart of man, which man could live without, so that he could replace it with something the man could love and hold close to his heart; thus implying the essence of the institution of marriage that he will now introduce.

God removed Adam's rib while he slept. Some have suggested that he was actually in a trance and watched what God did, and so could immediately respond with full understanding about Eve's nature-derived from his bone (Gen 2.23). However, the word used for 'sleep' means a 'deep sleep' in which all consciousness is lost. It may be that God put Adam into a state equivalent to being under a full anaesthetic so that he would not feel any pain. However, God could have removed the rib without causing pain—that would be far less of a miracle from our viewpoint than creating a woman. It seems, rather, that God induced sleep to remind Adam that the creation of the woman was fully God's initiative-man played no part in it and was not even a spectator of the undertaking. This may have served multiple purposes—to: 1) teach man to trust the word of God, by accepting the reality that the woman was derived from himself, 2) maintain an element of mystery about God's creative powers, and 3) provide Adam with a gracious and gloriously surprising gift.

As her father, God brought the woman to her husband to give her in marriage. Adam did not take the woman of his own will but received what was offered to him by God. Despite modern ideas about choosing a marriage partner, this transaction emphasizes the truth that marriage is a gift from God, not a human invention, and that ultimately whom one marries should be in the will of God-the Lord graciously provides the marriage partner that is right for each one of us. It is, therefore, not surprising that Paul uses marriage as an analogy for the relationship between Christ and his Church (Eph 5.32).

Naming the Sex of Man's Partner [April 21]

(Gen 2.23)

As the animals were paraded before Adam, it would have become apparent to him that they were not the same kind of creature that he was. We noted previously that Adam would have observed that he could not communicate with them and that they did not have rational capacities. He may have begun to wonder if he, among all of God's creatures, was one of a kind, and begun to sense his aloneness. Therefore, it is not surprising that after he awakened from the sleep that God had induced when he created the woman, and he saw the woman whom God brought him (Gen 2.22), he exclaimed with astonished joy. Adam's first recorded words are, "At last!" (literally, "This time!"). Finally, after all the different kinds of animals were brought before him, one who was of his own kind was presented to him. God's creation was now completely perfect; since not only were all aspects of it very good (Gen 1.31), but also his rational creatures were fully content, lacking nothing. We should take careful note of this. God's intention was that man would be blessed with both every material necessity and with every spiritual and psychological happiness. God is not a curmudgeon or niggardly. The reason that people are not happy today is not God's fault. He truly desires for his rational creatures to be happy and gives only good gifts (James 1.17). The problem of unhappiness lies entirely with us, since we have rejected his perfect ways.

Adam declared that the lovely creature before him was of his flesh and bones. We are not told how he knew this. Some suggest that he was able to observe and reason that this was the case (i.e., knowledge derived empirically), without special revelation. Others suggest that God imparted the knowledge to him in a vision while he was asleep, or that he communicated it to him by spoken word. How ever it was accomplished, the fact is that Adam knew that the woman was different from him and yet the same. He knew that she was uniquely compatible with him in every respect because she was, literally and figuratively, his flesh and bones. While men and women are physically different and have different God-assigned roles, they are of one substance and have inherently the same nature—as image-bearers of God. As much as men today may wish to believe that man is merely a step on an evolutionary continuum from protozoa to primate, man is differentiated from all the kinds of animals as a uniquely different kind of creature.

Adam declared that, "she shall be called Woman, because she was taken out Man." This is a parallel thought to his previous declaration that reads, literally, "bone *from* my bones and flesh *from* my flesh". The Hebrew words used for 'man' and 'woman' are respectively *ish* and *ishshah*. There is an obvious wordplay that is intended to support the idea of the derivation of the woman from the man. This wordplay may support the suggestion, we noted earlier, that the language of Eden was probably Hebrew. However, the origin of the words is obscure; they may be transliterations from an earlier language, and the wordplay was carried into the Hebrew. We are able to get a sense for this wordplay even in English with the words 'man' and 'woman'. The English word 'woman' comes from the Middle English *wifman*, from the 12th century, and means 'wife of man'. It is ironic that the feminist political movement called 'Women's Liberation', started in the 1960s, used the word 'women' on its placards and in its literature. The word 'woman' includes in it a relationship of dependence on 'man'. As Adam intended, when he named the sex of his partner *ishshah*, a 'she-man', 'made of man', or even 'female of the man', so the term 'woman' embeds the man's sex in the woman's and implies a special relationship of affiliation and derivation. Later Adam would give his wife her personal name, Eve (Gen 3.20).

As we noted when we looked at Adam's task of naming the animals, naming is an act of authority. By naming the woman, Adam is declaring his God-mandated authority over her. The concept of man's headship over the woman is hotly debated today, with some suggesting that it is an invalid concept, a culturally bound and obsolete structure, or the result of the curse on sin (Gen 3.16). However, Paul and Peter support man's headship (1 Cor 11.3, 9; 1 Pt 3.1-6). It is very hard to defend the claim that Paul and Peter are merely echoing the sentiments of their Jewish culture when the creation order, before mankind had sinned, is appealed to by the NT.

We should also observe the form that Adam's exclamation of joy takes. It has a poetic form and includes the wordplay on the male and female sexes. The use of the poetic form in the midst of a strict narrative section stands out and draws attention to the importance of the creative event, the presentation of the woman to the man, and the observation of the full compatibility between the man and woman. This use of creative linguistic forms indicates that Adam, as he came from the hand of the Creator, was brilliant and that he learned quickly. When the animals were brought to him for naming, he likely inferred (either through observation or innate knowledge) aspects of their nature and gave them names that were suitable for their kinds. With naming the woman, he has moved from mere declarative naming to poetic naming, from conceptual naming to metaphorical naming, from mere causal inferences to drawing logical connections, and from merely responding to understanding to creating. Out of words he defines reality as exhibited in a relationship. All of this in the space of a few hours! What a marvel is man—the pinnacle of all that God has created!

The Institution of Marriage [April 22] (Gen 2.22b, 24)

At the beginning, God established a few institutions, including the Sabbath, work, civil government, and marriage. These institutions are not Jewish inventions, nor were they established by Moses to support a supposedly unique cultural-religious cult; they are perpetual and universal institutions that apply to all of Adam's descendants in every

nation, through all time. Therefore, what we find in Genesis (Gen 2.22b, 24) must be the standard for marriage not only for those within the Church but also for everyone within our society. Jesus reinforces this truth when he appeals to Genesis (Mt 19.3-9) as the basis for his teaching on proper marital behaviour.

The creation of man as two compatible individuals leads to the obvious conclusion that they were to be together in a married relationship. This is why Genesis 2.24 begins with the word 'therefore'. What has been said in the previous verses about the creation of Eve as a fit helper for Adam, one who shared his biological and spiritual essence, can lead to no other conclusion than that marriage is the natural state for men and women. However, it is not easy to determine whether the conclusion stated in this verse was originally delivered by God to Adam as an anticipatory requirement for future generations, added by Adam when he relayed the account to his descendants, or added by Moses when he wrote Genesis under the guidance of the Holy Spirit. Regardless, Jesus declares it to be God's definitive word (Mt 19.4-5).

Despite the popularity of TV shows dealing with wedding planning, romantic comedies that culminate in a wedding, and news about celebrity marriages, marriage in North America today is thought to be optional and appears to be heading to obsolescence. The Biblical ideas expressed in the well-known words from the Anglican *Book of Common Prayer*—that "marriage is an honourable estate, ordained for the procreation of children, as a remedy against sin for avoiding fornication, and intended by God for mutual joy, help and comfort"—are almost universally ignored. Young people today have become cynical about matrimony and view it as merely a contract for long-term dating, which might give some financial advantages but results in more headaches at times than it is worth, and can be dissolved at any time. This negative view of marriage is the result of the acceptance of sexual intercourse outside of marriage and the belief that children can be raised successfully by single mothers, and a redefinition of marriage to include other relationships (e.g., male-male or father-daughter) which are based solely on mutual affection or lust.

Without doubt, marriage is a covenant relationship (Prov 2.17; Mal 2.14). This is implied by the instruction given here that the husband and wife are to form a new entity of relationship of 'one flesh', by the use of 'leave' and 'be united' (or 'joined'), and by the fact that leaving one's current family setting to be united to a spouse is a public declaration of intent. These terms are used elsewhere in the context of covenant relationships (e.g., Dt 28.20; Hos 4.10). In addition, divorce is viewed throughout Scripture as a covenant breach.

The covenant relationship that is established by a new couple creates new obligations that override already existing obligations to their parents. The 'leaving' that is spoken of in Genesis 2.24, does not mean that a new couple cannot live with one of their parents or have parents living with them (however, it may not be the wisest thing to do while a new couple is establishing their own household and shared practices). Nor does it mean that a married couple no longer has any obligations to honour their parents. Rather it means that the husband (and by extension, the wife) is to put the welfare and interests of his spouse above that of any other person (Eph 5.25-29). While it is recognized in Genesis 2.24 that there is a parent-child authority structure (instituted at creation), these natural bonds are not as strong as that between a husband and wife, who are to become 'one flesh'. A key lesson from this consideration is that married couples are not to allow their parents to run or ruin their marriages.

A married couple becomes one flesh—a single unit established through sexual intercourse. This means that the *only* place for sexual intercourse is within the married relationship of one man and one woman (1 Cor 6.9; Heb 13.4). However, this physical oneness is to be a symbol for a psychological and spiritual union which continues to grow beyond the physical sex act. Since sexual intercourse is to be limited to the marriage relationship, this means that the procreation of children should only occur within the bounds of a marriage. In 2012, the US reached a tipping point where more children were born to unmarried women than to married ones. If Canada has not reached that point, it probably will soon, since what happens in Canada usually mirrors what happens in the US. What used to be illegitimacy is now the new normal. This rejection of God's institution can only result in increased social, cognitive, behavioural, and economic problems for future generations. The iniquities of fathers will be visited on the children (Ex 20.5).

Christians living by Biblical principles provide the last human-based defense for proper beliefs about marriage and the practices associated with marriage. The more Satan attempts to dishonour marriage through such things as Islamic polygamy, the prevalent practice of unmarried cohabitation, or man-made laws which establish and endorse lewd homosexual practices, the more Christians should defend the creation ordinance of marriage by honouring it as a lifetime commitment between one man and one woman and by keeping the marriage bed pure from all adulterations.

God's Definition of Marriage [April 23] (Gen 2.24)

In a previous meditation, we considered the nature of the institution of marriage that God ordained at the time of creation. We noted that marriage is:

- A life-long physical, psychological, and spiritual relationship between one man and one woman.
- A covenant that creates new obligations, which override already existing obligations to the couple's parents.
- The only relationship in which sexual intercourse is to be practiced.
- Defined by God, not by legislators or some nine-person appellate court.

Monogamous, heterosexual marriage is God's standard. It was the form of marriage instituted at creation and is the only form that is permitted by God. It was the universally accepted definition of marriage in most cultures until within this current generation.

God prohibits sexual intercourse (whether fornication or adultery) outside of the bounds of marriage (Ex 20.14; Lev 18.20; Mt 5.27; Acts 15.20; Rom 1.29; Rom 13.9; Heb 13.4). He also prohibits marriage among people who are closely related to one another by birth or through marriage—i.e., incest—for example, a father cannot marry his daughter, nor may a brother and sister marry (Lev 18.6-18). God's prohibition against sexual intercourse outside of marriage has not been followed from earliest times. However, our culture seems to have outdone all others in favouring casual sexual relations. The result has been a broad confusion about all moral standards, wide acceptance of aberrant and deviant behaviours, and an inability for couples to form lasting, committed, marriage relationships.

Also excluded by God's definition of marriage is polygamy. A man should not have more than one wife at a time, nor should a woman have more than one husband. The fact that polygamy has been practiced in some cultures does not mean that it is right. Jesus, echoing 2.24 and Malachi 2.14-16, makes it clear that polygamous marriage was not what God intended. He reminded the Jews of his day that marriage is to be a life-long relationship between one man and one woman (Mt 19.3-8). God's standard for marriage also excludes divorce, except for very specific reasons (i.e., adultery and desertion after one party in the couple becomes a Christian), because a man is to leave all others and to be united to his wife.

God did not create multiple males and females at the beginning—only one of each. Therefore, he defines marriage as a relationship between one man and one woman. Two males or two females cannot be married to one another. Many governments have redefined marriage to include same-sex couples. However, their redefinition does not mean that the relationship is in fact marriage. Advocates of homosexual relationships argue that they have a right to have their relationships included under the definition of marriage. What they do is similar to what someone might do if he attempted to call a rat a 'lion'. No matter how much he insisted on his right to this definition, a rat is not a lion. Homosexual unions or partnerships are simply not marriages.

Since sexual intercourse is to be confined to the marriage relationship, any form of same-sex sexual relations is explicitly prohibited by God, and is declared to be unnatural (Rom 1.24–28) and abominable (Lev 18.22; Lev 20.13; 1 Cor 6.9). Advocates of homosexual relationships attempt to circumvent God's law by arguing that the Bible's prohibitions are time-bound and cultural. This is merely wishful thinking on their part. Homosexual practices are

identified as sin in both the OT and NT. Since marriage is a creation ordinance, which is between one man and one woman, and sexual intercourse is to occur only within the marriage relationship, the prohibition against homosexual acts is founded in creation.

Homosexual activists also claim that their same-sex 'love' (more accurately, *lust*) is an inherited trait. They do not want it to be considered as a choice, because then it would be possible for people to choose not to engage in homosexual acts. Some people claim that the debate is not about nature vs nurture nor about decision vs destiny. They claim that sexual preferences could result from a combination of factors, and be different for different people. Ironically, many of those who claim that there is a genetic basis for homosexual desires, also believe that mankind is the product of evolution. However, they cannot explain, by their own theory, how the forces of natural selection would have selected, through breeding, for a trait that cannot provide competitive advantage. If evolution were true, the (supposed) gene for homosexuality would have disappeared long ago from the human genome. Even if there is a genetic component to homosexual traits, this does not mean either that homosexuals may marry others of the same sex or that they may engage in sexual relations outside of marriage with a person of the same sex. Some people may have a genetic tendency to alcohol addiction. Their genetic tendency does not mean that it is right for them to become drunk—since drunkenness is a sin (Eph 5.18). Their genetic tendency makes it more necessary for them to avoid any contact with alcohol and being in situations where they would be tempted. Likewise, even if it could be proved that a person had a genetic tendency to homosexuality, this would not give him an excuse for doing something that God declares to be wicked—it is a logical fallacy to conclude that what is necessary is virtuous. Rather, it would make it necessary for him to be careful not to put himself into a situation where he was tempted to engage in homosexual practices.

Reproductive Technologies [April 24] (Gen 2.24)

From the beginning, God's intention was that marriage would be a life-long relationship between one man and one woman, sexual relations would be confined to marriage, and children would be produced only within that union. Until about 1970, that was the normative view, if not the prevailing practice, in Western culture. However, since then views have changed dramatically. Now, it is commonly believed that sexual intercourse should be freely available, without marriage; children can be raised outside of marriage (as we noted in a previous meditation, more than half of the children in the US are now born to unwed mothers); and that children can be produced without recourse to sexual intercourse. The change in attitudes and beliefs has been facilitated by the introduction of the 'pill' in 1960; unrestricted abortion after the 1973 US Supreme Court decision in *Roe vs Wade*; dozens of reproductive technologies developed since July 1978 when Louise Brown, the first 'test-tube baby', was born; and new definitions of 'marriage' which include same-sex couples. What God intended to be together—marriage, sex, children—was torn asunder by 20th-century man, with devastating consequences.

Some of the consequences include: millions of children being aborted every year, sex-selective abortions, children growing up without fathers engaged in their nurture, practicing homosexuals adopting babies, surrogate mothers suing to parent children that are not their biological offspring, lesbians using artificial insemination to produce children, auctions of beautiful models' ovarian eggs, expensive procedures being used to overcome fertility problems, breeding of 'designer babies', and custody disputes between 'parents'. When God's definition of marriage is rejected, confusion reigns. When God's law and institutions are rejected the world degenerates into chaos. It is true that in the ancient world there was also much abuse of marriage, including polygamy, divorce, sex outside of marriage, and even the use of concubines as surrogate mothers to produce children for infertile women. However, today we have seen an explosion of technologies that support the abuse of marriage—in particular to support sexual intercourse without ever producing children and producing children without sex.

Some of the dozens of reproductive technologies available today, include:

- In vitro fertilization and intracytoplasmic sperm injections.
- Assisted hatching, which increases the likelihood of fertilization.

• Donation of ovarian eggs from one woman and placing them in a recipient.

Today, we cannot examine the numerous moral and ethical ramifications associated with the complex area of modern reproductive technologies. At best, we can only consider some principles which should guide Christians thinking about the application of such technologies:

- God is the author of life and conception (Gen 29.31; Gen 30.2, 22). Infertility is part of God's work of unfolding his holy and good purposes. Children must not be made into an idol. Therefore, we must not become distressed if his plans for us include our not being able to produce children, and we must consider what other plans he has for us. We must truly believe that God has promised never to place a challenge before us that is more than we can bear (1 Cor 10.13).
- Just as we use technologies which God has given us to prolong life and to overcome medical problems (e.g., prosthetics, surgery, and drugs), there cannot be an absolute prohibition against using all forms of reproductive technologies.
- However, we must not use any reproductive technology that will result in our participation in an immoral action. Since human life begins at conception, we must preclude any fertility technique which requires the fertilization of multiple eggs and the destruction of the 'extra' embryos. This, in principle, is no different from abortion. Sadly, many Christian couples who pursue IVF techniques of this type allow the expediency of saving money or increasing the probability of a successful implantation to overrule the fact that they are complicit in the sacrifice of a human life.
- Since marriage is to be between one man and one woman, we also should rule out reproductive technologies which involve third-party donors of eggs or sperm, or implanting a fertilized egg from a married couple in a host womb of a surrogate mother. A way to demonstrate that these techniques are improper is by asking the question, would it be right for a married man to use a concubine to bear a child for his wife? Most Christians would reject that option. In principle, the difference between these techniques and using a concubine is merely the mechanical means of achieving egg fertilization and implantation.
- We should avoid any reproductive technologies which encourage the commoditization and commercialization of human life.
- We should also consider what might be the psychological impact on a child produced through the use of reproductive technologies if he learns that he was conceived in a 'petri dish'; especially if the egg and sperm were purchased on the Internet.

God's approved means of human procreation is through the sexual act within a marriage. Therefore, any reproductive technology we use should honour the institution of marriage and the marriage bed. Let us not play God but trust his ways and his providences. As our Creator, he knows what is best for us.

The State of Innocence [April 25] (Gen 2.25)

We might think that both the placement and the content of this verse is rather strange. It appears to be an odd way to conclude the creation account. Also, the statement itself, about the man and his wife being naked, seems peculiar to us. Yet, as we consider what it teaches, we will realize that God uses an amazing economy of words as he communicates important truths.

The first thing we should note is that this verse serves as a transition between the account of creation and what follows. A contrast is established between mankind's initial state of innocence as they came from the hand of God, and the state of sin and guilt that they would introduce into the world shortly after having been blessed with perfect gifts. The contrast is particularly obvious when we compare this verse with 3.7, 10 and 11, where we see that the knowledge of their nakedness, after their sin, results in shame.

In the paradise of the Garden of Eden, Adam and Eve did not need any clothing to protect them from any of the

environment's elements. This means that even though there was some temperature variation (Gen 3.8), there were no extremes of sunlight, heat, cold, rain, or wind. Thus, the initial conditions of the garden (and probably on much of the continent) were so finely tuned that there was no element of discomfort in it. This reinforces the fact that all that God created was very good—it could not have been good if man would have suffered or even been uncomfortable from inclement weather.

Another dimension of this goodness was the created bodies with which God endowed Adam and Eve. They were ornaments of beauty and God delighted in the forms that he had created. Adam and Eve also delighted in the vision of beauty that they beheld in each other. To cover this beauty with man-made clothing or to have adorned it with trinkets of jewellery would have been an insult to the Creator—far worse than spray painting graffiti on a Rembrandt. Artists throughout history have considered the naked human form to be a work of beauty; however, our corrupt minds turn this artistic masterpiece into an excuse for lust.

In the Biblical context, nakedness, and seeing nakedness, means more than only being without clothing or observing someone who is unclothed. The term 'nakedness' is often used as a euphemism for sexual relations or sexual offences (Lev 18.6, 10; Lev 20.17-21). Even before the introduction of the specific prohibitions in the Mosaic Law, Ham's exposing the nakedness of his father Noah (probably a reference to sodomy) was viewed as bringing great shame on the family. This verse (Gen 2.25) mentions the 'man and his wife' and then speaks of their being 'naked'. This is probably an indirect reference to each "seeing the other's nakedness"—i.e., having sexual relations. If this is the case, then it is significant since it tells us that Adam and Eve's eating the forbidden fruit was not the sexual act, as some interpreters of Genesis chapter 3 suggest—we are told that their exposed nakedness had no shame associated with it. It also may provide a hint as to how soon after the creation was completed that sin entered the world. Cain could not have been conceived prior to Adam and Eve eating from the tree of knowledge of good and evil, and be born a sinner. Since Adam and Eve's sinful action, everyone is conceived with original sin (Ps 51.5). Therefore, it is likely that Adam and Eve enjoyed paradise for only a few days before they ate the forbidden fruit—before Eve's first ovulation.

Although they were literally, physically, naked, this statement also includes spiritual and psychological dimensions—as shown by the fact that they were not ashamed of their nakedness. The absence of shame tells us that they were sinless—they were morally innocent—and did not know experientially what sin was—they were naïvely innocent. Only a person who has committed no sin can have no shame. The additional implication is that Adam and Eve had nothing to hide from themselves, from each other, or from God. The statement about their nakedness is symbolic of their complete openness and is an idiom for innocence. In English, we have a similar idiom that expresses this concept—the *naked truth*—and means that everything is in the open and nothing is being hidden. It tells us that they were at ease with one another and did not have a fear of being exploited or used by the other. In good marriages, a degree of trust between the husband and wife can be experienced; however, this trust cannot reach the level that Adam and Eve had with each other because sin leaves nagging doubts of potential betrayal or abuse.

In the sinless state, there was no shame associated with being naked or with the sexual act. When sin entered the world, the first thing that Adam and Eve identified as being out of order was their nakedness (Gen 3.7). The introduction of sin caused nakedness to become a source of shame. Ironically, the more licentious our society becomes the less shame it associates with public displays of nakedness and sexual acts. It has been the same at various times in history. The ancient Greeks viewed nakedness, at least among males, as heroic—as shown in their art. Roman society and Renaissance culture followed suit. Today, people who know no shame—more accurately, suppress their innate feelings of shame—like to show off their naked bodies. When the moral foundations of a society crumble, blushing over nakedness becomes a ridiculed prudishness. As Christians, we should reinforce the truth that exposing nakedness (outside of marriage) should be a source of shame.

A Creation Manifesto [April 26]

(Gen 1.1-2.25)

We have reached the end of the account of the beginning (Gen 1:1), in which God records his activities of creating, out of no pre-existing matter, everything in the universe. He concluded his work of creation by forming mankind, the pinnacle of his handiwork. The narrative is now going to move from the state of innocence to a state of guilt and shame. But, God's dealings with mankind will not end with Genesis chapter 3, with man's expulsion from the garden. God has great plans for mankind, whom he loves, and he will unfold history as he sets the stage for the Messiah's work—redemption of mankind from sin and the restoration of paradise. However, before we leave the sinless, perfect, paradise, it is necessary for us to summarize key conclusions from what we have considered in our meditations on Genesis chapters 1 and 2.

- 1. Genesis chapters 1 and 2 are a single, continuous (i.e., without gaps of millions of years), unified, historical (non-mythical), self-consistent, straightforward, and true account of God's creation of the universe (including space, time, energy and matter), the world, animals and mankind.
- 2. God created all things in the specific step-by-step order given in Genesis chapter 1. Any literary or thematic organization derivable from the creation account results from a recounting of the actual order of God's creative actions and not from a human author of the text who chose to structure the account topically.
- 3. God created all things (non-living and living) as discrete kinds (1 Cor 15.39-40), with no part of the created order being made from another part (Heb 11.3)—except for specified things such as the body of Adam which was made from the dust of the ground (Gen 2.7), not from an animal kind; and Eve who was made from a rib of Adam (Gen 2.21-22).
- 4. God created all things out of no pre-existing matter, by a supernatural voice of command (Gen 1:3) and by separate creative acts, not through natural processes such as macroevolution.
- 5. God could have created all things in an instant but chose to create in six 24-hour periods consisting of an evening and a morning, that were the first chronological days of history. Then he rested on the seventh day to establish a pattern of work and rest for mankind (Ex 20.11).
- 6. God created all things recently (about 6,000 years ago) and instantly, with all their diversity, in a mature and perfect state (with an inferred age)—to provide a well ordered cosmos inhabitable by mankind (Gen 1.31), who was created uniquely with the breath of God (Gen 2.7), to be God's image-bearer(Gen 1.27), with delegated dominion over the rest of the creation (Gen 1.26, 28).
- 7. God created kinds (Gen 1.11) with a broad genetic base that has disaggregated into species, each with a subset of the original gene pool. Since the first sin of Adam and Eve introduced death there has been a general deterioration of the created order (Rom 8.21-22) through accidental genetic mutation (which has been only deleterious), species extinction, and catastrophes such as the worldwide flood (Gen 6-8).
- 8. God and his creation can only be known and correctly understood by his creatures when he is acknowledged as our Creator and the creator of all things (Rev 4.11), as he has revealed himself in his authoritative, self-revelation—the Bible.
- 9. A faithful and Biblically based theology, in all its doctrines, must presuppose, and be based on, the doctrine of creation.
- 10. The gospel of Jesus Christ, the saviour of the world, must be presented within the context of the truth that God created the heavens and the earth (Acts 17.24-28).

The conclusions stated above *must* be accepted as truth because they are what God has communicated in his word.

No one can be a consistent Christian if he rejects any of these conclusions. No congregation should call a pastor who does not accept them, and no seminary or Christian university should appoint as a professor anyone who does not espouse them. The doctrine of creation is not open to question, opinion, or 'academic freedom' because no person has a right to reject or twist God's revealed word. We must not accept the opinions and theories of unbelievers who claim to be scientific, over the word of God. And, we must not put God into a little box by saying that he could not have created as he said he did. The rejection of any of these conclusions can only lead to one's questioning the veracity of Scripture and to the introduction and acceptance of all kinds of falsehood. All valid Christian belief must begin with a correct understanding of the doctrine of creation. Without doubt, people have been redeemed by the blood of Christ who do not believe the conclusions presented here. However, this does not mean that they can be excused for their unbelief. It only demonstrates that the love and mercy of God are greater than any of our sins.

Satan and the Serpent [April 27] (Gen 3.1)

There are only two instances in the Biblical record of animals speaking—the snake in this account, and Balaam's donkey (Num 22.28, 30). Balaam did not appear to be surprised when his donkey asked why it had been beaten— he may have been tuned to the extraordinary because God had been previously communicating directly with him. There is no doubt we would be surprised if an animal began speaking to us—we know that it cannot happen naturally. Eve, in contrast, being a new creature, had limited experience with the animal realm and may have let her thrill of meeting a speaking serpent overcome her logical faculties. If she thought at all about the improbability of a non-rational animal speaking, she may have reasoned that this was an instance of a new creature of which she was unaware—she had not been around when Adam named the animals, so did not know about all the different kinds of animals. We know from elsewhere in Scripture, that the serpent was not speaking of its own accord. Like Balaam's donkey the serpent was possessed by a rational spirit being; in this case by Satan, who used the serpent as his mouthpiece (2 Cor 11.3; Rev 12.9; Rev 20.2).

There may be a number of reasons why Satan chose to possess the serpent in order to speak to the woman. One factor that we need to consider is that the Bible does not state that Satan has miraculous powers—although some interpreters claim that Satan was behind the Egyptian magician's abilities to mirror the miracles Moses performed, they were probably equivalent to tricks of sleight-of-hand. Satan's (and demons') power is likely confined to an ability to possess humans (Mt 4.24; Eph 2.2) and animals (Mt 8.31) and to tempt and deceive mankind—except when Satan is given explicit permission by God to intervene directly in the physical realm (e.g., Job 1.6-12; Job 2.1-7). We must not think of Satan as equivalent to God, but an evil counterpart. Satan was a created angel who led a rebellion against God's authority. His means of waging war against God are in the spiritual realm (Eph 6.12). Therefore, he was probably not able to take on a material form and appear before Eve. So, he had to use a possessed animal as his means of speaking with her.

Another reason why Satan may have chosen the serpent as his instrument is because of its appearance. We are probably mistaken if we think that the animal which appeared before Eve was like a modern snake—paintings of the temptation of Eve usually include a python-like creature wrapped around the trunk or a branch of a tree. It is likely that the serpent that tempted her was a four-legged reptile, which may have had wings. Its later punishment confined it (and all of its descendants) to crawl on its belly (Gen 3.14) as its legs and wings had been removed. In addition, this serpent was probably a very colourful creature (as evidenced by the variety of colours and patterns which modern snakes can have). It is not easy to determine the derivation of the word translated as 'serpent', but some suggest that it might have the same root as the word translated 'brass' (Gen 4.22). If so, this would reinforce the idea that the serpent was pleasant to look at. It may have been similar to what we envision a dragon to be like, but beautiful, rather than what we think of as serpents today. Therefore, the original serpent may have been very attractive to Eve and thus a fitting instrument for Satan's wiles.

Finally, Satan chose to use the serpent as his messenger for a reason stated in the text. Satan had likely observed

the creation of the animals (as the angels were probably created on the first day of creation) and of Adam's naming of them, so he knew something of the nature of the beast. We are told that the serpent was more crafty than any other beast of the field. The word translated 'crafty' has the idea of 'shrewd' or even 'sensible'. At this point, the meaning cannot include *deception* since there was no sin in the world, and animals cannot act deceptively. Rather, the idea that is intended may be that the serpent was a subtle (KJV) creature. It has been noted by many commentators that the Hebrew word (*arum*) that is used to describe the serpent as crafty appears to be a play on the word (*asummim*) used to describe Adam and Even as naked. If this is the case, then the original nature of the serpent may have been one of openness and it may have appeared to Eve as a harmless creature. Satan used the animal's nature to deceive the woman. This is a marked contrast to snakes today—we do not consider them open and harmless but are wary of their sneaking habits.

We cannot leave our consideration of the serpent without addressing a foolish notion held by some interpreters. They state that the account is mythological and that the serpent was not a real beast but a symbol for human curiosity or for an inner voice which tempts us to do evil. The serpent was a real creature as shown by the statement that it was included among the beasts of the field, it was consigned to crawl on the ground for the rest of its life, the simplicity of the historical narrative, and the fact that the New Testament treats it as historical (2 Cor 11.3).

We learn from this encounter between Eve and the possessed serpent that Satan can use attractive and pleasant things—animals or other people—of this world to tempt us. It warns us of his deceptive nature—this is why he is called the father of lies (Jn 8.44)—and how he can twist what is good in its own nature into something that he can use in his wicked attempt to destroy all of mankind.

Satan [April 28] (Gen 3.1)

In the previous meditation, we noted that Satan had possessed the serpent as his instrument for tempting Eve. The fact that it was Satan behind the animal raises a number of questions about Satan, which we will now address.

Satan is an angelic being who was created along with the other angels, probably on the first day of creation. The angels collectively observed the rest of God's creative acts (Job 38.4-7). Satan was probably one from among the leading class of angels (a peer of the named angels, Gabriel and Michael) and led a rebellion of a number (some believe it was a third, based on Rev 12.4) of the angels against God's rule (2 Pt 2.4; Jude 6; Rev 12.7-9). There is much speculation as to why Satan rebelled. Some have suggested that it was out of jealousy when he saw God create mankind and give them dominion over the created order. Regardless of the reason, he has been a liar from the beginning (Jn 8.44), so it is not surprising that the first statements from his mouth are a lie deceptively appearing to be the truth (Gen 3.1), followed by an explicit lie (Gen 3.4). As soon as he became a sinner, he became a *satan* (accuser); as soon as he became a traitor against God, he became a tempter of man.

There are many who claim that Satan (or Devil, from the Greek translation of the Hebrew word) is not a real creature. For example, one poll found that 90% of Americans believe in God, but less than half say that they believe that Satan is real. However, the number who *claim* that they don't believe in Satan is much larger than the number who truly believe that he does not exist. Satan is such a proud creature that he is as disturbed by people worshipping God as he is by people failing to worship himself. Satan does not want his existence to be denied by men, he wants it to be recognized. The real reason people do not want to acknowledge their belief in Satan is that it is unfashionable, and they don't want to commit social suicide. Satan is okay with people secretly believing in him, but publicly denying him—he loves their commitment and duplicity. The reality is that most people believe in the existence of Satan, and of demons, as evidenced by the way people consume books and movies that deal with the supernatural evil realm as if they were eating potato chips.

Satan is given many other names in Scripture which are consistent with his despicable character, including: "Beelzebub, the prince of demons" (Lk 11.15), the "great dragon" and "ancient serpent" (Rev 12.9), the "ruler of

this world" (Jn 12.31), "the prince of the power of the air" (Eph 2.2), "the god of this world" (2 Cor 4.4), and the "evil one" (1 Jn 2.13). His entire being strikes out in rage against God and his glory, as demonstrated through his unremitting attacks against the pinnacle of creation—mankind.

Satan is powerful in the spiritual realm. However, we need to be careful how we view his power. He does not have miraculous powers, nor does he have the ability to foretell the future. His power is likely confined to possessing humans (Mt 4.24; Eph 2.2) and animals (Mt 8.31) and tempting and deceiving mankind. We must not think of Satan as equivalent to God, but an evil counterpart. In addition, Satan's powers are severely limited now that Christ has procured redemption for his people (Jn 12.31; Rev 20.2-3). It is not possible for him to take possession of a true believer in Christ—the Holy Spirit who possesses a believer would not permit this. Satan is always under God's control and consigned to everlasting damnation (Rom 16.20; Rev 20.1-2).

Since his animosity against God and man is so intense, and his powers of possession and temptation so strong, we have to wonder why he is not specifically named in the account of Eve's temptation. The serpent, a beast of the field, is given notoriety instead of Satan. God may slight Satan on purpose in this account. Satan is seldom mentioned in the OT. His first mention from a chronological perspective is in the book of Job (Job 1.6-12; Job 2.1-7), probably written before 2000 BC. The first named mention of him, in our English Bibles, is in 1 Chronicles 21.1; however, in the Hebrew OT the books of Chronicles appear last, not after 2 Kings as in our Bibles. His named absence from Genesis puts the emphasis on mankind's responsibility and does not allow mankind to use the excuse that they were tempted by a supernatural being. In addition, God may have determined to limit knowledge about Satan, as he does of angels, for a time, so that men would not think in dualistic terms or that the supernatural realm consists of a plurality of gods and demigods. God chose to use progressive revelation of the truth about the supernatural realm and reserved the fullness of revelation about Satan until it could be mediated thorough the incarnate Son of God—Jesus.

Even though Satan is finite, and his powers are limited, this does not mean that his wiles can be ignored. He is no less cunning today and his powers of deception and temptation are still strong. He is a "roaring lion, seeking someone to devour" (1 Pt 5.8), who desires greatly to tempt believers in Christ to sin. So, we need to be aware of his methods (2 Cor 2.11) and resist him (Eph 6.11; James 4.7). Men without Christ are held in slavery by him (2 Tim 2.26) and he uses his power to control their minds to influence them against Christ (Jn 13.2), his Church, and true worship of God. He uses false religions and evil governments—the False Prophet and the Beast (Rev 16.13; Rev 19.20; Rev 20.10)—as his pawns; and he compels the licentious hedonists to resist any imposition of God's law and to heap abuse on believers.

The Origin of Evil [April 29] (Gen 3.1)

The comedian, Flip Wilson, who died in 1998, sometimes played a character named Geraldine Jones whose line, "The devil made me do it!" became a widely recognized expression in contemporary culture. The laugh-line was used as an excuse for Geraldine's misbehaviour. Geraldine was not the first to blame someone else for her sin— Adam and Eve preceded her by about 6,000 years (Gen 3.12-13). This often practiced redirection of responsibility for sin leads to a consideration of the question of the origin of evil.

Asking about the origin of evil assumes that there is in fact something that we can call 'evil'. Anyone who knows anything about human nature, studies history, or watches the evening news knows that evil exists. Anyone who denies that evil exists is playing at being a 'moral nihilist'—one who asserts that morality, and therefore evil, does not exist. We could list endless examples of evil, mentioning men such as Stalin, Hitler, Kim Il Sung, or others like them. However, we should not define evil by examples but rather in absolute terms. While some religions define evil as spiritual ignorance, the only correct definition is that which is derived from the word of God in the Bible. Evil (or as it is also known by its synonym, *sin*) is ultimately rebellion against God's commands—either failing to do what he requires or doing what he forbids. Evil may be perpetrated against God directly (e.g., worshiping an

idol) or indirectly through his creation (e.g., murdering a fellow human or stealing what rightfully belongs to another).

Evil cannot be attributed to God. God himself does not sin and cannot sin, and all that he created was very good, both morally and aesthetically. Also, God does not tempt his rational creatures to sin (James 1.13). And, as Paul teaches (Rom 9.19) we must not argue that since God foreordained everything that happens he can be charged with being the author of sin. Therefore, we cannot find the origin of evil in God. Nor is evil a force or principle that has existed eternally as a counterbalance to God and goodness—any form of moral or philosophical dualism must be emphatically rejected by the fact that every entity (including Satan) that is not God, was created by God as good. So, we reject Eastern beliefs such as the Chinese Yin and Yang. Finally, evil is not a necessary constituent of existence. God is fully self-sufficient and does not need evil to exist. Evil was not present when man was created (Gen 1.31) and evil will not be present in the new heavens and earth (Rev 21.1-8). We also reject the ancient Greek idea that evil is inherent to the nature of matter.

Satan must have rebelled against God during the brief period between the time that God had created mankind and the time that he tempted Eve through the serpent. It is possible, as some have suggested, that Satan's reason for rebellion was not only that he wanted to usurp God's authority, but also that he was jealous of man's delegated authority (Gen 1.26). Evil in the angelic realm arose because the fallen angels chose to reject their assigned places and duties in the Kingdom of God and to strike out on their own. Evil arose from their own wilful desire to exist independently from God.

When Satan approached Eve to challenge God's authority to prohibit a particular action—eating from the tree of the knowledge of good and evil—he was living out his rebellious intent and wish to bring down mankind to his depraved level. Paul tells us that this is the way that evil works, it wants to bring others into its orbit (Rom 1.32). However, mankind is without excuse for the introduction of evil into humanity. Evil in man does not have its origin in Satan and his devils. Satan tempted Eve, he did not force her to act evil. We can see how important this distinction is when we consider the temptation of Jesus for forty days in the wilderness. Satan could only tempt, not force Jesus to sin. James places the origin of evil in man, where it belongs—in the desires that give birth to sin (Gen 1.14-15). Jesus' teachings on the subject confirms this (Mt 12.34; Mt 15.18). Evil in man arose from his own wilful desire to exist independently from God. Evil is the deliberate rejection or misuse of our God-given responsibilities. The origin and responsibility for evil lies in the heart of man, and each person is responsible for his own sins (Ezk 18.1-32).

God had a purpose for decreeing and permitting the introduction of evil, both among the fallen angels and in mankind, or it would not exist. While there is much that God has left unexplained about the origin of evil, we know that his purpose for its existence is to bring glory to himself. His glory is displayed in his conquering evil and through his exhibition of love for rebellious sinners. Therefore, rather than trying to explain what is largely unexplainable because our finite minds are polluted with sin, we should focus on what God has said that he has determined to do with evil. Instead of trying to probe the origin of evil, we should exult in the promise of evil's defeat. Evil will always exist in Hell; where Satan, the demons, and all unrepentant sinners are consigned forever. However, for believers in Jesus Christ and his atoning work on the cross, there is an end to all evil. We are unable to bring about the end of evil by our own initiatives (Rom 7.24), because evil possesses our entire beings—unable but not hopeless! Evil is the inevitable outcome of our sinful creaturehood, but not the necessary outcome. The solution to sin is found in our participation in Christ's death through belief in his resurrection and dying to sin, self, and the world. Thus, God makes it possible for us to be freed from the clutches of evil and to rise as new creations never to sin again.

Satan Tempts Eve [April 30] (Gen 3.1-5)

Prior to the account of the temptation of Eve we read that "a man shall ... hold fast to his wife, and they shall

become one flesh." (Gen 2.24) Just as the first man should have held fast to his wife, so his wife should have held fast to her husband. Yet, it appears that Adam and Eve had become separated in the garden. However, the idea that they were separated is debated. A common view is that Adam was present during the discourse between Satan and Eve—for example, Renaissance paintings by Michelangelo, Giulio Romano, Jacopo Tintoretto, and others, often depict Adam and Eve together with the serpent. To support this view, some suggest that since the form of the verbs Satan uses are in the second-person-plural this implies that Adam was present during the dialogue. However, Satan could have used the plural verbs even though Adam was not present so that the woman would not feel that she was acting on her own—as shown by the fact that she wanted to include her husband in the fruit-tasting activity (Gen 3.6). Also, it is difficult to believe that Adam would have permitted Satan to talk with Eve as he did—Adam would have known that serpents don't naturally speak and he would have had a holy jealousy to protect his wife. Therefore, it is likely that Eve was alone when she was approached by Satan as he possessed the serpent.

One possible explanation for why Eve was alone is that after Adam had told her about the command to abstain from eating from the tree of the knowledge of good and evil, she set out to satisfy her curiosity. She wandered near the forbidden tree so that she could see what was so special about it. For Satan, this was the opportune time to tempt her; while she was separated from the protective custody of her husband. This is a warning to us that we should steer clear of anything which might tempt us (Ps 1.1; Prov 4.14-15) and, as much as possible, stay in fellowship with other believers. If we do not, we will be less able to defend ourselves from temptation when we are on our own, and Satan and his demons may find a way to draw us into sin.

Satan approached Eve while she was alone, probably for a number of reasons. He knew that it would be easier to attack the will power of one person rather than of two who could work together to present counter-arguments. He also knew that Eve would be easier to tempt than Adam. She had probably not heard the command about the tree directly from God, as had Adam (Gen 2.16-17), so she had to take it as second-hand hearsay. She had, at this point, no reason to doubt her husband, but it would have been easier for her to believe that the communication was incomplete. In addition, Satan seems to have known that the woman was easier to deceive than her husband (1 Tim 2.14) because she had less direct knowledge about the nature of the animals and of God's commands, and because she was a woman. It is not considered politically correct today to suggest that there are differences between men and women, but it does appear that women are generally easier to dupe and to prey upon than men (this is one reason for the special warnings in Scripture to care for widows and not to oppress them). Satan knew that Adam could not be deceived, so he used Eve as the means of getting at Adam—Adam was not deceived, he knew exactly what he was doing when he ate the fruit, and he sinned willfully. Eve's weaknesses were her sensitivity to the beautiful talking serpent, her sympathetic ear, and her limited knowledge. Adam's weakness was his unquestioning trust of his only human friend—his wife. Satan used Job's wife in a similar way to tempt Job (Job 2.9), but unsuccessfully (Gen 2.10). Satan also tried to tempt Jesus through a close friend-Peter (Mt 16.22)-but also unsuccessfully (Mt 16.23).

It is clear from these examples that Satan is a keen observer of human nature. He hates mankind as an enemy and goes about like a roaring lion seeking whom to devour (1 Pt 5.8). Do not be fooled! Satan and his demons do exist and are out to destroy us, to spite God. So, they study their enemies looking for every possible weakness. Then they pick temptations and use techniques which align with our personalities, God-given gifts, and physical constitution. For example, when rich food is set in front of some who have trouble resisting the sensation on their palates, temptation strikes. Others they tempt with 'come-on' invitations in e-mails from girls named 'Lindsay' so that they will peek at pornography. They use frustrations as opportunities to tempt the impatient so that they lose their tempers and react in anger. They tempt the intelligent with venues for receiving accolades. And they place adoring fans in front of those whom they can tempt to boast of their athletic prowess.

Jesus used story telling effectively to illustrate concepts such as neighbourly caring for others and seeking first the Kingdom of God. In the same way, C. S. Lewis used stories to teach about key themes from the Gospel. One of his best-known examples is *The Screwtape Letters*, in which Uncle Screwtape ("Undersecretary for the Infernal Lowerarchy") writes letters to his nephew Wormwood—an inexperienced devil—with guidance on how to tempt

his assigned 'patient'. In these letters, Screwtape turns good and evil upside down and uses the simple things of life and common difficulties to drag down his human enemies to Hell. Satan did the same thing with Eve when he tempted her. He made God out to be a liar and insinuated that eating the forbidden fruit would give her untold knowledge and pleasure. In our next meditation, we will consider in more detail Satan's temptation tactics. But, for now, we need to resist the Devil and he will flee from us (James 4.7).

Satan's Temptation Tactics [May 1]

(Gen 3.1-5)

Satan is a "roaring lion, seeking someone to devour" (1 Pt 5.8); So, he and his demon henchmen use many blatant and subtle tactics to tempt mankind to sin. By considering the spectrum of means that he uses in this first temptation we can become more aware of his methods and avoid being outwitted by him.

He opens with a diversionary tactic to put Eve off guard (Gen 3.1). He doesn't start his conquest of her with a barrage of invectives against God—she would have seen his intentions and likely would have spoken in defence of God. Rather he asks a question that seems like an innocent query, but is cloaking a pit of venom. The form of his question is intended to be contradicted—he knew that he was misrepresenting God's prohibition. However, the question is also designed to confuse the woman and to plant in her mind the possibility that either she had misunderstood God's prohibition or that God had made a mistake when he restricted access to the tree of the knowledge of good and evil. Eve had likely been instructed about the prohibition by Adam, her covenant representative, rather than directly by God, and she may have begun to wonder if Adam had relayed the command correctly. So, Satan's question introduced an element of doubt into her mind that he would capitalize upon as he continued to bring her into a state of sin and misery. The first weapon in Satan's attack arsenal is to make us begin to question God's word.

Satan's question is the first recorded words of a created being speaking about God. Therefore, it should be noticed that he refers to God by using the word *God*, rather than by using his covenant name—the *LORD* (Yahweh). Satan certainly would have known of God's name, since Heaven would have been filled with praise of his holy name from the angels, before Satan rebelled. He effectively de-personalized God by speaking of him as an abstract entity. This provides a context for the remainder of his challenge and makes it easier for Eve to take the bait—she wouldn't have had the same sense of responsibility toward a distant impersonal deity that she would have had toward one whom she conversed with daily and addressed by his personal name.

Satan's initial question is also an insinuation against God. It suggests that he did not have good intentions toward mankind when he placed a prohibition before them. It is obvious that Eve understood this accusation against God, since she leaped to his defence by correctly stating that they had only been prohibited from eating from one tree. However, Satan's thrust had drawn first-blood. Eve added the restriction 'neither shall you touch it'. Some think she added this hedge around the tree and its fruit to reinforce her commitment to God's command. However, since what she says is incorrect, and actually a lie, she has entered the valley of sin, begun to question God's goodness, and charges him with a severity rather than blessing him for the bounty he has given them by providing access to all the other trees in the garden. We tend to respond in the same way to God's commands. Instead of rejoicing in the abundance of blessings he has given us, we begrudge him the portions of our lives he has reserved for himself— a tithe of our increase and keeping one day of seven holy to him—and we view him as a spoil-sport if we cannot indulge our lusts and passions.

The tempter responds to the woman's report of the threatened consequences of eating the fruit—death—by blatantly contradicting God's word. Some interpreters suggest that Satan's response is not an outright lie, since Adam and Eve lived for hundreds of years after they ate the fruit. They entirely misunderstand God's definition of death—a separation of two things that should not be separated (e.g., God and man, body and spirit) which destroys their unity. In addition, Satan is not omniscient, nor could he read God's mind, so there was no possible way that he could have known that Adam and Eve would not have been annihilated the moment they tasted the fruit. He does

not give the woman time to respond to this lie, but moves quickly to add another lie. Again, it would have been impossible for Satan to know the outcome of eating the fruit, so his suggestion that God was withholding knowledge from his creatures, is nothing more than a blatant abusive denouncement of God's character.

He provides Eve with the basis for a conscience salving rationalization to sin. She could think that since God was holding them back from fulfilling their destiny, it must be all right to eat the fruit. We use this kind of rationalization ourselves, "God wants me to be happy, therefore I can do …" We forget that God's ultimate destiny for us is to be obedient and our true happiness is based on obedience to his revealed will—as given in his law. Satan strikes a final blow, by making sin appear beautiful and a blessing for mankind—if you eat from the tree "you will be like God, knowing good and evil." What could man desire more than being like his Creator? However, the self-actualization and liberation that Satan promised the woman is the same false reward that he holds out to each of us; for example, he says, "If you get revenge you will feel better," or "If you have an affair you will grow to love and appreciate your wife more." Bite, and taste the foul dust of death!

Be warned! Satan's tactics are the same today, though often subtly disguised: question God's word and call it a lie, demean his gracious goodness toward mankind, and hold out the promise of rewards from the pleasures of sin.

God's Authoritative Word [May 2] (Gen 3.1-5)

Mankind's serious problem with sin and its accompanying evil consequences began when Eve questioned the authority of God's word. Satan asked Eve, "Did God actually say ...", and planted the seed of doubt in her mind, which she cultivated into the full-grown plant of rebellion. Questioning the authority of God's word is at the root of all problems in society and the Church.

When God spoke, the universe (heavens and earth) he had created moments before became energized (Gen 1:3). When he spoke, the unformed became formed (Gen 1.9) and the non-living became alive (Gen 1.11). When he spoke, non-living, non-rational dust became his image-bearing living, rational creatures (Gen 1.26; Gen 2.7). Later, he demonstrated the authority of his word when he directed Adam how to live before him in obedience (Gen 2.16-17). And, when he spoke, his creatures were disciplined for their sin (Gen 3.14-19). Similarly, he showed that his word is to be obeyed when he commanded Noah to make the ark (Gen 6.14-16). These examples show that God's authoritative word covers a spectrum of domains, including the physical, permissible, penal, and pragmatic.

Today, God does not issue authoritative commands directly to his creatures, as he did with Adam and Noah, and later with Abraham, Moses, and others (the prophets and apostles). He completed delivering direct revelation with the voice of the living Word, Jesus Christ (Heb 1.1-2). The record of Jesus, in the NT along with the previous revelation provided in the OT, collectively (the Bible) now serves as God's authoritative word for mankind.

Most people today claim that if the Bible contains any authoritative statements they are confined to the areas of religion or theology. For them, the Bible is at best a guide which can help a person obtain a spiritual 'high' or find comfort in a time of discouragement. They claim that the Bible was written for an agrarian society, and has little practical relevance to guide in other domains of human endeavour and knowledge; particularly in the 21st century which is dominated by advanced technologies, a global economy, competing religious mores, nation states at war with radicalism, and a rapidly changing understanding of 'standards' in bioethics and sexual practices. In contrast to this dismissive view of God's word, God demonstrated at the beginning that his authoritative word rules across all areas of life.

The Bible is the ultimate standard for all areas of human activity and thought. Whatever areas the Bible addresses, what God says is the final authoritative word on the matter. The Bible is not just a book about how to be saved, it is the standard for what men must believe in every area of thought, and how mankind must live and act before their Creator. Consider two examples:

- It is often claimed that the Bible is not a science textbook and what it says (for example, about how the world was created in Genesis chapter 1) must be interpreted in the light of the abundance of 'scientific' facts available today. This claim is usually made by people in the Church who reject the young-earth, six-day, creation view and want to find a way to hold to the moral teachings of the Bible at the same time as accepting evolutionary cosmological and biological theories. There is *nothing* in the Bible which contradicts the facts of science (as opposed to value-laden anti-God presuppositions). What the Bible says about how God created or how the flood happened is factual and to be accepted at face value as a literal historical account.
- Most nations in the West have outlawed capital punishment for murder—even in uncontested cases where many witnesses observed a psychopath gun down police and civilians. Their legislators claim that executing a murderer is barbaric. In so doing, they extend their claim of barbarism to God who decreed capital punishment for murder (Gen 9.5-6). By ignoring God's demand that crimes be equitably punished they have created a culture which ignores law and is progressively becoming more violent.

The Bible does not provide information only in the areas of theology and soteriology for the few who wish to believe it. Nor is it one instance among many guides for how to live a moral life. The Bible is the ultimate standard in *every* area in which it speaks. When it describes events and provides relative dates (e.g., the years in the chronologies in chapter 5 and 11), we must accept its statements as an accurate record of historical events, regardless of what archaeologists or radiocarbon readings might suggest about supposed dates. When it speaks about the nature of God, proper and false worship (Gen 4.3-7), law (e.g., the Ten Commandments), standards for punishment, responsibilities of civil magistrates, historical events, anthropology, psychology, linguistics (Gen 11.7-9), economic principles, and God's use of primary or secondary causes its authority must be accepted and applied.

God cannot lie, but declares only what is true. Therefore, the Bible, as his word, is completely accurate. Everything which it says can be taken as declared truth. And, as such it is the final authoritative word for mankind. If we question the authority of God's word in one area—e.g., claiming that Genesis chapter 1 is a topically arranged story rather than accepting it as history; or claiming that the flood was local instead of global, as his word declares—we open the door to rejecting the authority of God's word in every area—e.g., what it says about the virgin conception of Jesus and his resurrection.

Empiricism vs Presuppositionalism [May 3] (Gen 3.1-5)

In the branch of philosophy known as epistemology discussions are centered on a consideration of what knowledge is and how it is acquired by us. In particular, a key question is what knowledge can be known *a priori*, non-empirically and independent of experience; and what knowledge is gained *a posteriori*, through experience. A related debate, largely dismissed by non-Christian philosophers, revolves around whether all *a priori* knowledge is obtained by reason alone or if it is necessary to obtain some knowledge through revelation from God. We noted previously (in *Induction and Image* [March 2]), that if God did not reveal knowledge to us, we could not know that anything other than ourselves existed, process anything received by our senses, learn anything about the external world, extrapolate inductively from individual instances to populations, or communicate with other people.

As Christians, we should accept as an unassailable fact that what God has revealed in the Bible is absolute—which means that it is the highest order of knowledge and precedes all knowledge obtained through reason and through empirical methods. However, it is very often not the case that professing Christians accept this presupposition. They let either reason or experience become their final basis for establishing 'truth', and place them both above what God has revealed in his word. This is the fundamental reason why there are so many professing Christians who state, for example, that they believe that the earth is billions of years old and that the variety of life that we see around us came from a single ancestral life form. Similarly, it is the primary reason why many Bible scholars question the reality of miracles (e.g., Jesus multiplying the loaves and fishes or Jonah being swallowed by a large fish). We hear of arguments such as the following: "It is not reasonable to believe that the world is only 6,000 years old when the

geological formations took billions of years to form", or that "God/Jesus could not have done ...". We could multiple examples from science, philosophy, psychology, and ethics. The prevailing scepticism today in Western culture, and in the Church, about the priority of revealed Biblical truth is, at root, based on a doubt about the reliability of God's word.

Satan opened his discourse with the woman with the words, "Did God actually say …?" His intention was to instill doubt in Eve's mind and to cause her to question God's word as absolute. Eve entertained Satan's hypothesis and began to use an evidence-first approach for determining the truthfulness of what God or Satan had to say. She determined to let reason (her own rational thought processes) become the determining factor for whether God was speaking the truth. Her reasoning then advanced to an assessment of who spoke the truth, God or Satan, through an experiment—eating the fruit. She allowed empiricism to overrule the presupposition that God's word is absolute— both final and entirely true. Ironically, by applying her own reason to assess the truthfulness of God's word was accurate. Yet, since her senses and mind were both created by God, she could have had no means of determining whether God was being truthful. In order to determine objectively whether God was being truthful she would have had to a ppeal to a third party who was greater than God. This external standard certainly could not be her own mind, since it was created by God and therefore was less than God. Also, it would have been a logical contradiction for her to appeal to a third party greater than God since, by definition and fact, nothing can exist that is greater than God.

Satan's ploy was to get the woman to doubt God's word and to place his (Satan's) word, or her own reasoned thoughts, above God's word. One of his favorite lies is that knowledge can be acquired by creatures apart from their Creator. Her response should have been like that of Jesus when he was tempted by Satan (Mt 4.1-11). After each temptation that Satan placed in front of him, Jesus responded emphatically with the statement, "It is written". By so doing, he declared that the word of God is the final authority.

When we first encounter God's prohibition against eating from a particular tree, it might appear to us to be nonsensical and irrational. After all, we might think, what does it matter if Adam and Eve ate fruit from one tree or another? What difference could it make if they ate from that particular tree? That God did not give Adam a reason for the prohibition makes it seem capricious. However, God did not have to inform Adam of the reason. Nor does he have to give us an explanation for why he makes particular demands of us, or forbids us from doing certain things. Because we do not know the reasons does not mean that God's law is to be ignored or disobeyed—it is a very dangerous and evil tendency to suggest that God does not need to be obeyed until he has provided us with a reason for his commands. The reality is that God graciously gives us abundant reasons for most of his stipulations. Yet, we still end up challenging his word as if we are his equals. We need to accept the fact that any knowledge we have derived in this life, by deductive or inductive reasoning, or through observation, is infinitely small and polluted with sin when it is compared with God's immense and perfect knowledge. Therefore, our response should be to regulate all that we think, say, and do by God's word. One simple truth should be our watchword: God says it, it is true, and thus we will believe it and obey it.

Is vs Ought [May 4] (Gen 3.1-5)

What is the root of all sin? When we consider the temptation of Eve, from the perspective of what may have been going through her mind that caused her to eat the forbidden fruit, we find that there are three probable root causes which interact with one another. At the very root is unbelief—doubting God's word (we considered that sin in the previous meditation). Unbelief is reinforced by two other root sins: pride and ingratitude. Pride worked in her heart to make her believe that she could be the final arbiter of right and wrong. Also, at the core of her decision to disobey God was the sin of ingratitude. These three attitudes reinforced one another to encourage her to take the formal step of rebellion against God. Thus, Eve had already sinned before she took a single bite of the fruit, through unbelief, pride, and ingratitude.

After unbelief, the second root of all sin is pride—a pride that makes us think that we can act independently from God. Eve displayed a spirit of pride when she began to question God's veracity. She substituted herself for God, and determined that she could be wiser than God and make ultimate decisions about what is right and wrong behaviour. Her real motive, as Satan had encouraged her, was not to be like God—since she was already like God, having been created in his image—but to be in the place of God. What Eve did not realize, or wish to retain in her thinking (i.e., she suppressed the truth), was that created moral beings cannot go their own way morally and find freedom—to attempt to do so would be like a fish deciding that it no longer wanted to live in water. Adam also sinned willingly and chose to take a path of autonomy from God. All mankind since Adam and Eve follow their desire to unseat God from his rightful place as governor of his creation.

One of the reasons we think that we know better than God is that we chafe at the boundaries which God he has established for us. Satan knew that this would be the case in mankind, because as a created rational being he was unhappy with God's moral boundaries and thought that he could use the same feeling to tempt the humans. So, he used this common reaction to God's law as the ground for tempting Eve. He overemphasized the strictness of God's law by suggesting that God had restricted access to *every* tree in the garden. This exaggeration caused Eve to react and to question what right God had to place *any* restriction on her desire for pleasure or happiness.

The third root of all sin is ingratitude. It is a direct corollary of pride, since when our pride gets the better of us we think that we are responsible for all of the blessings we have received and that we deserve everything that we have. This entitlement-mentality permeates society, from the lowest to the highest, because it is endemic to human nature. It is found in the welfare recipient who refuses to work and claims a right to his monthly cheques because he is a 'victim of society'. It is also found in the bank executive who believes that the key to the executive washroom and his monthly allowance for his BMW are his by right. Eve (and Adam, along with her) displayed an entitlement-mentality and ingratitude. They had been given all of the animals to be their servants and the immeasurably well-endowed garden as their kitchen cupboard. Yet, they were not truly thankful and begrudged the fact that the fruit from *one* tree had been withheld from them. There is a great irony in Satan's having used a serpent as his instrument to tempt Eve. The serpent was a servant to the woman, yet she heeded the message placed on its lips. Instead of listening to Satan she should have said, "It is written, 'God blessed them.""

Adam and Eve were not satisfied to have been given the ability by God to understand the difference between right and wrong; they wanted to abrogate to themselves the right to define the difference between the two. We see many examples of this tendency today—one is with regard to death; we all know intellectually what death is, however our society is not satisfied with God's right over death and has taken to itself the right to determine who in its opinion should (e.g., a murderer) and should not (e.g., the unborn) live. Because we (starting with Adam and Eve) assume that our reason is the final standard for all things, we use what *is* as the basis for establishing moral values rather than what *ought* to be. And, since we reject God's prerogative to establish moral standards, we end up living in an irrational netherworld where there can be no enduring principles for meaning, truth, or morality.

By succumbing to Satan's temptation, through a created beast, Adam and Eve betrayed the trust placed in them by God as rulers over his creation. They gave up their right to rule by engaging in an act of treachery against their master, which was manifested in an act of outright rebellion. Their sins of pride and ingratitude compelled them to reject the authority of their Creator and King and to commit their first formal sin—eating the forbidden fruit. In contrast, they should have accepted the straightforward command of God and praised him for all of his gracious and bountiful goodness to them. We also need to do the same. We need to accept God's direct commands given in the Bible; even the commands we don't like. We need to stop trying to outthink God by claiming that his commands are culturally conditioned and time-bound, by impugning his motives and doubting that he knows what is best for us, and by rationalizing why his law does not apply to us in the 21st century. We need to accept at face value his commands and obey them, and praise him for all the gracious provisions with which he has endowed us.

Mankind's First Formal Sin [May 5]

(Gen 3.6)

We have seen that Eve doubted God's word and that this led her to demand a false independence from God and to disregard his gracious goodness toward mankind. The result was that she then looked with an improper desire upon the forbidden fruit. Thus, her heart had already sinned before she sealed her rebellion with the formal action of taking and tasting the fruit. Until then, no one but God could have known her sin; but afterwards the ruby-red streak of juice dripping from her chin would have betrayed her heart to any who could have seen her face. The developmental steps of her sin, from a perverse heart through a plucking hand, to partner-hurt are spelled out in the account:

- *Spiritual*: Sin started with Eve wallowing in a cesspool of unbelief, pride, and ingratitude. The essence of sin is idolatry—centering our existence, purpose, and measure of truth in anything other than God and his word. She wanted to usurp God's place as lawgiver, and establish her own self as the authority for meaning and morality. She abandoned her loyalty to her Creator and worshiped and served the creature (Rom 1.25).
- *Sensual*: The progress of her sin continued with her eyes, with which she saw that the fruit was good—good aesthetically as a delight to look at and good practically as a source of food. Everything in God's creation was good (Gen 1.31), therefore we can be certain that the tree and its fruit were both attractive and that the fruit would have been tasty and nutritious. A great deal of sin passes through our eyes. Thus, Job makes a covenant with his eyes (Job 31.1) and Jesus warns us to pluck out the sinful eye (Mt 5.29).
- *Subjective*: Her sin continued with intellectual rationalizations: "What is so special about this tree? Why are we forbidden to eat from it? God could not have intended anything so good to be bad for us. The goodness which I see in it can only bring about good for Adam and me. What harm can come of tasting a little of the fruit? After all, we will gain the wisdom which it symbolizes." Through this thinking she concluded that the barriers—the prohibition and threat of punishment—to her taking action had been removed.
- *Speculation*: Eve speculated on how eating the fruit would benefit her—in this case, make her wise. Satan had suggested that the knowledge she would gain would make her like God, knowing good and evil (Gen 3.5). As has been said, a dangerous person is one who doesn't know that he doesn't know. Eve did not know that she desired unnecessary knowledge, that she knew enough, and that the knowledge wrongfully gained would be far more than she could handle. Much of our sin is likewise based on speculation—such as a false belief that it will benefit us with pleasure, prestige, or power.
- *Singular*: She took the fruit of her own volition. Her sin was her own. She was responsible for her own action. Satan tempted her, but did not force her to pluck the fruit or to put it to her lips. Satan may tempt us to jump into sin but he has no power to throw us into it (Mt 4.6).
- *Substantial*: Her own sin reached its climax with her physically taking and eating the substantial fruit. The heart-based sin was worked out in the formal act of using her holy body to materialize the sin. Most sins have both a spiritual or mental component and a physical component to them. Jesus emphasizes this in the *Sermon on the Mount*. Sin is displayed through the physical dimension, such as idol worship, adultery, theft, or murder. But each outward, physical sinful act has an underlying spiritual dimension, such as self-love, lust, covetousness, or hatred.
- Social: She gave some of the fruit to her husband and he ate also. Sin has a relational aspect associated with it. We want others to join us in the forbidden pleasures of our sins (Rom 1.32), or often, like Satan, desire to drag them down to share our misery. Personal sins almost always destroy relationships—there is actually no such thing as 'private sins'—even the sins that we think only pollute our minds worm their way into our relationships. In this instance, Adam should have been able to trust his wife and to assume her absolute fidelity. But we find that their relationship was destroyed as she embroiled her husband in her sin. Forever after, they would not have

been able to trust one another without an element of doubt clouding their relationship.

Nothing is said in the account about how Adam came to a decision to follow his wife's example. She may have used similar lie-filled arguments to Satan's or used feminine cunning to bewitch him; or voiced an apparently reasonable argument and showed Adam that she had eaten but had not died physically. Regardless, Adam walked the path of rebellion on his own and progressed through similar stages of sin to those Eve went through. However, there is an additional dimension which appears in Adam's sin—it was *self-willed*: Adam deliberately chose to heed Eve's invitation to partake. He knowingly ate what God had forbidden, which was an act of conscious rebellion against his Lord. He thereby abandoned his divinely ordained responsibility to keep the garden (Gen 2.15) and the woman that God had given him as "a helper fit for him" (Gen 2.18, 20).

Desires of the Eyes [May 6] (Gen 3.5-6)

The debate between Satan and Eve turned to Satan's advantage when he suggested to her that her eyes would be opened if she ate the forbidden fruit and that she would gain special knowledge. He used 'eyes' as a metonymy for 'mind'. However, his use of 'eyes' is important; and it is significant that he didn't suggest that her ears would be opened to hear secrets, or that if she stepped over to a flower bed and smelled the roses she would inhale understanding. With the mention of her eyes, the woman was tempted to look at the forbidden fruit. Our English translations accentuate the Hebrew 'and' (*waw* consecutive), which begins verse 6, with wording such as "*so when* [she] saw". This emphasizes the connection between the suggestion that her eyes would be opened and the actual use of her open eyes.

After only a few hours of observing human behaviour, Satan had quickly picked up on the importance humans place on what they see in order to draw conclusions about reality. Mankind's reliance on the perceptions of the eyes was even the situation in the sinless state, as is shown by Eve's accepting her observations of the fruit as authoritative. A well-known aphorism, "Seeing is believing", illustrates that humans assess their experiences, and establish their conclusions about what constitutes reality, through subjective filters. Since the events associated with the temptation in the garden, the root of sinful human autonomy has been illustrated by the empirical declaration, "I will believe it only if I see it with my own eyes!" (compare, Jn 20.25). When a person makes such a statement he declares that his sensory observations are flawless and that his assessment of the observations is the final determining factor for establishing truth about physical reality. In addition, it means that a word of witness from a reliable friend or even from God will be dismissed unless he personally validates the evidence. In this, he declares himself to be the final arbiter of truth. It is, however, ironic that men place such reliance on their eyes, when they can be easily deceived by their eyes. There are many illustrations of this from a magician's sleight of hand, to optical illusions and special effects in movies, to popular representations of the complex idea of layered-reality presented in movies such as *The Matrix* or *Inception*.

During the debate, Satan had no advantage or power over Eve until he could get her to focus her eyes on the prohibited fruit. Once her attention had been directed to the fruit, and she made her observations, she drew conclusions about the fruit—it was good for food, a delight to look at, and eating it would make her wise. However, her conclusions could not be validated merely by looking. Some wild mushrooms are very colourful and appear to be more appealing than the standard white mushrooms purchased at the supermarket. Yet, eating them can cause hallucinations or death. Likewise, an attractive actor/actress may appear to be the fulfilment of our lustful dreams. However, if we were to meet the person we might discover that he or she was full of inflated self-perceptions, cursed with the profanity of a drunken rapper, as intelligent as a squid, and had the personality of a dishrag. Many things which may appear good to our eyes are in fact full of poison. Eve discovered too late that what we perceive is not necessarily the truth about what we see.

Men and women are tempted by somewhat different things, but the eyes are a key instrument in their temptation. Women are more tempted than men by what they perceive to be popular clothing and accessory fashions. For

example, many women become covetous when they see another woman, such as a celebrity in an advertisement or a commuter on the subway, who is carrying the latest Ralph Lauren or Proenza Schouler designer handbag. Men are generally less tempted by the sight of clothing than women are. However, place a Ferrari *Berlinetta* in front of most men and their envy-juices will overflow. Similarly, it is with the eyes that men stimulate lust as they drill deeper into Web sites displaying X-rated visuals. Almost every breach of the Ten Commandments starts with the eyes. Adultery and theft are both stimulated by what people see, covet, and pursue. Similarly, false worship is often an emphasis on the eye-feast of apparel, colour, and ritual movement.

Elsewhere, the Bible provides support for the idea that the eye is the source of much temptation to sin. For example, in Proverbs the woman, Folly, presents appealing facades to the gullible so that she can ensure them. Later in Proverbs (Prov 27.20), we are informed that the eyes of men are never satisfied, as death cannot be. The Apostle John (1 Jn 2.16) warns us not to succumb to the desires of the flesh ("the tree was good for food"), the eyes ("a delight to the eyes"), and the pride of life ("to be desired to make one wise").

Eve should have thought, "It is not what I see, or think that I see, but what God says, that is real." We cannot excuse her by saying that she was merely a new creature and had little experience with interpreting reality. We have lots of experience, and know that what we see is not necessarily a true reflection of reality, and yet we constantly let what we see be the determining factor in our conclusion about the nature of reality. We believe our own eyes before we are willing to accept God's word. Eve should have kept her eyes focused on God and what he had provided her (a husband and blessings in paradise) and not let her eyes go on a shopping trip in the supermarket of temptation. Likewise, we need to learn to look to Jesus, the founder and perfector or our faith (Heb 12.2), and keep our eyes from wandering into illicit desires.

Interconnected Sins [May 7] (Gen 3.6)

James (Gen 2.10) says that if we fail to keep one command from God's law, we are held accountable for breaking all of it. He does not mean that we literally break every command when we break one. For example, a person who covets another's fancy car does not break the commandment against adultery. Rather, he is pointing out that a breach of any commandment makes man fully guilty and liable to receive the death penalty. However, his warning also implies that the laws of God are interconnected, and in breaking one commandment a person may actually break multiple commandments.

The Ten Commandments (along with the detailed commands—that is, the case laws—which apply the Ten Commandments to specific situations) are highly interconnected. Often when one command is broken, one or more of the other commands are also broken. An act of committing a specific sin often includes multiple sins. For example, when someone steals, the reason for his theft is usually connected with the sins of idolatry and covetousness.

We often think of the sin that Adam and Eve committed in the garden as a rather simple and straightforward action. However, as we have seen thus far, the actual act of taking the fruit was preceded by sins of unbelief, pride, and ingratitude. The first sin that they committed was far more complex than it may at first appear. On examination, we find that Adam and Eve broke all ten of the commands Moses would record later (Ex 20.3-17):

- 1. They defined for themselves other gods, which they viewed with greater esteem than the living God. In this instance, their gods were self-will and pleasure. They declared through their action that their wills were supreme and above the will and prohibition of the only true God.
- 2. They did not make a carved image to worship. However, the command also includes a prohibition against bowing down to natural objects (e.g., a star, tree, or animal). They made the fruit of the forbidden tree into an idol which they worshiped by believing that eating from it would give them blessings that they did not already possess.

- 3. They blasphemed the name of God by accepting Satan's statement that God was a liar (Gen 3.4). When Satan lied to Eve, her passive concurrence without objection, confirmed Satan's position, and she misused the name of the most holy God.
- 4. They broke the Sabbath by using it as a day to indulge their idolatry rather than as the holy day, which they were to set aside for the worship of God. The first sin did not occur on the sixth day of creation since God set aside the Sabbath Day on the seventh day and gave them instructions about its being holy, and they had not yet been expelled from the garden. The sin had to have occurred before Eve conceived Cain (Gen 4.1). At most, they would have had approximately two weeks from the time of creation to Eve's first conception as they fulfilled their mandate to be fruitful and multiply (Gen 1.22). Therefore, it is certain that they retained their sinless state for only a few days, at most. Thus, it is reasonable to conclude that they committed the first sin during their first full day in the Garden of Eden. The day that was to be exclusively set aside for honouring the glory of God, they turned into a day of rebellion and idolatry.
- 5. Adam and Eve did not have parents in the natural sense. However, God is considered to be their ultimate parent, as their Creator (Lk 3.38; Acts 17.29). God was also their parent in the broader sense of how the fifth commandment is to be applied—they were not to neglect or do anything against the honour and duty which belonged to the one in authority over them. By disobeying God's prohibition, they dishonoured their parent. And, interestingly, they failed to reap the blessing of the first command with a promise—they lost the deathless life with which they were created and became subject to physical death.
- 6. Adam and Eve committed suicide, murder, and genocide. Adam, as mankind's representative, was the first murderer, not Cain (Rom 5.12, 17).
- 7. The command against adultery (and all sexual sins) may appear to be the only command that they did not break. Ironically, many interpreters claim that the first sin was the discovery of sexual intercourse. However, we can, consistent with Scripture, interpret their infatuation with the fruit as spiritual adultery (Jer 3.6-9; Hos 1.2-3; Rev 2.22).
- 8. They committed theft by taking that which did not belong to them.
- 9. They indulged in lies by accepting Satan's lies, by deceiving themselves, and by deceiving one another about the benefits that would accrue from an indulgence in the fruit that was pleasing to their eyes and palates.
- 10. Adam and Eve's only neighbour was God, who enjoyed access to his property (Gen 3.8). They coveted the fruit of their neighbour specifically because they did not possess it, even though he had graciously given them, as guests, free access to every other tree in his garden (Gen 2.16).

Although the Ten Commandments would not be formally delivered to mankind for another 2,500 years, they are a summary expression of God's eternal law that applies to all of mankind through all time. Adam and Eve broke all of the Ten Commandments, individually and as a set, and became liable to the threatened punishment of death (Gen 2.17) for their capital crimes. Eating the forbidden fruit was no mere indulgence; it was the greatest disaster ever to befall mankind!

Original Sin [May 8] (Gen 3.6)

Sin and its consequences have been in the universe since the day when Adam and Eve ate from the fruit of the tree of the knowledge of good and evil. Sin has infected and affected every human being descended from Adam and Eve by natural generation. There have been no exceptions, and never will be—because in Adam all have sinned (Rom 5.12). This sinful state and condition in which men are born is called *original sin*—men are born with sinful natures, every aspect of their beings is polluted with sin, they are guilty of sin even before they commit any actual sins, and have no ability by their own initiative or by their own power to change their natures and turn Godward. The fact is that man can, and will, do only sinful things.

This truth has been contested vehemently for thousands of years, and major portions of the Church emphatically deny it. Yet, overwhelming empirical evidence demonstrates it to be true. Notwithstanding problems with inductive arguments, everyone knows without a hesitation of doubt that even the most 'innocent' of children has within his

nature the propensity to sin—all we need to do is observe the angry screams of a recently born infant who feels he is being deprived of a suckling breast. However, we do not need to rely only on eyewitness evidence to make our case for the existence of original sin. The Bible teaches that it is true (Ps 51.5; Job 15.14; Job 25.4). The counter arguments of theologians and philosophers, and of all false religions, are simply evasion tactics. We will not address fanciful notions about the existence, origin, or nature of sin such as: evil is an eternal co-existent counterpart to good; matter is inherently evil; sin is the result of ignorance and inadequate education; sin develops only through imitation; evil is necessary to develop, or bring out, the good in God and man; or evil doesn't actually exist.

The most common argument against the doctrine of original sin is that it removes personal accountability for sin. Many people claim that children are born entirely innocent and guiltless (citing passages such as Dt 1.39 or Is 7.15) but then willfully chose to sin (or not to sin) as they come to an age of moral accountability. There is no question that the Bible teaches that we are responsible for our own sins (Ezk 18.1-32). However, our personal responsibility does not necessarily mean that we are not also held accountable and guilty for Adam's representative sin, nor does it address the question of causation. Most people who argue against the idea of original sin believe that it undermines man's 'free will'. Their real issue (which we will not address today) is not with the origin of sin in us, but with God's predestination of all human action.

The doctrine of original sin rests on the representative nature of Adam's position and his first sin. As the appointed head of the human race, and as the mediator of the first covenant (see, <u>The Covenant of Creation</u> [March 30]) between God and man, Adam represented us in his keeping or breaking the covenant. We are not held accountable for all of Adam's sins, only for his first sin which stood as a representative action on behalf of all mankind. The inquiry first directed to the man (Gen 3.9-12), indicates that the final responsibility for sin lies with Adam, not with Eve. Adam abandoned his headship role by listening to the advice of his wife and following her in sin.

The contention that Adam's action was representative on our behalf causes many to raise a second common objection against the doctrine of original sin. They argue that it is unfair for God to hold us guilty for Adam's first sin; we weren't there and we didn't have a chance to object to the sin or a choice about whether to sin. This argument is entirely specious, because:

- If anyone of us had stood in the place of Adam we would have sinned as he did. This is proved by the fact that Eve on her own sinned by eating the fruit, before Adam had sinned.
- The reality is that we are all sinners with only sinful intentions in our natures (Gen 6.5; Rom 3.23), and are thus guilty for the actual sins that we commit. So, we cannot claim that God is being unfair for holding us accountable for Adam's first sin when we are filled with our own sin.
- God conferred blessings on mankind through Adam, and he has the right to remove any, or all, of those blessings through Adam.
- It would not have been necessary for Christ to have been conceived by the Holy Spirit if original sin did not pollute all humans born of natural generation from Adam.
- We cannot have Christ's representation in the New Covenant without Adam's representation in the first covenant. We did not keep the law perfectly, we did not go to the cross and die for our sins—only Christ did. Yet, God is willing, and pleased, to allow Christ's actions to stand in our place and on our behalf (Rom 5.12-21).

It may appear to be absurd that the rebellion of one man, our ancestor Adam, proved to be the undoing of the entire human race. Yet, it is the reality that we all must face—an evil reality beyond the cruelest act that could be conceived in the mind of the most hardened psychopath. Adam's single sin injected the universe with moral and physical decay; wrought rape, adultery, murder, theft, deception, child molestation, war and pillage; and condemned billions of his descendants to Hell forever. However, this is not the end of the story, but only the beginning. Thanks be to God that he had plans to provide a solution, through the Last Adam, to the problem of sin.

Why Did God Permit Man to Sin? [May 9]

(Gen 3.6)

Why did God permit man to sin, particularly since the grievous outcome was not a surprise to him? The answer to this apparent challenge to the goodness and holiness of God does not lie in the speculations of false religions and philosophers. Some of the attempts to explain why Adam was permitted to sin, or why he sinned even without God's permission, include the following:

- *The universe is unfolding randomly, there is no God and Adam is a myth.* A person who holds to this position can never say that anything is right or wrong. Without God's moral standard, there can be no such thing as sin or evil. All other definitions of 'evil', 'bad', or 'wrong' are purely subjective. One man's evil can be another man's good.
- *God is evil; a deity with much to answer for.* God is good not evil and he has provided a way of escape from sin and evil—salvation through Jesus Christ. To claim that God is not good because he permits evil is to slap him in the face. Men have no right to say that God isn't a good and loving God. And, man has sinned, not God. We cannot blame God for sin or the evil that comes from it. Bad things happen to sinful people, not sinless people.
- *God doesn't care about mankind.* God may seem remote and impassive at times, particularly when we hear of the brutal rape and murder of an eight-year-old girl. However, no one who knows anything about Jesus, who is God, can honestly say that he does not care what happens to us.
- *God didn't know that Adam would sin.* God not only knew that Adam would sin but decreed his sin in his eternal council of predestination. God appoints all that happens, including all sin. Yet, God is not the source or author of sin, is not pleased with sin, and can't be blamed for it.
- *God is too busy to deal with everything going on in the world.* The god that is referenced in this argument is nothing but a shadow of the real God. The God who created the entire universe in six days by a spoken word and has every hair on our heads numbered is fully and intimately engaged with every event in the universe and every life on the earth.
- *Satan is the source of sin.* This only pushes the question back a level, because we could then ask, why did God permit Satan to sin?
- Satan is an independent evil agent equal to God who trapped man in sin. This form of dualism is contrary to the Bible's teachings, which state that God created all things—including the fallen angels (Col 1.16).
- *Man could not have a free will if he was not permitted to sin.* We dealt previously with the man's 'free will' (see, *Man's Moral Responsibility* [April 12]), so now only respond by noting that it does not necessarily follow logically that a person who cannot sin cannot have free will. Jesus has an entirely free will and he cannot sin.

David Hume, echoing Methodius (3rd c) in *Concerning Free Will*, who was probably responding to Epicurus (341-270 BC), whom Hume is often claimed to have quoted in *Dialogues Concerning Natural Religion* (1779), says: "Is [God] willing to prevent evil, but not able? then he is impotent. Is he able, but not willing? then he is malevolent. Is he both able and willing? whence then is evil?" This analysis has been restated by many professed atheists since Hume. Does Hume have unassailable logic? How can we reconcile the fact that God controls all events and planned, decreed, and permitted evil and yet is a good God who does no evil? We can lay out the following propositions:

- God is completely and only good (Ps 25.8; Ps 119.68).
- God is all-powerful and he can do anything except that which is against his nature (e.g., God cannot deny truth or make himself cease to exist).
- Evil exists by definition (against God's law) and actually (evil happens).
- God has morally good and sufficient reasons for permitting sin and its evil consequences that always result in fulfilling his plans (Ps 145.17; Jn 9.1-3).

The final proposition is missed (or ignored) by Hume. There is no logical contradiction in the set. While there is much that God has left unexplained about the origin of evil, we know that his purpose for its existence is to bring glory to himself. His glory is displayed in his conquering evil and through his display of love for sinners, who return genuine thanks for their salvation.

Consider the example of the man born blind. Jesus says that the reason for his affliction (a consequence of Adam's

sin) was not because of a particular sin on the part of the man or of his parents but so "that the works of God might be displayed in him" (Jn 9.3). Also, consider the premier example of how sin and God's goodness correlate for his glory—the crucifixion of Jesus was the greatest evil ever committed and those who sentenced Jesus to death and executed him were guilty of great evil (Acts 2.23). Yet, God's goodness was shown in his decreeing this event (Acts 4.27-28; Rom 5.8).

We see only a part of God's work. Things that appear to be evil when taken out of context can in fact result in good. When a child suffers through the extraction of an abscessed tooth, we do not say this is evil because we know the context. Yet, if someone saw only the screaming child, he might draw the wrong conclusion. We are like a man looking through a small window at a vast landscape. We do not know God's context for anything that happens around us. We must wait and see how God will work out his plans. We must trust God instead of trying to subordinate him to our standards of 'morality' and our intellectual 'authority' (Is 55.8-9; Rom 9.19-21). Those who reject God's goodness because he permits sin, perpetuate sin in their rebellion against him.

Experiencing Guilt [May 10] (Gen 3.7)

In the sinless state, Adam and Eve experienced no shame associated with being naked (Gen 2.25). When sin entered into their lives, the first thing that they identified as being out of order was their nakedness. Although they were physically naked, the statement, "they knew that they were naked", includes spiritual and psychological dimensions—as shown by the fact that they became ashamed of their nakedness and covered it up.

The account of man's rebellion continues with a brief, pointed, statement of the events which followed, and uses two metonymies—'eyes' for minds and 'nakedness' for guilt. Because of their sin, the purity of their nakedness in the original created order had become a source of shame. Feelings of shame that are now associated with nakedness are not because being naked is in itself sinful—clearly not, since Adam and Eve were originally naked and yet sinless. Rather, nakedness is associated with intimacy and serves as a symbol for it (Lev 18.6)—in particular the intimacy and trust between God and man and between a husband and his wife that has been destroyed by sin. The open display of nakedness in our society (in movies, TV shows, advertising, and on the internet) is an indicator of a society which knows no shame and is in open rebellion against God. While public displays of nakedness should be shameful, our society has turned good and evil upside down and views them as acts of 'bravery', expressions of 'artistic freedom', and a 'right' not to be interfered with by prudish religious zealots.

The knowledge that they gained by sinning was not the blessing that they had anticipated. What they thought would be good, became a curse to them as their minds were filled with guilt and embarrassment (Titus 1.15). Instead of becoming like God, as Satan had promised, they now were experiencing separation from God and from one another and a fear of facing God (Gen 3.10). They had exchanged true wisdom—knowing God and being in awe of him, and knowing each other with total open intimacy—for isolation and dread. Their guilt compelled them to cover their sex organs—not because the sex organs or sexual act are inherently sinful, but because the sex organs symbolized intimacy, life, and obedience to God's first command to be fruitful and multiply (Gen 1.28).

The problem of guilt underlies *most* psychological problems that people experience today—with rare exceptions, psychological problems may be the result of biochemical imbalances in the body. This account tells us that they *knew* that they were naked, not that they *felt* naked. Guilt is first a problem of knowledge, then a problem of feelings—it is what we know that leads to how we feel and act. Modern psychology tries to deal only with the symptoms of guilt—the feelings. For example, it suggests that 'healthy' guilt has a purpose to help us recognize extreme behaviour and that we need to take a different course of action; that we need to accept the fact that we did something wrong, but move on since we cannot change the past; and that we acknowledge that no one is perfect. It does not deal with the root cause, which is sin and the need for repentance and forgiveness. In fact, modern psychology does not permit the word 'sin' to be voiced within its unhallowed sanctums.

Popular approaches for dealing with guilt include binge behaviours such as going shopping for more shoes or a new yacht, eating Rocky Road ice cream, pounding a ball on the squash court, or consuming excess amounts of alcohol. All of these approaches are attempts to hide from guilt through distraction and physical solutions to what is a spiritual and psychological problem. Adam and Eve tried the same approach. They couldn't run out to the nearest Walmart to buy the latest outfits and fashion accessories, so instead they sewed together fig leaves to make loincloths. They were attempting to hide their inner guilt with outer solutions—by covering up guilt in their own way. It is ironic that with their great intellectual capacity (e.g., Adam named the animals) the first engineering feat of mankind was to design a covering behind which they attempted to hide from their Creator.

However, the fact that they knew that something was amiss—i.e., they felt guilty—was a good sign and a first step toward a solution. Moments before, they had been challenging God's authority and calling him a liar; now they were cringing at the thought of facing him. Their sense of guilt and shame before God, indicates that they had a conscience which still worked to condemn them by their own judgement. Their consciences had not been burned out or buried deep as they are in many today. God has designed man with a conscience that makes us feel guilty. Guilt is his stop sign to arrest our forward plunge into the superhighway of debauched baseness. He wants us to pause, look both ways, see the dangers, and turn around and return to him. Yet most men ignore the stop sign, rush into traffic, and become roadkill.

Human efforts to deal with guilt are always as ineffective as the attempt of our first parents. They could not hide from God or hide their guilt (Gen 3.8-10). What they needed was a permanent solution to their guilt. At this point they did not know about the redeemer who would come and who would provide a true solution—a covering—for guilt, but God would introduce him to them momentarily (Gen 3.15), and then he would provide them with a symbol of the that atonement covering, which would require the shedding of blood (Gen 3.21).

God Walked in His Garden [May 11]

(Gen 3.8)

God walked in his garden in the cool of the day. If we take this passage in its plain sense, it appears that God took on a physical form and literally walked in the garden that he had created. The idea that God actually walked in physical form in the garden, causes concern among some interpreters who say that it is inappropriate to suggest that God took on a bodily form—after all, they say, he is a spirit being (Jn 4.24). However, if we think about this carefully, it is not surprising that God would take on a physical form and visit frequently the garden he had created for his own enjoyment. He had created mankind and placed them in the garden to be his companions with whom he could walk (compare Gen 5.22; Gen 6.9) and commune. He had also assigned them the task of caring for his garden (Gen 2.15).

Despite what some people think, it is not farfetched to believe that God would inhabit a temporary physical body and enjoy his creation and visit and fellowship with the rational, physical creatures he had made and loved. While corporeality is not an essential characteristic of God, it is something that he chooses to utilize. His eternal plans called for him to take on a permanent physical bodily form in the person of the God-man Jesus, who in his resurrected body currently inhabits Heaven (Acts 1.9-10) or the everlasting paradise (Lk 23.43). Prior to the incarnation, God took on temporary physical forms by which he interacted with mankind—including the human form (Gen 18.1-3; Josh 5.13-14; Judges 6.11-16; Judges 13.1-22). God used *theophanies* (God in physical forms) as a means of revealing himself and his will to mankind. It appears that the first form of revelation that God used was conversing with Adam while in a visible form. For example, he brought the animals to Adam and may have sat with Adam and discussed the various traits of each animal-kind with Adam before Adam gave them their names (Gen 2.19). He also brought Eve to Adam, and as their Father officiated at their wedding (Gen 2.22).

We can consider analogies to help us understand what God may have been doing when he took on a physical form and walked in his garden. For example, think of a person who lives on a rural treelined road who takes his dog for a daily walk in the woods and along the edge of a stream. He enjoys the walk and the companionship of his dog.

How much more so would the Creator enjoy walking with the perfect rational creature he had formed? Or, consider a talented artist (like Robert Bateman or Glenn Loates) who has a private gallery of his paintings in his home and enjoys walking through the gallery and is amazed that the creative works before him came from his own hand. Why is it surprising then that the ultimate Creator would enjoy walking through his magnificent creation to glory in the works that came from his infinitely creative mind? Or, consider the example of computer games like *Sims* or *Second Life* in which people can create and participate in virtual worlds through avatars. As image-bearers of God millions of participants in these gaming environments enjoy being able to interact with others and to participate in virtual social, economic, and creative activities. It therefore should be no surprise that God would enjoy participating in the physical world that he has created.

The verse states that "God walked in the garden in the *cool of the day*". This supports the view that God took on a physical form and went into the garden to enjoy the sensation of the gentle breezes that flowed through it. The word 'cool' is a translation of the word elsewhere translated as 'wind' or 'breeze' (Ps 78.39). The general consensus is that this is a reference to the evening breezes which form as the earth gives off its heat from the sun. However, some interpreters view it as a reference to morning breezes, and suggest that Adam and Eve spent the night cowering in their shame. As we noted in previous meditations, it is likely that Adam and Eve ate the forbidden fruit on the first Sabbath. If this is the case, it is more likely that it is later that same day that God came down to enjoy the breeze and to enquire about man's sin.

God, in physical (and probably human-like) form arrived in his garden and walked through it to confront the couple who had committed a great crime. He arrived in a quiet and familiar manner (Adam and Eve already knew what God's footsteps sounded like as he walked in his garden). Similarly, God will appear once more in his physical creation to confront mankind about the evil they have perpetrated. However, the final confrontation will be different from the first. Since God has manifested himself in permanent human form as the God-man Jesus, he no longer uses temporary *theophanies* to reveal himself to mankind. Yet, until Jesus returns to the earth, no eye will see God in a visible form. But the day when Jesus returns to the earth to judge the world will not be like God's appearance in the garden. He will come unexpectedly, in a great display of noisy splendour and awesome majesty (1 Thess 4.16).

Jesus does not walk today physically in his creation to enjoy it—he walked it last as the man of sorrows (Is 53.3). The destructive effect of man's sin saddens him too much. However, he has a great plan to restore creation and remake it into a paradise which will exceed in beauty, goodness, and extent the original garden. He will again walk in his garden and enjoy communion with his rational creatures. In the past, he walked with Adam in a temporary body but soon he will walk with all his people in his permanent body and enjoy fellowship meals with them forever (Mk 14.25; Jn 21.12; Rev 19.9).

Guilt Leads to Fear [May 12] (Gen 3.8, 10)

In modern psychology, it is claimed that fear is founded on the subconscious startle-response such as flinching from pain or a pervasive survival instinct; both of which we supposedly inherited from our animal ancestors. Inordinate fears, usually called phobias, are claimed to be caused by a combination of genetics, which predispose certain individuals to specific fears, and learned behaviours, which may have been influenced by childhood trauma, abuse, or social conditioning. The general view among psychologists is that excessive fear is an inappropriate response to the world around us. Excessive fears are treated as psychological disorders which can be treated through suggestion to help loosen the fear's grip on us, conditioning to learn to suppress it, and chemical treatments to dull it. Excessive fear is considered dysfunctional and debilitating by most psychologists, but it is never attributed by the majority of them to its true cause. You will not find in their explanations of the causes of fear any suggestion that it is the result of sin or that being afraid can be a sin.

It is clear from this passage that guilt lead to the fear that Adam and Eve experienced when they heard the sound of

God walking in the garden. Along with guilt, another related cause of fear is a lack of trust in God. Consider, for example, an inordinate fear of flying. The person with such a fear may claim that his fear is the result of a concern about the skills of the pilots who fly the planes, a belief that the mechanics who prepared the plane for flight may have been inattentive to details, or a feeling that there might be terrorists who will try to crash the plane. Rational explanations about the odds against these things occurring will not convince a fearful person. He will claim that his fear is based on a lack of trust in men. While we are not to put our trust in men (Ps 146.3), we need to live among them and interact with them—we expect that milk purchased at the supermarket will be unadulterated, or that a doctor will operate on the correct knee. At root, excessive fear isn't a lack of trust in man, it is a lack of trust in God and, therefore, is a sin. This is why Jesus constantly encouraged his disciples not to be afraid. This is not optional for believers. Anyone who has the Holy Spirit living in him must trust God and believe that there is nothing in this created order that can work contrary to God's plans for us. We are not to fear mortal man or even death itself.

Fear causes us to do stupid things. As we become consumed with fear, our bodies and minds react to the fear. This often leads to a chain of effects which can end with, what is often called, a nervous breakdown or a dependence on addicting substances. Adam and Eve reacted foolishly to their guilt-induced fear. They tried to hide from God and they blamed their fear on the wrong cause (their nakedness) rather than on their sin. Their foolish behaviour is displayed first by the irony of their trying to hide their guilt behind a few fig leaves and then, when that did not work, behind a cluster of leafy trees. They were acting like young children who, after breaking a vase, think that they can hide from their father by partially crawling behind the couch; while he can plainly see their legs sticking out.

Adam blamed his fear on the fact that they were naked. When considered logically it seems to be a stupid comment. The man and his wife had been naked before God with no shame (Gen 2.25) since the moment of their creation. However, there is more to his statement than that he didn't like to have his private parts exposed before God. His confession of feeling naked indicates a deep sense of guilt at having his inner being exposed before God—his self-consciousness had changed and he was humiliated by being caught in rebellion. This was a new experience for him and the best he could do to explain the feeling of shame was to use the physical analogy of nakedness.

Adam and Eve didn't know how to deal with their guilt. Rather than running to God in repentance, they ran away from him in fear. Before they had sinned, when they heard God in the garden they would have welcomed him. Now, in their confused state, they hated his presence. God had yet to introduce them to their need for redemption and to the way of repentance. Without this revelation, they were at a loss about what they should do. So it is with all mankind today. No one can figure out on his own how to deal with sin, guilt, and fear. While he didn't understand it, Adam was ultimately afraid to appear before God without being dressed in righteousness—we also should have this proper fear. The only solution for Adam was to have the nakedness of his rebellious heart covered by garments that Christ provides—as would be symbolized by the skins from the slain animals (Gen 3.21). When we are clothed in the righteousness of Christ we no longer need to flee from God but can approach him—the loving and forgiving God—with a holy confidence (Heb 4.16; Heb 10.22).

The tragedy of their sin quickly displayed its ugliness. Rather than becoming like God, they lost their innocence and trust in God and destroyed fellowship with him. Rather than gaining wisdom, they experienced emotional trauma and became subject to pain and death. Rather than gaining freedom, they become slaves to sin and Satan and were chained by fear and trepidation. Adam and Eve handed over all mankind to these evil consequences. But thanks be to God for Christ, the Last Adam (1 Cor 15.45), who provides sanctification, restored communion, cleared consciences, eternal life with freedom from all pain, purification from sin, and true peace.

God Seeks for Man [May 13] (Gen 3.9)

After Adam and Eve had sinned, God called to Adam asking where he was. This is the first time that God called out to man or to any of the created order. After some of the angels rebelled against God's authority, God did not

call out to them but cast them into gloomy darkness to be kept for judgement (2 Pt 2.4). In contrast, God reached out to Adam and sought for him. If God had not done so, Adam's situation would have been as desperate as the fallen angels'; since once Adam had declared self-autonomy and false sovereignty, he would never have gone seeking for God. This interaction indicates that God takes the initiative in all divine-human relationships and in graciously providing a solution to man's self-imposed depravity. It also indicates that God deals with mankind in a covenantal manner, since he addressed Adam individually (in the Hebrew, both 'man' and 'you' are singular). Adam was the representative and head of the husband-wife pair before God.

God's question, "Where are you?" was obviously not voiced because God lacked information about the physical location of Adam and Eve. God used an indirect and subtle question to draw out a confession from Adam but also to make him think deeply about what he had done. He could have said, "What have you done?" And Adam would have answered "I ate." (Gen 3.12) But God wanted Adam to think about what he had done—the question was designed to establish more than that he had merely eaten a piece of fruit. The question is laden with deeper meaning, including:

- *What have you done?* God wished to elicit an explicit confession of guilt from Adam. All our own interactions with God must begin with the acknowledgement that we have broken his law and sinned against him.
- *Why would you do such a thing*? God wanted Adam to reflect on what he thought he could have gained from disobeying him and whether he had gained what he expected. Each of us believes that sinning will benefit us—e.g., by satisfying a lust or providing pleasure—but if we reflect on the outcome we find that the hole in our soul remains unfilled and the lust and desire for pleasure has only increased.
- *What ruin have you wrought?* God directed Adam to consider the evil outcome of his action—bringing sin and decay into the physical universe. When men and women sin they often need to have their faces rubbed in the mess they have created so that they can face the seriousness of their depravity—for example, the man who commits adultery not only messes up his own life but destroys his family.
- *Where is your 'head' at now?* God instructed Adam to consider the current condition of his heart. We all need to deal with sin in the same way, by asking ourselves if we care that we have sinned against God and if we want to find a solution to the problem of sin in our lives.
- *How are you going to deal with your problem?* God challenged Adam to think about how he was going to rectify the situation. After we have come to a realization that we have broken God's law, we need next to consider how we are going to be extricated from our dire situation.

The answer for Adam was not to flee from God and to try to hide from him. It is not the answer for us either. It is utter foolishness to think that we can hide our thoughts and actions from God, and impossible to execute. No physical object (as shown by Adam and Eve's use of fig leaves and trees) can hide us from God's all-seeing eye—this should be particularly obvious when the problem is spiritual. Likewise, no intellectual, psychological, or spiritual camouflage can hide us from God. The Psalmist announces this reality in Psalm 139.7, by rhetorically asking where he could flee to avoid the presence of God. Men today try more sophisticated means of hiding from God than Adam and Eve tried, but they are as foolish—for example: denying God's right to be worshiped by his creatures and to expect obedience to his commands, postulating theories of life's origin which exclude God, inventing religions which depend on self-righteous acts, and living for the pleasures of today as if there is no tomorrow. Not only is it foolish to think that we can hide from God, but it is as foolish to think that it could be a good or desirable thing to do so. Jonah learned how far he had withdrawn from God, the source of life, when he fled to Tarshish. The return-path was humbling and difficult and, in the end, he had to follow God's instructions. We simply cannot avoid God and his demands.

Since Adam did not go in search of God, God went in search of him. Men today are in the same situation since Adam introduced sin into the human race, and all follow their father Adam by trying to flee from God. But as God went searching for Adam, he comes seeking for his children everywhere. Jesus teaches this truth in the parables of the lost sheep and lost coin (Lk 15.1-10). And when he finds them cowering in the bushes, he asks of them a similar question to: "Where are you?" But it may come in a different form, such as: "What do you think about the Christ?

Whose son is he?" (Mt 22.42)

Since we would not seek God of our own accord, he comes seeking for us. He loved us before we could ever love him (1 Jn 4.19). He finds us and frees us from a bondage to sin and Satan from which it is impossible that we could escape on our own. Therefore, we must hear in the query to Adam a gracious plea with the intent of recovery, more than a grievous pursuit with the intent of rebuke. If God did not act to seek mankind there would be no hope for us!

God Is Love [May 14] (Gen 3.9)

The word 'love' (or 'kindness', from the Hebrew *hesed*) does not appear in Genesis until chapter 19, when Lot asks the angels to show kindness to him. The word is not used in reference to God until chapter 24, where Abraham's servant refers to God having shown 'steadfast love' to his master. The book of Job, probably written before 2000 BC, contains the earliest written reference to God's love (Gen 10.12). In later portions of the OT, God reveals that he is a God of love (Dt 7.9; Ps 36.7). The NT explicitly declares that "God is love" (1 Jn 4.8, 16). However, prior to the time of the patriarchs, we do not encounter references to God's love in his self-revelation. This causes us to wonder how the patriarchs knew that God shows love toward mankind.

The world's philosophers claim that it is difficult to explain the existence of sin and evil if there is a loving God. They claim that God, or at minimum the God of the OT, is cruel and unloving. They make statements such as: "How could a *loving* God allow Adam to sin and to bring suffering into the world?" or, "How could a *loving* God command genocide for innocent people through a flood or by Israelite armies?" They equate God with the gods of the ancient pantheons, which were characterized by passions such as pride, jealousy, lust, anger, and a thirst for revenge. Showing love toward human beings was not a primary attribute displayed by the mythical gods. We addressed the challenge of those who present this 'problem of evil' in a previous meditation (see, *Why Did God Permit Man to Sin*? [May 9]). From a Christian perspective, providing an explanation for the presence of evil in the world is not difficult. We know why, when, and how evil infected mankind. It is materialistic naturalists, who believe the lie that man is intrinsically and innately predisposed to goodness (compare, Gen 6.5; Jer 17.9), who have the far more difficult challenge of explaining the existence of evil.

An even greater challenge for materialistic naturalists is how to explain the existence of love or kindness in a material-only universe that is dominated by mechanisms of 'survival of the fittest'. They believe that they can explain how survival instincts and behaviours arose through evolutionary processes. However, they have a challenge explaining behaviours such as self-sacrifice. Proponents of sociobiology try to address this challenge by claiming that social behaviour is shaped by natural selection. They argue that behaviours like altruism are merely a moral feeling resulting from biological adaptation. They even claim that the idea of the existence of God is a biologically induced illusion which promotes altruism. If man is no more than a naked 'ape', the idea that he can display love is ludicrous. He could, at best, show the attributes of his maker—and apes do not understand the concept of love.

For both the Christian and non-Christian the real challenge is to explain why there is anything good, including love, in the world, in light of man's sin; and why God shows love toward sinful humans. Since we do not deserve any kindness from God, the answer for why there is anything good and why men can love, is because God is love and displays his love toward mankind. However, we need to consider how men came to understand this concept—i.e., that God shows love toward us.

The origin of our concept of God's love toward mankind is provided in this verse and in the subsequent account of how God dealt with Adam after he had disobeyed, by eating the forbidden fruit from the tree of the knowledge of good and evil. Adam had broken the only explicitly prohibitive rule that God had given him. In addition, this command had an associated penalty of death (Gen 2.17). Yet, the most amazing thing that we discover, in the entire transaction related to Adam's first sin, is that God did not instantly wipe out mankind. He could have justly executed

Adam and Eve, destroying both their physical bodies and their immortal souls—leaving no remnant of his imagebearers on the earth—and started over with a new humanity. However, this is not what he did. Instead he searched for them, and reached out to them in love.

We identified reasons why God created the universe: 1) for his own glory, 2) to receive honour from his intelligent creation, 3) for his own enjoyment, and 4) for our enjoyment (see, <u>Why God Created the Universe</u> [January 8]). This last reason resonates with God's love for mankind—at least before he had fallen into sin. We can add a fifth reason. God created the universe in order to display his great love. He displays his love toward us in particular through:

- *General grace*. He provides food, clothing, and shelter to all men whether or not they acknowledge and worship him (Mt 5.45). God cannot be blamed for the fact that some people have less of these blessings. The immediate cause is the sinful behaviours of oppressors and oppressed.
- *Saving grace*. He promised Adam a redeemer (Gen 3.15), and through belief in that coming redeemer he provided redemption from sin. We noted in the previous meditation that God first loved us so that we could love him.
- *Covenant grace*. He blesses his believing covenant people in special ways. He provides them with true joy, a new purpose in life, and hope of an everlasting paradise (Lk 23.43) through the resurrection (Gen 5.24).

Adam knew what his sin had produced. He knew of the paradise he had lost. He knew of the fellowship with God that he had lost. But he also knew of God's forgiving love and of a renewal of hope. He, of all people, understood what John means when he says that "God is love."

Innocent Until Proven Guilty [May 15]

(Gen 3.11)

After Adam had sinned and was questioned by God, he told God that he was afraid and had hid from his presence, because he was naked (Gen 3.10). God then asked Adam two questions: 1) "Who told you that you were naked?" and 2) "Have you eaten of the tree of which I commanded you not to eat?" (Gen 3.11). Adam did not answer the first question, because neither Eve nor Satan had informed him that he had done anything wrong by eating the forbidden fruit. He knew that it was his own sense of guilt, which came from within his own mind, that informed him that he had done wrong. Adam's silent response to God's first question demonstrates that mankind has been endowed with a conscience and an innate sense of guilt when he does something wrong.

Even though God knew exactly what Adam had done, he did not immediately accuse him of sinning, pronounce a charge against him, find him guilty, and sentence him to receive his punishment. Instead, God first formulated a second question in a way that gave Adam the benefit of the doubt, and an opportunity to declare his own innocence. However, Adam didn't respond by claiming innocence. Instead, he answered the question by suppressing his sense of guilt, abdicating his responsibility by blaming Eve, and implicating himself by confessing that he had eaten the fruit (Gen 3.12).

The second question is formulated to presume innocence. It serves as the foundation for the principle that we find in English Common Law, which we usually state as, "innocent until proven guilty". Adam was not charged with a crime (a sin) and then asked to demonstrate his innocence. Rather, he was given an opportunity to declare his innocence and then God, as the prosecutor, would have proceeded to provide evidence of Adam's guilt—e.g., God would have pointed to the missing fruit, Adam's fruit-stained hands, and Adam's full belly. However, the proceedings never reached the point where God had to produce evidence. Adam was not a competent lawyer, by any modern reckoning. He cracked quickly under God's questioning and confessed his sin and guilt before the allknowing God—when he said, "I ate."

The principle of "innocent until proven guilty" was not codified in early instances of Western constitutional law. For example, it does not appear in the *Magna Carta*, the *English Bill of Rights* of 1689, or the US *Constitution* or

its associated *Bill of Rights*. However, it is implied in the 6th century *Digest of Justinian* which compiled earlier Roman laws to about 530 AD. It provides a general rule of evidence which has been paraphrased as, "proof lies on him who asserts, not on him who denies". This concept places the burden of proof upon the accuser, thus presuming that the accused is innocent. The specific origin of the concept of "innocent until proven guilty" in modern legal precedent, has been debated. However, the principle was incorporated into English Common Law implicitly for centuries, even if not explicitly until around 1900.

The principle of "innocent until proven guilty" is not explicitly stated in the Bible. However, it is consistent with Biblical jurisprudence (Ex 23.6-7; Num 5.14-31; Dt 17.6; Josh 20.3-5). Also, the example of God's behaviour toward Adam (Gen 3.11) indicates that the principle is consistent with the nature of God, and therefore that it should be included in human legal systems. As is often the case in Biblical revelation, God sets the standard for proper behavior by a direct action and then follows later with a stated command—for example, he sacrificed an animal to cover the guilty nakedness of Adam and Eve (Gen 3.21) before he instituted the practice of animal sacrifices as a symbol of blood satisfaction for sin. Thus, even though many in the legal profession would deny it, the principle of "innocent until proven guilty" derives its origin from God and from the earliest days of human history.

Our judicial systems, based on English Common Law, accept the principle of "innocent until proven guilty" because it is also founded upon another principle, a person cannot be found guilty of a charge if there is any reasonable doubt of his guilt. This also is a Biblical principle. There must be eyewitness and sufficient circumstantial evidence to reach a verdict and apply a conviction (Dt 19.15; Dt 17.6; 2 Cor 13.1).

Our judicial systems also accept the principle for a third reason. It acts as a safeguard against making an error and convicting an innocent person. This is particularly important when dealing with a murder charge and the possibility of convicting and executing the wrong person. If an error could be committed in judgement, a 'false positive' (a 'Type I' error)—an innocent person is convicted of a crime when he is in fact not guilty—is more egregious than a 'false negative' (a 'Type II' error)—a guilty person is declared not-guilty of the crime he is charged with, when in fact he did commit the crime. It is better to allow the guilty to escape than to punish the innocent. However, both are bad procedure (Prov 17.15) and diligence needs to be applied to ensure that justice is administered fairly.

The introduction of the principle of "innocent until proven guilty" in the midst of the trial and conviction of the first man (Adam) for his first sin, reinforces the truth that law and legal procedure have their origin with God. Man is not a law unto himself, and all human systems of law and legal procedure must have their origin in God's law i.e., it must be possible to demonstrate that a law or a legal procedure is derived from, and is consistent with, God's law in the Bible, God's directions for administering justice, or God's example.

Before God's Tribunal [May 16] (Gen 3.11-13)

God engaged Adam and Eve in a conversation to establish that they had eaten from the tree of which he had commanded them not to eat. Even though his good creation had been vandalized by their criminal action, he did not lash out at them in anger or destroy them instantly, although that is what they deserved for committing the capital crime of genocide. Often people who do not understand the true nature of God attempt to present him as a mean, vindictive, and selfish person. In contrast God, as he is described in the Bible, is slow to become angry (Ex 34.6) and one who displays love toward sinful creatures (Rom 5.8). He displayed the nature of his patience as he calmly interrogated Adam and Eve, treating them like the rational creatures he had made, rather than as brute beasts which they had become.

God used three questions to interrogate Adam and Eve, rather than an explicit proclamation to denounce their sinful action. He addressed Adam first, even though Eve had sinned first; thus, acknowledging Adam's role as the covenant head and mediator, representing mankind; and emphasizing his greater degree of responsibility. He first asked Adam who had told him that he was naked. The only possibilities for who could have communicated this

information to Adam are God, Satan, or Eve; but none had. Therefore, God's question forces Adam to realize that the knowledge of his nakedness—i.e., his consciousness of guilt and shame—had to be the result of the new knowledge he had gained from eating the fruit. Adam had not become like God in his knowledge, but had become like Satan, experiencing evil through rebellion. The lies of Satan had begun to be revealed. He had claimed that they would not suffer any evil consequences, but now they were dreading continuance of life. He had promised them freedom but now they were slaves to perversity. He had assured them of an eternity as gods but now they were facing imminent death. Without God's converting grace mankind will continue to fall for Satan's lies and be left with nothing but fear, captivity, and everlasting damnation.

God continued with a second question directed to the man and formulated with the language of doubt; not to enquire into the matter of his sin but to confirm it, since he knew precisely what Adam and Eve had done. Satan used the same format when he questioned Eve about God's command (Gen 3.1). However, Satan's question was intended to be answered as 'no', in an attempt to convict God. When God used the question format, he expected the answer to 'yes' to convict the man, and indirectly Satan. After Adam had blamed Eve for his sin, he admitted that he had eaten the fruit. Then, when he mentioned 'the woman', God turned to her and asked her what she had done. The 'this' in God's question probably refers to her giving the fruit to her husband and deceiving him, rather than to her having eaten the fruit. She does not identify this nuance, or ignores it, and blames the serpent for deceiving her and also admits to the obvious—she had eaten. She does not admit to her unfaithful service as a partner and helper for Adam and that she had become his enemy. The result of these questions is that God obtained from Adam and Eve their confession and self-incrimination. However, the fact that Adam and Eve both blame someone else for their actions indicates that they do not realize the enormity of the consequences of their actions and that their confession is half-hearted at best—it is as if they admit, like children often do: "I did <an obvious action> but I am not guilty of it since it isn't my fault."

God reminded Adam that he had given him a command not to eat the fruit of a particular tree—the tree of the knowledge of good and evil (Gen 2.17), but not named during this interrogation. God's reference to the command was to remind Adam that God is the ultimate lawgiver and that sin is breaking his commands. It also taught him that his sense of guilt and shame was the direct result of his rebellion against God's law. These truths—God has provided summary commands in his law, we sin when we break any of these commands, and we are guilty before him when we sin—need to be placed constantly before all of Adam's posterity, regardless of which religion they currently practice or in whatever nation they live today.

When God spoke with Adam and Eve, he addressed them individually. This is emphasized by the use of the secondperson singular 'you' in God's side of the dialogue. Even though God deals with mankind through covenants and covenant-mediators, he still focuses on individual responsibility and liability for sin. Adam and Eve could not successfully deflect blame for their sin to anyone else. They were individually interrogated, individually found guilty, and would be individually judged (Gen 3.14-19). This first exemplar carries through as a principle for how God will deal with *every* individual. Every one of us will have to appear, at the end of time, before God's tribunal, which is called the *judgement seat of Christ*. Even though God knows the details of all our sins, at our interrogation we will be asked individually the same questions—"Who told you that you have sinned?" i.e., "Against what standard are your actions judged?"; and "What have you done?" Anyone who has not repented of his sin, will be required to incriminate himself and be humbled before God. Based on this interrogation, each person will be judged according to what he has done, whether good or evil (Mt 16.27; Rom 14.10; 2 Cor 5.10). The righteousness of Jesus will stand in the place of the deeds of those whose sins have been covered by his blood. For the rest of mankind, they will be repaid according to their rebellion against the law of God.

Blame Game [May 17] (Gen 3.12-13)

When confronted by their sin, Adam and Eve played the blame game. They knew that they had done wrong by eating the forbidden fruit—the evidence was undeniable since they probably had the sticky red juice from the stolen

fruit on their chins and pieces of rind under their fingernails. But their response to God's inquiry, "I ate", was a half-hearted unrepentant confession as they sought to excuse their guilt by casting blame for their action upon another entity. Adam emphatically blamed the woman for giving him the fruit through his repetition of 'she' (Hebrew: 'she, she gave'), and Eve blamed the serpent by stating that it had deceived her. They both compounded their guilt by not quickly repenting of their sin and throwing themselves on the mercy of their Father.

Adam went further than shifting the blame for his actions onto his wife. After he had pleaded "not-guilty" and had blamed her, he belligerently went beyond and blamed God, his creator, for causing him to sin. God had given Eve to Adam as a precious gift, and Adam turned it around and blamed God for having given her to him and implying that the gift of Eve was a mistake. Adam's contention was essentially that if God had not given Eve to him, he would never have sinned. He therefore insinuates that God was an accessory to his sin and as, or even more, guilty than he was, since God was ultimately responsible for the sin. The accusation that God (whether by predestination or sovereign providence, or by permitting man to sin) is somehow culpable for sin, is an intolerable blasphemy which men perpetuate in every generation. For example, the 'neo-atheists' of today say that the God which they *claim* not to believe in cannot be God since he is either unable to stop evil and therefore impotent, or unwilling and therefore malevolent. God's retort is that man is responsible for his own sins (James 1.14) and that we have no right to blame him for our sins (Rom 9.19-20; James 1.13).

Eve demonstrated that she was a quick learner. She followed the example of her husband's casting blame, but was subtler. She could see that it wasn't a wise move to blame God for her sin, so instead she placed the blame on the deception of Satan (as represented by the serpent). By doing this she was able to claim that she was a victim of circumstances, since what she stated was accurate—Satan had deceived her. Her eyes had been opened and she learned the difference between good and evil (Gen 3.5)—for example, what was falsehood and what constituted an intention to deceive—and attempted to use this knowledge to her advantage. However, by laying the blame on Satan, she demonstrated that sin is a mocker and became a fool, thinking that she could absolve herself. She did not think through the questions with which God could have replied, "Why did you accept Satan's word as more reliable than mine?" and "Who *forced* you to heed Satan's lie?"

Adam and Eve rejected God's authority to declare what is right and wrong, and to hold them guilty for their wrong actions perpetrated through willful rebellion. As a result, their example has become the standard operating procedure for all of their posterity. Every one of us, from the youngest infant who can voice a rebuttal or point a finger to the wizened granny, plays the same blame game with men and God. When we are tempted, and fall prey, to misuse the good gifts God has given us, we excuse our disobedience in various ways; for example, we:

- Rationalize that our circumstances are special or extenuating; such as using a low salary as an excuse for not declaring all of our income (e.g., money given when a preacher provides pulpit supply) on our tax forms.
- Fool ourselves into believing we are obeying the law; by saying things like: "God didn't really say ... did he?" "He couldn't have meant that ..."
- Justify a 'little' breach of God's law; saying, "After all it is only a little fruit, and it is pleasant." And "God wants me to be happy!"
- Claim that a particular law is 'stupid' and that we can be judges over it. Satan implied this when he tempted Eve.
- Appeal to fate, our social-economic background, our environment, or our genetic predisposition as the cause of our behaviour so that we can deny responsibility for our actions; such as when we use the 'but' provision: "I know it is wrong for me to lose my temper with the kids, *but* I am under a lot of pressure at work."

Today, psychiatry, the courts, and many government programs exacerbate the situation by undermining personal responsibility for one's own actions. Psychiatrists will tell a person that blaming himself is the problem which needs to be cured, to layoff accusing himself, and to accept himself as he is, vices and all. Judges today often appear to hold people to different standards of behaviour based on their particular circumstances. For example, a Native American who commits a crime while intoxicated is excused because of the prevalence of alcohol in his reservation

community. Government programs often encourage irresponsibility and a lack of concern for personal welfare by subsidizing laziness and profligacy.

We blame others for our behaviour because it allows us to justify our own sin. We find any means possible for deflecting responsibility for sin so that we can go on sinning without being inflicted with guilt and shame and so that we can delude ourselves with respect to our accountability before God.

The Cult of Irresponsibility [May 18]

(Gen 3.12-13)

If you find two children fighting and break up their fight, they immediately will point a finger at the other and say, "He hit me first!" For once it would be good to hear them say, with bowed heads, "I am sorry, it was my fault, I won't do it again." However, when they blame each other, they let us know that they are children of their great, great ... grandfather Adam. They tell us that since time began every man, woman and child acts like their first parents.

The claim of every sinner is, "It's not my fault, don't blame me! Look somewhere else, but don't look for a problem in me." This is the cult of irresponsibility. Ever since the sin in the garden, men, women and children have been unwilling to take responsibility for their actions. At some points in history there has been a greater tendency to irresponsibility, and some less. Some cultures encourage irresponsibility more, some less. But always, in the natural man, there is a tendency to irresponsibility. Sadly, today this tendency seems to be more pronounced, for this seems to be an age of irresponsibility.

The deep cause of man's irresponsibility lies in his rebellion against God. More directly it comes from his soul being laid bare before God (Gen 3.8). Man went into hiding because the evil intentions of his heart had become a bloody wound exposed to the salty gaze of the all-seeing God. The basic and most fundamental problem man now has is that he does not consider himself to be a sinner and does not want to admit that there is anything sinful in him. For, in the very moment that he confesses that he has sinned, at that moment he places himself between two very hard rocks—the rocks of:

- *Creaturehood.* Man does not want to admit that he is not the centre of the universe and that all of meaning does not begin with himself. He does not want to acknowledge that his standards are not the standards governing the universe. He does not want God to be sovereign; he wants nothing to do with God's standards.
- *Immorality*. Man does not want to admit that he has broken God's law. So, he convinces himself that God's requirements are not real or that his evil actions somehow didn't break God's requirements.

Of his own will, man will not walk forward out of these rocks. Instead his course of action is to hide behind the rocks; to disavow any knowledge of God's standard, and, if that doesn't work, deny having broken the standard.

Consider how Adam handled the situation. He said, "Oh come on Lord, I didn't ask you for the woman, if you wanted to go about creating a woman, don't make me responsible for her!" He hid behind the first rock. "Don't blame me, I didn't create this situation. If I'm not in control, then how can I be responsible?" Then, he deftly slipped behind the other rock, by saying, "Why are you blaming me, after all everyone else is eating the fruit. How can it be wrong? It really can't be that bad, eh? She came up to me and offered me a bite. I just tasted it. I mean ... is that really sin?" Eve also placed herself behind a rock. But she didn't deny that God had established a standard. She knew too well what it was, because she had just completed her discourse with the Serpent and she could clearly hear herself saying, "[B]ut God said, 'You shall not eat of the fruit of the tree that is in the midst of the garden, neither shall you touch it, lest you die." (Gen 3.3) So, she planted herself behind the second rock, "How can this be *my* sin? I was fooled into eating. Surely you can't blame me for being fooled?" And, so began the cult of irresponsibility, the oldest of all false religions. And, ever since then, every sin has been accompanied by a disavowal of responsibility for the sin.

Man's general approach to his actions, to his life, and to God, is to emphasize anything other than his responsibility.

Consider these examples of worship in the cult of irresponsibility:

- *Reproach vs Responsibility*. First, blame everyone and anything but one's self. The alcoholic blames his past, the obese person blames his glands, the drunk blames the alcohol or the bartender who served him, the murderer blames his split personality, and the thief blames his poverty.
- *Rights vs Responsibility*. Second, demand your rights. Homosexual activists want 'marriage' rights, Quebec demands sovereignty rights, the poor want equity rights, unions want unconditional rights to strike, management wants rights to preferential treatment, feminists want the right of choice to murder the unborn, and the handicapped want equal access rights. Everyone claims a right. But we see no one carrying a placard demanding responsibilities. When was the last time you heard people asking seriously how they could help or what they should give, instead of demanding that they be helped and receive?
- *Rationalization vs Responsibility*. Third, deny that sin is sin, or excuse the sin by explaining why you think it really isn't sin.
- *Reliance vs Responsibility*. Finally, expect someone else to be responsible so that you can depend on him. A common belief today is that the individual is not responsible for his own employment, health, education, safety, welfare, and general wellbeing. Rather the belief is that the government is responsible. Our society is in a mess because individuals in our nation no longer want to be responsible individuals, they want 'big-brother' to take care of them.

We need to be on guard against these, and other, acts of worship in the cult of irresponsibility. Beware, lest you are sucked into this cult!

The Cult of Irresponsibility – Its Consequences and Cure [May 19] (Gen 3.12-13)

In the previous meditation, we considered ways in which Adam's descendants have followed his example of abdicating responsibility for his sin. Worship in the cult of irresponsibility is a driving force behind much of the moral chaos we see around us. For example:

- When science accepts evolution as its god, man becomes nothing more than an organic machine of chemical and physical events in a random cosmos. A machine cannot be held accountable for moral actions.
- In a society with no true religious moorings, the fatalism of mysticism fills the void and provides men with a rationalizing excuse for any action.
- When an individual is viewed as essentially the product of his education and environment he can get away with murder, figuratively and literally; and be released from responsibility because of diseases like 'affluenza'.

This is where we are today—standing in a pool of filthy mud before the altar of irresponsibility. Irresponsibility is the world's worship, sermon, service, and song of praise.

Worship at the altar of irresponsibility is a highly infectious disease which has afflicted all of us. By nature, we are all weak with irresponsibility. And, in an attempt to cure the debilitating disease, we gulp down more of the drug of irresponsibility—for example, by abdicating our personal responsibilities to 'government', hoping that it will solve our problems. This results in a mad cycle of irresponsibility that drags us into hell. When a person continues to deny his share of responsibility for Adam's sin, and for his personal sinful actions, he will meet the everlasting consequences of his irresponsibility in hell. Ironically, Hell is the ultimate end of irresponsibility, proof of personal responsibility, and the final solution to irresponsibility.

Is there any cure for irresponsibility? Most certainly there is! The curse of irresponsibility has not totally devastated mankind. Man was not left to wallow in his filth forever. God planned a means of reclaiming responsibility. Paul tells us how God brought this about. 'Christ redeemed us from the curse of the law by becoming a curse for us—for it is written, "Cursed is everyone who is hanged on a tree"—so that in Christ Jesus the blessing of Abraham might come to the Gentiles, so that we might receive the promised Spirit through faith.' (Gal 3.13-14)

Jesus Christ took responsibility for our sin! He did this since we would not, and could not, take responsibility. And

those who, by faith, believe that he has done this, are given the promise of the Spirit. It is the Holy Spirit who comes to us and makes us able to admit to God that we are responsible for our sin. An irony is found in this transaction. We wouldn't take responsibility for sin, so Christ took upon himself our responsibility. If we believe that he took responsibility for our sin, then we become able to take on the responsibility and admit before God that we are sinful creatures.

A person who has been rescued from the cult and curse of irresponsibility, should be a different kind of person—responsible! This means in our day-to-day life we will:

- *Take responsibility for the sins which we commit.* This is impossible for a natural man to do, and very difficult even for Christians to do. It is hard to admit that we have done something wrong, and are at fault, or that we have sinned. We have trouble facing our brothers and sisters in Christ, or worse, facing non-Christians, and saying to them: "I am sorry, I was wrong" or, "I owe you an apology, I am sorry I hurt or offended you." It is much easier for us to say: "Well, I have confessed my sin to God, isn't that enough?" or to create 1,001 excuses for why our neighbours are as much at fault as we are, and therefore it isn't necessary for us to pursue reconciliation. For example, if each of us in a congregation, practiced taking responsibility for the misunderstandings and hurts we have caused, we would find that we would grow to love one another more, as true Christians should.
- *Be willing to take personal responsibility for acting in love.* Yes, it is true that God is in control. But we should not use his eternal plan as a cover-up for our individual responsibility. Doing so is fatalistic. The command of God given to us is, "Go and act, and be responsible creatures before me." This commission of responsibility began when mankind was created and God said to them: "Be fruitful and multiply and fill the earth and subdue it, and have dominion over the fish of the sea and over the birds of the heavens and over every living thing that moves on the earth." (Gen 1.28) Each of us must take responsibility in our families, congregations, social situations, work or school settings, neighbourhoods, and society. To fail to act responsibly is as bad as slandering a neighbour or stealing from him. When we fail to act responsibly we are sinning by omission.

Adam's sin caused all of his natural born descendants (excluding Jesus, who was conceived of a virgin) to enter life with sinful natures (see, *Original Sin* [May 8]). Thus, everyone today worships at the altar of irresponsibility. When Adam put his faith in the promised messiah (Gen 3.15) he admitted his sin and guilt and left the cult of irresponsibility. Like Adam, anyone can stop worshiping at the altar of the world's oldest false religion by confessing his sins to God and man and taking responsibility for his actions.

The Serpent's Punishment [May 20] (Gen 3.14-15)

Adam and Eve had tried to deflect their guilt by implicating others in their crime. However, based on their own confession ("I ate") and God's infallible knowledge, God determined that they were individually guilty of sin and immediately proceeded to sentence them. However, before sentencing the man and his wife, he passed judgement on the serpent, and indirectly Satan. There is no record that he interrogated either the serpent or Satan, and it is likely that he did not. The serpent was an irrational beast with no moral sense. Also, God did not discourse with Satan and the fallen angels, as he had with man, because there was nothing in his plan to offer them the opportunity to repent. Since the serpent, possessed by Satan, was the first entity to bring sin into the world, God declared sentence on it first.

As we will see, the punishments meted out on Adam and Eve affected all their male and female descendants, since they acted in a representative capacity. In the same way, the curse (punishment) of the serpent did not only affect the one that tempted Eve, but was applied to all snakes that are the descendants of that original serpent and its mate. The assignment of shared guilt is implied by the serpent's being cursed above (more than) all the other livestock or beasts of the field. All creatures shared in the general curse on nature, which was associated with Adam's punishment (Gen 3.17-19). However, snakes share an additional curse, because of the punishment of the serpent, which had been the instrument of Eve's temptation.

The punishment that God declared for all snakes consisted of three things:

- 1. *Crawling on their belly*. It is likely that the serpent that tempted Eve was a four-legged reptile; and may have had wings. Thus, its punishment confined it to crawl on its belly as its legs and wings had been removed. Although many interpreters question the idea that the serpent's form was altered by the curse, the declaration of its punishment loses all meaning and force if it was only consigned to continue living as it had been.
- 2. *Eating dust.* Snakes do not literally eat dust. God is using a metaphor for humiliation. When the serpent had tempted Eve, it had risen up on its legs to dominate her. Now snakes are consigned to be forever humbled at mankind's feet. Since this sentence was delivered, making someone 'eat dust' has become a common curse against one's enemies (Is 49.23; Mic 7.17). The original serpent was likely a beautiful and majestic creature, and attractive to Eve. Ever since, snakes have been considered, by most people, to be vile and despicable creatures, which we avoid.
- 3. *Being at enmity with mankind.* While we usually consider verse 15 to be speaking metaphorically about Satan and Christ (which we will consider later), the curse on the serpent also included a literal physical effect. Snakes are dangerous, and when they strike out against mankind it is often at their feet ('heels'). Men, in turn, crush snakes when they feel threatened by them. Women, in general, seem to have a particularly strong distaste and fear of snakes, more so than men. For example, one survey from 2001 found that 56% of Americans were afraid of snakes. This was the most common fear reported by the respondents (greater than a fear of public speaking, heights, flying, etc.). Also, the number of women stating that they were afraid of snakes was more than 50% higher than the number of men reporting this fear. This continuing fear of snakes among mankind is probably a direct result of the curse on the serpent.

A fundamental question that we need to address is why God would punish a brute beast, which has no moral accountability. God does nothing arbitrarily or capriciously, so there must be legitimate, just, and good reasons for all his actions. We can suggest a number of reasons for this punishment:

- 1. *The serpent serves as a symbol for Satan*. God does not address Satan or punish him directly for his sin in tempting Eve. So, the punishment decreed for the serpent symbolizes the punishment given to Satan. We will consider this relationship in our next meditation.
- 2. *The serpent was Satan's instrument and had to share in his punishment.* As any beast that was used as an instrument of an unnatural crime was to be killed with the person committing the crime (Lev 20.15-16), so the serpent had to be punished for its instrumentality.
- 3. *Justice must be done*. If an animal bites a man it is to be punished. If it kills a man, it is to be put to death (Gen 9.5; Ex 21.28).
- 4. *The serpent suffered punishment because of Satan's sin.* As all of creation was cursed because of man's sin, and animals of wicked men were to be slaughtered along with the men (Dt 13.15), the serpent was punished with a specific, appropriate, punishment for Satan's sin.
- 5. *The serpent had become an enemy of man*. The serpent had been created to be a servant of man, but had been employed for his destruction. It was punished the same way that a father might destroy the gun or knife that killed his daughter.
- 6. *The serpent's punishment is a symbol of the curse on sin.* Jesus cursed the fig tree (Mt 21.18-22) because its leaves were deceptive (there was no early fruit) and symbolical of an unproductive Church. So, the punishment of the serpent is a symbol of how much God hates sin, and of how displeased he is with anyone who entices others to sin.
- 7. *The serpent's curse is a symbol of the coming judgement*. At the final judgement, all sinful creation will kneel and eat dust (Ps 72.9; Phil 2.10).

Satan's Punishment [May 21] (Gen 3.14-15)

The serpent was the mouthpiece and representative of Satan and stood in his place in the temporal-spatial realm. Although this relationship is not explicitly described in the Genesis account, other parts of Scripture validate the

identification of the serpent with Satan; in particular John supports the connection by referring to Satan as the 'ancient serpent' (Rev 12.9; Rev 20.2), and Paul equates the two (2 Cor 11.3). As Satan had spoken to Eve through the serpent, so God spoke to Satan through the serpent to declare his punishment. It would appear that it is obvious that God would not have punished the messenger, an irrational animal, which carried the voice of the tempter, without also punishing the author of the sin upon whom the blame must rest. Therefore, we can view the punishment decree delivered to the serpent as an indirect statement of what Satan was to receive.

Satan had probably led a rebellion against God at some point before he tempted Eve and had thus lost his place among heaven's host (Rev 12.7-9). His rebellion may have occurred on the day before (from our time reckoning) he tempted Eve; particularly if it was the case, as some have suggested, that he rebelled out of jealousy when he saw God creating mankind and giving them dominion over the rest of the created order. Therefore, God did not make any effort to explain to Satan why he was being punished—Satan knew precisely what evil he had done when tempting Eve—since it has always been his blatant intent to destroy mankind. So, God commenced Satan's judicial sentencing with an immediate and direct statement of his punishment. Although this punishment fell literally upon the serpent, it also applies to Satan in a figurative sense.

The first component of Satan's punishment is that he was consigned to crawl on his belly. If we imagine the appearance of angels, when they take on physical form, we think of them as having wings (Ezk 10.5). Thus, Satan figuratively lost his wings. We do not know much about what goes on in the spiritual realm, but we can legitimately surmise that he no longer has the freedom of movement that he had as a holy angel. It is possible that his punishment includes frustrations that affect his ongoing existence, making it difficult for him to operate—the spiritual equivalent of crawling on one's belly and not being able to walk upright and look into the face of other beings of the same, or equivalent, order.

Secondly, Satan was consigned to eat dust. It is likely that it was his pride that turned him from being an angel into a devil. He was not willing to remain in the role for which he had been created—a servant of God, charged with the welfare of men (Ps 91.11; Heb 1.14)—and he wanted to exalt himself above men, and even above God. Therefore, his punishment consisted in this once-exalted creature having all his glory and majesty stripped from him and instead being consigned to an everlasting humbling. He became subject to contempt and disgust from angels and from the saints who have been saved out of mankind. They both view him with abhorrence, in a way that is similar to how most men consider snakes—as vile creatures. His spiritual condition is equivalent to a president of a bank who has been disgraced, lost his family and all his possessions because of his felonies, and lives on food salvaged from dumpsters behind fast-food outlets.

Thirdly, Satan was condemned to a perpetual state of war and irreconcilable enmity with mankind. However, he is fighting only a losing war against men because humanity has a victorious champion, Jesus, fighting on our behalf (Lk 22.31-32). As much as Satan would wish to triumph over God by destroying mankind, he finds God rescuing from his grasp many human souls every day. Seeing God save a great multitude (Rev 7.9), and removing them from his clutches, must be the most exasperating thing in Satan's existence. His hatred against God and mankind must make him scream like a mythical banshee—the painting, *The Scream*, by Edvard Munch is a good illustration of Satan's present state of mind.

Finally, Satan's ultimate and everlasting demise is guaranteed. He knows it, and cannot do anything to stop it from happening. His head has been struck by Christ's death and resurrection, and he is 'dying' in pains of agony waiting for his consignment to the everlasting pit. While the elect from mankind and the rest of creation will be restored to a state that will exceed the beauty and goodness of the first creation, Satan will be consigned to remain in perpetual degradation—in a lonely gloom and darkness with nothing but his hatred to fill his mind forever. What will make his demise worse, from his perspective, is that it has been achieved by the work of the offspring of the woman—the God-man, Jesus. From the beginning, God's plan was that mankind would have dominion over the rest of creation (Gen 1.26). This dominion did not extend to the angels. However, with Satan's attempt to have dominion over mankind, he has now lost his parity with mankind, has been defeated by the Last Adam (1 Cor 15.45), and will

see mankind crush his head (Rom 16.20). The irony will be nothing less than spectacular, as humankind will have the final victory over Satan and his evil hordes (1 Cor 6.3). At the final judgement, Satan will watch as the saints are ushered into the everlasting glory of paradise with their resurrected bodies, while he is cast into the lake of fire with no more access to the souls of men.

Messianic Promise [May 22] (Gen 3.15)

When God issued sentences on the first criminals, he stated that there would be two offspring (seeds)—of the woman and of Satan. Since Satan does not reproduce and have children in the sense in which mankind multiplies, we must understand this passage to be speaking metaphorically of non-physical seed. Those who are the seed of the woman are those whom God redeems and purifies from their sin. Those who are the seed of Satan are all those (fallen angels and men) who will continue in their rebellion against God forever. This differentiation is not explicitly set out in this verse, but other parts of Scripture confirm that those who persist in sinning and do not repent are children of Satan (Jn 8.44; Eph 2.1-3; 1 Jn 3.8-10). Those who are not the offspring of Satan must be the offspring of God, in the spiritual sense (Jn 1.12; Jn 11.52). There can be only these two options (Mt 13.38). This theme of the two offspring is soon realized through two of the sons of Adam and Eve (Cain and Abel; and Abel's replacement, Seth), and is carried throughout Scripture and beyond, to the end of time—sometimes in other forms, such as being described as two cities (e.g., Jerusalem *vs* Babylon).

These two offspring will be at enmity with each other in various ways; as we learn later in Scripture, and as we see from history and the daily news. For example, Satan tempted Christ directly as he began his public ministry (Mt 4.1-10) and in the garden on the night before his crucifixion. Satan and his demons attack citizens of the Kingdom of Christ with temptations and accusations. Satan uses his human subjects, who adhere to false religions, to persecute Christians and murder them while they are worshipping together. Or, he encourages his evil hordes to ridicule and expel Christians from public service or academic positions. This war will continue until the last believer crosses onto the celestial shore and the last rebel is cast into the pit.

This verse shifts from collective offspring to a singular offspring, referred to as 'he'. Although the 'he' is not named, it is clear from elsewhere in Scripture that this is the first reference to the Messiah, who would be born of the line of the woman (Gal 4.4). This verse teaches that the Messiah would be a man since he would be a descendant of the woman, but would also be more than a man since he would defeat a spiritual being—Satan. We now know that this prophecy could be fulfilled only through the incarnation, in which God would appear in the form of the God-man, Jesus Christ. It may also provide a hint of the virgin conception, since genealogies ran through male lines (Gen 5.1-32; Gen 11.10-26; 1 Chron 1-9; Mt 1.1-17; Lk 3.23-38), yet here it is through the woman's line.

Satan (the primary 'you' intended in this verse) was to strike the heel of the woman's offspring. Since snakes crawl at ankle level, this is a fitting image for how Satan tries to trip God's people. The imagery of striking the Messiah's heel, when contrasted with his own head being struck, implies that some damage will be done to the Messiah, but that it would not be absolute. Herod's murder of the infants in Bethlehem is included in Satan's striking at the heel of Jesus; as is Satan's temptation of Jesus in the wilderness, and Jesus' suffering during his trial. The heel striking ended with Satan stirring up Judas, the Jewish crowd, and the Roman and Jewish leaders to murder Jesus (Acts 2.22-23). This final strike was fatal but temporary; so, it was only a bruising of the Messiah rather than a crushing.

According to the prophecy given here, Satan was to wound the heel that would ultimately strike his head. The battle between good and evil will end when Satan's head is crushed by Christ (Ps 110.1; Col 2.15; 1 Jn 3.8) and his people (Rom 16.20). Yet, while the defeat of Satan is certain it is also progressing in time. Satan has been defeated (Lk 10.18; Jn 12.31; Jn 16.11)—with Christ's death and resurrection providing the fatal blow (Heb 2.14)—but he struggles on, in dying agony, until he will be consigned to his everlasting destiny in the lake of fire, at the end of time (1 Cor 15.24; Rev 20.10).

The fact that the tempter's head would be struck by the offspring of the woman hints at the coming of a saviour who would bring to an end the reign of Satan and provide a means of restoring the broken relationship between God and man. Thus, this verse is considered to be the first announcement of the Gospel. However, it would have been unclear to Adam and Eve and to Satan. Satan likely did not understand the nature and full extent of his punishment, even until the day Christ was raised from the dead—if he had understood this prophecy, he would have tried to prevent the crucifixion rather than advancing it, in an attempt to avoid his doom. Adam and Eve could not have discerned from this statement the nature of the incarnation or the way in which Christ's death would atone for their sins. Nevertheless. God begins the process of revealing his glorious purposes—to exterminate evil, restore relationships, and renew paradise. This leads us to ask, were Adam and Eve saved and are they in Heaven today? Even though they did not have full knowledge of the redeemer, they had sufficient knowledge. How they dealt with that knowledge would determine their destiny. We are not told that they repented of their sin; however, they likely did. Also, they probably took God at his word by faith that a redeemer was coming; and that was sufficient for God to pardon them. God's searching for them (Gen 3.8) and covering them with animal skins, symbolizing substitutionary atonement (Gen 3.21); Adam's naming of Eve (Gen 3.20), and their naming Seth (Gen 4.25) and worshiping God (Gen 4.4, 26); seem to imply that they had been restored to fellowship with God.

"I Will" [May 23] (Gen 3.15)

This is the first instance in which God makes a prediction about the future—in this case a future that was over 4,000 years away! He had previously stated his intent to act, and then followed through immediately (Gen 2.18). This does not mean that God did not eternally plan the creation of the universe 'before' he created it. A challenge we encounter when we speak of God's planning before acting is that we need to use time-bound concepts in order to conceive of an order of precedence. Since time was created as part of this universe (see, <u>When Time Began</u> [January 2]), God does not exist in time. So, how he can plan before acting, without time, is difficult for us to understand. In this instance, we can understand his planning to do something before doing it, because of the time that passes between the two, from our perspective.

However, his statement raises another matter for consideration. That is, how God can make a statement about the future, particularly a very distant future, with absolute certainty, as he does here. The reason is that he not only knows the future, but he also predestines it and makes every event unfold according to his detailed plan. When we state that God predestines man's actions, most people object with the claim that this removes man's freedom of will, and that man becomes nothing more than a programmed carbon-based computer, who cannot be held accountable for his actions (e.g., for sin). They even go as far as to say that if God predestined man to sin, then God is the author of sin.

Some people try to protect man's 'free will' by suggesting that God knows the future but does not control the future actions of men—i.e., he looks into the future and sees every free action of men. They say that foreknowledge is not the same as fore-determination; being able to predict that something will happen is not the same as making it happen. For example, they say, God can have foreknowledge of those who will believe in Jesus, and in response he loves them in advance. This allows man to act freely and God to see in advance the events (repentance) that are contingent on the free will of man.

Others suggest that God's knowledge of the future is contingent and partial. They claim that the laws of physics prevent God from knowing the details of what will happen in the future. Some use the uncertainty principle of quantum mechanics as the basis for their argument. This principle posits fundamental limits to the precision with which pairs of physical properties of particles can be known. For example, we cannot know precisely both the position of a particle and its momentum—if we know precisely where it is, then it cannot be in motion, if we know how fast it is moving then we cannot know where it is precisely—or its current energy at a given point in time. They also appeal to the uncertainty of quantum states. They apply these limits to God and claim that he cannot

know precisely how the universe is currently behaving and therefore cannot predict the future with precision.

God makes a blunt statement that everything he plans will happen (Is 14.24). The only possible way for this to be true is if God *makes* happen that which he purposes. If events are truly contingent, then they are indeterminate, and if indeterminate, they are unknowable in advance. There is no way that anyone, even God, could have predicted hundreds of years before that a pregnant virgin in the line of David, living in Nazareth, would give birth in Bethlehem because she was summoned there by a Roman census, or that her son would be crucified while men gambled over his clothing, unless he made it happen. The only way that men will act in a particular way, is if God decrees the action. God knows the future is certain because he makes it certain.

While God sovereignly predestines all events including every thought, word, and action of all men (Ps 139.4, 16; Prov 16.33; Acts 13.48; Rom 8.29-30; Rom 9.1-29), men are still truly and fully responsible for their actions (Jer 17.10; Ezk 18.1-32; Rom 6.23; Mt 16.27). God even states that events are both predestined and the actions of responsible agents (Gen 50.19-20; Acts 2.23; Acts 4.27-28). This appears to be a contradiction, but as an antinomy it is not illogical.

Man's free will is a psychological fiction. Men believe that they act entirely from their own rational selfdetermination. In fact, they are determined by their inborn evil natures (Jn 8.34). Man cannot behave contrary to his nature physically, morally, or volitionally. Man, as a sinner is not free to choose to do either good or evil, because he has an evil heart that ever inclines him to sin. If we were truly free agents then we could choose not to sin—but everyone born, by natural generation, throughout all history has sinned. If we were truly free agents, we also could choose the time and circumstances of our birth and death, or choose not to die (excluding suicide). Since we cannot do any of these things, it is clear that we are not actually free agents. The biggest lie that has ever been told is that men are born as free moral and volitional agents; but the Bible nowhere teaches this.

Most attempts to reconcile God's sovereignty and human 'free will' bog down in definitions and convoluted conditions, and end up either limiting God and giving man too much volitional freedom or turning man into a mere puppet. Instead of trying to explain something that our finite minds cannot understand, it is better for us simply to accept truths that God states: he predestines all things and men are responsible for their own actions.

Is the Bible True? [May 24] (Gen 3.15)

It might seem strange to use this verse as a touch point for answering the question, is the Bible true? We will consider its relevance to this question in a moment. First, we need to note that a classic conundrum in philosophical thought is how we know that truth is true. For example, how do we know that the Bible is true and other religious documents such as the *Qur'an* and *Book of Mormon* are not the word of God? No test can be devised by human minds to make this determination definitive. The only way that we can ultimately know that truth is true is because the Holy Spirit, through direct personal revelation, tells us that it is. We know that the Bible is true because God opens our minds so that we can understand the Scriptures.

However, in this verse God provides a 'test' for demonstrating the reliability of the Bible. Like evidences for the existence of God, this 'proof' of the Bible's truthfulness can only be indicative and not absolute. We cannot use deductive arguments to prove the existence of God or to prove that the Bible is true. We cannot do this because it would place our minds and arguments above God and his word. Our measuring instrument would become a higher standard than God himself. Also, we would end up in an infinite regress of proofs. Someone could ask us how we know that our instruments for measuring are the right ones, and we would require another level of standard to determine the accuracy of our first measuring instruments. The only final standard can be God and his word. All men know that God exists and they know many of his attributes (Rom 1.19-20). They also know that the Bible is God's only permanent communication to mankind and that it is true. But, while knowing these things, they choose to suppress them (Rom 1.18).

The 'test' God provides is foretelling the future (Is 42.8-9; Jn 13.19). In this verse. God announces the arrival of the Messiah about 4,000 years before he arrived. It is true that this prophecy is somewhat cryptic and it could be inferred that it is too general a prophecy from which to draw the conclusion that God knows the future in intimate detail. However, there are other prophecies in Genesis 1-11 which demonstrate that God knows, and plans, what will happen. For example, he tells Noah that in seven days he will bring the flood rains (Gen 7.4).

There are hundreds of prophecies in the OT which have been fulfilled—many through the incarnation, death, and resurrection of Jesus. As God's revelation unfolded many of the prophecies became more specific. For example, Isaiah, writing about 740 BC provided the specific name—Cyrus—of the monarch who would issue the decree allowing the people of Israel to return from their captivity (Is 44.28; Is 45.1). The fulfillment of this prophecy occurred about 200 years after it was written. Daniel, in chapter 11, provides incredibly specific detail of events which were to occur between his time (around 540 BC) and the arrival of the Messiah (4 BC). It is as if he wrote an historical account of events which have passed, but he wrote it hundreds of years before the events occurred. Because of the accuracy of Isaiah's and Daniel's prophecies, sceptics have resorted to the claim that these prophecies were written after the events occurred. However, there are so many prophecies about the Messiah in the OT that were fulfilled, that it is impossible for additions to have been injected into the texts after the fact (e.g., by Christians). For example, the Messiah would: be born of a woman (Gen 3.15), a virgin (Is 7.14), in Bethlehem (Mic 5.2); be a descendant of David (Is 9.7); live in Egypt (Ho 11.1) and Nazareth in Galilee (Is 9.1, 2; Is 11.1); be betrayed for thirty pieces of silver (Ps 41.9; Zech 11.12–13); and be crucified with criminals (Ps 22.16; Is 53.12), have people gamble for his clothes (Ps 22.18), receive vinegar to drink (Ps 69.21), die with words of forsakenness (Ps 22.1), be raised from the grave (Ps 16.10; Ps 49.15), and ascend into Heaven (Ps 24.7-10).

God gives a test to determine the truthfulness of his word or the word of any pretend prophet. He declares that if a prophet speaks about the future and the prophet's word does not come true then he is a false prophet (Dt 22.18). This is the test to determine if any other book or writing, considered to be sacred or holy, is true. If it cannot predict the future with explicit accuracy it is not a word from God. For example, the Book of Mormon does not even provide an accurate account which can be compared with historical facts, let alone provide verifiable prophecies which have been fulfilled. Defenders of the Qur'an claim that it presents prophecies which have been fulfilled (e.g., "They will alter Allah's creation" [4:120] refers to genetic engineering, "[W]hen the wild beasts are gathered together" [81:6] refers to zoos, "[W]hen various souls are paired" [81:8] refers to modern communication systems, and "By the heaven containing pathways" [51:8]" refers to air transportation. It is clear from these examples that the *Our'an* does not include specific prophecies about the future which have been realized. In addition, what 'history' it records is often a fairy tale—for example, claiming that Jesus was not crucified [4:157], referring to Mary as the sister of Moses and Aaron [19.28], and portraying Alexander as a righteous man [8:83-99]. Other religious texts tend to be mystical ramblings that have little connection with history or the future. The Bible is unique among all religious texts, being absolutely accurate in its predictions of the future and in everything it says in the realms of history or science. The Bible is the word of the omniscient and omnipotent God. It is true and must be believed to be true by all men.

Eve's Punishment [May 25] (Gen 3.16)

Eve's punishment for eating the forbidden fruit was centred on relationships. As the mother of all living (Gen 3.20), she was condemned to suffer pain as she brought new life into the world. Her relationship with her children should have been filled only with joy, when she fulfilled the mandate to be fruitful and multiply, but instead it become arduous. Another relationship that was damaged was that with her husband. It was changed from being a relationship of love, respect, and support into one of ongoing conflict and tension. She attempted to gratify her pride and pleasure, and instead gained pain and persecution. Her punishment not only affected her, but has been visited on all of her female descendants.

The pains of childbearing include not only the severe pain associated with labour but also other problems, including difficulties conceiving, pain during sexual intercourse, miscarriages, excessive bleeding after giving birth, breech births which often require caesarian sections, and lactation problems such as that caused by plugged milk ducts. These pains related to childbearing that women experience worldwide are a constant reminder of Eve's grievous sin.

The statement "your desire shall be toward your husband" has interpretation challenges. First, the Hebrew word translated 'desire' appears only two other times. In one instance (Song 7.10) the meaning appears to be 'sexual desire'. If this is the meaning here, then God may be setting up a contrast—even though women will experience pain in childbearing they will still desire to have sexual intercourse and thereby produce children, thus ensuring that the mandate to bear children is achieved in a sinful world. Today, we see how women have thwarted this mandate with the use of conception control, so that sexual desires can be fulfilled without a connection to procreation.

The other occurrence of the word translated 'desire' is in Genesis 4.7. In that instance, the word has the meaning of sin wanting to be a master over Cain. Thus, the ESV provides the translation for the 'toward' of 'contrary to', and the statement could be read as, "your desire shall be *against* your husband". Given the contextual proximity of Genesis 3.16 to Genesis 4.7, it may be best to translate and interpret the two passages in a similar manner—i.e., with 'against'—with the idea that the woman will desire to have mastery over the man. Thus, it appears that God declares that Eve and her descendants will have a desire for independence from, and to rule over, their husbands. Instead of accepting their God-defined role in marriage, as helpers for their husbands, they will want to oppose and dominate them. Some respond to this suggestion by noting that Eve had already acted independently from her husband when she ate the fruit, and thus her punishment would be that she would *desire* from then on to be submissive toward her husband. However, this response is faulty since if Adam and Eve had not sinned, Eve would have desired to be submissive to Adam, in accord with God's defined role-hierarchy.

It is evident that many women despise, disobey, and domineer over their husbands—a direct result of the curse on the marriage relationship. And, this rebellion extends beyond the marriage relationship. It underlies the struggle between the sexes that has been especially visible as a driving factor beneath modern feminism, which has been taken over by lesbians who hate the God-defined male headship (1 Cor 11.3). It has become a curse that causes modern media (e.g., in advertisements) to portray men as bumbling fools and their spouses as rational, clear-headed leaders. It is this curse that has also led women to demand roles which God has not assigned to them such as participating in combat in military engagements or being elders or pastors of congregations. This curse has also contributed to the gender confusion of our day that has resulted in lesbian couples breeding and rearing children without the presence of a male marital partner.

As a result of Eve's sin and punishment, women are cursed with not being content to have submissive roles to men. The NT clearly teaches that women are not to aspire to fill roles assigned by God only to men (1 Cor 14.34-35; 1 Tim 2.11-12) and that women are to be submissive to their husbands (Eph 5.22-24; Col 3.18; 1 Pt 3.1-6). This is not a culturally conditional injunction which died out after the Apostolic age, as many modern interpreters attempt to demonstrate. It is based on the creation order (1 Tim 2.13-15).

The curse extends beyond the attempt of women to have dominion over men—it includes the failure of their attempt, as shown by the translation, "*but* he shall rule over you." In a sinful society, when women attempt to dominate men, it backfires, and men reassume their God-given headship; but do so in an authoritarian and harsh manner. This is why the status of women is so bad in societies dominated by false religions such as Islam and Hinduism, where men rule over women with despotic cruelty, treating them as slaves. It is only in Western civilization, with a Christian heritage, that women have been granted the rights that are missing elsewhere. However, as the West has continued its decline into resurgent paganism, the Church has ceded the Biblical position and has encouraged women to dominate men. If the Church does not emphasize the proper Biblical model for marriage—wives being submissive and respectful and husbands being wise, loving and gentle with their wives (Eph 5.21-33)—we can expect to see the return of harsh domination of women by men, even in the supposedly enlightened countries of

Europe and North America.

The Problem of Pain [May 26]

(Gen 3.16-17)

Both of the punishments given to Eve and Adam included pain as part of an ongoing curse on mankind. The woman and her descendants were to experience pain in childbearing, and the man and his descendants were to experience pain when working the ground to provide sustenance.

Pain is a constant reminder that we now live in a sin-soaked realm. Before Adam and Eve had sinned, the world (universe) was all very good and no pain would have been associated with any activity of humans or animals. There will also be no pain in the new earth (Rev 21.4). This means that in the paradise that existed originally, in this temporal-spatial realm, God designed and controlled the physical systems so that nothing bad (e.g., a tree branch falling on someone's head) would happen which could cause pain. Likewise, in the coming paradise he will design and control the physical systems to prevent events from causing pain. It also means that pain is a direct result of the sin that mankind introduced into the world.

Those who wish to deny the existence of God, or to accuse him of being a mean and capricious person, attempt to use the existence of pain as a reason for their unbelief. They claim that Christians have *the* problem of pain, because a good God would not allow his creatures (e.g., 'innocent' children and baby animals) to suffer from pain. We can explain the reason why pain was introduced into the world—as punishment for mankind's sin of rebellion. Thus, it is not God who is to blame for pain, but our first parents. We can also explain, logically, why a good God would allow and decree that supposed innocents would suffer pain—they suffer because they were partners with our first parents in their sin, and pain is part of God's just punishment for those who attempt to usurp God's authority and to live autonomously. For Christians, if there is a problem of pain it is not a logical or factual problem, it is a psychological problem and a problem of unbelief. If we have problems with why God decrees pain, it comes down to the simple fact that we don't believe that God can have a sufficiently good reason for his decrees and that he is truly working out all things for the good of his people (Rom 8.28).

We can lift the veil somewhat on why God permits pain in a sinful world and find good reasons for the existence of pain. For example, the pain caused by a pebble in our shoe makes us stop what we are doing and remove the pebble so that we do not cause serious damage to our foot. Or, the pain caused by touching a hot stove makes us quickly remove our hand from the glass over the heating element to prevent first-degree burns. People who are born with the rare condition (*analgia*) of not being able to sense pain, or who suffer from leprosy which kills the pain sensing nerves, cause great damage to their bodies. From this perspective, we can grudgingly agree that pain is justified. Admittedly, it is difficult for us to explain what the value of excruciating or chronic pain is. However, we must accept it as fact that since God has good reasons for allowing us to suffer from basic forms of pain, he also has good reasons for allowing us to suffer from the worst forms of pain—only we do not understand the reasons at this time.

We should put the problem of pain into a proper perspective. Jesus was the only innocent person who has ever lived. Yet, he suffered pain of a kind, and to a degree, that exceeds what most people will ever suffer. His pain was the result of his being beaten and whipped, crowned with thorns, and crucified. In this instance, God had a very good reason for decreeing and permitting his son to suffer and die—to display his love for us (Rom 5.8). Christ suffered to pay our debt of sin so that God could forgive us. No one, believer or unbeliever in Christ, has a right to claim that God does not have a sufficiently good and loving reason for allowing suffering caused by pain.

It is not Christians who have the problem with pain; it is the materialistic naturalists who have the problem. They cannot explain why:

• *Pain exists*. When we walk out of a dark room into sunlight our eyes automatically make an adjustment to the increased light, but do not cause us pain. Without fanciful inventions, proponents of evolution cannot explain

why warning systems, which currently give pain signals, do not operate like other self-protective biological systems. They cannot explain why pain is beneficial for survival.

• *Pain can be very painful.* Excruciating pain cannot be explained under the Darwinian model. For example, evolutionists cannot explain the adaptive value of the extreme pain associated with passing a kidney stone through the urinary tract. Organisms suffering from severe pain often cease to function normally—for example, they shut down their metabolic and reproductive systems, and animals suffering from pain make sounds that attract their enemies. If survival of the fittest were actually how life developed, then the way animals and men react to pain should have been bred out of the genome by natural selection.

The existence of pain is a philosophical problem for every system of thought that denies the Genesis account. Only Christianity has an answer to the problem of pain. The presence of pain should not be a problem for us, but rather it should teach us to trust God and remind us to look forward to the resurrection when pain will no longer be a problem for any of God's people.

Adam's Punishment [May 27] (Gen 3.17-19)

Adam abdicated his headship role in the first marriage relationship, listened to his wife's false claims about the benefits of eating the forbidden fruit, and allowed her to lead him into sin. Instead of acting as her protector and guide, he neglected his responsibility for the pleasures of a moment. His behaviour is a solemn reminder to all married males that they have a responsibility to act as the moral conscience for their families. Instead of following, they are to lead and guide their families to obey God's commands. As a result of his deliberate rebellion he was punished with a punishment that has continued to afflict all of his descendants to this day.

The first aspect of his punishment is that work has been cursed; in particular, because he ate what was prohibited, mankind will always face challenges providing enough food. The challenge is not because the world does not have sufficient resources to feed a large population. It does, even if mankind was faithfully following God's command to be fruitful and multiply (Gen 9.1). Rather, the problem is that food production requires hard work. Until Adam's sin, work had been, and was intended always to be, a pleasant activity that would stimulate man's mind and engage his creative abilities. Feeding himself would not have been the primary purpose of work for Adam. We might think that the curse has been lifted today since only about one percent of the North American population works directly in agriculture and only about ten percent of our income is required to supply food. However, we have not overcome the curse on work through technology, the green revolution, and automation. The entire human population faces an on-going battle with weeds, insect pests, soil erosion and infertility, and declining plant and livestock genetic viability. Notwithstanding the largess of the soon-to-implode welfare state, the reality is that if we do not work, we cannot eat. In addition, men cannot seem to find or maintain a balance with respect to work—for most people work has become arduous and boring and they attempt to avoid it, or it has become a compulsive and destructive force in their lives. Work has become an abysmal drudgery or an addicting drug rather than a blessed benefit.

Man's food has also been cursed, as a result of Adam's punishment. Prior to Adam's sin, the fruits and grains to which he had access (Gen 1.29-30) were of an excellent quality and provided all the nutrients which he needed to carry out his duties. Now the curse includes eating 'the plants of the field' (Gen 3.18). This implies that something about food and man's diet was changed after he had sinned. Some suggest that this means only that he would no longer have access to the plants in the Garden of Eden (Gen 3.23). However, if he had not sinned and had borne many children, mankind would have spread beyond the garden. All of their food in Eden, and beyond, would have been as excellent as that found in the garden, because all that God had made was very good. Therefore, man's relationship with his food has been changed. Even with the abundance of food available to us in North America we find that the majority of people are overfed and yet malnourished. Food is no longer only good for us, but it can be dangerous to our health and detrimental to longevity.

If Adam had not sinned he would have lived forever and been fulfilled with his work and worship. After his sin, his

body underwent a change and he became mortal and subject to a process of decay. Hard work became his lot and eventually he would die. Even though death is not mentioned in Eve's punishment, because of Adam's representative position, Adam's punishment is applied also to her. And, because of Adam's sin, physical death is the prospect for all mankind (Rom 5.12)—we all must live out a life of miserable sweat until we collapse in our last breath. The form of the curse is instructive. God does not explicitly use the words 'die' or 'death' in the pronouncement of Adam's punishment. The death of which Adam was warned (Gen 2.17) is here referred to as a return to the dust out of which his physical constituents had been formed (Gen 2.7). Adam, who tried to play God, was reminded that he was far from being a god and was before God only dust. This pronouncement of our frailty should humble us as we live our allotted seventy to eighty years.

Jesus is the Last Adam (1 Cor 15.45), and the curses pronounced on Adam also fell on Jesus who was the offspring of the woman (Gen 3.15). On our behalf, and as our substitute, he suffered the consequences of the curse on Adam. His work was filled with agonizing sweat (Lk 22.44), thorns inflicted pain on him (Mt 27.29), a tree became his instrument of death (Gal 3.13), and he became subject to death. However, where Adam failed to obey, Jesus kept the law perfectly. Thus, in Jesus we begin to see the reversal of the curse. First, his body did not decay into dust (Acts 2.31), then he conquered death through resurrection, and soon he will lift the remnants of the curse on our lives and work when he reforms creation. Therefore, we must not lose hope. The curse on Adam is not the end, but the beginning of a marvelous story of redemption and restoration. This hope is hinted at even in the midst of the curse. Adam's life was not immediately snuffed out. He was permitted to live for 930 years before he died; he was not cursed directly as the serpent and Satan were (Gen 3.14), but indirectly through the curse on the ground. Earth, although it would produce thorns and thistles, still produced enough good food for his nourishment. Even his work, as difficult as it was, would still provide a measure of satisfaction (for example, we take legitimate pride in seeing the completed products of our handiwork). Even in God's wrath, there is mercy.

Cursed Creation [May 28] (Gen 3.17-19)

Adam's sin and its associated punishment introduced calamity and decay into the physical universe. Throughout the created order, from 'edge' to 'edge', wherever mankind sets his foot, the consequences of the curse can be seen. The cursed ground (Gen 3.17) and "thorns and thistles" (Gen 3.18) are to be understood as a synecdoche, in which a part of an entity is used to refer to the whole entity. In the NT, Paul indicates that this is how we are to understand the effect of Adam's sin—i.e., all of creation has been cursed (Rom 8.20, 22).

Underlying this curse is the fracturing of the harmonious relationship that originally existed within mankind, and between mankind and the animals and the rest of the natural realm. The ground that was under man's dominion, and was to be a source of comfort and joy, has become his enemy and a source of toil, weariness, and pain. The thorns and thistles stand in the place of everything that can hurt men, including rocks falling from cliffs, hot lava spewing from volcanoes, tornados destroying homes, viruses that cause diseases, and toxic plant parts. Everything which is injurious to man, whether organic or inorganic, alive or inanimate, or plant or animal, was introduced into God's perfect creation as a result of man's sin.

Animals were originally vegetarians (Gen 1.30). Thus, the curse on creation introduced carnivorism. We cannot fully understand the manner in which this change and other significant changes in nature were introduced; but we must believe that God could have easily used direct or indirect means to bring about the changes. For example, he could have instantaneously changed all animal kinds for their new place in the now spoiled world—sharp incisors, poison glands, and cruel claws could have suddenly appeared in the animals created on the fifth and sixth days of creation. It is inappropriate for men to attempt to limit the Creator by saying that he could not have done such a thing. A God who created all the stars in the universe in a single day can certainly change the anatomy of his created animals. Alternatively, God may have flipped a genetic 'switch' in the broad spectrum of coded information found in every creature's DNA, so that the existing creatures produced progeny suited to their new hostile environment.

Along with the changes to plants and animals, making them dangerous for mankind, the curse affected all of creation in another way—the universe began an irreversible process of decay. Until that point, God probably governed the physical systems through different 'laws' than he uses today. For example, although some increase in entropy would likely have been necessary—such as that which is caused by friction so that men can walk on a surface and pick up objects—God likely maintained a level of energy stasis through a constant injection of high-order energy (similar to how he created light on the first day) and a removal of low-order energy (heat). Now, in contrast, God operates the physical universe as a closed system—the total amount of energy in the universe does not change (the first law of thermodynamics) and entropy increases through time (the second law of thermodynamics). Other forms of decay which would not have been present in the original creation include: 1) information degradation (e.g., the rate of transcription errors in human and animal genomes is increasing with each generation), 2) galaxy and planetary systems falling apart (e.g., stars explode, the sun is burning up, the earth's rotation is slowing down, and the moon is moving away from the earth at about 4cm/year), and 3) physical systems weakening (e.g., Earth's protective magnetosphere) or deteriorating (e.g., rust). The universe (with the earth in it) is not chronologically old (at about 6,000 years), but it is growing old quickly as it groans under God's curse.

Another significant aspect of the curse was the introduction of death, which now affects all living creatures. Prior to man's sin, men and animals would have lived forever in paradise. The long life span of the pre-flood patriarchs (chapter 5) indicates that man's physical constitution had been designed to last indefinitely (e.g., supported by flawless cell replacement). Note that death is a phenomenon applied in Scripture to specific types of entities—living beings—which includes men and some animals. Death is not applicable to plant material decomposing into soil nutrients—i.e., cells do not *die*, in the Biblical sense, any more than clouds do when they give up their water. As we noted previously (Gen 1.14-19), since death is the result of Adam's sin, all animal fossils must have been formed after the creation of man. The 'geologic column' does not provide a billion-year history of the earth, as evolutionists claim. Rather, it records the effects of a worldwide flood and the geologic activity (e.g., volcanism) after the waters had receded from the land.

Finally, the curse introduced all forms of social dysfunction and deterioration, including tyranny, genocide, murder, rape and weapons of mass destruction. This wickedness quickly escalated after Adam's sin, until it had become so detrimental to life that God found it necessary to intervene directly (Gen 6.5-7). It is only because of God's gracious general governance that mankind has not entirely obliterated himself since the days of Noah. In the past, God judged the earth with water. When mankind's wickedness has once again reached its fullness, God will judge all men at once; this time it will be by fire (2 Pt 3.7, 10-12). Then God will re-create the universe and remove all vestiges of the curse, as he creates the new heavens and earth (Rom 8.21; 2 Pt 3.13).

Genomic Decay [May 29] (Gen 3.17-19)

Axiomatic principles of the evolutionary paradigm include:

- 1. Random mutations in the genome (genetic information in a class of organisms, including chromosomes, genes, and nucleotides) provides for the variety found in the 'building blocks' of life.
- 2. Natural selection filters these mutations, and only those that assist an organism to survive continue to exist.
- 3. Genomic changes cause different kinds of organisms to develop.
- 4. Over time, the complexity of some genomes has increased.
- 5. All of life can be placed on a single genetic continuum—with viruses and bacteria on one extreme and humans on the other.

A fundamental assumption of evolutionists is that some random mutations are good—i.e., they contribute to the overall health of a phenome (an instance of a genome, such as an individual animal or human). However, all evidence points to the contrary. Adam's sin and its associated punishment introduced decay into the physical universe. Despite what evolutionists say, *random* mutations are bad. An *accidental* change (e.g., induced by radiation) in a complex DNA structure cannot improve the coded information, any more than a random letter

replacement in a document can improve the message. Many mutations are similar to spelling errors in a document and have minimal effect on the comprehensibility of the overall message. However, some 'spelling' errors in DNA are significant, just as a spelling error in a document can have serious consequences. Consider for example the difference between "I will kiss her" and "I will diss her". The second would not be a good thing to do to someone you love. Some genetic mutations are more significant 'spelling' changes and result in the equivalent of entire words being changed or deleted, which has serious consequences for the phenome, even leading to premature death. The existence of ~1,000 different human genetic disorders is evidence that genetic mutations are deleterious. However, God built into the DNA instructions methods for working around genetic errors so that animals and humans can continue to function even though their genetic instructions are faulty—what he provided is similar to fault tolerance and redundancy in computer systems.

Evolutionists respond to the reality that most mutations are bad by pointing to examples of phenomic variety as if this were the result of transcription errors in DNA replication. For example, they point to bacteria adapting to different environments (e.g., developing drug resistance, or surviving in temperature extremes). They *interpret* these as examples of good mutation, whereas in fact this is evidence of adaptability God programmed into the genetic makeup of the bacteria—for example, 150 year-old bacteria from remains of members of the Franklin Expedition in the Canadian Arctic were resistant to drugs developed a century later. DNA is not a simple step-by-step recipe for creating a cell, it contains within it a complex program that can sense and react to changes in the environment, command genes to react, and reorganize genetic sequences. This capability is pre-programmed into the makeup of the DNA for each kind of organism and is not a result of mutations—the variety already exists, by design, in the DNA; it is not injected by random mutations.

Evolutionists also claim that some examples of genetic mutation are good—such as a hairless Chihuahua being more tolerant to extreme heat. However, the 'goodness' (e.g., the overall fitness of the organism) of these mutations can be debated, and instances of these kinds of mutations are the result of information loss—i.e., degeneration— and not the result of an increase in coded information. It is ironic to see how scientists contradict themselves. Articles speaking of deliberate human-induced genomic modification often reassure readers that the genetically altered organisms prove to be less viable than their wild-type counterparts and hence are unable substantially to affect existing ecosystems. If human-directed genetic alteration is less viable than the pre-existing natural organism, under what conditions would random genetic alteration be more viable?

If we assume, for discussion purposes, that some 'good' mutations do occur, this does not support the evolutionists' case, since the majority of mutations are bad—which evolutionists agree is the case. Over time, bad mutations accumulate because they escape the repair processes God has put in place. This is probably a reason why the incidence of diseases like cancer appears to be increasing. Some of the bad mutations (over 100, and probably around 300, transcription errors, such as nucleotide substitutions, occur per generation in humans) are transmitted to an organism's descendants. With each generation, the genome deteriorates. No extremely rare 'good' mutation can offset this decay process. Genomic decay makes it impossible that man could have evolved from a pre-hominoid creature over millions of years—the genome would have decayed to extinction long ago. Genomic decay is increasing at such a rate that all animal populations and the human population will produce nothing but monsters at some point in the not too distant future. An expert in genetics estimates that the human population will have reached the point of extinction in about 300 generations. We are now approximately 200 generations since the flood.

Genomic decay is such a serious problem for evolution that it is *the* deal-breaker. However, evolutionists ignore genomic decay. They are content to live in denial, and without any hope of an explanation of how life actually formed, rather than accept God's creative work as the explanation.

Cursed by Limitations [May 30] (Gen 3.17-19)

In the sinless state Adam and Eve had been given many gifts by God, including immortal life, freedom from all

pain, direct fellowship with their creator, dominion over the created realm, meaningful work, companionship with one another, the prospect of producing a family, a delightful habitation, abundant supplies of tasty food, and moral standards to guide their behaviour. Another exquisite gift was intelligent and clear minds with which they could explore and learn about the created realm in which they had been placed. Using a concept from the world's understanding of human psychology, we can say that Adam and Eve, living in the Garden of Eden, had all of the needs in Maslow's hierarchy fully met: physiological, safety, love and belonging, esteem, self-actualization, and self-transcendence. In summary, they lacked for nothing to live happy and totally fulfilled lives forever. What more could anyone ask for? Of course, we know the answer. They were dissatisfied with the gifts they had been given and wanted to usurp God's authority—they wanted to be like God (Gen 3.5).

As we have seen, the result of their sin was that each of the gifts they had been given became distorted and limited in various ways They brought on themselves physical pain, separation from God, loneliness, discouragement and disappointment, lust and jealousy, privation, moral chaos, and eventual physical death. We can also conclude that as part of the curse, their minds became clouded and their intellects diminished. Paul states that men in sin are: "futile in their thinking, and their foolish hearts [are] darkened" (Rom 1.21), and they walk in the "futility of their minds" (Eph 4.17). We see examples of what Paul speaks of when people struggle with basic arithmetic, observe superstitious practices, apply invalid logic in arguments, have problems following directions on a form, worship idols, believe that the seeds of life came to the earth on a comet, or legislate inane laws with unintended consequences. Even the most brilliant of men, with IQs above 160, are imbeciles compared with how Adam and Eve originally were.

When a person becomes a Christian, his mind is renewed (Rom 12.2; Eph 4.23; Col 3.10) and he begins to think more clearly. However, even the mind of a believer is still limited in comparison to the mind with which Adam and Eve were originally endowed—in the areas of raw intelligence, rationality, and creativity. Our minds are limited as an ongoing vestige of the curse, in much the same way that other aspects of our temporal existence are limited. For example, the potential length of our lives is a fraction of the length of the lives of the antediluvians and clearly limited when compared with the immortality that Adam and Eve originally had; mankind's constitution is also radically weakened and deteriorating rapidly due to genomic decay.

We see flashes of the intellectual skills which Adam and Eve once possessed, and hints of what is theoretically possible, in a strange phenomenon—the savant syndrome: a condition in which a person with a mental disability or head injury demonstrates profound mental capacities or physical abilities far superior to what would be considered normal. Examples of savant syndrome include the following:

- In 2006, Derek Amato, a 39-year-old sales trainer was in Sioux Falls, South Dakota tossing a football with friends. He fell into the shallow end of a swimming pool and landed on the concrete face-first. He drifted in and out of consciousness and was taken to the hospital emergency room where he was diagnosed with a concussion. He suffered from some hearing loss in one ear, headaches, and memory loss. Four days after the accident he was at a friend's home and saw an electric keyboard. He had never learned to play the piano. But, that day he was able to play complex lyrical chains of notes as if he had been playing for years.
- Franco Magnani, an immigrant from Italy, was living in San Francisco when he came down with a severe fever that caused seizures. He started having vivid memories and, although he had never painted before, began to paint images from memory as near photo-realistic renderings. They turned out to be images of his childhood hometown of Pontito, Italy that he had left when he was four years old, 30 years before.

These individuals retained most of the normal faculties that they had had prior to their injury or illness, but suddenly developed amazing skills in new areas. There are many more documented similar cases, including people who develop photographic memories and computer-like mathematics skills. There are also instances of people who have severe mental handicaps and yet have prodigious abilities in calculating dates or large numbers, or who have total recall (e.g., of strings of random numbers or entire books). It is ironic that these extreme capacities of the human brain-mind are displayed where there are handicaps, illnesses, or brain injuries. It is almost as if the injury tears down something that was blocking access to higher capabilities.

God may have limited man's intellectual capabilities as part of the curse, as a means of dispensing his general grace on mankind. Otherwise, if sinful men had access to the full mental capacity of Adam and Eve, the evil they would invent would be orders of magnitude worse than anything Hitler perpetrated. Believers in Jesus can look forward with expectation to the resurrection when their minds will be clear of all mental clouds and they will be supergeniuses in God's restored paradise.

Is There Intelligent Alien Life? [May 31] (Gen 3.17-19)

It was claimed, by a former Pentagon consultant, that the FBI and the US President, Eisenhower, held secret meetings with aliens at the Holloman Air Force base in New Mexico, in February 1954, while officials were told that he was on vacation in Palm Springs, California. It was also reported that Winston Churchill, who demanded that a claimed UFO sighting be kept secret, discussed how to deal with UFO sightings with President Eisenhower. In addition, thousands, and possibly millions, of people worldwide claim to have seen UFOs. What are we to make of these claims? And, why would these claims be addressed in a series of Meditations on Genesis 1-11?

We accept without question, based on the word of God, the existence of angels and demons. So, someone might ask, "So, isn't it possible that God could have created other rational creatures somewhere in this vast physical universe but has not told us about them because their existence is not relevant to our situation on the earth?" Of course, God *could have* done so, but the real question is, *did he*? "No, God did not create intelligent life anywhere else in the universe." The claimed sightings of UFOs from other star systems and meetings with aliens who travelled in spaceships are bogus—the observers may have seen something that they cannot explain, but what they saw was not vehicles carrying intelligent creatures visiting earth from planets beyond our solar system.

How can I be so emphatic? Because this account of Adam's sin and the subsequent curse on Adam, all mankind, and the created order teaches us:

- Man is responsible for the introduction of sin into the physical universe. Almost all science fiction novels and movies that portray aliens include hostilities between humans and aliens, or at least the potential for such hostilities. We innately understand that the curse on Adam's sin pervades the universe and if there were intelligent beings elsewhere, they would be affected by Adam's sin and yet would not be responsible for it. In contrast, the angels who sinned were held accountable, expelled from Heaven, and consigned to Hell for their own sins (Mt 25.41; 2 Pt 2.4). But other rational creatures in the physical universe could probably justly claim that God is unfair if they suffered the consequences of man's sin when Adam was not their covenant representative before God as he was for us.
- The consequence of Adam's sin resulted in decay and disaster everywhere. Not only was the earth affected, but the entire universe (Gen 3.17-19; Rom 8.22). If man could travel beyond our solar system to distant planets, he would discover that rocks could fall and kill him, as on earth. Any intelligent creature anywhere in the universe would also be subject to the increasing entropy and danger that man has caused by sinning against the Creator.
- Jesus took on a flesh-and-blood human nature, becoming the last Adam (1 Cor 15.45), so that through his death he could provide for mankind a means of redemption from sin (Heb 2.14-15). But he did not take on the nature of angels or die for angels who sinned (Heb 2.16). Likewise, Jesus died to cover the sins for believing human beings (1 Cor 15.21-22), but not of other rational beings who are supposedly out there but are not descended from Adam. Jesus did not become a God-Kryptonian or a God-Wookiee—he became the God-*man*. Nevertheless, his death on the cross, and resurrection, was a once for all space and time event (Rom 8.19-22; Col 1.20; Heb 7.27); not just a once for *humanity* event.
- As Peter tells us (2 Peter 3:10–12), the physical universe, in its totality, will be consumed when Jesus returns to this earth—this includes all the stars and all the planets around all those stars. If there were sinless or sinful rational creatures on those distant planets, they would have no means of being warned of the coming destruction by fire—unless we posit a purely speculative idea that the second person of the Trinity visited these places in a way similar to his incarnation on this earth.

God could have created non-rational life in other parts of the physical universe, but likely did not. Mankind was given dominion over the rest of the living entities on earth (Gen 1.26). This mandate could logically be extended to any place beyond this earth in which non-rational life existed—for example if men went to Mars and found animals living there, mankind's dominion would extend over them. But the exercise of this delegated dominion would be meaningless if it could never be realized. Since there is little probability that mankind will ever travel beyond our solar system in the time left to this earth, before its decay reaches the point that it can no longer sustain life e.g., due to degeneration of the magnetosphere that protects the earth and accelerating human genomic decay) and Jesus re-creates it (2 Pt 3.13), it is likely the case that even non-rational life does not exist beyond our planet.

Man is alone in the physical universe as the only intelligent, rational, being created in the image of God. Man is unique and the earth he possesses as his home is unique throughout the entire universe. This is not, as some suggest, because man is the product of a profoundly improbable sequence of cosmic, geologic, climatic, chemical, and biological events. Rather, it is because God created mankind to inhabit this world, which is an ideal habitation for us. Mankind is figuratively and probably literally at the centre of the universe—no physical fact is contradicted by the claim that man and the earth are at the centre of the universe (though, we are located on the outer edge of a spiral galaxy in a rare 'habitable zone').

The Martian landers found a biological sterile planet and mankind will likely not be able to test for life in another solar system. So, any suggestion that there is any form of life beyond the earth is a pure guess. It is a total waste of resources to fund programs such as SETI (the search for extraterrestrial intelligence) or Breakthrough Listen. The underlying reason why men wishfully search for intelligent life (or any form of life) beyond the earth is their hope that they can demonstrate that evolutionary forces must exist, which can produce life. This is the result of their desperate attempt to dethrone God and to reinforce their materialistic and naturalistic belief that man is nothing more than the product of random events, and essentially no different from the animals and the inanimate universe. Alien life will not be discovered within 10 years, contrary to a claim of a NASA scientist (*National Post*, 2015-04-08).

Curses Replace Blessings [June 1] (Gen 3.14-19)

To this point in the narrative God has recorded three explicit blessings, on the animals (Gen 1.22), mankind (Gen 1.28), and the Sabbath (Gen 2.3). These blessings include significant components of creation: animals, man and time, but do not seem to include the inanimate material creation. However, when God punished Adam he cursed the entire physical creation (Gen 3.17-19). Therefore, by implication, the entire material physical creation must have been blessed if it was to have had its state changed to *cursed*—there can no middle ground before God; an entity is either blessed or cursed before God. Thus, we can conclude that the entire universe was blessed when it came from the hand of God. The world began under divine blessing.

In the punishments God decreed, he cursed the serpent (Gen 3.14), including Satan the agent behind the animal which acted as his spokesperson, and the entire physical creation. He does not, however, pronounce an explicit curse against Adam and Eve, even while he punishes them. They would be constrained to suffer the consequences of the general curse on creation, such as experiencing excruciating pain when giving birth and facing sweat-inducing challenges from the baked earth and weeds when growing food. However, God may not have issued a specific curse against Adam and Eve because he had already forgiven them and had predestined their salvation—anyone who is a spiritual child of God cannot be cursed!

All of the physical creation continues to suffer under the curse that was announced to Adam. As we noted in a previous meditation, this includes animals and plants now being dangerous to man, the irreversible process of decay (things wear out and entropy increases), the introduction of death to all living creatures, and all forms of social dysfunction and deterioration. All men who continue to reject God's authority exist under this on-going state of a

curse. No matter how much men try to overcome the curse with education, scientific and technical advances, and economic, political, or social programs they are not able to stop the consequences of the curse. At best, these humanbased approaches only push back a small aspect of the curse (e.g., famine, disease, pain, or tyranny) for a brief time, and in a limited geography. The universal curse is like a volleyball in a swimming pool—no matter how much you might wish to keep it below the surface of the water it always pops up again. The world began under divine blessing but now curses have replaced the blessings.

There are various words in Hebrew which are translated into English as 'curse' or 'cursed'. The Hebrew word that is used in these punishment declarations (Gen 3.14, 17) occurs about 50 times throughout the OT; but mostly in the Pentateuch. It seems to be more than a common curse which a person might invoke against an enemy or criminal and includes the idea of a royal pronouncement against a person in authority. It appears that the use of this type of curse is limited to God, or one of his direct agents (e.g., Noah, Gen 9.25), imposing a severe malediction.

The last book in the OT, in our English Bible translations, is Malachi. It was written sometime between 440-430 BC and contains the final words of OT prophecy. In the various English translations commonly used by Protestant Evangelicals, the last word of Malachi is 'cursed'. The translation exception is the ESV, which provides the following "a decree of utter destruction" for the Hebrew word (*herem*), which means 'devoted to a ban' and certainly can be understood as a curse. In some places (e.g., Lev 27.28) the same Hebrew word is translated in the Greek OT as *anathema*, which, when used in the NT, is usually translated as 'accursed' (e.g., Gal 1.8). From the perspective of an OT believer in the intertestamental period, the situation would have looked bleak with God's threat to strike earth with a curse.

However, the OT is full of eschatological prophecies of a future prosperous Messianic Kingdom. The prophecies begin with the mercy that is mixed with God's wrath in judgement: The woman will know of pain in giving birth to children, but she will bear children. The man will know of trials in his work, but he will be able to work and they will eat. Adam will return to the dust, eventually, but he will live a long life before he dies. Eve will chafe at being subject to her husband, but she will be subject to a husband who loved her; she will not be a concubine in a harem. Also, an explicit prophecy of the Messianic King is buried in the midst of the curse, with the promise of the offspring of the woman (Gen 3.15) who would strike the tempter. For Adam and Eve, the curse was chastisement to bring them to repentance, not damnation.

Then, Jesus arrived on the scene! While the OT ended with a word 'curse', the ministry of Jesus opens with words of blessing (Mt 5.3-11). The Bible contains approximately 200 instances of the word 'curse' (in various forms) but almost three times as many occurrences of the word 'bless' (in various forms). Christ, the Last Adam, arrived with blessing. He kept all the demands of the law perfectly, where Adam could not obey a simple command! He provided recompense for the sins of mankind, where Adam could not even make repayment for his one sin of eating the fruit. As a result, those who have repented and believed in Jesus, are blessed and are given access to the tree of life (Rev 22.14). God plans to restore; blessings will replace curses.

Countering the Curse on Creation [June 2] (Gen 3.17-19)

God intended that the curse on creation would make man's work difficult. However, since he states that men would still be able to eat, this implies that:

- The consequences of the curse were not to be so overwhelming that it became impossible for us to continue our existence on the earth.
- God expected mankind to meet the challenges of the curse by working to counter it. For example, if farmers did not clear thorns and thistles from their fields, the fields would soon be overrun and would not be able to produce food. Likewise, if we do nothing to counter the challenges of the curse we will soon all starve to death.
- We need guidelines for how to counter the curse. For example, clearing a field of thorns and thistles with hand

tools requires a certain amount, and kind, of labour. Alternatives could include burning them off, removing them with a bulldozer, applying an herbicide, or creating a virus which would annihilate the thorns and thistles. We need a means of determining which alternatives are legitimate for us to use.

When we consider means for countering the curse in different areas of life we may encounter divergent opinions among Christians about which alternatives are legitimate. For example, some people say that they do not wish to have 'heroic measures' used if they become terminally ill—i.e., a treatment which has a high risk of causing damage to their remaining health, yet any lesser treatment will not save their life. Sometimes we hear statements such as, "If God had intended man to fly he would have given him wings." Or, "We use only natural treatments." We often hear this kind of comment when people object to an innovation or change. It is unlikely that most Christians in North America today would say, "If God had intended for us to read at night he would have given us lights in our foreheads." Yet, many in the Amish community do not consider the use of electricity from the public power grid to be valid since it ties them too closely to the world and would permit the introduction of television and the internet into their homes. However, many of them will use electricity for lighting and operating power tools, which is generated from solar panels, or engines fueled with propane, diesel, or natural gas.

This passage speaks specifically about food production. In agriculture, there are a number of means for countering the curse applied today which we take for granted, such as the use of soil tillage and aeration, the application of fertilizer, and the use of genetic hybrids—much of the corn seed planted in North America is from hybrids which cannot produce a viable second generation. Yet, there are debates about the application of genetic modification (GM) to produce foods plants. GM foods are produced from organisms that have had changes introduced into their DNA using genetic engineering. In Europe, GM foods are generally outlawed, whereas in North America many GM plants are used widely—for example, much of the corn, rice, soybeans, tomatoes, wheat, and canola which we consume has been genetically altered to some degree.

God provided garments of skins for Adam and Eve (Gen 3.21), which appears to indicate that men can use animals in various ways to counter the curse. We could enumerate other examples for providing food, clothing, shelter, and reasonable levels of comfort, and for prolonging life. However, we should instead try to develop guiding principles for determining which technologies or techniques are legitimate means for our use as we counter the curse. We can propose an initial set of guidelines—applied technologies should be:

- 1. *Moral*. They should not result in our doing anything which is contrary to God's law. For example, correcting genetic encoding errors, such as some forms of blindness, may be, in principle, no different than postnatal corrective surgery. However, re-engineering genetic encoding to create 'improvements' for 'socially desirable' traits, may cross into the realm of the immoral.
- 2. *Legal.* For example, the controlled use of opiates for countering pain may be moral, but it may not be legal in certain jurisdictions.
- 3. *Tested*. The safety of a technology should have been carefully tested in a controlled manner before wide adoption. For example, advocates of a ban on incandescent light bulbs did not properly address the safety of using CFLs which contain mercury.
- 4. *Cost effective*. The expenditure of significant resources on a technology may be unjustified, particularly if the expenditure is state funded. For example, we might question the merit of a private person choosing to spend a million dollars on an expensive drug to extend his life by six months. However, using taxed funds for the same purpose would be wrong for a number of reasons—including that it falls outside of the remit of government and a cost-benefit analysis would demonstrate that the money could be better used to provide more long-term benefits for many more people.
- 5. *Beneficial*. They should not be used for selfish or vain reasons. For example, there are legitimate uses of cosmetic surgery, but much of that kind of surgery is applied for reasons of vanity.

We need to remember that the curse on creation can never be entirely undone in this present temporal-spatial reality. Ultimately the curse will only be countered when Jesus returns and initiates the consummation of this age and unveils a better paradise than that which Adam forfeited.

Why Man Dies [June 3] (Gen 3.19)

People who do not accept the explanation given in the Bible for why death (of mankind and animals) was introduced into God's perfect creation—as a punishment for Adam's sin—cannot provide an ultimate or even intellectually satisfactory reason. Instead, they postulate proximate, and simplistic, reasons such as:

- The only constant in the world is change and decay.
- It is a law of the universe that every living thing must age and die.
- Living things fall apart and can't make adequate repairs.
- Cells fail to make accurate copies. The failure can be attributed to the presence of radiation or oxidizing free radicals.
- Infectious diseases, cancer, physical system decay, and accidents cause living entities to die.
- Organisms have evolved a minimum design that allows them to survive only long enough to reproduce; beyond that survival is dumb luck.
- Natural selection acts on individuals at the reproductive stage of life; there is no genetic advantage to an individual that can last longer.
- It is difficult to evolve an organism that can last forever, so it hasn't happened yet—at least not on the earth.
- Death is necessary and good or species would be condemned to stagnate.
- Species that do not die and get replaced cannot evolve. Species that evolve will outlast species that don't.
- "Death is very likely the single best invention of life. It is life's change agent. It clears out the old to make way for the new." (Steve Jobs)

When we consider these explanations, we notice that we could reply to each of them with another 'why?' question. They do not provide an answer to the question of *why* death occurs that is both intellectually and psychologically satisfying. When pressed, materialistic naturalists admit that the evolutionary origin of senescence and death continues to be an unexplained phenomenon of biology. No philosophical inquiry, religious myth, or scientific theory is able to explain the origin of death or to provide an adequate reason for death's existence without incorporating the Bible's explanation.

If Adam had not failed the test of obedience he would have passed at once into a new state in which he could not have sinned. There would not have been any death for men or animals and they would have remained forever immortal in their current bodies. To support this state of immortality, God would have left the physical systems essentially as he had originally created them—all very good—and no living creature would have been subject to the process of decay, and no physical system would have been able to cause harm that could have left to death.

God informs us in the Bible that decay and death are unnatural—God did not desire his good creation to be spoiled rather death is an enemy that must be conquered (1 Cor 15.26). Death is a separation of two things which should not be separated (e.g., God and man, body and spirit), and which destroys an essential unity. Adam died spiritually (Eph 2.1) at the moment he ate the forbidden fruit, when the relationship of trust between him and God was shattered. Also, he became mortal and subject to the power of death at that same instant, and the process of physical decay, leading to bodily death, began to take its toll—as God had said, "dying you shall die" (Gen 2.17). He eventually died physically (Gen 5.5), and if he had not repented of his sins, he would have also become subject to everlasting death.

Adam and Eve did not immediately die physically after eating the fruit because God had planned, from the depths of eternity, to work in a different way with fallen mankind than with the fallen angels. In mankind's case, God planned to demonstrate his mercy, patience, and love by providing a redeemer (Rom 5.8). All angels were created at one time (angels do not produce offspring); some of them rebelled individually against God's authority, but many remained individually obedient. However, in mankind's case God did not create all humans at once. Instead, he had planned to populate his physical creation through procreation, starting with Adam and Eve. His plans were not

changed by their sinful action, and he is redeeming a great multitude with which he will fill the new heavens and earth.

Sinful men dread death, even if they pretend otherwise. They know that at the moment of their physical death they will not pass into an endless sleep or cease to exist. They know, in the deep recesses of their minds, that they will have to face God and be held accountable for their actions. So, many try to postpone death in whatever ways they can afford—taking vitamins and health supplements, exercising regularly, transplanting body organs, undergoing rejuvenation therapy, and using cryonics hoping for a future resuscitation. In contrast, everyone trusting in the substitutionary atonement of Jesus, who has been born again, does not need to fear death. He can live with the assurance that physical death is not the end of his existence or even of physical life. He knows that God plans to restore the created order (2 Pt 3.13), that he will participate in the resurrection and be given an immortal body (1 Cor 15.35-49), and that he will never be subject to death again (Rev 21.4). It is a sad irony that so many fear death and do everything they can to postpone it when there is a simple solution to the problem of death—believe in the Lord Jesus Christ and you shall have eternal life (Jn 3.16/).

Eve, the Mother of All Living [June 4] (Gen 3.20)

If a person sees only despair, discouragement, and disappointment ahead of him he does not look to the future with any hope. However, despite the punishment that had been given to him and to his wife, and the curse that had been inflicted on the natural realm, Adam looked to the future with hope. His hope is seen in the new name—Eve—that he gave to his wife. How he came to this hope is not stated. God may have provided additional information, between verses 19 and 20, which remains unstated. Or, more likely, Adam correctly inferred from God's pronouncements of punishment that God was offering him forgiveness. The elements in the pronouncements which provide hope are: 1) he and his wife would produce offspring, 2) one of her offspring would conquer the tempter, and 3) they would continue living and be able to produce food, even if under challenging circumstances.

Once he realized that he was not going to be snuffed out, Adam indicated that he had done wrong, by letting his wife lead him astray, and that he would now exercise his divinely appointed authority, by giving her a new name. A man's headship over his wife is not the result of the punishment delivered to the first woman. Rather, as we noted (Gen 3.16), as a result of Eve's sin and punishment, women are cursed with not being *content* to have submissive roles to men. Also, Adam had exercised the same prerogative before sin had entered the world, when he had named his wife 'woman' (Gen 2.23). In contrast to what many interpreters suggest, this action of renaming his wife indicates not that Adam was acting tyrannically over her but that he loved her and saw her as an important part of his future hope. When he gave her the name 'woman' he indicated that her life was derived from his. Now, as he names her 'Eve', he indicates his indebtedness to her for the future of all human life.

The Hebrew word 'eve' appears to be related to the expression 'living', and the two words sound similar—*chawa* and *chaya*. This wordplay indicates that Adam had not lost his creative abilities after sinning and that, even after being punished, he could display a sense of humour by creating an ironic pun—the one who had borne death would now bear life. It may also indicate that originally mankind spoke Hebrew, or a proto-Semitic cognate. This wordplay and others in the pre-flood narrative (e.g., the names of Adam's descendants in chapter 5) would likely have been too difficult to translate from a pre-flood language into Hebrew. After the events at Babel, when the languages were confused, the line of descent from Seth, through Abram, to Moses would have been able to read the documents, containing the narrative of creation and subsequent events, carried through the flood in the ark.

Adam's giving Eve her new name has additional significance. It indicates that he had learned, through God's grace and his own calamitous experience, to take God at his word. Thus, he believed the word of God when he had provided hope in the midst of the curse. It also shows that Adam's belief was more than mere intellectual assent and that he had true faith in what God had promised—in particular, the coming of the offspring who would strike the tempter. Consequently, for his faith to be true, he must also have repented of his sin of eating the forbidden fruit.

This combination of repentance with belief in God's word and faith in the coming Messiah, indicates that Adam was redeemed and was looking to a future life, with hope. Therefore, giving his wife the name Eve meant more than that she would be the mother of their living descendants, but that she would be the source of the *one*—Jesus Christ—who would be the truly living one, and that she would also be the source of eternal life through him. The change of his wife's name may also have covenantal significance. As the mediator of the first covenant between God and man, Adam changed her name as a seal of his understanding of the covenant promises. He was doing what would be done in other covenant administrations (e.g., when Abram and Sarai's, names were changed).

It is ironic that evolutionists refer to 'Eve' as the prototypical human mother. For example, *Science Daily* (2010-08-17) had an article with this headline: "'Mitochondrial Eve': Mother of All Humans Lived 200,000 Years Ago." Scientists who believe in the evolutionary origins of mankind claim that there was a single female who was the most recent common ancestor of all humans alive today. They have attempted to identify when and where she lived using statistical analysis of hundreds of samples of mitochondrial DNA (mDNA) taken worldwide, based on assumed mutation rates. In general, their analysis has led them to claim that 'Eve' lived somewhere in sub-Saharan or East Africa sometime between 100,000 and 200,000 years ago. This claim persists today despite studies conducted by biologists on the remains of the Russian Romanov family and of American soldiers (e.g., from the Civil War) which seem to indicate that mDNA mutations occur much more frequently than the assumed once in every 600 generations. One report⁹, indicated that if we started with one female, it would take about 6,000 years to account for the variety of mDNA that is present in the human population today. The article noted that the findings suggested that humans have been on the earth only about 6,000 years, but went on to say, "no one thinks that is the case." Just as most evolutionists ignore this study because it doesn't fit their paradigm, they ignore and dismiss the Biblical account of Eve, the mother of all living.

Garments of Skin [June 5] (Gen 3.21)

God had prepared a perfect abode for mankind in their sinless state. After their fall into a sinful state he continued to display his care for their physical dimension by providing them with garments of skin to replace their makeshift coverings of fig leaves (Gen 3.7). This provision teaches us that God is not distant and removed from his physical creation (as deism and Gnosticism claim) and that God provides for the needs of mankind even when they have rebelled against him (Mt 5.45; Mt 6.25-33). Before the creation was cursed, man did not need clothing because he knew no shame from being naked (Gen 2.25) and there was nothing in his environment, such as excessive heat or cold or inclement weather, which would cause discomfort. The fact that man needed garments made of animal skins may indicate that nature had been changed in such a way that man would need protection from the weather. Since clothing was introduced as the result of sin, this should warn us not to put too much emphasis on clothing. Clothes do not make the man, they only provide propriety and protection. Therefore, we should be cautioned not to over emphasize the appearance of our garments or to dress to be noticed because of our apparel (1 Pt 3.3). Each time we put on our garments, we should be reminded that they are only required because of our corrupt moral condition and because of the curse that has polluted all of creation.

A question that arises from this verse is, did God actually craft the clothes for Adam and Eve? Many highly respected interpreters suggest that it is not necessary to think of God as having undertaken the work of preparing the animals skins and sewing the garments, as if he were a servant. They suggest that, instead, we are to understand that God directed Adam and Eve how to make their own clothes. While it is possible to attribute causation this way, it seems that a more consistent way to interpret Scripture (i.e., taking it in its plain sense) is to understand that God did make the garments. However, this does not mean that he worked like a seamstress. Rather, we could understand his work of making the garments in a similar way to how Jesus turned water into wine at Cana—God instantly turned the skins into finished garments.

⁹ Ann Gibbons, "Research News: Calibrating the Mitochondrial Clock," Science, Volume 279, Number 5347, 2 January 1998, pp. 28-29).

Regardless of the process that was used to produce the garments, God did not create them *ex nihilo*, but used the intermediate existing material of animal skins as his starting point. This means that animals (probably sheep) had to be killed so that Adam and Eve could be clothed. It is probable that God instructed Adam to kill the animals. The requirement to kill the animals would have been a shock to Adam, who had shortly before seen them as his friends and had named them. This act of killing would have heightened his understanding of the consequences of his sinful action, reinforced the reality that death had been introduced into the world, and reminded him that he was mortal and heading toward his own physical death.

Another question which this account raises, is why did God clothe them in animal skins? Why, for example, did he not make the garments out of woven plant fibers (cotton or flax) or use animal hair or wool so that the animals did not need to die? Various answers to this question have been postulated, including that the animal skins would have had a degrading appearance which would have corresponded with their sinful condition. This seems to be a farfetched explanation. Garments of leather or fur can be made attractive as well as functional—and we can be sure that God's finished product would have been excellent in quality and appearance. Also, God used animal skins in the tabernacle, and it would be inappropriate to suggest that they were used there to degrade the appearance of the tabernacle. It seems that other reasons are more applicable. One reason for why God required the slaughter of the animal stock and is not merely another animal—man is a distinctly different kind of creation. Even though animals are living beings, they have been given to mankind for our use, even if that requires their death. People who hold the views espoused by false religions, such as Hinduism, and believe that killing animals is wrong, are shown to be mistaken by this example of God's provision for the preservation of human life at the commencement of history.

However, there is a more significant reason for why God made their garments of skins—the slaughter of the animals is a symbol of the substitutionary atonement, which was to be provided by the Messiah, the seed of the woman. There are a number of aspects to what is symbolized by these garments:

- Animals had to be sacrificed to provide coverings for Adam and Eve, signifying that a life must be taken and blood shed to atone for man's sin (Heb 9.22).
- Man's sin must be covered. God forgave their sin and covered their shame with garments that symbolized Christ's righteousness (Rom 13.14; Rev 7.14), probably using animals that were ceremonially clean (Gen 7.2, 9).
- The covering for sin must be provided by God. Man-made coverings will not work to cover sin. God provides the covering entirely by grace—it is a free and undeserved gift.
- From this example, men knew that certain animals were to be offered as sacrifices (Gen 4.4; Gen 8.20).

This slaughter is the precursor to the formal system of animal sacrifice that God would introduce later and of the ultimate sacrifice of Christ on the cross.

Idolatry [June 6] (Gen 3.22)

Adam recorded God's words and noted that he said, "Behold ..." as he made an observation about Adam's condition. This imperative can be understood as having the sense of 'since' or 'now that', and is used here as a causal connector, directing the hearers and readers to consider the reason for God's actions that follow his statements. Thus, what immediately follows, provides a logical connection between the cause—man's sin—and the effect—his expulsion from the Garden. It shows that God's action against Adam and Eve is neither ruthless nor arbitrary, but the just, appropriate, and necessary consequence of man's sin and sentence.

The speaker who said 'behold' in this instance was probably God the Father, who took counsel with the other members of the triune Godhead to address the particular matter of what to do to limit mankind's rebellion. When we considered the hints of the Trinity found in chapter 1 (Gen 1.2, 26, 27) we noted that there is much debate about whether God revealed his triune nature in the creation account. There is a similar debate about whether the 'us' used

here can be understood as a reference to the Trinity. As a continuing part of his progressive revelation of himself to mankind, God reveals the Divine nature to exist as a plurality of persons, while existing as only one in his essence. Any other explanation of the use of 'us' in this verse (e.g., this statement includes angels, uses the plural of majesty, or can be translated to include Adam such as: 'the man is like me and we are as one') results in a speculative and misguided interpretation. Adam may not have comprehended that the Divine nature is a Trinity, but this does not rule out the fact that God had revealed himself to be a Trinity before the flood. Much of the unwillingness to accept the idea that God revealed his triune nature this early in history is the result of accepting the faulty views of anthropologists who hold to a developmental model of religion, rather than to a regressive model.

God's concern was that Adam had become like himself in knowing good and evil. This is certainly a difficult statement to interpret. Some suggest that God is speaking sarcastically—Satan had promised Eve that on eating the fruit she would become like God (Gen 3.5)—and rebuking Adam for believing the lie and directing him to consider what a 'godly god' he had become—a sorry excuse for godlikeness! While it is true that God laughs at mockers (Ps 2.4; Ps 37.13), it is a stretch to suggest that God is using Adam's situation as an object for his amusement. God had just delivered the first indictment and sentence against the crime of rebellion; had given hope, particularly through the promise of a redeemer; and had clothed Adam and Eve with garments which symbolized an atonement covering, and indicated that they had believed his promises and had repented. Therefore, in this history-changing situation God is speaking with profound sadness. It is also difficult to accept the idea that by sinning man had become like God. God does not know evil experientially—he has never sinned and cannot sin. Therefore, the problem was not that man had a perverse appetite for illicit knowledge that only God can have, because this knowledge is knowledge that even God himself does not have experientially.

The obedience test placed before Adam (Gen 2.16-17), established whether our first parents would be content to allow God to define the standards for right and wrong or if they would attempt to usurp his authority. It seems, therefore, that the way that Adam and Eve became like God, knowing good and evil, was by setting themselves up as gods who thought that they could dispense with God's standards for morality and usurp God's prerogative to establish the standards for right and wrong.

Mankind's attempts to become like God, by knowing (i.e., defining) good and evil according to their own wills and fantasies, is the root of all idolatry; which takes many forms, for example:

- *Images* The idea that the transcendent, invisible, God can be worshiped through an image; or the worship of an image representing another god.
- *False religions* Every religion (including Hinduism, Islam, Sikhism, Judaism, Bahaism, and Shintoism) and cult (e.g., Mormonism and Jehovah's Witnesses) which defines God in a non-trinitarian form.
- Autonomy Rejecting or ignoring God's law and the just laws enacted by God's appointed civil magistrates.
- *Materialism* Philosophical systems (including Confucianism, Buddhism, and Evolutionism and Scientism) which deny the existence of an omnipotent Creator and claim that everything that exists is the product of chance events acting on matter through time.
- *Covetousness* The love of money and the things that money acquires.
- *Narcissism* Self-worship and the idolization of popular figures in the sports and entertainment industries.

God knew that even though Adam had repented of eating the forbidden fruit, there would be the latent tendency to idolatry resident within him during the remainder of his earthly residency (Rom 7.21-23), and within all his progeny (Gen 6.5) throughout history. Therefore, God acted to limit mankind's ability to sustain his idolatry by removing from him access to the tree of life. God continues to limit man's resolute pride and associated idolatry through many checks, such as: death at a young age, financial disaster, social ostracism, and mutiny and coups against tyrants.

The Tree of Life [June 7] (Gen 3.22)

Throughout Biblical history, as he has enacted his covenants with mankind, God has provided visible symbols (e.g., the rainbow, circumcision, baptism) of the covenant ratification and has often included a ratifying meal (most clearly exhibited by the Passover and the Lord's Supper). When we read the account of the creation of the Garden of Eden we find the tree of the knowledge of good and evil and the tree of life presented together (Gen 2.9). In a covenantal context, the tree of the knowledge of good and evil represents the covenant obligations—God gave a command about the fruit of the tree as a test of obedience. The tree of life appears to have served as the sacramental sign and seal of the Covenant of Creation. It would have reminded man daily that life comes from God. The tree of life could also have been intended to provide the ratifying meal for that covenant administration.

In this final scene in the garden, the two trees are again considered together. The use of the word 'also', in this verse, with respect to the tree of life seems to indicate that Adam had not yet eaten from the tree and that the covenant ratifying meal had not yet been observed. This reinforces the idea we have already noted, that the sin of Adam and Eve occurred shortly after they had been created, probably on the first Sabbath day—when they should have been worshiping the Creator, they were making gods of themselves.

As a result of his failure to keep the obligations of the Covenant of Creation, Adam was excommunicated and was barred from access to the ratifying sign and meal. If he had partaken of the fruit, it would have indicated falsely that he was living in perfect communion with his Creator and was a possessor of the eternal life that should have been his if he had passed the obedience test. The Covenant of Creation required perfect obedience but had been broken irreparably, and there was no room for repentance in its administration. The only possible outcome of breaking the covenant was death (Gen 2.17). The solution to this problem would be revealed in time—a Last Adam would be required who would keep the obligations of the covenant perfectly and pay the debt of death that was required for the breach of the covenant obligations. Therefore, God did not deprive mankind of access to the symbol of the covenant to discourage him, but to cause him to look to a new covenant administration which would be mediated, and kept perfectly, by the seed of the woman. God prevented Adam from doing what many people today are prone to do—to abuse the Covenant symbols—for example, superstitiously partaking of the Lord's Supper when they are not true believers in Jesus Christ, and thereby bringing condemnation upon themselves (1 Cor 11.27-30); or seeking to have their children baptized under the foolish notion that the act of having water sprinkled on their foreheads will provide protection to ward off evil, remove original sin, or make them redemptively holy.

It is evident that the tree of life had a sacramental and covenantal purpose, and many leave the consideration of its relevance at this point. However, it may also have been intended to provide non-sacramental physical benefits for mankind. Many interpreters are quick to dismiss this idea—i.e., that the fruit of the tree had any benefit beyond the symbolic. For example, they say that there was nothing magical about the fruit or anything inherent in the physical properties of the fruit which would have been beneficial to man. They claim further that if Adam had eaten from the fruit, he would not have been restored to a state in which he could not experience physical decay. Rather, they say that eating the fruit would have been a vain clinging to a symbol. However, their view appears to contradict the plain sense of the account. God says that if Adam had eaten fruit from the tree of life he would have lived forever. It is possible, therefore, that the tree of life had intrinsic properties associated with it that would have imparted imperishable physical life. It is ironic that today many in the medical field promote the supposed life-prolonging benefits of certain fruits (e.g., blueberries) because of their anti-oxidant or cancer fighting properties, yet Christians are unwilling to take God at his word when he says that if Adam had eaten from the tree of life he would have become immortal and lived forever.

Evidence that the tree of life had properties that are more than symbolic can be observed by the fact that God cut short his council of deliberation about what could have happened if Adam had eaten the fruit from the tree of life. He did not finish his sentence, implying that the consequences of Adam's eating the fruit from the tree of life in the state of sin were too significant to consider, and too grim to voice. If Adam had eaten the fruit he would have lived forever in a perpetual state of sin. The outcome of sinful men living long lives—even over 900 years (per chapter 5)—was that they had no fear of death or of God and that every intention of their hearts was only evil all the time (Gen 6.5). It would have been the worst of all possible worlds if man could have lived forever in his fallen state

with no hope of redemption. Rather than contemplating the consequences further, God moves directly to restraining man from the possibility of eating the fruit and compounding his cursed condition. After this point, when Adam and his descendants came to the gate of the Garden of Eden to present sacrifices of worship, they would be reminded that the tree of life was nearby, but inaccessible. Their hope would have to be the same as ours—for a restored paradise in which will be found an accessible tree of life (Rev 2.7; Rev 22.2, 14).

Blessings of the Expulsion [June 8]

(Gen 3.23-24)

Adam and Eve would undoubtedly have wished to remain in God's garden, where the trees provided fine fruit for the picking and there was no need for hard toil to produce food. But God drove them out of his garden to protect and to provide for them as well as to punish them. God protected them by preventing them from eating from the tree of life and compounding their guilt and temporal-physical situation—i.e., existing forever in sin-polluted bodies, in a sin-stained world. God had greater plans—to redeem mankind *and* the rest of the physical creation from sin's curse. So, God only drove them from the garden, not from the world. God only deprived them of a temporal paradise, not of an everlasting paradise.

Their expulsion from the garden into greater-Eden is mirrored later by the distinction in the tabernacle between the most holy place and the courtyard, by the separation of unclean persons from Israel (e.g., those with leprosy) who were required to remain outside the camp (Lev 13.45-46), and, in the New Covenant economy, by excommunication and exclusion from the Lord's Supper. God's purpose in expulsion is not to disenfranchise individuals forever, but to emphasize his holiness and encourage them to repent.

The cherubim placed at the entrance to the garden may have been assigned guard-duty to keep mankind from entering again. If the images of cherubim from ancient Middle Eastern frescos and carvings are representative of cherubim, as they are described in Ezekiel 1.4-28, they appeared as creatures with lion-like bodies and eagle-like wings, and would have been fearsome to face. Cast golden images of cherubim were included with the Ark of the Covenant to overshadow the place where God made his presence known above the Atonement Cover or Mercy Seat (Ex 25.22), and they may be the angels around God's throne in Heaven (Rev 5.11; Rev 7.11). So, their presence at the gate of the garden had more of an honour-guard function—servants ready to carry out the King's command immediately—than just to prevent access to the garden. Thus, their presence was primarily to remind observers that the way beyond where they stood led to the presence of the August Majesty.

To prevent physical access to the garden, God also placed a flaming sword (likely a pillar of fire that had a swordlike appearance, rather than an actual metal sword that was on fire) so that mankind could never enter again while in the polluted state. The flame (representing God's wrath) spinning in the gate would have been a source of terror to anyone who thought of attempting to enter the garden and would have prevented any actual attempt at access.

On being driven from the garden, Adam was given an assignment to work the ground—in other words to labour in order to provide for himself and Eve. In the garden, no work would have been required to provide for their sustenance and they would have quickly fallen into a stupor of laziness and a spirit of entitlement. God knows the tendency of a man's sinful heart and his expectation that others should care for him with handouts, so he required man to work to maintain his existence. If only the proponents of our welfare state systems would heed God's example, we would see a dramatically different sense of personal accountability—a responsibility mentality rather than a rights mentality. Even in the assignment of Adam's toil there are blessings: he was given important duties, not immediate death; he was given the ground to plow, not a grave to possess.

The entrance to the garden was on its eastern edge. Later, the front of the tabernacle (and temple) would face east, mirroring the layout of the garden. Until the flood, Adam and his descendants who worshipped God (Gen 4.26) would have come to the gate to present substitutionary sacrifices of worship. The presence of the garden, with its closed gate, would have been a constant reminder to them of God's holiness, man's sin, and the paradise lost and

to be regained through the work of Eve's promised offspring (Gen 3.15). Undoubtedly the believers, when they assembled for worship, would enquire of Adam about what it had been like to live in the garden. As a herald of righteousness (like Noah; 2 Pt 2.5) and of judgement to come, he would have been a witness to them for over 900 years. One of his descendants would have carried his message until the time of the flood—it could have been Methuselah (Noah's grandfather) who died in the year of the flood (Jewish tradition says that he died seven days before the flood), since his life overlapped with Adam's by over 240 years. During that time, he would have heard Adam's account many times and would have communicated it faithfully for the remaining years until the flood.

God's strategy was to shame mankind over the expulsion, solicit repentance, and engender hope in a future restoration. Thus, the expulsion was a blessing in a number of ways, since it:

- Humbled sinners and showed them that they had forsaken holiness and fellowship with their Creator.
- Encouraged them to consider what they had given up, and what could be.
- Controlled presumption and stopped them from trying to steal blessings.

God could have cast mankind into Hell as he did the rebellious angels (2 Pt 2.4). Instead, he punished them, while providing pointers to the Messiah—the means of escape from everlasting damnation.

Angels [June 9]

(Gen 3.24)

This is the first specific mention of angelic creatures in the Biblical account. For Adam and Eve, the existence of cherubim and their appointment as honour-guards at the entrance to the Garden of Eden would have been no more surprising than a serpent which could speak. Everything in the creation was new and wondrous to them. We have considered, in passing, the place of angelic creatures in previous meditations; for example, we noted that they:

- Are created living, spiritual beings (Lk 24.39 with Mt 8.16; Eph 6.12; Heb 1.7, 13-14). We also considered whether they (and Heaven and Hell) are part of the universe.
- Were probably created on the first day of creation and observed the rest of God's creative work.
- Were all created at one time. Angels are not sexual beings and do not reproduce like humans (Mt 22.30).
- Are intelligent, rational, and moral creatures; but they were not created in the image of God, as was mankind.
- Were able to sin. Some, led by Satan, rebelled against God.

The angels posted at the entrance to the garden were cherubim. Cherubim appear, from Ezekiel's visions (Ezk 1.4-28; Ezk 10.1-22; Ezk 11.22), to be a class of angel which, when they take on physical form, appear as creatures with lions' bodies, eagles' wings, and human-like heads (with one or more faces). Linguists seem to be uncertain about the meaning and origin of the term *cherub*. This specific name, for this class of angels, appears to predate the flood. Therefore, its origin should not be sought in a post-Babel language (as some attempt to do by suggesting that the word is based on the Greek word from which we obtain our English work gryphon). Beside the cherubim, there appear to be two other classes of angels referred to in the Bible. The seraphim (mentioned in Isaiah 6.2-3) take on a fiery appearance, but the Bible provides no additional information about them. There may be a third class, archangels, mentioned in a number of books, including Daniel, the Gospels, Acts, Jude, and Revelation), which take on a human form. They are the only angels for whom names (Gabriel and Michael) are mentioned in the Bible.

The term 'angel' is derived from the Greek word for messenger; which is a translation of the Hebrew word with essentially the same meaning. Angels are assigned various duties by God, including:

- Serving as honour-guards around his throne in Heaven and wherever God makes his presence known on the earth (e.g., in the garden or tabernacle).
- Making important announcements, such as at birth of Jesus.
- Carrying messages and commands from God to specific people; for example, to Daniel, Zechariah, Joseph, and Mary.
- Waging war in the spiritual (i.e., non-physical) realm against Satan and his demons (Eph 6.12).
- Acting as agents of God's providential actions in worldly affairs.

- Providing comfort and counsel; as they did for Jesus after his temptation and for the women who came to the empty tomb.
- Acting as personal guardians for mankind; in particular for children.
- Singing in the choirs in heaven; praising and rejoicing when sinners turn to God in repentance and faith.
- Escorting dead believers in Christ into the everlasting presence of God the Father and God the Son.
- Serving as agents in dispensing God's wrath on the unrepentant world.

A debatable topic is whether angels are a higher order of creation than mankind. Many theologians assert this based on a particular understanding of Psalm 8.5. However, alternate translations for that verse can be considered, when compared with Hebrews 2.7 which reads "You made him for a *little while* lower than the angels". Angels do have gifts or powers which men, at least in the temporal-spatial realm, do not have. However, mankind was created as the pinnacle of creation; mankind was created in the image of God, angels were not; angels are sent by God to be ministering spirits to men, men do not serve angels; Jesus did not take on angelic form, but became a man; Jesus loved mankind enough to die for us, he did not die to give eternal life to fallen angels; and men, in Christ, will judge angels (1 Cor 6.3). Therefore, it seems to be inappropriate to say that angels are a *higher* order of being than man. At best, we can say that mankind and angels are *different* orders of intelligent, rational *creatures*. This is one reason why it is not right for men to worship angels (Rev 19.10; Rev 22.8-9).

Included among the angelic kind are Satan and demons. They are sometimes referred to as *fallen angels*; however, the term 'angel' is usually reserved for the angels who did not rebel against God. Satan and his demons are powerful, but they are finite creatures. They do not have miraculous powers and cannot foretell the future. Their power is likely confined to the ability to possess humans and animals (i.e., cohabit with the spirit already present within the body) and to tempt and deceive mankind—except when given permission by God to intervene directly in the physical realm. We must not think of Satan as equivalent to God, but an evil counterpart. Satan is a created being of angel-kind who led a rebellion against God's authority.

Much is said about angels, in passing, in the Bible. But God does not intend us to make it into a major area for our consideration or study. We are to focus instead on ensuring that our relationship with God, in Christ, is secure.

Judicial Procedure [June 10] (Gen 3.1-24)

In a number of previous meditations through our study of chapter 3, we have addressed various specific topics. Today, we will consider the chapter in its entirety and in the context of the preceding chapter. When we look at this chapter from a comprehensive perspective, we find that it is structured around a judicial procedure that is similar to the one with which we are familiar from the English common-law system, adapted for use in North America.

First there was the enactment of law. We think of law-making as belonging to a legislative body—as it does in the US or Canadian models—with judges ruling in relation to the laws. However, laws are also made by judges through precedent, or case law, which is based on the collective decisions of courts and similar tribunals, rather than on legislative statutes or executive fiat. God as both sovereign and judge laid down the first law (Gen 2.16) which Eve repeated with an incorrect addition in her conversation with Satan (Gen 3.3).

Eve, followed by Adam, contravened the law (Gen 3.6), became aware of the guilt associated with their transgressions (Gen 3.7), and attempted to become fugitives from justice (Gen 3.8). In our day, the behaviour of criminals is almost always the same. Most criminals, such as murderers and thieves, have a modicum of guilt and fear of being apprehended, and try to avoid leaving evidence at the crime scene, which could lead to arrest and conviction. They usually escape from the scene of the crime quickly and lie low or flee to another jurisdiction from which they would have to be extradited to face charges.

The authorities (in our case, police) hunt for a suspected criminal and track him down. God did the same thing (Gen 3.9) when he sought Adam and Eve in the garden. Of course, God knew where they were—he used the question, "Where are you?" to lead Adam to make a confession.

The next step in our judicial procedure is to collect evidence about the crime and who committed it and, if possible, to obtain confessions from the suspects of the crime. God did the same thing in the case of Adam and Eve. He put the suspects into an 'interview room' and began to interrogate them. They probably still had the sticky red juice from the stolen fruit on their chins and pieces of rind under their fingernails. The circumstantial evidence was conclusive—they had eaten the fruit which God had forbidden. In addition, Adam effectively admitted his guilt before the interview began (Gen 3.10). But God conducted the interrogation interview anyway (Gen 3.11). He didn't have to use psychological tricks (e.g., 'bad cop', 'good cop') or physical techniques (e.g., hot lights) to extract a confession from Adam. Adam had not yet developed skills of evasion—he cracked easily and quickly, and incriminated himself (Gen 3.12). However, Adam had already learned to blame another for his crime. His disavowal of responsibility for his actions is a prototype for all of mankind's unwillingness to admit to their responsibility and guilt when they break God's laws. Men everywhere plead special circumstances, including ignorance, following commands, suffering from phenotypic or ethnic prejudices, economic hardship, environment, parental pressure, genes, insanity, or many other reasons, for why they should not be held accountable for their actions. Eve followed her husband's example and blamed a dumb beast (Gen 3.13).

Their arraignment was followed by a conviction and issuance of sentences (Gen 3.14-19). The declaration of their guilt is implied by their individual sentences and through their collective expulsion from the garden (Gen 3.22-24). However, in the serpent's case (Gen 3.14)—representing Satan—and in Adam's case (Gen 3.17), their convictions are more explicit and can be found in the word 'because' which precedes the declaration of their sentences. The sentences handed down were far more serious than any an earthly judge could issue for crimes committed today. They had committed a capital crime—genocide—and life imprisonment or even death by execution could not begin to provide sufficient recompense. Adam and Eve lost the immortal lives they had had in paradise and eventually died. But of more serious consequence was their separation from God and the devastation that Adam—as covenant mediator—brought upon the entire human race: disease, disaster, discontent, and death.

The story told in this chapter is the saddest story ever recounted. We have moved from the account of God's creation of a beautiful paradise within a magnificent universe—earth is only a little over a week old, the animals and man only few days old—and Adam has destroyed everything that was good. His behaviour was like, but immeasurably worse than, a son who is given an expensive car by his parents on his eighteenth birthday and who destroys it in a drunken binge within hours of being handed the keys.

If the Bible ended at this point, the tragedy would be greater than any ever written. However, this is not the end, but the beginning of an amazing story. In our justice system there can be a pardon. Likewise, within God's divine justice system pardon is possible. As we have seen, in the midst of the curse there is a promise of restitution (Gen 3.15) and a hint of parole for mankind in the covering that God provided for them (Gen 3.21), which pointed to the shedding of the blood of the Messiah that would purchase their final pardon. Instead of punishment there is provision; instead of subsistence, abundance; instead of alienation, fellowship; instead of death, life; instead of despair, hope.

The Four States of Man [June 11] (Gen 3.1-24)

In his *Treatise on Rebuke and Grace* (chapter 33), Augustine of Hippo (354-430) says that Adam "was able not to sin, was able not to die." He goes on to say that "the first liberty of the will was *to be able not to sin*, the last will be much greater, *not to be able to sin*; the first immortality was to be able not to die, the last will be much greater, not to be able to sin; the first epseudo perseverance, to be able not to forsake good—the last will be the felicity of perseverance, not to be able to forsake good." Elsewhere (in, *Enchiridion*, chapter 118), he speaks of the

four stages or states of a Christian's life. We can extrapolate from Augustine's writings and describe the four states that a person can go through, with respect to sin and death, as follows:

	1. Pre-Fall	2. Post-Fall	3. Regenerate	4. Glorified
Sin	Able to sin or	Unable not to sin	Able not to sin	Unable to sin
	not to sin		or to sin	
Death	Able to die or	Dead spiritually; unable	Unable to die	Unable to die in
	not to die	not to die physically	spiritually	any way

Augustine argues also that in three of these states (1, 3 and 4) God's grace is operative in the life of his people i.e., being able not to sin or being unable to sin is a direct result of the Holy Spirit's operative work. He also applies these four states to the history of the Church as: before the law, under the law, under grace, and full and perfect peace. The Scottish Puritan, Thomas Boston (1676-1732), in his book *Human Nature in Its Fourfold State*, echoes Augustine and speaks of four states of human nature: primitive integrity, entire depravity, begun recovery, and consummate happiness or misery.

Adam and Eve were the only persons ever to experience all four of these states. In their pre-fall state they briefly experienced unadulterated fellowship with God. However, their pre-fall state was probationary and temporary. They had been constituted by God with the ability to make a decision to obey and live forever or to disobey and to die immediately through severance of their intimate fellowship with God and an overwhelming experience of guilt; and eventually through the experience of physical death, which severed body and spirit. Their period of probation would last only a few hours, or at most a day or two. If they had chosen to obey and had rejected the temptation to eat the fruit, their probation would have been lifted. They would have been granted immortal physical life and on-going possession of the Garden of Eden and of the rest of the earth without any dangers or decay.

Immediately upon eating the fruit from the tree of the knowledge of good and evil, they moved to the second state. They no longer could obey God. Their hearts were inclined to evil all the time (Gen 6.5) and all their actions were tainted with sin, because of the wickedness now resident in their hearts. We see the immediate change by their abdication of responsibility for their sin and by their casting blame for sin on someone else. They also brought a curse on all their natural descendants, who are born with indwelling sin, and on the rest of creation, which continues to suffer the consequences of their sin. Every person who is granted existence by God and enters this world, begins life in this state. He is unable not to sin (Rom 1.21), is dead spiritually from the moment of his conception (Ps 51.5), and cannot avoid physical death (Heb 9.27). People do not like to hear this truth. They do not want to be told that they cannot do anything good of themselves, and that every one of their actions is evil because it comes from a heart polluted with sin (Jer 17.9). However, it is obvious that a spiritually dead person cannot cause himself to become spiritually alive, no matter how much he may claim the contrary.

God did not leave Adam and Eve in the second state. Rather he graciously offered them the opportunity to be reborn by placing their faith in a promised redeemer (Gen 3.15). They received the redemption offered by God. The evidence is shown by Adam naming his wife Eve, the mother of the living (Gen 3.20); their receiving the skins of scarified animals (Gen 3.21)—a symbol of Christ's death; accepting God's word about the coming redeemer (Gen 4.25); and worshiping the LORD (Gen 4.26). In the regenerate state they were able not to sin when they depended on the Holy Spirit. They could not die again spiritually since they had been reborn of the Spirit and were no longer under probation. However, they would have to experience physical death to complete the announced punishment for their crime (Gen 2.17) and to shed their now mortal and deteriorating bodies. Eventually they died (Gen 5.5) and entered a glorified state in which it became impossible for them to sin and to die again. Since there is no probationary period after physical death, their state is now everlasting.

Angel-kind were also created in the pre-fall state. However, in contrast to mankind, as represented by Adam, each angel acted on his own accord. Once the probationary period ended some entered a post-fall state in which they are forever unable not to sin and are forever dead spiritually. For them, there is no opportunity to enter a regenerate

state (Jude 6). The angels who did not rebel, passed their probation and entered a perpetual glorified state. Jesus was unique among men. He entered the world in the same pre-fall state as Adam, without sin. He also was subjected to a probationary period—but it was considerably longer and more challenging than Adam's, lasting 40 days (Mt 4.1). He resisted the temptation to sin, passed his probation, bypassed stages 2 and 3, and entered directly into the glorified state after his death.

Children Representing the Two Lines are Born [June 12] (Gen 4:1-2)

A generally stated opinion among commentators, and a universally accepted belief within the Christian community, is that this passage teaches that the first two children born to Adam and Eve were Cain and Abel—some people even suggest that they were twins, born of the single conception mentioned in verse 1. However, the passage does not say that they were twins, or that Abel was the second-born child. Regardless, it is legitimate to assume that the first child born to Adam and Eve was Cain, because of the way in which this chapter begins. However, given the fact that Adam and Eve had many children (Gen 5.4), it is not necessary to assume that Abel was their second-born *child*—although he may have been their second son.

This account of Cain and Abel is not presented to teach us about the two sons of Adam and Eve, but to draw our attention to two seeds and two offspring which would arise from the woman (Gen 3.15)—the line of Satan, as represented by Cain; and the family of those of the Messianic line, as represented by Abel (until he was murdered, and Seth replaced him). This account lays the foundation for the Bible's record of the age-long struggle between the two lines, into which all of humanity is divided. Cain is clearly a spiritual child of Satan, as shown by his rebellion when he was rebuked by God for false worship, murdering his brother, and the wickedness of his descendants recorded in the latter part of chapter 4. Abel was selected from the children of Eve for inclusion in this account as a vivid contrast to Cain, because he was clearly a representative member of God's spiritual family; as shown by his proper worship being acceptable before God. The acceptance of his worship offering provides the first indication that he was a true believer in the Messiah who had been promised to his parents. Other parts of Scripture, including an express endorsement by Jesus, give a clear testimony to Abel's righteousness (Mt 23.35; Lk 11.50, 51; Heb 11.4). The unjust persecution and murder of Abel, at the hands of a wicked man, previews a theme that is repeated throughout Scripture, from Genesis to Revelation.

Adam and Eve may have had sexual relations in the garden, during the first day of their mutual existence. Genesis 2:2 mentions the 'man and his wife' and then speaks of their being 'naked'. As we noted previously, this is likely an indirect reference to their having sexual relations. However, this chapter opens with a reference to their first sexual encounter ("Adam knew his wife") which resulted in a *conception*. This is an important consideration; first, because it indicates that all descendants of Adam and Eve were conceived after Adam and Eve had committed the first sin. Therefore, all of their descendants, by natural generation, are conceived in the context of sin (Ps 51.5), are born captive to original sin, and are subject to the universal curse. It is also important because it indicates that Adam and Eve did not spend much time in the garden before they sinned, otherwise their first Sabbath—when they should have been worshiping God, they were stealing fruit from God's proscribed tree. Another thing we should note is that Adam had sexual relations with *his wife*. This is a highly loaded statement since it indicates that Adam had only one wife—ruling out polygamy—and that his sexual relations were with his wife—declaring pre-marital sexual relations, homosexual relations, and divorce (Mk 10.6-8) to be contrary to God's law. Also, their faith in God's promises that they produced offspring.

Eve's faith is declared explicitly by her response to the birth of her firstborn and by the name that she gave to him. She indicates that she had a trust in God's goodness and a hope in his promise (Gen 3.15) when she declared that it was with the LORD's help that she had gotten a man (male child). She named her firstborn Cain and declared her reason for giving him this name. The word 'cain' is the equivalent of a pun on the Hebrew word 'gotten', since, in

Hebrew they have similar sounds. Thus, by both her statement and by Cain's name, Eve indicates that she knew that life is a gift that comes from God (Ps 127.3) and that she is thankful for God's preserving her life so that she could produce offspring. It is ironic that she gave Cain a name with this meaning, for she soon discovered that Cain was not the blessed gift that she thought, but rather a burdensome grief. Seeing Cain's unwillingness to worship God rightly, his jealousy and murder of Abel, and the on-going rebellion of his family, Eve would have cried to God about her son for the rest of her life.

Abel's name is derived from the Hebrew word for 'vanity' or 'vapour' (see Eccl 1.1, and many other examples). No explanation is provided for why Eve gave Abel this name, so we must be careful not to read unwarranted meaning into the name. However, names and their associated etymologies are highly significant in the early history of mankind. So, it is probably valid to suggest that by the time Abel was born, Eve had seen the results of sin welling up in her children and grandchildren. She voiced through the name she gave Abel, her disappointment with mankind's fallen condition that was becoming increasingly evident as the human population increased. Her choice of a name for Abel is prophetic, since Abel's life was cut short and was but a breath—with 'breath' being another valid translation of the word 'abel'.

Conception is from the LORD [June 13] (Gen 4.1)

(Gen 4.1)

Eve had been tempted by Satan to question God's word (Gen 3.1-4). However, this does not mean that she was ignorant about God's role as the creator of the universe and, in particular, of how she had been created from Adam's rib. In addition, she had repented of her sin and would experience regret for the rest of her life as she saw the pain resulting from her sentence (Gen 3.16) being worked out in the births of her children and grandchildren. She believed God's promise that a redeemer would come from her offspring (Gen 3.15). The evidence that she had repented and believed is seen in her response to the birth of her firstborn and by the name that she gave to him. It is also seen in her stating that Seth was born by the appointment of God (Gen 4.25).

Eve believed in God's sovereign causation with the births of Cain and Seth. She declared that the conception and birth of children occurred only with the help of God. Other OT believers in the living God also understood this truth. For example, when Rachel saw her sister bearing children she demanded that Jacob give her children, and Jacob replied that he was not in the place of God to withhold the fruit of the womb (Gen 30.1-2). Likewise, Sarai and Hannah understood that their initial barrenness was the result of God's direct involvement in their lives (Gen 16.2; 1 Sam 1.5-6). The fact that God gives a woman the ability to conceive (Gen 29.31) is a truth that the majority of the earth's population, and many professing Christians, seem to forget or ignore.

Our understanding and sense of God's direct engagement with his creation has been dulled by the way science is taught today. The current definition of science attributes all events in the physical universe to natural forces and laws and allows for no consideration of God's involvement in the outworking of events. As a result, we live as practical atheists, with little conscious sense, and no awe, of the reality that moment by moment Jesus holds together the physical universe, from quarks to galaxy-clusters (Col 1.17); that we inhale and exhale every breath only because God wills it so (Acts 17.28); and that behind the electric pulses triggering our heart beats is God's direct causation.

The conception and birth of a child is not a *natural* event; it is a miracle. It is a miracle in both the sense that it is an extraordinary event displaying God's direct involvement in human affairs and in the sense that it is an outstanding and unusual event. Most people would respond to this assertion by saying, "There is nothing miraculous about conception and birth, it happens all the time." They are mistaken, it is miraculous! The simple way to demonstrate this is to ask any person, who makes the claim that conception is natural, to create a live human being. Mankind will *never* be able to bring to life a pile of inert chemicals, not even ones that have the exact same DNA sequences as are found in the human genome. While assembly of the cellular components may be explainable through physical processes, the protein molecules will be as lifeless as a pile of granite without the essence of life which God must breathe into every living being. At the moment of conception, God *creates* a new living human being. As Hannah

said, "The LORD brings death and makes alive" (1 Sam 2.6; NIV).

The reality that conception is from the LORD should engender in us a spirit of praise. We should remember our Creator, not only in the days of our youth but every single day; and praise him for giving us life. It may seem to be obvious, but without life we would not exist and would never experience anything. Yet God has given us life and immortal existence. Our bodies will die, but we won't cease to exist. And, at the resurrection all men will be given new bodies (Acts 24.15)—believers in Jesus will be given spiritual bodies fit for the new paradise, with which to enjoy eternal life forever; but unbelievers will be assigned bodies in which they will suffer decay and pain forever.

Also, since conception is from the LORD, this means that it is God who forms each person (Ps 139.13). The life in a mother's womb does not belong to the mother, it belongs to God. Women who claim that they have rights over a growing embryo are not only depriving their unborn child of his rights but attempting to usurp God's rights over life. Therefore, abortion is an evil that should never be considered as a 'option' in an unexpected pregnancy.

Another consideration that follows from the reality that conception is from the LORD, is that we must exercise extreme caution if we use conception prevention or reproduction enhancement technologies. For example, we must not use conception control techniques which expel a fertilized ovum, or use a fertility enhancement technique which requires the fertilization of multiple eggs and the destruction of the 'extra' embryos. These, in principle, are no different from abortion. Also, every technology we use must honour the institution of marriage and the marriage bed—ruling out techniques such as surrogate mothers. Simply, we must not attempt to play God with conception.

A final consideration is that some couples are placed by God in a situation where they are unable to produce children. It is easy to say, but hard to apply, that people placed in such a situation must acknowledge God's purposes and believe that he has a greater purpose for assigning them a position where they cannot fulfill his mandate to be fruitful and multiply. We must trust God's ways and his providences. As our Creator, he knows what is best for us.

Work Specialization and Development of an Economy [June 14]

(Gen 4.2)

An often-told story is the development of human civilization from prehistoric conditions to its modern, postindustrial, technological form. Almost all world-history textbooks and multi-volume sets begin with a section describing Paleolithic societies which were supposed to have first appeared in Africa or the Middle East hundreds of thousands of years ago. The early humans (Cro-Magnon, Neanderthal, or similar) making up these societies, we are told, had small brains, the rudiments of language, and limited social constructs (e.g., religious rituals, family structures and crude forms of trading). They subsisted as hunter-gatherers, produced rudimentary tools (of bone and stone) and used fire from lightning strikes or volcanoes because they, initially, did not know how to start a fire. The story continues with Neolithic societies which arose somewhere around 10,000-15,000 years ago. These societies domesticated animals, reduced their migratory behaviour, and stabilized around forms of agriculture. As time passed, settlements increased in size and metal-based (first bronze and then iron) implements were introduced. Somewhere around 5,000 years ago, the first civilizations arose out of the mists of great river deltas—e.g., in southern Mesopotamia and Egypt. The story sweeps the reader along much like a good novel and is intended to make him feel proud of the human accomplishments. However, the story is nothing more than a myth and a total fabrication from the minds of men who have been steeped in evolutionary theories.

Paleontologists and archaeologists will object to my sweeping dismissal. They will claim that cave drawings, remnants in fire pits and garbage dumps, and artifacts and skeletons in burial sites provide evidence to support their story. However, they have interpreted facts upside down to provide support for their preconceived theories of how man is supposed to have evolved from an anthropoid or simian. What they are unwilling to accept is that the artifacts from the sites which they have labelled as Paleolithic and Neolithic do not show progress over tens of thousands of years, but rather rapid change over decades or at most a few hundred years, and in many cases, they show decay—not where man came from, but where he ends up when he moves away from a God-oriented society. When we study

chapter 11, we will note that, after the confusion of languages as men were scattered over the earth, the farther men moved away from the centre of civilization and the revelation of God, the more brutish their societies often became.

There are key Biblical facts which definitively rule out the generally accepted model of the progress of civilization from Paleolithic to technological. One is the highly destructive worldwide flood that occurred less than 4,400 years ago. Human-based artifacts (from burial sites, cave dwellings, or settlement excavations) must all be post-flood. Secondly, this verse informs us that the domestication of animals and the introduction of farming had occurred within the first one-hundred years of man's existence on the earth (Seth was born when Adam was 130 years old) and Cain and Abel, as adults, were practicing their professions of farmer and shepherd. In addition, the use of fire for smelting ores and forging instruments of metals (bronze and iron) was known to the antediluvian inhabitants (Gen 4.22). After the flood, Noah worked as a farmer and planted a vineyard (Gen 9.20), indicating that farming is not a late development in human history. He also used fire (Gen 8.20) immediately after the flood. This indicates that these usual evidences of civilization were known at the very beginning of postdiluvian history. There undoubtedly was a short period of time (less than 200 years) after the flood when the three sons of Noah worked with their respective descendants to re-introduce and expand on the technology that had been available prior to the flood.

Cain and Abel each had honourable occupations in line with God's provision of meaningful work for mankind— Cain was a farmer, likely growing grains and vegetables, and tending vines and fruit trees; Abel tended a flock, which would have included sheep and goats, and may have included cattle. They also utilized a form of division of labour which demonstrates that some form of an economy developed quickly as the human population began to grow. Cain and Abel would have had to trade with each other to obtain the products of the other's work. There were other specializations. Later we read of musicians (Gen 4.21), metalworkers (Gen 4.22), and likely specialists in wood working (Gen 6.14). Other professions possibly arose such as fishing and priests (Gen 4.26). When we add the possibility that at least some of the population knew how to write—since the record of the antediluvian history was recorded and brought through the flood on the Ark—we can conclude, again, that the structures of a civilization formed very quickly. The commonly held view, that civilization took thousands of years to develop, is false.

Abel tended flocks (and probably herds) to provide wool and skins for garments, based on God's example (Gen 3.21). It is possible that milk was also used. It is unlikely that Abel and his family used animals for meat because of God's instructions about man's food source (Gen 1.29; Gen 2.16; Gen 3.19). However, part of man's rebellion before the flood may have been displayed by the consumption of animal meat—just like men showed their rebellion through cannibalism until recently. While meat was not permitted to men, it was intended to be used for sacrifices to God (Gen 4.4; Gen 8.20), setting up the next scene in the early history of mankind—offering of acceptable worship to God.

The Worship of God [June 15] (Gen 4.3-4a)

The worship of God is often defined today as being whatever we dedicate to the Lord before the assembly of believers (e.g., a newly composed song, a musical performance or dance routine, prayer, etc.), an attitude of awe toward God, or all of one's life being lived for God. These definitions are usually suggested when someone attempts to put a boundary around what constitutes worship. It is true that all of our lives are to be lived in homage to God (Rom 14.7-8; 1 Cor 10.31; Col 3.17, 23). However, the Bible is clear that worship consists of specific actions that are distinct from the other activities of life. For example, riding a bicycle is not an act of worship, but praying is. True worship consists of reverential acts authorized by God, that are directed to him and that are performed to honour him or his name (Ps 96.9).

In these verses we find a reference to the first *recorded* instance of worship, although likely not an account of the first act of worship outside the garden. It is a mistake to think that what is recorded here is a spontaneous result of the innate human impulse to bring worship to God. Men would not have known how to worship God in the right

manner (as Abel did), if God had not given explicit instructions to Adam. Adam had undoubtedly instructed his children about how they should worship God and had led his family in worship on each Sabbath from the time that he and Eve had been expelled from the garden. Except for those in the line of Seth who called on God rightly (Gen 4.26), mankind participated in every form of idolatrous blasphemy at that time (Gen 6.5) as they did after the flood (e.g., with their Baal and Ashtaroths), and continue to do today. Therefore, this instance of worship is called out, not because it is the first instance of worship but, because it presents the first instance of *false* worship contrasted with true and acceptable worship.

The original form of worship, authorized by God, may have consisted of Adam acting as a prophet (a preacher of righteousness like Noah; 2 Pt 2.5), prayer, and offering animal sacrifices which served as a tribute payment (the firstborn of the flock) and a symbol of substitutionary atonement. Adam would have told his family about God's works of creation, his giving the law, mankind's disobedience and need of a saviour, and the promise of the coming Messiah. Then he would have led his family in a prayer of invocation as he placed the burnt offering in the fire on a stone altar. Their worship would have been focused around hearing God's revelation, speaking to God through prayer and looking forward to their hope of salvation in Christ. Adam did not rashly devise this form of worship or it would not have been accepted by God, but followed God's instructions for worship. Their worship would have honoured God as God; humbled man by pointing out his sin and inability to pay the debt of sin, and need of a saviour; and looked forward to the renovation of all things and the restoration of paradise.

Cain and Abel brought their offerings before God. They took them from their places of daily employment and carried them to another place—a place set aside for worship. It is quite likely that they brought their offerings to the entrance of the Garden of Eden where the way to God's holy abode was indicated by the honour-guard of living cherubim—similar to how images of cherubim in the tabernacle were later used to symbolize the presence of God dwelling among men. Adam had probably set up an altar outside the entrance to the garden, where animals could be offered as burnt offerings—it is unlikely that Abel brought pieces of meat and left them scattered about, or in a pile, to rot—since the offerings that were brought by Cain and Abel were intended to be consumed by fire.

The account says that they came "in the course of time" or more literally, "at the end of days". There are a number of suggestions for what is meant. Some say that it is a reference to an annual festival (e.g., at harvest time or at the end of the solar year), others that it was at the end of the week (i.e., on the Sabbath), but in either case it is referring to an established time. Regardless of what time period came to an end (a week, a harvest season, or a year), the offerings were most likely presented on a Sabbath. In addition, there seems to be something different about this offering, this time. At previous times, as his children were growing up, Adam, acting as a priest in a covenant mediator role, would have brought the offerings on behalf of his family. This may have been the first time his sons had brought their own offerings. Or it may have been the first time that an offering other than slaughtered sheep or goats was brought before the LORD.

Something was different about the nature of the two offerings this time, from offerings that had been brought previously. This made it necessary for God to challenge Cain about his offering (Gen 4.5; Heb 11.4) and not only about his attitude. So, a fundamental question is why did God require these offerings? In the Mosaic economy, there were different types of offerings (including grain and animal sacrifices). In addition, God introduced the requirement to pay a formal tribute in the form of a tithe. The offerings required before the flood were not formulated into a complex system of sin, burnt, guilt, and peace offerings like they were in the Mosaic system. The example we have of Abraham's offering (Gen 22.1-14) is a better indicator of what God originally had required as the form of an offering—an animal substitute for man's sin that requires death, serving as a pointer to the sacrifice of Christ.

Acceptable Worship [June 16] (Gen 4.3-5a)

Many commentators on this passage say that the reason God rejected Cain's offering is not immediately obvious or it is unspecified. They also are quick to state that this passage (and Heb 11.4) cannot be used as a proof text for the

superiority of blood sacrifices. And, they dismiss the suggestion that what was offered by Abel was acceptable to God while what was offered by Cain was unacceptable. So, they conclude that the reason that God confronted Cain was not because his offering was vegetable-based rather than animal-based, but only because his attitude in making the offering was not right. However, the passage says that God looked favourably both on Abel *and* his offering, but was displeased with Cain *and* his offering. A distinction is made between the persons and also between their offerings. In addition, Hebrews 11.4 indicates that Abel's offering was better. The primary reason, though rarely stated, why these commentators are unwilling to admit the truth that Cain's offering was unacceptable is that they realize that there are significant ramifications if they do acknowledge the difference between the forms of the two offerings. If the form of Cain's offering was unacceptable to God, then this means that only what God has required can be offered, and much of what men offer to God as worship today is unacceptable to him.

There is no question that a person's attitude when he offers up worship to God must be right in order for the offering to be acceptable to God. However, we must be very careful when we consider the implications of this statement. Every one of us has a bad attitude when we offer worship to God. Cain's offering was a heathen grudge—he brought the offering only because God required it. Also, his heart was probably filled with pride as he thought that he was bringing to God the efforts of his hard work and that God should be pleased to accept his offering. However, Abel's heart was also affected by the remnants of indwelling sin and his offering. It is impossible for it to be otherwise, until we reach Heaven. The difference in their attitudes did not arise from anything innate within Cain or Abel. The difference was due to the work of Christ, through the Holy Spirit. Abel's offering was given in faith (Heb 11.4), whereas Cain's was not. But since faith is a gift of God, the only reason Abel's attitude was better was because Christ made it acceptable to the Father. The right attitude in worship can only be that which is humble before God and fully dependent on the merits of the work of Jesus Christ. So, even if someone offers the proper form of worship, if it is not offered in faith it is unacceptable to God (1 Sam 16.7).

Equally important as the attitude of the worshiper, is the form of worship that he offers up. It may sound trite, but a worshiper can be sincere, and yet be sincerely wrong in what he offers as worship. He can come before God with a humble attitude, a desire to please God, and a heart overflowing with love for Jesus, and yet offer worship that is unacceptable to God. Consider for example, a nun who has devoted her life to caring for lepers for Jesus' sake, lives an austere life, attends mass every day, and prays in her cloister for two hours every morning. Her attitude may seem to be right. However, if she prays to God, appealing to one of the saints or to Mary to assist her prayers to reach Heaven, the form of her worship is unacceptable to God.

The difference between Abel's offering and Cain's is not that one brought the first fruits and the other retained the best for himself; or that one brought a costlier offering, thus expressing greater devotion. The difference was that the *form* of Cain's offering was unacceptable to God because God had not authorized it. At one time, most Protestants understood the fact that true worship must be offered up with both a right attitude of heart and in the right form (Jn 4.23-24). They knew that true worship consists of reverential acts authorized by God, that are directed to him and that are performed to honour him or his name. However, most Protestants today have forgotten the lessons of the Reformation when false worship was purged from the Church, and are wilfully re-introducing all the forms of human innovation and invention that had seeped into the Church during the Middle Ages.

Many today say that the form of Cain's offering was okay, but that Abel's offering was better. They make the difference relative rather than absolute. However, our passage tells us that Cain's offering was not acceptable to God, not that it was okay but not as pleasing as Abel's. Cain viewed worship as being defined by his own will and determined that he could bring whatever he wanted as an offering. He was testing the boundaries of God's law, as his parents had in the garden—his deeds were evil (1 Jn 3.12).

Abel's offering was acceptable to God because at that time the only form of physical offering God had authorized was that which required the slaughter of an animal. From the earliest days, God was teaching mankind that without the shedding of blood there could be no forgiveness of sins (Heb 9.22). Abel understood the necessity of animal sacrifice, which he had learned from his parents' example of having their nakedness (symbolical of the shame of

sin) covered with animal skins (Gen 3.21). He understood the principle of substitutionary atonement and sacrifices being a sign pointing to the coming Messiah. By his offering, Abel acknowledged himself to be a sinner who deserved to die, but who had placed his hope for mercy in one who would come and offer to God a greater sacrifice—the sacrifice of his perfect life.

God Regulates Worship [June 17]

(Gen 4.3-5a)

This passage teaches that God regulates worship. By rebuking Cain for the form of his offering, as well as for his bad attitude, God demonstrates that he defines what is, and is not, acceptable as an offering that can be brought to him as worship. Cain's offering was unacceptable because, at that time, the only physical offering that was acceptable to God was that which required the slaughtering of an animal, as a symbol of substitutionary atonement.

The idea that God regulates the content and form of worship, even in the NT era, is largely dismissed in the Evangelical Church today. A widely held view is that anything, as long as the action is believed not to be inherently sinful, can be offered to God as worship; and that men (through tradition or practice) define the standards for what is valid worship. However, the position that God does not regulate worship is not supportable from Scripture (Mk 7.6-13; Acts 17.25; Rom 1.21-25; 1 Cor 14.40; Col 2.18-23) and results only in subjectivism and chaos. God regulates worship (Ex 20.25-26; Mal 1.6-10; Jn 4.23-24; 1 Cor 11.2-34; 1 Cor 14.1-40) and defines what is acceptable as worship. He defines the legitimate elements of worship both by *proscription* (negative exclusions; Ex 20.4-6; Dt 4.15-19) and by *prescription* (positive inclusions; Ex 40.16; Dt 4.2; Dt 12.28; 2 Chron 26.16-21; Mic 6.6-8).

God used different covenantal forms, with associated worship elements, as he progressively revealed his law and redemptive plans to mankind. In each significant covenantal administration, God demonstrated the importance of correct worship by providing representative examples of punishment for men who invented or introduced false worship. Not all instances of false worship were punished; just as not all overt sins are immediately punished today. The first example is Cain's bringing his unauthorized and illegitimate offering of farm produce. At the introduction of the Mosaic covenant and its new forms of worship, God punished Nadab and Abihu for bringing unauthorized fire (Lev 10.1-2). David, acting as a prophet, not in his role as king, introduced the form of worship used in the temple. So, God reinforced the importance of true worship by punishing Uzzah (1 Chron 13.9-10), and later Uzziah (2 Chron 26.16-21). When the NT form of worship, consistent with the New Covenant, was being introduced in the Apostolic Church God again provided examples to demonstrate that he continues to demand correct worship, by punishing Ananias and Sapphira who claimed to be worshipping God with an offering of the proceeds from the sale of their land (Acts 5.1-11). Paul informed the Corinthians that some of their number had become sick or had died because they had abused the observance of the Lord's Supper (1 Cor 11.29, 30).

Cain attempted to introduce false worship and was punished for it. He was not a prophet, like his father, and had no warrant from God to change the prescription for worship that God had delivered through Adam. Likewise, today, no unauthorized individual has the right to introduce changes in worship. In the past, once a new form of worship was introduced by a person with prophetic authority, the generations that followed continued to observe the form exactly (Josh 8.30-31; 2 Chron 8.13-15; 2 Chron 29.25-30; Neh 12.24) or were declared guilty as idolatrous lawbreakers. The last covenantal administration is the one introduced by Jesus Christ, directly and through the Apostles. Since there has been no prophetic form. No one in the Church today fills the prophetic office, and therefore, no one has authority to make changes to the form or elements of worship introduced by the Apostles who acted on behalf of Christ. We, therefore, have an obligation to do what we can to determine from Scripture what the Apostolic form of worship worship introduced by the Apostolic form.

The contrast between the worship forms of Cain and Abel teach us that:

1. God alone defines true worship. Anything that he does not require by precept or example as worship is, by

definition, not true worship.

- 2. True worship consists of reverential acts authorized by God, that are directed to him and that are performed to honour him or his name.
- 3. In each covenantal age, God provides a suite of elements that constitute true worship. These are the only elements of worship that he permits; any other elements that people bring before him are false worship.
- 4. God cannot tolerate false worship. His nature requires that true worship be guarded jealously, and that false worship be punished.
- 5. Men are finite creatures. So, it is absurd to think that they can determine what is right as worship, and what will please God.
- 6. Men are sinful creatures and their natural tendency is toward idolatry and toward the introduction of false worship.
- 7. Men have no authority to change the form of worship. Only prophets, under direct revelation, were given temporary authority by God to introduce changes in his worship. There are no prophets today, and no changes to the Covenant, so there cannot be changes introduced in the elements or form of worship that differ from what the Apostles practiced.

From the beginning, what men did in worship has been the definitive factor in demonstrating their obedience to God. The question we must ask is simple, do we do what God requires of us, or not? Worship is not a matter of opinion or taste, it is what God defines it to be, because God regulates worship.

Fat from the Flock's Firstborn [June 18]

(Gen 4.4)

Abel "brought of the firstborn of his flock and of their fat portions". The ESV's almost word-for-word translation does not make obvious exactly what Abel did. The NIV translation says, "brought ... fat portions from some of the firstborn of his flock". The NIV makes the assumption that his offering consisted *only* of fat portions. Later, in the Mosaic ceremonial system, it appears that some slaughtered animals were to be burned entirely as a holocaust offering (Num 28.3-4), in other cases only the fat portions of the animal were offered (Lev 3.6-17; Lev 4.8-10) and the other parts were disposed of in different ways—the offal was taken outside the camp for burning (Lev 4.11-12) and portions of the meat could be consumed by the priests mediating on behalf of the worshipers (Lev 6.26; Num 18.9-10). Regardless of exactly what Abel sacrificed, we can infer that God had instructed Adam how properly to conduct acts of worship which involved animal sacrifice, as he would later tell Moses how animal sacrifices were to be offered.

In Abel's case, a portion of the sacrificed animal was probably not consumed as food, since at creation God had given to mankind vegetable materials for their food (Gen 1.29-30). Many interpreters believe that until the flood, men were required to continue this pattern. However, it is hypothetically possible that God permitted men to eat meat after Adam and Eve were ejected from the Garden of Eden, and did not give a written endorsement of the practice until later (Gen 9.2-3). This would be consistent with the fact that the principles and specifics of the Ten Commandments were known to men centuries before they were formally delivered in written form through Moses.

Sheep or goats from the *flock* were selected for the sacrifice. Later we learn that the antediluvian patriarch Noah knew of a distinction between clean and unclean animals (Gen 7.2). Presumably God had also revealed this to Adam, who communicated it to his sons and other descendants. Why God designated some animals (e.g., cows or sheep) as clean but others as unclean (e.g., pigs, horses, or camels) is not known. Some argue that it was for sanitary and safety reasons. However, that is mere supposition. It is not important that we know the reason. Rather, what we need to notice is that some forms of offering, and of animal sacrifices, were acceptable and others were not. This teaches the principle that God is to be worshiped acceptably (Heb 12.28).

The animals selected for the sacrifice were taken from among the *firstborn* of the flock—i.e., the first lamb or kid born to a young female sheep or goat. This is the only mention of firstborn animals being offered as sacrifices until

God instructs Moses to consecrate the firstborn of man and beast (Ex 13.2). In the Mosaic system, the firstborn of animals belonged to God. The firstborn of humans were to be redeemed with a substitutionary animal (Ex 13.13). At the time of the Exodus, God relates the consecration of the firstborn to the slaughter of Egypt's firstborn. However, this would not have applied to offerings at the time of Adam. The firstborn were consecrated to God as a token of his being the author of life. Jesus was Mary's firstborn (Lk 2.7) and he was consecrated to God (Lk 2.22-23) in accordance with the command given to Moses. Thus, when Jesus went to the cross, he was an acceptable sacrifice because he was a firstborn without any blemish. The example of Abel's offering the firstborn, and the endorsement of his sacrifice, teaches that worship is to be an offering back to God of a portion of what he has given to us. We do this, for example, when we tithe, observe one day out of seven as holy to the Lord, or use the Psalms in worship (since they were ultimately composed by the Holy Spirit and given to us in his word).

Abel's offering consisted of (or, it may have included) the *fat* portions from the flock's firstborn. The fat portions were to be offered because they represented the best ('richest') portions of the animal, particularly the fat from around the kidneys and liver (Ex 29.13). Throughout the OT 'fat' is used as a metonymy for rich or good things (Gen 45.18; Dt 31.20; Dt 32.15; Neh 9.25; Ps 63.5). In our case, we should also offer 'fat' as our sacrifice. The spiritual equivalent of offering fat is to offer the best possible as worship. For example, if a congregation offers a rendition of a mere human composition such as John Newton's *Amazing Grace*, rather than singing a Psalm, it is not offering the 'fat' as a sacrifice. As good as the hymn is, offering it instead of a Psalm is like offering a pig's foot instead of the fat of a sheep's liver.

Acceptable worship is not, as some suggest, "Any human act intended as worship which carries with it reverence toward the divinity." It is not okay to sacrifice a pig with reverence, or to pray through Mary with reverence. We are to offer only the fat from the flock's firstborn. We must not follow tradition or popular opinion, or consult our own wills, to determine what is acceptable worship. Rather, we must consult the Bible and apply guidelines which can help us determine what is right, for example, by asking:

- 1. What did Jesus and the apostles do? They set the standard for the NT Church through the remaining ages.
- 2. Is our action based on principle or preference? If we are not able to defend our practice from the Bible, and not willing to defend it even to the point of death, then it is not true worship.
- 3. Are we worshiping in Christ? Our works have no value or merit before God. We cannot ascend to God on our own terms. Our worship becomes acceptable to God only if it is through Christ (1 Pt 2.5).

Envy and Its Children [June 19]

(Gen 4.4-8)

Hieronymus Bosch was a Dutch painter who lived during the days of the Reformation. His paintings often use grotesque images to illustrate religious themes. People are portrayed with exceptionally ugly caricatures or mask-like faces, as emaciated, impaled on spears, or with half bodies. In the middle panel of *The Haywain Triptych*, portraying the seven deadly sins, he shows a scene of confusion and violence with people from many occupations around a hay wagon. The scene depicts an old Flemish proverb: "The world is a mountain of hay; each one grabs what he can." Representatives of the seven deadly sins are in the foreground, in front of the hay wagon. In the sky, above the hay wagon, there is an image of Christ, hands raised in suffering, as he contemplates the folly of men. On the right panel Hell is displayed. On the left, the Garden of Eden. When these panels are closed the outside displays a traveller who passes through an ominous landscape. The traveller represents mankind heading from Eden to Hell through the seven deadly sins.

The list of seven deadly sins—pride, envy, anger, covetousness, sloth, lust, and gluttony—was invented in the Middle Ages. Although the list of sins does not appear specifically in the Bible, they are certainly deadly sins which breach one or more of the Ten Commandments. For example, pride is setting yourself up as God and a breach of the first command. Jesus tells us that anger breaks the sixth. A person who breaks *any* of the Ten Commandments will die if he does not repent of his sin before God.

Bible scholars in the Middle Ages came up with this specific list because they are subtle and especially deceptive sins. Consider for example, pride. Where does honest satisfaction in work well done fade into pride? Or in the case of sloth, where does honest rest and recreation become laziness? Each of these sins has a counterpart which is valid and pure. Another reason that these sins are included, is that they are often heart-sins which lead to outward sins like lying and murder.

A number of sins can be found in these verses. Anger and murder are mentioned; and we can also find pride, envy and deception. Cain's pride is displayed by his unwillingness to be subject to God's requirements for worship. Today we will consider his envy and its children. Envy can include wanting what someone else has, but that is usually called *coveting*. Cain could have had what Abel had—the favour of God—if he had done what was required and had offered suitable and correct worship before God. It would have cost Cain nothing more than his pride and he could have received favour from God. Envy is more than merely wanting to have what someone else has. Envy does not want a neighbour to have what he has. Envy is the sin which fills us when we see another person receiving an honour, being presented with a pay raise, or gaining an advantage. It is envy that makes a person upset that a co-worker got the *same* bonus amount; the person is not upset that the co-worker got something he didn't get, he got the same amount! Envy is the sin that wishes that the co-worker got a smaller bonus or none at all.

Envy is not unique to Cain; his is only the first record of a person displaying it. Envy infects every human heart. But we do not realize how prevalent it is and how much it consumes us. The reason is that we cannot see it. Although we talk about a person being 'green' with envy, it is not envy that we see, but its children. Envy is a sin that works inside a person. What we can see are the results of envy. In Cain's case, envy produced visible symptoms of anger that showed on his face. His anger then brought forth envy's grandchild, murder. His pride gave birth to envy, envy to anger, and anger to murder—a black chain of wickedness. The children of envy include deception, lying, theft, slander, and revenge. Envy's children are exceedingly damaging.

Examples of how envy brings forth wicked children are everywhere around us. When young punks storm through a neighbourhood scratching new cars, ripping up shrubs and breaking windows, it may be because they are bored. But, often the underlying sin is envy. They do not like the fact that folks in their neighbourhood have nice possessions. When hockey players seek ever-higher salaries, it is often envy that drives them—"It is not enough that I make \$3M. If he makes \$3.1M, then I deserve \$3.7M!" If a person smiles in secret when a brother in a congregation has been brought low—lost a job or been caught in a sin—then he has cultivated envy in his heart and produced a wicked child—hate. We don't need to look at others to find envy, it is present in all of our hearts. We may just be good at hiding it. Next to pride, envy is probably the most common of sins—probably more common than lust.

The cure for envy is not explicitly stated in this account. In his response to Cain, God told Cain that if he did the right thing he would be accepted. By doing the right thing, by offering correct worship, Cain would show that he was willing to subdue his pride. However, the cure for envy is implied by the opposite of what Cain did. Out of envy he murdered his brother. The cure for envy consists of: 1) admitting that we have a problem with envy—i.e., acknowledging our sin; 2) confessing our sin to God; and 3) loving our brother. The cure for envy is love, since, "love does not envy" (1 Cor 13.4). If we love our co-workers, friends, and brothers in the Church, we will be truly happy for them when they receive honour, recognition, and rewards.

Anger [June 20] (Gen 4.5-6)

Although we might infer that God was angry with his creatures when he pronounced curses on them (Gen 3.14-19), the Biblical account does not mention anger until Cain displays it. Thus, these verses record the first historical reference to any expression of anger. Cain's anger was petty and unjustified. In contrast, God had a valid reason for being angry with Adam, but instead displayed mercy by not annihilating him for his sin and by giving him the promise of salvation through a redeemer. We know, from elsewhere in Scripture, that God is slow to become angry

(Num 14.18; Ps 103.8). Rather than anger, the emotions (from our perspective) that God likely displayed were disappointment and grief (since the Holy Spirit can be grieved; Eph 4.30) over the mess that mankind had made of his perfect creation.

Anger is a strong feeling of annoyance or displeasure that often arises in people when they react to specific types of external events, such as someone saying something that they don't like, or deliberately doing something which causes them pain or an inconvenience. The emotion of anger is accompanied by physical symptoms such as an increased adrenaline flow, heart rate, and blood pressure; muscle tightening; flaring of the nostrils; and flushing of the face. It is usually easy to tell when another person is angry by the change in his appearance and mannerisms. We do not need to be taught how to interpret most emotions, including anger. For example, from infancy a child knows instinctively when his father or mother is pleased or angry with him.

Adam and his growing family had probably observed anger before this instance is recorded. When Cain and Abel were boys, Adam may have become angry with them for leaving the sheep gate open or for being careless and breaking one of his mallets. Or, even more likely, one of the boys may have become angry and thrown a temper tantrum when Eve forgot to put honey in his banana mush or his brother got the larger portion of a pear. Thus, Adam had likely become familiar with the emotion of anger and had associated a word with the emotion. His observation of human behaviour over the preceding 18-or-so years had prepared him to make an assessment of Cain's state when God rejected Cain's offering. Thus, Adam could read the signs of Cain's anger-response and reported that Cain was 'very angry'.

Basic reasons for why people become angry include the following:

- *Envy* Some people become envious when they see another person receiving a commendation or award. Their way of responding to their inner emotion of envy is to turn it into a display of anger.
- *Rejection* The other side of envy is a feeling of rejection. For example, when a person hopes to get a job or a raise and is turned down, he may become angry over the rejection.
- *Pride* Often a person will become angry because his pride has been humbled, or he has not been successful in getting his own way. His humiliation may result from being embarrassed at having a sin or mistake pointed out or being rebuked for a thoughtless action.

These causes of anger are not mutually exclusive. They often occur together as the root of an angry outburst. All three of them were at work in Cain's reaction to God's rejection of his offering. Cain was envious that God had accepted his brother's offering of the fat from the firstborn of the flock, that his offering of produce had been rejected, and that God had humbled him by not accepting his offering. Thus, Cain was *very* angry.

Modern psychology claims that anger is "a completely normal emotion" and "often healthy". Anger is excused if it is mild and explained as being brought on by tiredness or stress. However, the Bible indicates that expressing anger is sin (Mt 5.22; James 1.19-20). There is a class of righteous anger (or wrath) which God displays (Rom 12.19), and at times humans may display (Eph 4.26). However, righteous anger is directed at those who commit specific calculated breaches of God's law. It is difficult for us to direct anger at the sin of others without it becoming a response to a personal affront. We might be legitimately angry with Islamic terrorists who rape and kill Christian children at a far-away school. However, our anger directed at a neighbour, who is breaking the law by adding a back room without a permit, is likely tainted by our envy and pride. Since human anger is almost always unrighteous, it is best if we stay focussed on avoiding anger of any kind and for any reason.

It is often claimed that certain types of *events* cause anger—e.g., someone cuts in front of another person in line, or a person is insulted by a co-worker. However, two people can react differently to the same type of event. Therefore, an event is not really the cause of anger. Anger comes from within our hearts (James 4.1-3). Therefore, we must deal with both the outward display of anger—as in Cain's case, a fallen face, or a frown—and with the inner cause. God instructed Cain to do right and to master his sin of anger. This twofold instruction provides us with the best strategy for dealing with a temptation to anger. We need to repent of our sins of envy and pride, ask God to help us

resist the temptation to react to events which trigger an anger emotion in us, and replace the anger response with doing what is right. We need to train our minds, emotions, and wills not to react angrily to external stimuli, replace the anger emotion with a soft answer (Prov 15.1), pray for the person who has offended us, and respond to unkindness with love (Mt 5.44).

God Confronts Cain about his Sin [June 21] (Gen 4.5b-7)

We are not told how Cain knew that God was displeased with his offering or with his attempt to usurp God's authority to define the elements of worship. An ancient scribal tradition states that God sent down fire which consumed Abel's offering, but left Cain's untouched. Some respected commentators dismiss this idea. Yet, in light of later examples (Lev 9.24; Judges 6.21; 1 Ki 18.38; 1 Chron 21.26), this suggestion makes good sense. Since the people at that time did not have a complete revelation like we have in the Bible, it was necessary for God to use alternative means of revealing his will to mankind.

Regardless of how God communicated his displeasure with Cain, Cain knew that both he and his offering had been rejected and he became very angry—his anger was displayed by a scowl that he wore on his face like a pouting child. Many attempt to analyze why he was angry. But the reason will not be found in suggestions such as: he felt that his birthright was threatened. There is no indication that at this point in human history men had worked out the concepts of inheritance which would appear in civilizations after the flood. People who make suggestions like this usually read this chapter from the perspective of Israel in the land of Canaan, instead of understanding these events in their pre-flood context. The context tells us that Cain's anger was the result of his wounded pride and of his envy over the acceptance of Abel and his offering. Cain did not want to let God establish the standard for worship, and could not stand to see the obedience of his brother. It should not surprise us that this is the reason. Men have shown consistently for thousands of years that they do not want to worship God in the way that he has defined. The Bible and extra-Biblical historical accounts are full of examples of men bringing their own additions and innovations into worship. Men take umbrage at the suggestion that God could have a prerogative to reject their inventions in worship.

We should note that chapter 4 deals with the consequences of men living under the curse on sin and of being born with original sin. In general, the first area to be affected by man's pride is the true worship of God—this is one reason why the Ten Commandments deal with the sins related to worship before other sins are mentioned. From sins in worship (as we will see) sin escalates into murder and lies, polygamy, and all other manner of wickedness (Gen 6.5). Since he cannot get even with God, Cain will take out his anger against his brother. This should teach us about how important it is to honour God with only the elements and forms of worship which he has authorized in his Word. The Church should take heed and strive to keep the worship of God pure; because when it does not, it falls prey to every manner of other evil—for example, denominations that introduce pollution into the worship of God eventually compound the evil by ordaining practicing homosexuals.

God confronted Cain and asked him to give a reason for his sullen pout and unjust anger. This should encourage us, since God did not wipe out Cain with the same fire that consumed Abel's proper offering of the animal sacrifices. Instead, he spoke directly with Cain (as a father with a son), possibly out of the fire he had sent to consume Abel's offering (compare Ex 3.2, 4), and challenged him to explain why he was downcast. Of course, God knew the reason—he had rejected Cain's offering. But God showed his patience with the sinner and gave him an opportunity to think about his sin and to repent.

God reasoned with Cain and laid before him two options, which present the essence of the Gospel message: 1) repent and bring a proper offering and you will be accepted (lifted up, or exalted) instead of being downcast; 2) continue going in your way of rebellion and you will remain forever a slave to sin. The mere exercise of offering a proper sacrifice would not save Cain, but by offering an animal sacrifice pointing to the Messiah, Cain could demonstrate that his heart was right before God. In the same way Jesus says, "If you love me, you will keep my commandments." (Jn 14.15)

By allowing his anger to fester and by refusing to repent, Cain would be handed over to the power of indwelling sin. His heart would be hardened, and he would consign himself to sin's power and Hell's flames. God uses the image of a wild beast, straining to get at Cain and ready to pounce if released, to describe the nature of sin and Satan's temptations (1 Pt 5.8). If Cain does not resist the temptation to get even with God and Abel, he will be consumed by his own sinful nature and sin will have its mastery over him.

This encounter between God and Cain teaches us that we are individually responsible for dealing with sin in our lives by repenting, embracing Christ's merits on our behalf, and replacing disobedience with obedience to God's law. The passage does not address the matter of predestination. As was the case with Pharaoh when he hardened his own heart, God had hardened his heart (Ex 8.15; Ex 9.12), Cain hardened his own heart. It was his decision. This reminds us that the matters of eternal life and death are important decisions *we* make. We are not puppets in the hands of Satan and we cannot blame anyone else for our sin (Rom 9.19-20). We must resist the temptation to do evil (Eph 6.13; James 4.7; 1 Pt 5.8-9). Each person who hears of Christ's (God's) law reaches the same point in his life—he decides either to repent or he refuses to and is handed over to the domain of Satan and sin forever.

Cain, the Murderer [June 22] (Gen 4.8)

Cain's refusal to deal rightly with his sins of false worship, pride, and envy allowed his anger to fester and erupt into lies and murder. James teaches that sinful desire gives birth to sin, and sin when it is grown brings forth death (Gen 1.15). James is speaking primarily of everlasting death. However, Cain's desire to usurp God's authority in worship led to fratricide. Cain is thus the prototype for all hardened sinners who refuse to listen to God and press on in their rebellion. The outcome of not resisting temptation and of not repenting of known sins is always the escalation of sin—both in scope and intensity.

Cain first compounded his sin through deception. The account says that he spoke with his brother, without revealing the content of the conversation. Within the fuller textual context of this verse, it seems that what he suggested was that they go out to the field together. He was pretending to be friendly with Abel, while harbouring hatred, and lured him outside the area where they lived. This indicates that his subsequent evil action (murder) was premeditated. Since most people have a degree of remaining conscience, and a fear of the consequences when they act wickedly, they try to hide their sins (whether sexual liaisons, theft, or murder) by indulging in them in private or in the dark. Cain made it seem that everything was okay between him and his brother. Sadly, Abel did not suspect the evil intentions of his brother, and went along willingly. Abel may have even thought that having some time alone with his brother might give him a chance to encourage him privately to repent and bring proper worship to God. This may be one of the reasons why Abel is referred to by Jesus as a prophet who was persecuted for speaking truth (Lk 11.49-51). A general lesson we can derive from this prototypical example is that Christians must be cautious when making friendships and alliances with unbelievers, as they will always have hidden motives for the association. Thus, Jesus warns us to be as wise as serpents, while being as innocent as doves (Mt 10.16).

With powerful brevity the account continues by reporting that Cain rose up against Abel and murdered him. We should note a number of aspects related to this murder of a righteous man (Mt 23.35) by a wicked one (Jude 11):

- 1. Cain "rose up against" Abel. The idea that seems to be implied is that he took deliberate action—the murder was cold-blooded and remorseless.
- 2. This was not the first murder, from one perspective. Adam had committed genocide by sinning and had brought instant spiritual, and slow physical, death upon himself and Eve, and on their posterity. However, Abel was the first person to have his physical body sent to the grave by the direct action of murder by another person.
- 3. The motives for Cain murdering Abel included envy, anger, and hatred. These are included in any modern psychologist's lists of the top five to ten motives for murder.
- 4. Jesus equates anger with murder (Mt 5.21-22). Cain was already a heart-murderer in God's eyes before he went into the field with Abel. All he needed was the opportunity to lift his hand against his brother.

- 5. The account refers to "his brother" multiple times in verses 8-11. It was not necessary to include this expression for identification purposes. The readers would have known that Abel was Cain's brother from the earlier part of chapter 4. The repetition is intended not to inform, but to reinforce the wickedness of Cain's act—a man should be protecting his brother, not murdering him.
- 6. Just as Cain had challenged God's authority to define the elements and content of worship, so he challenged God's authority as the owner of life. Cain, through his actions, declared that life does not belong to God. This same challenge is thrown in God's face by those who support abortion and euthanasia—they claim that they have the right to define when life begins and ends, and who may choose to bring life to an end.
- 7. Cain rebelled against the clear warning which was given to him (Gen 4.7). So, by carrying out his heart's intentions he declared that he was without any excuse. His protestation of not being responsible (Gen 4.9) is groundless.

Sin could not have displayed more vividly its perversity than in Cain. Adam and Eve certainly sinned throughout their lives, but they were repentant sinners striving to please God and depended on him in hope. Cain, from the second generation of mankind, shows how quickly sin bears its wicked children. This illustrates the on-going problem Christian parents face—a problem that we find played out as the generations of Jewish kings passed; a good king would often be followed by a wicked son. We cannot assume that our children will be faithful to the truth, even though they are born into a covenant family. We must teach them about the importance of faith, repentance, and obedience to God; and we must pray that God will keep them from going the way of Cain.

The account of Cain and Abel is the account of mankind. Evil and good are played off each other in this chapter, with Cain being presented as the prime representative of the seed of the serpent (Satan) and Abel being the first representative of the seed of the woman and the first martyr for the Faith. It would seem that the seed of Satan has triumphed. But, as we shall see, a replacement for Abel will be born who will be the ancestor of the Messiah, who would strike the head of Satan.

Cain Denies Responsibility for His Brother [June 23] (Gen 4.9-10a)

The account does not say how long it took before God questioned Cain about the murder of Abel. Some think that it was the following Sabbath, when Abel did not come to present his offerings to the Lord. Others think that it was immediately after the murder, and that God went out to the field and confronted Cain. It may be that when Cain came back from the field without Abel, God met him and asked him about his brother. God asked two questions of Cain to show that he knew what he had done—as demonstrated by the fact that after he asked the second question he immediately declared Cain to be guilty (Gen 4.10)—and to instill in Cain a sense of his guilt and to engender a spirit of repentance. God had offered mercy upon repentance when Cain had brought the unauthorized offering. He again provided an opportunity for repentance when he asked Cain about the welfare of his brother. But Cain showed that his heart was hardened in a path of complete rebellion and refused to admit his guilt and to repent.

We should observe that both questions are very brief. God does not require extensive interrogation to elicit truth from men—he knows all. Rather, these questions teach us that God knows exactly how to confront each person with his sin and guilt. When God confronted Adam and Eve, with equally brief questions, they were evasive. In contrast Cain was belligerent and blatantly lied. Cain's lie demonstrates the nature of sin; which compounds itself as one sin leads to another. This is demonstrated in even a young child who, if he hits a sibling and is confronted by his mother, immediately lies about the hit.

Cain added to his sins of murder and lying by denying any responsibility for the welfare of his brother and by indirectly accusing God of injustice for expecting him to demonstrate any responsibility. Not only did he attempt to absolve himself of responsibility, he made a joke out of Abel's situation by saying that it was not his duty to *keep* Abel as if he were a garden of fruit trees that needed tending (Gen 2.15), a sanctuary that required guarding (Gen 3.24), or wayward sheep that must be gathered to safety (Jer 31.10). In effect he says, "Abel is a big boy, he can

take care of himself'. Cain is the prototypical example of all human selfishness and self-centeredness which gives no thought for the welfare of others. We see this behaviour throughout all human societies, from the highest to the lowest; particularly where the influence of the Gospel is less prevalent. For example, when Barak Obama was running to become president, he was interviewed by Rick Warren in 2008 and was asked at what point a baby gets human rights. Obama responded with equivocation and said, "[A]nswering that question with specificity ... is above my pay grade." Another example from October 2011, gained international attention. The Toronto Globe and Mail had an editorial cartoon that showed an actor in one panel quoting from Hamlet, "What a piece of work is a man, how noble in reason, how infinite in faculties, in form and moving how express and admirable, in action how like an angel, in apprehension how like a god!" In the next panel it showed a sketch of a newspaper with a picture of a street scene in a city in China where a toddler was caught on video crossing the street and being run over twice by vehicles. None, of the many, on the scene bothered to rescue the child. The third panel of the editorial cartoon showed the actor with bowed shoulders, throwing away the paper and saying, "Whatever." Psychologists have defined the 'bystander effect' to describe why people fail to take responsibility for others. They suggest that generally people assume by default that it is someone else's responsibility when things go wrong. Our current political and cultural milieu reinforces the abdication of responsibility for others by its emphasis on personal rights. In fact, in many cases, our legal system mitigates against citizens taking responsibility for others, as shown by the need to enact "Good Samaritan" laws and laws permitting citizens' arrests, to protect individuals who take responsibility for others from being subjected to legal action because they cared enough to act.

The authors of the *Westminster Shorter Catechism* understood this perversity in human nature. They ask what is required in the sixth commandment and state the duties to be: "all lawful endeavours to preserve our own life, and the life of others." Their point is that it is not sufficient to say that God does not give exhaustive lists of how we are to *keep* our brothers and neighbours, but to do all that is in our power to tend to their welfare. Elsewhere in the Bible mutual responsibility is a foundation of the covenant community—starting with a love for neighbours that is equivalent to love for self (Lev 19.18), and extending to a care for our neighbours' persons, possessions, and property. Jesus reinforces this responsibility with his pointed *Parable of the Good Samaritan* (Lk 10.25-37). The early NT Church lived out the principle of mutual responsibility (Acts 4.32-37).

Christians should be the opposite of Cain and premier examples of *keepers* of our brothers in the Church and neighbours in the world. We should step up and take action without having to wait for someone to suggest a need or to ask for help. This does not mean that we are to be nosy or pushy. For example, if something needs repair or cleaning in a church building, do it instead of assuming that it is someone else's responsibility. At the scene of an accident, be a leader and take action to call for help and apply first aid instead of being a paralyzed gawker. At work, volunteer to mentor a new employee. As Christians who act responsibly we can be effective evangelists for Christ.

Blood's Cry [June 24] (Gen 4.10-11)

God did not respond to Cain's impious question, "Am I may brother's keeper?" (Gen 4.9) Instead, he asked Cain a rhetorical question, "What have you done?" and gave him no opportunity to respond. Thus, God rejected Cain's claim that he was not responsible for his brother's welfare and directed his attention to the fact that he (God) knows all that transpires on the earth. Even though there were no human witnesses to the murder, God knew what had transpired and indicates that a proximate source of his knowledge was Abel's blood crying from the ground. Cain could not hide what he had done from the all-seeing eye of God, and could expect the execution of God's justice against his crime. No human sin, from the practice of false religions, blasphemy, or Sabbath breaking, to murder, theft, and adultery goes unobserved by God. And all sins will be called to account by God, as Cain's actions were.

God uses an interesting literary device to drive home the extent of his total knowledge about human sinful actions a personification of blood. This is the first time blood is mentioned in the Bible—here it is described as having a voice. Later, we find that blood serves as the symbol for God's ownership of life (Gen 9.4-6; Lev 17.11). Murder—

spilling of innocent blood—is a sin that pollutes the land. Each drop on the ground is like a clanging gong sounding in heaven. Thus, God would later introduce provisions for cleansing the land of bloodshed (Dt 21.1-9), to stop the ringing cry for vengeance. This account also records the first personification of an inanimate object in Scripture, and hints at God's later use of poetic forms to reveal truth. In the Genesis account of the interaction between the brothers, the words of Abel are never reported. Yet, his post-mortem voice is heard calling for vindication, and his example of a life of faithful obedience continues to speak to our day (Heb 11.4).

There is no room in God's trial court for claiming innocence or for plea-bargaining. Nor does God need to conduct a cross examination to establish the facts of the case, since he hears the voice of the blood and knows what crime has been committed. Rather, God immediately declares the verdict as "Guilty!" and then he moves quickly to sentencing. Cain's sentence was that he would be cursed from the ground that had received Abel's blood. Because of Adam's sin the ground was cursed (Gen 3.17)—meaning that there would be, for the remainder of time, difficulties associated with growing food and universal decay in the natural realm. In Cain's case, the ground cursed him—which implies that Cain would be harmed by the ground. The meaning is provided later—no matter how hard Cain worked, the ground would not supply him with sufficient food to eat and everything that it produced would be hostile to him (Gen 4.12). Cain thought that his punishment was worse than the curse that resulted from Adam's sin and he claimed before God that he would not be able to bear it (Gen 4.13).

Cain slaughtered his brother when he should have been making efforts to provide for and advance his welfare. But, as this account indicates, God hears the cry of the innocent ones whose blood is shed in murder by their supposed protectors. Thus, we can be assured that God hears the silent screams of the most innocent of humans, the babies who are being aborted by those who should be their protectors—parents and doctors. No matter what euphemisms are used for supposed reproductive rights, abortion is murder perpetrated on such a large scale that it is beyond comprehension. Cain denied that he was responsible for his brother's welfare. In the same way, any person who does not speak and act against abortion is following in the ways of Cain.

Abel's shed blood, and its cry from the ground, are the prototype for all of the suffering that is directed against the godly seed of the woman by the wicked seed of Satan. Scripture is replete with examples, including: the slaughter of the male babies by Pharaoh and by Herod, and the murder of God's prophets and apostles (Mt 23.34-35) by the people who could not tolerate hearing the message of God's righteous requirements and of the coming judgement. The on-going persecution of believers throughout the ages (Rev 6.9-10) is the enduring legacy of Cain's attack on Abel. It has been witnessed by the torture and martyrdom of millions of Christians at the command of Roman emperors; by the Church's hierarchy through its left-hand, the inquisition; by Communism's purges of Christians throughout the Middle East, North Africa and South-Asia. The ultimate example of the murder of an innocent person whose blood-cry went up to Heaven is the crucifixion of Jesus. The Jewish people and their leaders told Pilate that his blood would be on them and their children (Mt 27.25). At the cross, the ground opened its mouth to receive the blood of Jesus dripping from his wounds. The cry of his blood was heard in Heaven and it spoke a better word than the blood of Abel (Heb 12.24)—a cry of "Not guilty!", because it made full payment for the sins of God's spiritual children.

The death of the saints is precious in the sight of the LORD (Ps 116.15). As he avenged the shed blood of Abel, so he avenges all unjust shedding of the saints' blood (Gen 9.5; Ps 9.12; Ezk 3.18; Ezk 33.6). Even though men have dismissed God's requirement to repay murderers with the shedding of their own blood, God will not forget, and will repay. This is consolation for all Christians who suffer to the point of death at the hands of wicked men.

God's Knowledge [June 25] (Gen 4.10)

God indicates that he knew about Abel's murder because Abel's blood on the ground told him of it. Of course, God uses a figure of speech when he speaks of the blood crying out from the ground. By this statement, God told Cain

that he knew what he had done. The murder of Abel could be hidden in the field from the eyes of men, but not from the all-seeing eye of God. Likewise, God sees and knows everything that transpires on the earth. He knows about every thought and every action of every person (and of everything that happens to inanimate or animate entities throughout the universe)—no sin is ignored, no good deed done in the name of Christ goes unobserved.

When God speaks of seeing or knowing about the actions of men, he uses anthropomorphic terms to facilitate our understanding of what transpires in his mind. However, it is obvious that God's knowledge is not obtained in the way that we derive knowledge. We use our physical senses. We watch a solar eclipse or observe the seasonal movement (relative to our frame of reference) of the sun, moon, planets, and stars. We smell and taste fruit, touch the soft fur on a kitten's tummy, and hear the rustling leaves in a birch forest. In contrast, God does not acquire knowledge in any of these ways because he is a spirit, does not use instruments of sensory perception, does not acquire knowledge through empirical processes, and does not exist in time, so does not observe processes, events, or states as we do.

God is often portrayed as a somnolent, silent, watcher who only takes interest in, and reacts to, events in our realm when they become extreme. He is likened by many to Treebeard, from the *Lord of the Rings*, who takes considerable provocation before he becomes motivated to act. When thought of in this way, God merely reacts to events in the natural realm, in response to what he observes. This image of God is only a step away from the God of the Deist who may, or may not, be personal but who does little more than initiate a big bang and create a spark of life; and then lets matters in the physical universe transpire as they happen.

A step further, is the view that God sees all, by observing in real-time what is happening but also by predicting (accurately) what will happen. Many people attempt to explain the foreknowledge of God as his looking into the future and calculating with infinite precision how events will unfold. This view is similar to that of some materialists who claim that if we had sophisticated enough instruments, we could measure the current state of every entity and predict with extreme precision what would happen next. Others dismiss such ideas of foresight-whether God's or that of a near-infinite computer—with arguments from physics. In particular, they point out that 'laws' such as the uncertainty principle make it impossible for anyone to know accurately how things will transpire. Werner Heisenberg, in a 1927 paper, stated with respect to sub-atomic particles, that "The more precisely the position is determined, the less precisely the momentum is known in this instant, and vice versa." In essence, you cannot know both the position and momentum of a particle with precision—because to know where it is, it could not be moving (or it would no longer be where it was). Many atheistic scientists, and some theologians, extrapolate from this postulate of quantum mechanics to God's knowledge and claim that it must be limited by physical reality. They argue that God cannot know the future because no event can be absolutely certain. Some theologians use this argument to bolster their 'open theism' position, in which they claim that God has chosen to make some of his actions contingent upon human actions worked out in time and space. The proponents of 'open theism' also argue that God cannot know precisely what people are going to do or they would not be free to make their choices. They claim further that if an action was known beforehand by God, it could not be a free choice.

God knows everything, not by observation or measurement but by decree. Everything (*everything*!) that happens in the universe happens exactly as God purposed and decreed it would happen. Everything transpires because God has predestined it. It is simple, God could not know for certain what would happen in the future if he just looked at the future and had not decreed it. But he knows precisely where the smallest sub-atomic particle is and at the same time (relative to our frame of reference) how fast it is moving, because he has planned for that particle to be at that point in space at exactly that time.

Most people become very uncomfortable with the doctrine of predestination. They think that somehow, if God has predestined everything, humans have no freedom to act as volitional, self-willed agents; and that the origin and cause of sin must lie with God. God tells us without an equivocation that he predestines everything that comes to pass (Ps 139.4, 16; Prov 16.33; Acts 13.48; Rom 8.29-30; Rom 9.1-29); and at the same time that man is a responsible agent, fully accountable for his actions (Ezk 18.1-32; Rom 6.23). We must avoid the universal tendency

to go to one extreme or the other—to view God as a superhuman being, but with limited knowledge; or to view men as mere puppets and the victims of fatalistic forces. Don't try to outthink God! He has told us what the situation is, and it is our responsibility to believe it and to trust him. God knew what Cain had done, because he had decreed it. God knows all things because of his eternal will. God's knowledge is not derived, but rather an innate aspect of the essence of what it means for him to be God.

The Unhappy Wanderer [June 26] (Gen 4.11-12)

After Adam and Eve had sinned, the serpent (Gen 3.14) and the ground (Gen 3.17) were cursed; but here, for the first time, a person is explicitly cursed. This shows how significant God considered Cain's sin to be. We might wonder how Cain's murderous action could be more serious than Adam's sin, which brought misery and death upon all mankind. The difference may be implied in the words, "from your hand". Adam sinned because he desired autonomy to determine right and wrong. Cain sinned willfully and maliciously, with a desire to do evil. Adam sinned to challenge God, but not out of an overt hatred for God. Cain sinned in rebellion and with an explicit hatred against God, which he took out on his brother, because God had rebuked him for his irreverent sacrifice. The difference between the two can be seen in children today. Like Adam, a little girl loves her mother but wants to be like her, so she takes things from her mother's jewellery and makeup boxes that she has been forbidden to touch. In contrast, like Cain, a teenage boy who has just been rebuked by his father for drinking alcohol and smoking dope, fumes in hatred against his father and burns down their house with his siblings inside.

God's response to Cain's wicked action is to curse him directly. A curse, as with a blessing, when delivered by God, is not a perfunctory word; it results precisely in what God intends. When God had challenged Cain to bring proper sacrifices in worship, he left open a door for repentance. However, it appears that by cursing Cain he declared that Cain had gone beyond the point of redemption—like a Pharaoh or a Judas he was handed over to possess the consequences of his sin for the remainder of his temporal life and in death.

Cain's punishment was associated with his crime. He had defiled the ground by taking the life of his brother and by pouring out his blood on the ground. In turn, the ground was symbolically to take Cain's life. No matter how hard he worked at cultivating crops, the ground would not supply him with sufficient food to eat and everything that it produced would be hostile to him. Although the ground had been cursed after Adam's sin, and crops could only be grown by sweat-inducing labour, with Cain's sin the ground became to him hardpan. There is an element of irony in his punishment; it was designed specifically for him. His occupation had been a "worker of the ground" (Gen 4.2)—tilling the earth and growing crops; that is, subduing the earth. However, after his sin, he could no longer carry out his occupation, because the ground had been constrained by God to become his agent of vengeance and would be a slave-master over Cain to drive him into the grave.

In addition, the ground that hosted the Garden of Eden and provided places of habitation for Adam and Eve and their descendants outside of the garden, would no longer host Cain—he would be a cropless wanderer in a land that would no longer provide refreshment or rest. His wanderings would be physical, psychological, social, and spiritual. He was sentenced to perpetual exile from his homeland, haunted by an accusing conscience with no hope of the salve of forgiveness, condemned to be a pariah—an untouchable outcast—and alienated from his parents and from God. Cain is the prototype for men who chose to live without God. In their rebellion and often overt hatred against God they inflict on themselves a restless shifting and straying. They can never settle down, are never content, and are always searching. Life is always a phantom dream that they can never quite solidify.

God could have executed Cain immediately, either directly as he later did with Ananias and Sapphira (Acts 5.1-11) or through an intermediary (e.g., a lightning bolt or an angel). It is not clear why he did not execute Cain in one of these ways, particularly in light of the introduction of capital punishment for murder after the flood (Gen 9.5-6), and the later restriction that prohibited substitution for the life of a murderer (Num 35.32). Many reasons have been suggested, including that: 1) God left open the door for Cain to repent (this is unlikely since Cain was cursed). 2)

The human population was very small at this time and could not afford to lose an early progenitor. 3) The presence of the fugitive and wanderer (as a marked man [4.15]) would serve as a potent warning to all who crossed his path of the enormity of murder. 4) The preservation of Cain's life served as a symbol that God reserves to himself the right to determine who lives, a right that he had not yet delegated to men. 5) God gave a sign that vengeful retribution is wrong and wanted to avoid its escalation. 6) Adam as the patriarchal head of the human family, and thus the proxy civil magistrate, would have had to execute his own son. Some of these suggested reasons have merit, but each presents difficulties. We cannot examine the legitimacy of each reason today but need to rest in the assurance that God knew what he was doing and had a valid reason for it.

Regardless of the reason, the preservation of Cain's temporal life certainly indicates that God does not abandon humanity under the condition of sin—even the most rebellious of men is given many blessings that he does not deserve. Rather, God gracefully sustains humanity even while estranged from him, and holds out the promise of mercy if men turn to him in repentance and faith. We should not be tied in a knot trying to explain God's providences. We are heart-murderers (Mt 5.21-23) and are, by nature, unhappy wanderers from God; and deserve both Cain's curse and immediate retribution from God. It is only because Christ was forsaken by the Father and became a curse for us (Gal 3.13), that we can receive any blessings from God.

Cain's Protest [June 27] (Gen 4.13-14)

A child screams at his parents "It isn't fair!" when he thinks that he is being mistreated—either claiming that he did not receive the same benefit that his sibling received or that he is being punished more severely than he deserves. In response to the sentence for murder, Cain behaved like a spoiled child. He claimed that his punishment was not fair.

Cain summarized his complaint by saying that his punishment was unbearable, and then itemized the particular reasons for why he believed the punishment was too severe. He said that he was:

- 1. *Banished* Driven out from the presence of his kin, with no opportunity for ongoing social engagement with them; but rather required to flee from their avenging arm. He had used brotherly fellowship to fool Abel (Gen 4.8) and had denied its importance (Gen 4.9), so forfeited his rights to it.
- 2. *Disenfranchised* Driven off the land of his occupation to a land that would be hostile to him and not produce enough food for him.
- 3. *Alienated* Driven away from meeting with God at the place of worship. There is much hypocrisy in the heart of men who have no desire to offer only the proper worship authorized by God and to live by his standards, but yet claim that their excommunication is a great deprivation.
- 4. *Fearful* Paranoid of being murdered. Murderers know from their own callousness that men can easily turn to murder when angered, so they are cautious to avoid revenge from others.

There is considerable irony in each of his specific complaints. Yet, while he thinks he is being unfairly treated, he is dealing with God who is the ultimate exemplar of fairness and justice.

Before we consider further Cain's protest we need to digress for a moment to address the question (often raised) of whom it was that Cain was afraid might kill him. Some scholars claim that since there were only a few people around (e.g., Adam and Eve and their two sons; and possibly a few younger siblings), Cain was referring to future generations who would be descended from Eve. Others suggest that Cain was speaking of primitive pre-human hominoids, such as Neanderthals, which were living near the early settlement of Adam and Eve. These views are expressed by people who clearly do not consider that God is reporting history in these chapters. Eve likely had a child yearly, or every couple of years. If we make one assumption, that Cain was about 30 years old at the time he murdered Abel, then he would have had at least 15 siblings, and Adam and Eve could have had more than 50 grandchildren. Some of these may have been eager to avenge the death of Abel. However, it is possible that Cain and Abel were older (some argue that Cain was 129 years old, based on 5.3) and that there were considerably more people alive at the time of the murder of Abel.

Cain had refused to accept correction when confronted about his offering, murdered Abel in an attempt to get even with God, lied regarding the whereabouts of his brother, and denied responsibility for his sibling's welfare. Now he exacerbates his rebellion by protesting against the punishment God had decreed for his sin. Instead of humbly repenting and asking for forgiveness, he complained that he was being treated unfairly. His impudence in challenging God is staggering. Reprobates throughout history have acted in the same way. They see no fault in their own persons or actions but find every kind of fault in those who would dare to tell them what God says about their wickedness. They need to listen to what Paul says, "Who are you, O man, to answer back to God?" (Rom 9.20) Woe to him who dares to challenge his Creator and pass sentence on the omniscient Judge!

However, Cain's impudence is at heart mere bluster. At the core of his challenge is an admission of God's authority. Cain does not say, "I am not guilty and should not be punished." Rather, he snivels about the degree of his punishment, and thereby subtly admits that God is the lawgiver who has the proper authority to establish moral standards, which he has broken. However, his admission leads nowhere but to fear and hopeless despair. There is no sorrow over his sin; only remorse over being caught in sin. He is not sorry for his actions; only for the consequences. But he will not turn to God; rather he will only turn away from God and go off into the land of nothing (Nod). So it is with all of Satan's sons. Like Cain, and later Judas, they admit that they have sinned but have no desire for reconciliation with God. Instead, they flee from his presence into an everlasting hyper-venting against him, a perpetual wallowing in self-pity and remorse, and an endless self-imposed misery.

If queried, a typical person today will affirm that every society must have laws, the enforcement of laws, and the punishment of those who offend. However, law and punishment are only for other people. For example, other people should pay their taxes so that he can have tax-funded benefits, and it is fine if he hides income from the tax collector. Or, others should observe the speed limit on highways, but he should not be charged with an infraction if he drives 50kms too fast. Men want justice and punishment, so long as it does not come down on their own heads. They are the children of Cain and challenge the authorities about the injustice of their punishment. There is rarely any admission of responsibility; only disgust over being apprehended. There is no sense of evil before their eyes, except if it is to call God evil.

Cain's Sign [June 28] (Gen 4.15)

Cain's request (Gen 4.13-14), and God's response (Gen 4.15), does not teach that even hardened sinners like Cain can pray for mercy and receive it. A prayer-like utterance (e.g., someone flings out a 'God help me!' as a plane is crashing) of a person who is not a believer in Jesus (in the OT, the coming Messiah) is not true prayer. Cain did speak with God and whined about his punishment. But, his vocalization was not *prayer*. Prayer, by definition, can only be offered to God by a righteous person (i.e., one who has the seed of a new spiritual life planted in him by the Holy Spirit; James 5.16), in faith (James 5.15), in the name of Christ as Lord (Jn 14.13-14; James 5.14), and for things which are consistent with the will of God (1 Jn 5.14). As God rejected Cain's physical offering of produce (Gen 4.5), he detested Cain's vain appeal (Prov 15.8, 29). Therefore, it is a mistake to suggest that God heard the 'prayer' of Cain.

This verse also does not teach that Cain's punishment was mitigated. Some interpreters suggest that God displayed a longsuffering nature and conceded to Cain's objections that his punishment was too severe and, to diminish his fears, graciously acted as a kinsman protector to safeguard Cain's life. To the contrary, God rejected Cain's plea and carried out the sentence he had decreed in response to Cain's rebellion. Nothing was changed about Cain's sentence after his remonstrance, as is shown by his expulsion (Gen 4.16). Cain was, however, protected under God's wrath so that the full intent of the sentence could be executed. Cain had to live out the remainder of his long life under banishment, disenfranchisement, and alienation. The only possible aspect of mitigation was that Cain would not need to be constantly looking over his shoulder in fear. However, that is not much of a mitigation when contrasted with the centuries of misery that he endured as a fugitive.

God gave Cain a sign, not to favour him but as a means to control and oppose a personal vendetta. The Hebrew reads, "And the LORD placed a sign for Cain." Most translations read the preposition 'for' as 'on' (one exception is the NASB). However, it is probably more accurate to suggest that God did not place a mark *on* Cain, but rather gave him a sign that his life would not be taken from him in personal revenge over the death of Abel. So, we are not to speculate over what Cain looked like, as some do, suggesting that his skin colour was changed; a tattoo or horn was placed on his forehead; or that he appeared hideous to the rest of mankind so that they would shun him, and to remind them of his great sin and strike terror in their hearts lest they do the same. Despite the suggested parallel with Ezekiel 9.4 (the preposition is 'upon'), it seems that the best way to interpret this verse is that God gave Cain a sign that his punishment would be carried to completion. Determining what the sign was is not possible. However, one suggestion that is interesting to consider is that it was an increased ferocity of his personality—like a violent temper. This would have served a multi-fold purpose. It would have constantly reminded him of his sin, furthered his alienation from the rest of mankind, warned off all who came in contact with him, and served as a reinforcement of sustained judgement rather than of mitigation.

God says that anyone who would attack and kill Cain would suffer a seven-fold vengeance. Considering that physical death seems to be as final as men could have imagined without revelation, we might wonder how a person could be repaid with greater than an equivalent punishment—i.e., death. This figure of speech is used to express the completeness of God's vengeance in terms of both the certainty and severity of recompense against anyone who would take vengeance belongs to himself and that any form of vigilante action is prohibited. This warning is repeated after the flood (Dt 32.35; Rom 12.19). God reserves to himself the right over life and death. Capital punishment must be executed only by human authorities who are acting under delegated authority from God (Gen 9.5-6), not by self-appointed agents of revenge. God establishes a principle of jurisprudence, that criminals, in particular those condemned of capital crimes, are under the protection of legal sanctions against personal vendettas. Anyone who dares to take the sword out of the hand of God, or his appointed magistrates (Rom 13.4), is guilty of contempt in God's court.

God also begins to reveal other truths to mankind. This statement contains two latent concepts. First, God provides a hint that some crimes—capital crimes, with murder as a particular instance—are sufficiently grievous to warrant the forfeiting of the perpetrator's life. Thus, God declares that men who take the life of another out of hatred (as Cain did) or out of vengeance (as God prohibited here) are guilty of the same crime as Cain, and subject to capital punishment. Whether men exercised capital punishment before the flood cannot be known. However, immediately after the flood God does introduce it as a means of restraining murder and for the exercise of justice. In addition, this statement suggests that there are degrees of punishment, and the existence of a particular punishment that is more complete than physical death. This could only be achieved if there is a next life, in which there is everlasting punishment. This verse, therefore, gives the first hint of the reality of life after death—a concept which God will reveal in seminal form through the early patriarchs (e.g., Job), progressively through the prophets (e.g., Daniel), and more fully through his final prophet, Jesus.

Cain Went to the Land of Nod [June 29] (Gen 4.16)

This verse provides a brief historical summary of what Cain did after his encounter with God about the murder of his brother Abel. However, it also provides a poignant statement about the heart of all men who have reached a point of no return, in which their consciences are so seared that they are hardened against all repentance and want to have nothing to do with the living God—whom they know, even when they emphatically deny having any knowledge of his existence.

Cain deliberately turned away from God. He refused to repent of his sins of self-willed pride and murder. Instead, he went away from the place where the LORD made his presence known (at the gate to the Garden of Eden), where

Adam and his family assembled at the appointed place for the worship of God. While he moved physically out of Eden, we can also understand this metaphorically, as his moving spiritually away from anything to do with God and his demands. He was not driven out of Eden, as Adam and Eve were from the garden. Rather, he chose a self-imposed exile in an attempt to remove himself from God's sight. This means that he willfully renounced his family and God and the exercise of the true religion as typified through animal sacrifices. He wilfully gave up the blessings of family and the exercise of true religion so that he would not have to admit before God that he had done wrong by murdering his brother. Cain's action was deliberate. His action demonstrates that, since Adam's sin, people deliberately choose against whatever knowledge they have of the true God (even if it is only that displayed through evidence in nature that there is a Creator-God) to follow the course of sin and to go the way of Hell. They do not want to have anything to do with God and with his demands for obedience to his law.

Cain departed from Eden and went to the land of Nod. Nod was the name given to a place that existed before the flood, so any attempt to locate it in today's geography will be fruitless. It was to the east of Eden, probably at a lower elevation, since Eden was the source of the four major rivers which watered the original single continent (Gen 2.10-14) of the antediluvian world. Nod was probably located in an area with a less temperate climate, which had been quickly affected by the curse brought on the earth by Adam's sin. It may have been, by the point of Cain's departure, in a hostile bio-zone (e.g., jungle or desert). The Hebrew word *nod* means *wandering*. The land was probably given its name after Cain and his descendants occupied the land. Although Cain attempted to maintain a sense of permanency by building a city (Gen 4.17), he and his descendants may have been subjected to an increasingly hostile climate and environment, which caused them to live as hunter-gatherers rather than as farmers (Cain's former occupation), with their activities focused around a centrally located 'headquarters' settlement.

Although the reference to Nod is to be taken literally—i.e., there was a region in the antediluvian world called Nod—it also has spiritual implications. Nod symbolizes man's state as he flees from the presence of the Lord. Mankind imposes on himself an alienation from God, from which he does not want to return. To dwell in the land of wandering is the deliberate choice of reprobate sinners and it leads to progressive degradation and confusion. We can understand Eden figuratively to represent the earth—the current abode of mankind—the Garden of Eden to represent heaven—where God dwells and where men should aspire to dwell with him—and Nod to represent Hell—the land of everlasting wandering from God.

Cain *settled* in Nod. This statement is pregnant with irony, since he settled in wandering. In the remainder of the account of Cain's descendants (Gen 4.17-24) there is mention of urban life, economic activities, and social interactions, but there is no mention of God or his worship. Under Cain, mankind established a new world order which specifically excluded God. We cannot know if they explicitly set up a false religion, however this may be implied by the fact that when Adam and Seth are mentioned, we are told that, "people began to call upon the name of the LORD" (Gen 4.26). The writer may be creating a deliberate contrast between Cain's family which deified man, and the line of Seth which called upon the true God. Cain's dynasty was the first anti-God world order. After the flood, it would be imitated by the men of Babel (Gen 11.1-9) and later, by the Neo-Babylonian Empire, brought to its pinnacle under Nebuchadnezzar.

Cain's departing from God's presence is the prototype for all of mankind who have deliberately suppressed their innate knowledge of God. All men who have chosen this path wander farther and farther from him. We can see this in many ways. For example, at a cultural level, consider a rough outline of the history of Western thought since the Reformation. From a foundational belief in God as the transcendent, yet personal, Creator men wandered into forms of Deism, in which a god is defined as an impersonal, distant force. They then wandered further into the death-of-God philosophy of Nihilism or into the alternate reality of scientism in which nature is a self-creating entity and evolution is life's 'creator'. On an individual level, children who have grown up in a Christian home often turn against the teachings of their parents when they are older. They know that there is a God and of his righteous demands, but they deliberately choose to go out from his presence. And, like Cain, they settle in a land of spiritual wandering, in which they can never find true rest.

Cain's Family [June 30] (Gen 4.17-22)

Cain was banished from the presence of God and from association with his parents in Eden, to the land of Nod and to a life of wandering. Nevertheless, he had a family and he founded a dynasty. God demonstrated his provision of general grace by permitting Cain to survive and produce progeny even in a hostile environment (Acts 14.17). If Cain was married before he killed Abel, his wife did not abandon him. If Cain was not married at the time he killed Abel, then there was a woman who was willing to go with him into exile. It might seem strange that anyone would go with him, since he probably was marked with a violent temper as a result of his curse, and the conditions of life which he could offer to her would be only discomfort. We can find examples today of people who are fascinated by hardened criminals and offer to marry them. For example, the convicted killer Karla Homolka was found to be living in the Caribbean with her husband and three children. Cain's wife may have been honouring the marriage relationship as permanent (Gen 2.24) and abiding by the principle commonly heard today that marriage is "for better or for worse". But, her accompanying him is more likely a testimony to her own wickedness—she loved the darkness of sin as much as Cain did.

Cain's wife was one of his sisters (Gen 5.4) or a daughter of one of his siblings. She was not a hominoid creature who was less than fully human as some commentators postulate. They have been influenced by evolutionary thinking and the view that life has been on earth for millions of years. Clearly, it was necessary for Cain to marry a daughter of Adam and Eve because there were no other humans around. Thus, Cain's wife was fully human and included in the guilt of Adam's sin (1 Cor 15.22). God introduced a universal and perpetual prohibition against the marriage of siblings later (Lev 18.9), as it was unnecessary for marriage to be within that degree of consanguinity; to limit concupiscence among those who cohabited as children; and likely to limit damage caused by inbreeding due to accidental genetic mutations that are accumulating at an accelerated rate since the flood.

It is recorded that Cain had a son, probably his firstborn, whom he named Enoch. The name Enoch appears to be related to the Semitic words meaning *dedication* or *initiate*. If this is the case, it is possible that Cain was declaring further rebellion against God. He would not have dedicated his son to the true God, whom he despised. So, the act of dedication would have been to declare the initiation of his own cause and reverence for his own ability to create life, devoid of any overt inclusion of God. He effectively declared, "I have been cast off by God, but I will show him that I don't need him, by creating life and a civilization in my own image!"

Multiple generations are recorded in Cain's account. They are likely included to illustrate the fact that kind gives birth to kind, and evil perpetuates itself. In general, God does not stop wicked people from producing offspring, which carry on the detestable acts of their parents. The extension of Cain's rebellion, carried to Lamach in the sixth generation, demonstrates that except for God's saving mercy, man cannot deviate from the path of wickedness. Drug addicts, prostitutes, pornographers, thieves, and murderers all have children. In fact, some of them have dozens of children which they expect others to care for. For example, Desmond Hatchett of Knoxville, TN had thirty children by eleven different women and requested that the state provide child-support payments for them. God permits this kind of behaviour as a witness to the way of wickedness and to show the amazing power of his grace as he saves some out the depths of their depravity.

Two of the names in Cain's genealogy include the term 'el' (*god*)—for example, Mehujael could mean "god gives life". This does not mean that the parents were honouring the true God by giving their sons these names. To the contrary, they probably dedicated their sons to false gods, as later cultures would use equivalent terms for god (e.g., Baal and Allah) and include the terms in the names of their children (e.g., Belshazzar). This may indicate that the Cainites had established a false religious system as a direct challenge to the true worship of God. This may be why the chronicler of the antediluvian world reminds us that, while this false religion existed, there were still true believers in the coming Messiah who participated in public worship (Gen 4.26).

A contrast is established between Cain's line and Seth's line (chapter 5). The two lines contain two identical names

and some similar-sounding names; and both genealogies are linear through a key representative in each generation, concluding with a branching at three sons. Even though good men and bad men may bear the same names, God distinguishes between those who are the 'sons of God' and the 'sons of men' (Gen 6.2). The seventh from Adam in each line (Lamech in Cain's line, and Enoch in Seth's line) accentuate the contrast. Lamech was as evil as any man can be and reinforced his wickedness by memorializing his ancestor Cain in his son's name Tubal-Cain, but Enoch was among the godliest men ever to live and was rewarded by not having to face death. The age to which each patriarch lived in each generation is not recorded for Cain's line. However, for Seth's line, the age at death of each patriarch is recorded. Thus, God emphasizes the truth that, in general, a long life is a reward for wisdom and holiness (Dt 5.16; Ps 91.16; Eph 6.3) and a symbol of honour and renown.

Cain Built a City [July 1] (Gen 4.17)

Sometime after Cain was banished to Nod he began to build a city, which he named after his firstborn, Enoch. The Hebrew text implies that the project took some time; thus, the NIV's rendering, "was then building". The ESV translates the passage as, "when he built". Both of these translations seem to be better than, "and he built", since they include the idea of passing time and allow for a considerably increased human population.

The report of Cain's building a city appears in the context of his banishment to Nod. Thus, this construction project seems to have been:

- 1. A challenge against God. His action appears to be in direct defiance of God's command that he was to be a wanderer (Gen 4.12).
- 2. An attempt at permanence. Although Cain and his descendants probably lived as hunter-gatherers, rather than as farmers and were subjected to increasingly hostile conditions, they attempted to establish a sense of permanence and unity with a centrally located 'headquarters' settlement.
- 3. *A monument to man.* His pride and ambition compelled him to erect an edifice that he dedicated to his son; thus, challenging God whom he should have been honouring.
- 4. *A response to fear*. Cities were walled and fortified. Thus, he attempted to defend himself from any who might be set on vengeance (Gen 4.14); not trusting that his life would be spared and protected by God (Gen 4.15).
- 5. *A declaration of separation*. He declared his independence from God and from the rest of humanity, particularly those who called on the name of God (Gen 4.26).
- 6. *A rallying point for apostasy*. His city would have been the focal point for his man-centered religion (like the Tower of Babel became later) and an alternative to the place where God made his presence known at the gate to the Garden of Eden.
- 7. *A declaration of his hope*. He used an earthly settlement and associated outward prosperity to fill the hole in his soul, rather than placing his hope in an everlasting rest from God.

Cain's action raises questions about the propriety of city building. Often the ideal of a peaceful life is presented as an Edwardian pastoralism, such as that lived by the Hobbits in the Shire in the *Lord of the Rings* trilogy. Adam was assigned the occupation of gardener in the original perfect state, and the first occupations mentioned after the expulsion from the garden are those of shepherd and farmer (Gen 4.2). On the other hand, many argue that the greatest social and technical progress has been achieved by men living in cities—e.g., democracy from Athens; a legal code from Rome; commercial instruments from Amsterdam and London; music from Vienna; computer technologies from Pal Alto. An apparent confirmation appears to be the inventive genius of several of Cain's descendants (Gen 4.21-22). Nevertheless, Cain's building a city appears to be a direct challenge against God. After the flood, the residents of the city of Babel also challenged God by concentrating in a city and refusing to abide by his mandate to fill the earth (Gen 9.1) and by practicing false worship. Cities built by men, without reference to God (Ps 127.1), are not morally neutral but intrinsically evil and they quickly become concentrations of wicked men and their institutions of money, political might, religious influence (priest cults), 'culture', schools, and military power. In the Bible, they are often represented as symbols of wickedness and apostasy (Gen 18.24-32; Josh 6.1-26; Rev 2.13) which will be judged by God (Is 25.2; Is 26.5; Is 27.10; Jer 6.6; Jer 21.8; Rev 18.2).

However, there is a tension in the Bible with respect to cities. Cities can be either bad or good; much like almost everything that man touches. Cities can be understood as a logical extension of the original institutions of family and government for larger agglomerations of people. Regardless, God uses human instruments and inventions in his providential administrations. So, we often find positive references in the Bible to cities; for example, as places of refuge (Num 35.6), a gift from God (Josh 24.13), a blessing of permanence instead of wandering (Ps 107.4), a place where God chooses to make his name known (1 Ki 11.32, 36; Dan 9.18), and the dwelling place of God's chosen dynasty (2 Sam 5.9). Believers are exhorted to seek the peace and prosperity of the city in which they live (Jer 29.7).

Cities in the Bible, cast in a positive light, point to the work of Christ and to his Church. All mankind that believes in Jesus as Lord is destined for city life. Man was designed by God as a communal creature, not a loner, and is intended to be in fellowship with God and other rational creatures. This is fostered by city life, not rural life. Therefore, God is going to redeem the institution of the city for his purposes. Ultimately, he will show that every institution and cultural artifact used among men is polluted, by destroying them. However, he will redeem some (e.g., government, religion/worship, work, and the city) for his ultimate glory. As Abraham looked for a city with foundations whose architect and builder is God (Heb 11.10), so we should focus on the everlasting city and not on the cities built by the Cains of this world. The first city was built by a wicked man. The last and ultimate city, the New Jerusalem (Rev 3.12; Rev 21.2, 10, 14-23), is being prepared by God as an inheritance for his people. In that city there will never be any evil (Ps 101.8; Is 52.1; Rev 22.14). Also, the tree of life will not be found any longer in a garden but in the midst of the everlasting city (Rev 22.19).

Polygamy Introduced [July 2]

(Gen 4.19)

The history of Cain's line is very brief. Yet, the writer wants his readers to understand that the consequence of rebellion against God is an increasing stranglehold of sin on mankind. Thus, he mentions a new sin—polygamy, as exhibited by Lamech who took two wives. Undoubtedly, this is the first occurrence of polygamy in history, so the writer thought that it was necessary to mention it in the context of the wicked line of Cain, even if he does not provide any direct comment on its impropriety.

God's definition of marriage is a permanent, monogamous, heterosexual union (Gen 2.24). This is the only form of marriage that God has ordained and approved. A man should not have more than one wife at a time, nor should a woman have more than one husband. The fact that polygamy has been widely practiced in many cultures, or that it was not specifically condemned when practiced by the postdiluvian patriarchs, does not mean that it is right. Jesus, echoing 2.24 and Malachi 2.14-16, makes it clear that polygamous marriage was not what God intended. He reminded the Jews of his day that marriage is to be a life-long relationship between one man and one woman (Mt 19.3-8). God's standard for marriage also excludes divorce and remarriage (i.e., 'serial monogamy'), except for very specific reasons (i.e., adultery or desertion committed by an unbelieving spouse), because a man is to leave all others and to be united to his wife.

Lamech's motivation for taking two wives is not stated. However, there may be a hint of part of the reason in the names of his two wives. This may explain why the names of his wives were included in the narrative, whereas the names of the wives of the godly patriarchs (chapter 5) are not mentioned. In ancient times, names were often representative of peoples' true character; e.g., Nabal ('fool') was a foolish and churlish man, like his name implies. The names of Lamech's wives appear to be derived from terms associated with physical beauty. It is usually suggested that the name Adah is associated with either the words meaning *ornament* or *morning*. The name Zillah appears to be derived from either the word for *shade* or *shadow* or the word *tinkle* (as in the sound of a cymbal). Thus, there seems to be a hint of sensuality in the names. If this is the case, it may indicate that Lamech was driven by excessive lust, which he tried to satiate by taking a second wife. The ancient rabbis suggested that one of his wives was selected for domestic purposes—to keep house and raise children—whereas the other was selected as

his mistress for pleasure. There may be merit in this suggestion.

It is also probable that other motives were associated with Lamech's decision to take two wives. In his own prideful rebellion against God—following in the footsteps of his forefather Cain—he was ambitious and may have felt that he could extend his power and reach by increasing the size of his family. He may also have felt that he could show further contempt for God and his laws and outdo Cain by breaking another of the few explicit commands that had been recorded to that point.

Polygamy is unnatural, not being what God had intended for marriage when he created mankind. In addition, polygamy results in numerous problems. The OT hints at some of these problems (Gen 29.31; Gen 30.1, 15-16; Dt 21.15-17); even though it does not explicitly rule out polygamy. Except possibly for Levirate marriage (Gen 38.8-11; Dt 25.5-10; Ruth 3.1-18; Ruth 4.10; Mt 22.23-33), which applied to specific inheritance and land-related circumstances, polygamy was not the norm in Jewish society. It is clear that polygamy is a breach of God's universal law, as expressed by Jesus (Mt 19.4-6).

Polygamy is one sin that many people in the West still believe to be wrong for society to permit and embrace. Negative views about polygamy are expressed by many who would otherwise endorse overt sins. For example, radical feminists, who claim that abortion is a woman's rights issue and support homosexual 'marriage', argue that polygamy is structurally inegalitarian because it treats women as commodities for barter among rich patriarchal males. Political scientists who would reject many of the Bible's principles speak out against polygamy, arguing that it is contrary to the principles of a modern liberal democracy.

Despite positive presentations of polygamy, such as in 'reality' TV shows, there are inherent problems with it. Fundamental are the jealousy, bickering and hatred it engenders among multiple wives and among their children. Wives in a polygamous marriage can never say anything good about the others. The first wife feels that she is hated by the other wives who are waiting for her to fall. She continually has to protect her 'rights' as first-wife. The second wife feels a sense of entitlement, thinking that she was selected because of problems with the first wife or because of something special in herself. Other wives feel that they are in a no-win situation, being essentially in a fallback position for when things aren't going well with the other wives and having the role of being baby making machines. Evidence from recent studies shows that societies in which polygamy is institutionalized have increased social or criminal problems with children who feel disenfranchised and with lower-status males who cannot marry due to the shortage of available women. The issues with polygamy should not surprise us. Societies that desert God's ordinances will suffer the consequences.

Development of an Industrial Economy [July 3] (Gen 4.20-22)

We noted previously (Gen 4.2) that a fledgling economy developed at the beginning of human history—with Cain being a farmer and Abel a shepherd. The brothers didn't attempt to do everything on their own that was required to provide their needed food and clothing, but developed a division of labour, focusing on their individual skills. They would have traded with each other to receive the benefits of the other's work. The expansion of an early industrial economy is described in these verses; with additional specializations: tent making, nomadic herding of livestock, forging cutting instruments of bronze and iron, crafting stringed and wind musical instruments, and the provision of entertainment using those instruments. We can infer that other specializations in the pre-flood economy were practiced; including carpentry (Gen 6.14), leather working, production of milk and cheese, and scribal work by those who recorded history and genealogies in written form.

The early part of the Genesis account shows that the commonly held view that civilization developed over tens of thousands of years is incorrect. The fact that Tubal-Cain worked with both bronze and iron confirms that progress from implements made of wood or stone to implements forged from metals was rapid, occurring within a few hundred years of creation. After the flood, Noah and his sons would have re-introduced and expanded on the

technology that had been available prior to the flood. However, as men began to migrate from the plains of Shinar (Gen 11.1, 9) there would have been a (temporary) loss of technical skills and men would have reverted to using more 'primitive' implements (for example, the Inuit using bone, stone, and wood). The idea of a 'stone age' followed by a 'bronze age' and 'iron age' as part of cultural evolution is bogus. Also, the fact that metals were used shortly after creation, indicates that metals (and possibly metal ores) were readily accessible for use by men—indicating that God created the deposits *in situ* and long ages were not required to produce them.

The innovations mentioned in this account teach us that God has endowed mankind with amazing creative abilities to utilize the physical resources which he has provided for us on this planet. Common thinking is that the economy (often compared with a pie) is of a fixed size and if one person takes a big slice, then there is less available for everyone else. However, as many economists point out, the creative abilities of mankind have continued to increase the size of the pie so that everyone can have an increasingly larger slice. The resources available to mankind are essentially unlimited—or limited only by mankind's ability to create new ways of using physical assets. For example, products that once used considerable amounts of metals and energy to produce, such as a television, now use significantly less, for a better product. From a merely technical perspective, what has been achieved by mankind is astounding, and the innovation appears to be continuing at an accelerating pace.

Since technical and artistic abilities are attributed to the line of Cain, with no mention of equivalent abilities in Seth's line, it could be inferred that prowess in these areas falls primarily within the line of rebellious mankind. There is likely an element of truth underlying this inference, as there does appear to be a degree of correlation between moral failure and advancements in the arts and technology. Men who have rejected God as their Lord and Jesus as their Saviour, have no other source of hope than in this world. So, they make every effort to get the most out of the world by creating means for comfort and ease, prolonging life, escape from facing spiritual realities, and providing themselves with a sense of meaning and purpose. For example, it is likely that the percentage of unbelievers who have been winners of Nobel prizes in science is higher than their percentage of the population from which the prizewinners have been drawn. This does not mean that civilization did not advance under the godly line of Seth, or that Christians do not contribute to this advancement today. To the contrary, there is considerable evidence that a Christian worldview is an essential element for the advancement of science.

The achievements credited to Cain's descendants indicate that God is gracious. Despite Cain's overt rebellion against God, his family was still able to apply the creative abilities with which mankind is endowed as an imagebearer of God. God gives gifts liberally to all of mankind, including the most tyrannical or wicked, so that they can use their brilliance to produce, despite their selfish goals and desires, beneficial goods and services such as advances in medicine or air transport. Although men may be deprived of God's saving Spirit, yet they are still blessed with a general spirit of capability that allows civilization to progress. Thus, God holds these men accountable for contempt because they do not acknowledge his goodness to them nor do they thank him for his kindness toward them.

In general, innovations in technological knowledge may be utilized for good or evil purposes. Therefore, as Christians, we must be aware of the moral responsibility associated with each invention and new concept, and not allow worldly accomplishments to become our focus. Sadly, many Christians envy and imitate the world, rather than being a guide to light the way of life in a world in which no value in placed upon spiritual regeneration and service for the glory of God.

Human Creativity [July 4] (Gen 4.20-22)

Our society is inconsistent in how it views the ancient world. On the one hand, people are enthralled by the idea of ancient civilizations, like Atlantis, which were supposedly technologically advanced. On the other hand, the same people would indulge in our culture's hubris and express the belief that if Noah existed, the culture in which he lived was primitive and there was no way that he could have built the ark described in Genesis chapter 6.

During the years leading to the flood, the antediluvians probably developed levels of technology that were comparable to that of ancient Egypt, Greece, or Rome. We cannot prove this, as we have no historical records from that period, other than what is recorded in the Bible. However, these verses (Gen 4.20-22) tell us that, within a few centuries after creation, metallurgical techniques had been developed, luthiers crafted instruments, musical scales were known, and felt and woven wool had probably been invented. In addition, by the time of Noah, sophisticated carpentry (Gen 6.14-17) techniques were available, stone masons were likely using techniques required to build structures comparable to the pyramids, and writing had already been in use for centuries. Although all of the antediluvian habitations were destroyed by the flood, there may be extra-Biblical evidence about the level of technology available prior to the flood. For example, a number of artifacts have been found in coal and rock formations, which are supposedly millions of years old, including a bronze bell found in West Virginian coal, with a figurine on the end of an extended handle. A strange man-made object was found embedded in a geode-like rock near Olancha, California. X-rays showed that it is made of a white porcelain cylinder, with a shaft of metal and a spring on one end. Mortars and pestles, nails, screws, pots, jewellery, 'dolls' (or idol images), an iron casting of a face, tools (e.g., a hammer), a medallion with inscriptions, and similar objects have been found in deep digs where, according to evolutionary geology, no human should have ever walked. Sceptics dismiss these objects as being dropped by natives (how they migrated to deep levels is unexplained) or as hoaxes. However, at least a few of these artifacts could have been swept away during the flood and buried under layers of sediment that has been compressed into rock since the flood.

Another indication that technology had advanced significantly prior to the flood, is how quickly it redeveloped afterwards. Noah and his sons brought considerable knowledge and insight (the equivalent of many current lifetimes worth of learning) with them through the flood and would have taught their descendants many industrial techniques. For example, the people of Babel built a tower a few generations after the flood, and the oldest pyramids in Egypt were built within 300 years after the flood.

It should not surprise us that the antediluvians had developed sophisticated technology, since man was made in the image of God and has been endowed with creative abilities. However, when most people write about the image of God in man, they rarely include creativity as an attribute of image-bearing. Similarly, when definitions of God are given (for example, the answer to the fourth question in the *Westminster Shorter Catechism*), they do not identify creativity among God's attributes. Yet, one of the first attributes God displayed was his creativity as we see multiple times in chapter 1.

Creativity is: 1) the ability to conceive of something new or original that will have value (e.g., a new tool or a way to solve a problem), 2) designing an approach or plan for taking an abstract thought and giving it form, and 3) acting to turn the idea into reality. Human creativity also requires an element not found in God's creativity. God can create things without utilizing pre-existing resources—he can create from pure thought. Humans must add a step between steps 2 and 3, above; which is, to assemble necessary resources to realize the plan. A person who has many ideas may be imaginative but is not creative if he does not act on his ideas. Psychologists and management gurus would claim that there are particular attributes of creative persons such as, the ability to view things from alternative perspectives, intelligence, flexibility, passion and conviction, perseverance, and the ability to compare alternatives and test hypotheses. While it is probably true that some people are more creative than others are, the reality is that every person is endowed with creative abilities. However, because of the presence of sin our creative abilities, like every other God-given ability, are spoiled and polluted.

God has endowed mankind with amazing creative abilities to utilize the physical resources which he has provided for us on this planet. Even unbelievers have been graciously given gifts of creativity—sin has not entirely wiped out the remnants of this good blessing. Creativity is one of the key attributes that distinguishes man from animals; and may also distinguish man from the angels, who may not be endowed with creativity (or to the same extent as humans are). Scripture gives no indication that angels were created in the image of God—and yet they have many (or all) of the other attributes often included in image bearing such as rationality and a moral consciousness. Among creatures, creativity may be an exclusively human attribute. Thus, we see human creativity displayed widely—from engineering and technology to arts and crafts. However, as with all of God's endowments, the fundamental question is, do we use the gifts for our own glory, as Cain's line did, or for the glory of God?

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Lamech's Boast [July 5]
(Gen 4.23-24)
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Lamech's boast contains a strong element of demand, with the double 'hear' and 'listen' rendered in the imperative. It would be interesting to know what led him to make his pompous boast before his wives, rather than to his friends and neighbours, or even his enemies. It may have been that another man had attempted to seduce one or both of his wives. He may have fought and killed the usurper and was strutting before his wives, declaring his jealous authority over them, demanding their obeisance, and warning them of the serious consequences of heeding any approach from another man. His wives likely cowered before him—alarmed at his violent temper and evil disposition—and suffered under his despotic demand that they listen to him. There was no fear of God displayed by Lamech and no Christian spirit which would have guided him to love and cherish a wife (Eph 5.28-33).

His boast claims personal invincibility and presents a double challenge to God. His forefather Cain had been promised a degree of particular protection by God (Gen 4.15). Lamech effectively claimed that same boon and declared that his position was unassailable. His own son had forged instruments of metal. This innovation would have been used for creating farming and construction implements, but likely also included the creation of weapons (swords and iron tipped spears) which allowed Lamech to introduce the first 'arms escalation' and to declare his domination over any who might challenge him.

The first aspect of his challenge against God is seen in his expectation that he would be protected more than Cain. He used the hyperbolic declaration that his vengeance was assured seventy-sevenfold. Although men today know that generally they will die within 80 years, they still make absurd claims about their invincibility and challenge God in various ways—for example, tempting him to strike them down when they commit sins through which they could acquire sexually transmitted diseases or by ingesting or injecting body-and-soul-destroying substances. If the length of the lives of the patriarchs (chapter 5) is indicative of the general situation in the antediluvian world, men in Lamech's day had little experience with death. In the account of Cain's line there is no mention of death (other than murder), as there is in chapter 5, probably indicating that no one had died among the ancestors of Lamech when the account was written. So, Lamech had no sense of dread in the face of impending death, as men today have.

The second aspect of Lamech's challenge is found in his hardened and perverse rebellion. He believed that a polygamist and violent murderer could mock God with impunity. He undoubtedly sought other ways by which he could make depravity his god. He was the first 'postmodern' man living in a technologically advanced and hedonistic society (Gen 4.20-21); seeking pleasure, declaring that the only life of importance was his own, living as if there are no moral boundaries, and practicing anything that would go beyond the natural limits with which man is endowed as an image-bearer of God. There was no terror of judgement in Lamech's heart as he raised his fist at God.

Lamech added to the demonstration of his evil nature by glorying in his wicked exploits and declaring his desire to have his wickedness made known. He wanted his boast to act as a threat to others about his strength, ferocity and self-perceived courage. Also, he shows how a wicked nature delights in the practice of wickedness. Paul speaks of this tendency in the human heart when men not only do wicked deeds but also approve of the practice of them (Rom 1.32). In Lamech, we see how bad becomes worse, as Cain's line degenerates into total perversity (Gen 6.5). Without the restraint of God's general and saving grace all men would live out their mortal existence as Lamech's heirs.

Lamech displayed another dimension of his exaggerated personality in his threat to make his vengeance seventysevenfold. His idea of justice and fairness was perverted, as was every other aspect of his nature. He declared that

he would take revenge into his own hands. When God dealt with Cain, he (God) said that he would take vengeance on anyone who killed Cain. Lamech, however took on himself the role of avenger, usurping God's right to avenge (Dt 32.35) directly or through appointed authorities (Gen 9.5-6; Rom 13.1-5). In addition, his call for a disproportionate vengeance (killing one who struck him) is as extreme as everything else displayed by his actions. We have an inbuilt sense of fairness—to see this, observe children as a mother doles out coloured candies. However, as with all other aspects of our innate moral sense, we suppress and pervert truth. So, God found it necessary to provide specific guidance for proportionate justice. He introduced the principle of *lex talionis* (the 'law of *talion'* or retribution), that punishment should be proportionate to a crime. It is often summarized by the concept of an "eye for an eye" (Ex 21.24). God established appropriate punishments for various classes of crimes. For example, he provided limits on the repayment of stolen items which restored the amount stolen and provided for an amount as punishment. In our society, we see abuses of the principle of equitable justice in two directions—punishments for serious crimes which are clearly inadequate (e.g., sentencing a drunk driver who kills a pedestrian to a month of house arrest) or drastically overstated (e.g., awarding millions of dollars to a person who spills hot coffee on herself in a restaurant). Our society is following in Lamech's footsteps—doing what is right in its own eyes.

Establishing the Line of the Seed of Promise [July 6] (Gen 4.25-26)

Scripture now reports that Adam and Eve bore another son. This reference to the conception and birth of Seth is not reported in chronological order after the events immediately preceding in the account. The writer had introduced a digression from the chronological account (Gen 4.17-24) to review the line of Cain to the seventh generation from Adam. He now returns to his main story—following the line of the seed of promise (Gen 3.15) which would eventually lead to the Messiah. So, after Cain had been sent into exile (Gen 4.16), Adam comforted his wife and she bore another son, who she viewed as a replacement for Abel. However, we are not to infer that Seth was their *third* son. They undoubtedly had had other sons (Gen 5.4) prior to the birth of Seth, since God had originally endowed them with flawless bodies and had given them the charge to be fruitful and multiply—it would be incredulous to infer that they had not had any other sons during an approximately 100-year period prior to the arrival of Seth. Rather, the birth of Seth is noted because he was the first son born to them after their first loss of a child. During the first 129 years of human history it is likely that not a single child or grandchild of Adam and Eve had died—based on the assumption that the long ages recorded in chapter 5 was a general phenomenon in the antediluvian world.

The author (Moses) of Genesis is, here, giving us a preview of what is to come in the Adamic line. At the time that this portion of Genesis was written down by Adam (Gen 5.1), Seth had had a son (Enosh), but the remainder of the genealogical account was yet to be revealed through the birth of significant sons leading to Noah (chapter 5). Adam's intention in recording the birth of Seth and Enosh was to inform his readers that God had not abandoned his promise to provide a seed of the woman who would lead to the redeemer. He sets up a contrast between the rebellious line of Cain that ends with the most wicked of all his descendants—Lamech—and the line of Seth who "began to call upon the name of the LORD". The line of the Cainites reached its peak in worldly accomplishments—building cities, industrializing, and establishing means of entertainment. In contrast, the line of Seth would be known for its spiritual pursuits—the worship of the true God. This differentiation continues to this day. The seed of Satan are honoured for their accomplishments in time, whereas the seed of Christ is commended for faith (Heb 11.39).

Seth is declared to be an *appointed* son and is named in recognition of this appointment—the Hebrew word for appointed sounds similar to the name Seth, with the same two consonants and only a difference in the vowel sound. When Eve had given a name to Cain (Gen 4.1), she named him in recognition of God's action on her behalf, and undoubtedly, at first thought, that he was intended to be the seed of promise, or that he was intended to be the father of the line leading to the seed. Later, her hope would have been transferred to Abel, who displayed a godly character. However, when Cain murdered Abel and was sent into exile, she lost two sons at the same time and her hope appeared to be misdirected. She would have thought that not only had she been bereaved of two sons but that she

had also seen the end of the promise that a redeemer was to come through her male progeny. So, even though Eve had given birth to other sons before the birth of Seth, she knew that there was something special about Seth. She understood that he was a replacement for Abel, so she attributed his birth to God's direct action. In naming Seth, she again acknowledged God's part in the conception and birth of a son.

When Eve had named Cain, she had referred to him as being delivered with the help of the *LORD*. With the birth of Seth, she attributed the help to *God*. Of course, they are the same person—and Eve knew that! But there is likely significance in her choice of attribution. She may have been thinking back to Satan's tempting her and responding, although belatedly, to his challenge. Satan had used the name 'God' when he spoke to Eve (Gen 3.1-5), and cynically questioned her understanding of God's goodness. Satan would not have wanted to use God's personal name—LORD (Yahweh)—when he spoke with Eve, but rather effectively de-personalized God by speaking of him as an abstract entity. So, it is likely that with the birth of Seth, Eve deliberately chose to state that it was the Creator, God—the one Satan and she had questioned—who was now showing his goodness to her.

God had made his promise to Eve that one of her offspring would strike Satan and his offspring. Eve declared through the act of naming Seth that her faith had grown and that she was trusting in the promised Messiah. She believed that God would send a son who would provide redemption for mankind. She was ready to put her hope in God who provided this substitute—"an offspring *instead of* Abel". We also should be encouraged by reading about the birth of Seth, and Eve's recognition of its importance. There have been various times in history when it might have appeared that Satan had won in his battle against God—the first was the death of Abel; others include the growth of wickedness in the antediluvian world (Gen 6.5), Sarah's barrenness, the murder of the royal family by Athaliah, and the crucifixion of Christ. We know that it was through Seth that the Lord Jesus was eventually born (Lk 3.38). So, we have seen the fulfillment of God's promise to Eve. However, we often treat the fulfillment of God's promises with detachment. Satan may appear to be winning today as he wreaks havoc on the Church; but the Church of the Messiah will never be destroyed, and he is coming soon to rescue his seed.

The Public Worship of God [July 7] (Gen 4.26)

This verse does not refer to the first instance of the worship of God. Adam had undoubtedly brought his children to worship God at the gate of Eden and had taught them how to worship correctly. Cain and Abel had also brought, respectively, unacceptable and acceptable offerings of worship (Gen 4.3-5) long before the birth of Enosh. As the human population expanded and dispersed throughout the pre-flood world, it would no longer have been possible for all people to assemble before the gate of Eden each Sabbath—although some people may have made periodic pilgrimages to the site of the flaming sword and cherubim, where God made his presence known; as Jews would do centuries later when they travelled to Jerusalem and the temple. Thus, this verse is generally understood as referring to the introduction of a new form of worship—what we call *public worship*. The word 'public' does not mean open to all (which it is!) but, rather, open to people who are not necessarily connected by immediate family ties. It means assembling to worship corporately with others in a formal and organized fashion—as distinct from personal or family worship. Thus, this verse refers to the introduction of communal or corporate worship, beyond Adam's immediate household unit.

The mention of the introduction of the public worship of God is associated with the family line of Seth to establish a contrast with the wicked line of Cain. Cain's descendants went to an extreme, living in affluence and pleasure as they founded the *City of Man*, with no regard for God. Seth and his descendants, traced to Noah (Gen 5.1-32), are portrayed as righteous and stand out as being dedicated to living within the knowledge and fear of God's presence. They sought the establishment of the *City of God*. The focus of the Cainites was on human accomplishments and man's glory; the focus of the Sethites was on extolling God's glory. The true Israel of God, from OT patriarch (Gen 12.8; Gen 21.33) to NT believer (Rom 10.13; Gal 6.16), traces its spiritual ancestry to Seth.

The worship of the Sethites was formulated around calling on the name of the LORD. Calling on this name means

calling on God as a person with distinct dimensions to his self-manifested nature. For example, they understood God to be the transcendent creator, sovereign Lord, and moral adjudicator; but also, a God with whom they could have personal communion and fellowship. They knew God to be the one who loved them and the one who had made a covenant with them, by which he promised to send a saviour who would redeem believers and the natural world from the clutches of Satan and his spiritual children.

Some interpreters note that in this verse reference is made to calling on the name of the *LORD*, and then claim that God did not reveal himself by that name until much later (Ex 6.2-3). They conclude that the 150+ uses of the name LORD (Yahweh) in the book of Genesis were introduced by Moses (or a later writer) after the fact, and that early believers did not know God's covenant name. The statement in Exodus could be understood as a rhetorical question "Did I not make myself known?" or, more likely, God tells Moses that the pre-flood and post-flood patriarchs had used the name without knowing its full significance until God revealed additional information to Moses.

The introduction of the public worship of the living God occurred about 235 years after the creation of the world. There is no mention in the antediluvian account of the introduction of any false religious system—although there is mention of the unauthorized worship of God (Gen 4.3-5) and the attempted deification of man by Cain and his descendants. The worship of the LORD as the only God (i.e., monotheism) did not develop out of animism or polytheism as many non-Christian anthropologists claim. After the flood, Noah was in a covenant relationship with God and worshiped him (Gen 8.20-22; Gen 9.9-17). So, the first religion was that in which men called upon the name of the LORD. All other religions (including, Ashurism, Buddhism, Confucianism, Hinduism, Islam, paganism, Sikhism, and Zoroastrianism) were founded after the flood and are perversions of the true worship of God.

This verse states that people began to *call* upon the name of the LORD. This could be a reference to prayer and praise. The Hebrew word that is used here can also have the sense of 'proclaiming' (Ex 33.19; Ex 34.5). Therefore, it is possible that the expression 'called on the name of the LORD' is being used as a synecdoche (i.e., a part representing the whole), to indicate that the public worship of God, at that time, included proclamation—preaching and recitation (reading) of God's revelation (the available Scriptures to that point)—by righteous men such as Adam, Seth, Enoch (Jude 14) and Noah (2 Pt 2.5); prayers or petition; praises of thanksgiving; and sacrifice of burnt offerings (Gen 4.4; Gen 8.20). There may also have been a covenant renewal ceremony with a fellowship meal as a reminder of eating from the tree of life (Gen 2.9, 16). If so, the basic elements of the public worship of God were already in place shortly after creation and are still the basic elements of our form of worship today, with bloody sacrifices replaced with the fruit of our lips in praise (Heb 13.15). From the beginning of time all people have known that the living God is worthy of worship as the sovereign creator and loving covenant-keeper, who must be worshiped in the way that he has instituted. All people have known this but all unbelievers in the Messiah, and even some believers, have either rejected the true worship of God or perverted it with the introduction of many forms of false practices which they have invented in self-willed rebellion.

God's Revelation to the Antediluvian World [July 8] (Gen 4.1-26)

In Genesis chapter 4, references are made to two locations, Nod (Gen 4.16) and Enoch (Gen 4.17). If Moses *composed* the book of Genesis and used names that were meaningful to his contemporaries, then we should expect to find some reference to these locations (at least to the region of Nod) outside of this account, either in the Bible or elsewhere in ancient writings. However, neither of these locations, nor the locations of Eden, Havilah, Assyria and the four rivers (Gen 2.10-14), can be identified in a postdiluvian context because they were destroyed by the flood. The names Nod and Enoch were not re-used as location names after the flood, as were other names (i.e., Euphrates, Tigris, Havilah, and Assyria). The fact that there are no references to Nod and Enoch outside of Genesis chapter 4, indicates that their locations were relevant primarily for an antediluvian audience. There is evidence that Moses wrote Genesis using older writings as source material (see, *Assembled Accounts* [March 18]). This also provides support for the view that Genesis chapter 4 was written for an antediluvian audience, not immediately for

people living in the Middle East around 1440 BC.

There is additional support for the idea that Genesis chapter 4 was written for a pre-flood audience, and from a pre-flood context, found in the references to the sons of Lamech. We are told (Gen 4.20-22) that Jabal "was the father of those who dwell in tents and have livestock" and that Jubal "was the father of all those who play the lyre and pipe". After the flood there were no descendants of Lamech left alive (Gen 7.22-23), so Jabal and Jubal could not have been the ancestors (other than in a figurative sense) of those who had specialized skills as herdsmen or as musicians.

This consideration is important since it indicates that God had begun to compose his written revelation (what we now call the Bible) shortly after mankind was created. The contents of the book of Genesis (in particular the first eleven chapters) is not a myth created by a wandering tribe of Semites in a Middle Eastern desert, nor did it come from the hands of scribes during the post-Alexandrian period who were attempting to create a legacy to justify their existence as a special people.

There has never been a time, through the 6,000 years of the earth's history, when there has not been a direct revelation from God to mankind about himself and about his righteous requirements. It is true that God did not reveal everything he wanted man to know all at once, at the beginning of time. But by the time of Adam's death, God would have revealed enough to ensure that the pre-flood men knew what they were to believe concerning God and what duties he required of them. Thus, the world has always had a prophetic voice to declare God's will—both from preachers of righteousness and in written form. Adam was the first preacher (and writer of Scripture). He was followed by, at least, Enoch (Jude 14) and Noah (2 Pt 2.5), and likely by Methuselah or Lamech to fill the long period between Enoch and Noah, after Enoch was taken from the earth. All three of Adam, Enoch, and Noah had direct dialogue with God and undoubtedly received revelation directly from him—for example, Adam would have received the revelation about the creation week and the laws which God required men to obey. So, these men were God's prophetic voice of revelation to the early world. Their existence among their contemporaries would have been a witness to God's truth. In addition, these men would have been God's instruments by which he recorded that portion of his revelation which he wished all men, in all places and times, to know; which we find in the first few chapters of Genesis.

Some people might wonder why God deemed it necessary to maintain a permanent record of certain of these early events and people—for example, the fact that Tubal-Cain was the first person to forge metal implements or that his sister was Naamah. Often the same question is asked of other parts of the Bible—for example, about the relevance for us of the genealogies in the opening chapters of 1 Chronicles, or of the details found in some chapters of Leviticus. Paul tells us that all Scripture is valuable for our instruction (2 Tim 3.16-17). Therefore, we need to seek to understand the reason the Holy Spirit chose to include each section in the Bible. We have already considered the contemporary relevance of the first four chapters of Genesis in the previous meditations and have seen that what is recorded has many direct applications to our situation. We can also consider, as an overarching lesson, that God included these details in chapter 4 to remind us that nothing is outside of his purview. He is intimately involved in all the details of this world and is fully cognizant of all that transpires—whether good or evil.

The early chapters of Genesis also have worldview confirming or shattering importance. What God tells us puts a lie to the views held by the majority of cosmologists, biologists, paleontologists and anthropologists. God's record of creation week dismisses evolutionary theory and any credence in the idea that the world is billions of years old or that man's, supposed, ancestors lived millions of years ago. The Biblical record also shows that the pervasive belief in cultural evolution is false. As man did not develop over millions of years, culture did not arise out of an extended-family setting over tens of thousands of years. Rather, as we are told here, and will find later when we consider Genesis 9-11, the foundations of civilization arose quickly—within the lifetime of the first patriarchs. "Let God be true, and every man a liar."

Reflection on the Creation of Mankind [July 9]

(Gen 5:1-3)

The account of Cain and his descendants (Gen 4.1-24), concluding with Lamech, illustrates the inevitable direction that sin takes mankind—morally downward and progressively farther away from God. Without God's general grace the end of this declension would have been marked by a worldwide escalation of evil under many lustful tyrants such as Lamech. There would soon have been nowhere safe on the earth to hide from their devious schemes. However, mankind's history does not end with the ascension of the Lamechs of this world. It ends with the final ascension of the Last Adam—the Lord Jesus Christ. Thus, the account of Satan's seed is treated as merely a temporary intermission in God's great drama. His plan is to fill paradise with his holy seed. So, the human author (Noah, Gen 5.1a belongs with chapter 4; Noah's portion runs from Gen 5.1b to Gen 6.9a) of this part of God's record now brings into focus the godly line who were not only created in the image of God but lived according to his image.

A golfer whose shot off the tee ends up in a deep pond will mark a penalty stroke and take his shot over. A movie director who is not satisfied with a take will put everyone in first positions and reshoot the scene. Likewise, the author takes us back to creation, the starting point for everything related to mankind. He reminds us that man, created in the image of God, should be more God-like. In effect, he says, "The outcome wasn't good the first time, let us see if man can be righteous with a second chance." As we know, from later in the account, this second try did not work, and God had to destroy most of mankind with a flood and make a clean start. But, as history records, the post-flood restart didn't work either—demonstrating the necessity for an entirely different approach, through a different kind of man, the God-man, who could reverse mankind's downward spiral away from God, through his perfect life and sacrifice.

The author's summary restatement about the creation of man is critical for us to consider, since it teaches us that:

- 1. God created man; therefore, man is not his own creator.
- 2. Man was created; therefore, he is not his own master.
- 3. Man is a distinct creation; not the offspring of an ape-like creature.
- 4. Both the male and female of man were immediately created by God.
- 5. Man consists of two sexes united in marriage; not one, not many.
- 6. Man was created in the likeness of God; his created nature resembles God more than it resembles the beasts.
- 7. As the image-bearer of God, man was created holy and happy.
- 8. Man was blessed by God, indicating that his future was intended to be more than what the curse brought on Cain and his line.

These truths remind us that we have God-like nobility, a spiritual dimension which transcends the beastly, and a glorious destiny. We need to consider these truths every day; particularly as we face the onslaught of man's denial of God's sovereignty, constant indoctrination in evolutionary theory and 'politically correct' thinking, and the pervasive practical atheism which consumes voraciously without any thought for God.

The author recorded these truths to establish a contrast with Cain and his progeny. They became so degraded that they were beast-like rather than God-like. They did not honour God or give thanks to him (Rom 1.21), while they pursued their creature comforts. Evil reached its climax in Lamech, the tyrant, who took two wives and demanded that they be subservient to him. He is the first proof that all schemes invented by sinful man, whether religions, philosophies, or social and economic programs, which are not derived from God's principles in the Bible, end up being tyrannical and, in particular, oppressive to women. The author, seeing what happened with Lamech, wanted to remind his generation, and all mankind, that when God's model for mankind's two sexes and for marriage is not followed, the end result is the oppression of women. Consider Lamech's legacy today: Islam and Hinduism treat women as inferior beings, feminism turns women into male-wannabees and persuades them to covet roles for which they are not designed and to abort their children, popular 'culture' defines women as sex objects for male titillation rather than encouraging men to love their wives, and government policies (e.g., tax laws and welfare programs) discourage marriage and increase the incident of single-mother households.

The author records a new beginning with the birth of Seth, born in Adam's own likeness and after his image. He tells us that even though Cain's line was a disaster, there is hope for mankind, through the birth of a son in Adam's image and, indirectly, the image of God. To reinforce the importance of this message he records it as part of a growing book—not what we think of as a book with pages sewn together in a leather or carboard binding; rather it means a 'written document' complete in itself, that may have been originally in the form of clay tablets with cuneiform (wedge shaped) symbols impressed on them. This is the first reference to a book in the Bible and it predates any other reference to a written record in the history of mankind. Thus, writing was a pre-flood invention. There are no grounds for suggesting that the pre-flood account of creation and the account of the flood was handed down through generations of oral tradition, and therefore twisted into mythical proportions. The sources Moses used to write the larger book of Genesis were created by communities which existed long before the nation of Israel left Egypt.

The Origin of Writing [July 10] (Gen 5.1)

In this verse, we find the first, and oldest, reference to a book in any historical record. The specific word used in the Hebrew is *seper*, which can also be translated as 'document' or 'writing'. This indicates that the capability to use writing was available prior to the flood. The section (Gen 2.5-5.1a) of Genesis, in which this reference occurs, was likely a personal account written by Adam, in which he included some information he had received from God (see, *Assembled Accounts* [March 18]). This means that Adam knew how to write and may have been the person who invented writing.

This understanding presents a considerably different view about the origin of writing than that which is believed by the majority of historians. They claim that writing, as a system to represent oral language, developed millennia after spoken languages developed, and evolved from an early form of ideographic proto-writing and mnemonic symbols. It is claimed that true writing systems, which allow the contents of a linguistic utterance to be encoded by one person and reconstructed by another, developed at a later date than the languages they encode.

In general, it is claimed that the evolution of writing passed through a series of stages. Writing began as glyphs (simplified pictures), which represented concrete objects and some abstract concepts. Then it passed through transitional phases, in which graphemes were associated with objects as names. This was followed by the development of phonetic systems, in which graphemes represented words, and then syllables. Eventually, alphabetic systems developed which represented phonemes (sounds).

Since Adam knew how to write, the account he wrote (the 'book' referred to here) and the preceding account (Gen 1.1-2.4), also written down by Adam, were available in written form to Noah and carried with him in the ark. Thus, there was never a period of oral transmission of the earliest accounts of the history of the world. Rather, the two earliest accounts were written down by Adam, and that written record was transmitted through Noah and Shem to Abraham, and eventually passed from the patriarchs to Moses, who included the account in the book of Genesis.

There would have been some 'evolution' of the symbols used to represent words and sounds after the flood. However, likely not as much as historians claim. For example, the variations in cuneiform scripts may not all represent an evolutionary progression from stylized pictograms to abstract symbols. Rather, some of the variation may reflect differences among scribal schools and the use of written texts for different purposes. This would be similar to our using cursive or printed letters, lower case or upper-case letters, and different font types. Even the earliest versions of cuneiform scripts can be associated with both words and spoken syllables, nearly approximating an alphabetic system.

Writing in the formal sense—that which permits another person to make sense of the transcribed contents—was available to all of the immediate descendants of Noah, who spoke a single common language (Gen 11.1). However, this does not mean that everyone could read and write. Archaeological evidence of different forms of writing in the

period after the flood must not be interpreted as *all* showing progressive evolution of writing. Rather some show the opposite—a regression from a well-developed original. After the confusion of language at Babel (Gen 11.7), and the forced dispersal of men from the Middle East (Gen 11.9), many people would have had a recollection of the concept of writing but would not necessarily have known how to write. As they migrated from Shinar, they attempted to re-create systems for recording their spoken languages. Thus, in the archaeological records of the period immediately after the time of the Tower of Babel, we should expect to find numerous attempts (some 'primitive' and some 'sophisticated') at creating writing systems. Similarly, throughout the scattered tribes around the world we should find the same mix. This collection of written forms is not necessarily indicative of a progressive evolutionary development but of a number of creative attempts to bring order out of the chaos that had been introduced at Babel. In addition, different scripts were better suited to different media. For example, the wedge-shaped cuneiform system of writing works well on wet clay tablets and thin metal plates, but is not as suitable for 'paper'. After papyrus was developed, a different form of script, which was more suitable for ink-based transcription, developed rapidly. At the same time, scripts stabilized and standardized in concert with some languages becoming dominant common languages among the dispersed peoples.

Whatever script Adam used would have been understandable by Shem. He, or one of his near descendants (e.g., Eber), may have had to transcribe Adam's written texts into a different script in order for them to have been read by his contemporaries. However, it is possible that the original script used by Adam was also understood by Moses. For example, cuneiform script was used to record Sumerian, Akkadian at the time of Sargon I, Old Persian during the days of Darius and Xerxes, and a number of languages in between. Thus, the cuneiform script was used for about a thousand years before and after the time of Moses.

Transmission of God's Image [July 11]

(Gen 5.3)

The challenge of creating life has always intrigued mankind. The quest, and its associated consequences, are addressed in Mary Shelley's (1823) novel, *Frankenstein or The Modern Prometheus*. Since then, many science fiction novels and movies have dealt with the topic. In 2010, scientists announced a revolutionary process, by which they had synthesized a bacterial genome and used nuclear transfer techniques to transplant the synthetic DNA into a functional bacterium. Their claim was that they had created artificial life. The hubris of men who claim to be creating life is evident. They are not *creating* life but taking pre-existing materials (as Victor Frankenstein collected body parts from graves) and recombining them. They also have never been able to, and never will, infuse an animating principle into lifeless substances—a soul in creatures with the "breath of life". The role of creating life belongs to God, who brought life into existence out of no pre-existing matter or, in the case of Adam and Eve, used pre-existing matter and breathed life into it.

In the next meditation we will consider the clear ethical problems associated with using human zygotes for research, *in vitro* fertilization, human cloning, and recombinant DNA. Today, we will only note two ironies associated with what men are attempting to do:

- While they attempt to create or manipulate life, God has granted them an amazing gift to produce children in their likeness and after their image.
- While they attempt to create life in a petri dish, they often destroy life that already exists in a mother's womb. Men should be following God's decree to be fruitful and multiply (Gen 9.1) through the God-given means of pro*creation* within marriage, rather than attempting to play God.

We often hear someone remark that a baby looks like one or both of his parents. We can easily recognize facial features that are reproduced across generations. Yet, animation and animatronic artist have been challenged to create life-like human faces—although the technology has recently advanced to the point where it is becoming possible to replicate a face with near perfect accuracy. Again, we need to note an irony. A massive expenditure of effort, time and financial resources has been required even to approximate a human face in CGI. Yet, a man and a woman can bring a new life into existence that is a unique human being, yet in their own likeness and image—far beyond

approximating a human that artists and engineers are seeking to do.

In the account of Eve giving birth to Cain and Abel (Gen 4.1, 2), there is no record that either of them had been born in the image of their parents, as there is for Seth. Therefore, this new information about the son being like the father must be significant. Commentators generally observe that the reference to Seth being born in the likeness and image of Adam refers to the image of God that was indirectly transmitted from Adam to Seth. However, most of them go beyond speaking of the indirect transmission of aspects of the Divine nature and add that Seth also inherited his father's sinful nature. They say that being born in the likeness and image of Adam includes the aspects of Adam's nature that resulted from his unlawful attempt to usurp God's authority; including guilt, an innate tendency to sin, physical frailty and decay, and eventual death. There can be no doubt that all of Adam's descendants, except for Jesus, are corrupt. However, we need to question the idea that this verse speaks about Seth being born in the likeness of Adam's sinful nature. This idea implies that Adam's spiritual corruption is inherited organically. If each person's spirit is created uniquely, at the moment of physical conception (Zech 12.1)-a view which cannot be defended in the limited space of this meditation—then the organic connection between parent and child with respect to moral properties cannot apply. The reason men are sinners and inherit a sinful nature is not because they pick up a piece of a sinful spirit from their father (like amoeba reproduce through mitosis and cytokinesis), but because Adam's sin is imputed to us through his representation of us under the Covenant of Creation (Rom 5.12-14). The corollary is also true; believers do not inherit Christ's righteousness through a physical union with Christ. Rather his righteousness is imputed to believers through faith and repentance (Rom 5.15-21), and then they are united to Christ organically.

The author of this portion of God's word is establishing a contrast between the line of Cain (which was recorded in chapter 4) and the new line of God's sons (Gen 6.2), which begins with Seth, and will be recorded in the remainder of chapter 5. Cain and Abel were born with sinful natures as were the numerous other sons and daughters (Gen 5.4) which Adam and Eve had prior to, and after, the birth of Seth. What differentiates Seth is not his inheriting a sinful nature. The author's point is to highlight the fact that Seth was different from all the other children of Adam and Eve. This difference can be seen only from the perspective of the end of chapter 5—indicating that the author of this section of God's word was Noah. Seth was different, not because he was more or less human than his siblings, but because it was through him that the hope for mankind would be realized. The image of God in man is carried through Seth to Noah who would save mankind through the flood (Heb 11.7). Seth is the one through whom the blessing on humanity (Gen 5.2) would be realized. Seth is the one through whom the promised seed (Gen 3.15) would be realized and the Divine image would be restored and fully realized in humanity.

Reproductive Biotechnologies [July 12]

(Gen 5.3)

In the previous meditation, I stated, without demonstrating, that there are clear ethical problems associated with using human zygotes for research, *in vitro* fertilization, human cloning, and recombinant DNA. Today we will consider the reasons why using these biotechnologies, on human subjects, is clearly a moral issue.

Using human zygotes for research. A new human being begins to exist at the moment of conception (Ps 51.5); so developing embryos are fully human. To use human zygotes [a zygote is the new celled formed when an egg cell is fertilized by a sperm cell] for research and then to dispose of the embryos (even if only a few cell divisions have occurred) is performing an abortion in a petri dish and assigning a living person to an unjustified execution. Therefore, human zygotes must not be used for any kind of research—no matter how 'noble' the stated purpose or end goals.

In vitro fertilization (IVF). IVF involves harvesting multiple eggs from a woman's ovaries, fertilizing them, and selecting the most viable embryo for implantation in the woman's uterus. The other embryos, particularly the ones judged to be unviable, are destroyed—again, this is a form of abortion. Even though IVF has been applied successfully on humans, since 1978 with the birth of Louise Brown, this does not mean that it is a morally valid

option.

Human cloning. Plant cloning (e.g., a new plant being grown from a twig) has been used for centuries. However, animal cloning is relatively recent. Aspects of animal cloning were demonstrated in the 1920s with amphibians, and a frog tadpole was successfully cloned in the 1950s. Since then, a number of mammalian kinds, including mice, sheep, pigs and cows have been cloned. In 1996, a Scottish sheep named Dolly became famous for being the first mammal to have been successfully cloned from an adult cell. The genetic information from a donor sheep was inserted into a second sheep's ovum and the developing embryo implanted in a third's uterus; and Dolly was born through a normal pregnancy. Dolly did not live a normal life span for a sheep, raising questions about the viability of cloning. However, subsequent research demonstrated that 25 successive generations of mice could be cloned with no apparent genetic degradation of viability or reduction in lifespan—it may yet be determined that genetic imprinting from two parents is required for long-term viability. Regardless, what was required to produce Dolly raises moral issues related to cloning humans. To produce Dolly required over 400 attempts before a viable embryo could be produced. Similarly, it required thousands of eggs and experiments to successfully clone mice. The success rate for cloning animals has improved greatly and it is now a routine process for some kinds of animals. But, thousands of fertilized ova were destroyed during the development of the cloning process.

So far human cloning has apparently not been successful. Blastocysts growth has been reported, but the developing embryos were destroyed after a few cell divisions. These entities had a full complement of 46 chromosomes and were genetically human. Some would argue that they were therefore fully human beings. However, it may prove to be impossible to clone humans because the spiritual component of man is not the same as that of animals and God's direct intervention may be required to make a human being alive (Gen 2.7) at the moment of conception. Regardless, men should not be attempting to clone humans, because of the possibility that each fertilized ovum that is destroyed during attempts to refine cloning techniques may be sacrificing a human life. If it is technically feasible to clone humans, we can be sure that someone will do it, regardless of the moral and legal censures on the process.

Additional moral issues will be raised if human cloning is successful, such as:

- Using clones for harvesting body parts, as in the movie *The Island*.
- Attempting to recreate geniuses, prodigies, or celebrities by taking their DNA; sometimes without their permission.
- Celebrities selling their DNA so that childless couples can have babies that look like them.
- A woman who discovers her husband in bed with another woman who is a younger version of herself.
- The development of a black-market economy around the acquisition and distribution of the eggs—human ova are a relatively scarce resource.

Creating hybridized mutations. The moral implications associated with recombinant DNA and the use of geneediting tools, in particular the creation of human-animal hybrids, can be seen by considering the possibility of wealthy men ordering exotic mates such as cat-human hybrids, parents asking cosmetic surgeons to give their children wings so that they can have their 'little angels', or virulent infectious diseases being released. However, it is unlikely that such hybrids will be possible, because human DNA was engineered by God to be different from animals'—humans are not part of an evolutionary continuum—and humans have a different kind of soul than animals do.

The four biotechnologies considered above are given as examples. There are others which are equally problematic when applied to human embryos. Their application treats human life as disposable and falls beyond the boundaries which God has defined for a person producing a child in his own image.

From Adam to Noah's Sons [July 13] (Gen 5.3-32)

Business planners often compare the 'as-is' state to the 'to-be' state for organizational models or business systems. Likewise, home improvement shows end with shots of how a house looked before the transformation began, compared with how it looked after the reconstruction was complete. The genealogies in Genesis chapters 4 and 5 serve a similar purpose. The first genealogy illustrates what mankind is like without the fear of God; with a focus only on present life of power, prestige, and pleasure. The second illustrates what mankind can be like, in a sinstained world, when they call on the name of the LORD (Gen 4.26) and raise up a righteous seed which lives with the hope of everlasting redemption.

The Genesis chapter 5 genealogy does not, as many suppose, record the birth of the first son in each generation. Rather, it is written from Noah's perspective and records his direct ancestors (and three of his sons) to the time of the cleansing of the earth of its sinful inhabitants by the flood. The first line of evidence to support this view is that Seth is not a firstborn son. Also, Ham is mentioned before Japheth (Gen 5.32) indicating that the order of birth (Gen 9.24) is not the key consideration in this chapter, but rather the relevance of the named patriarch from the perspective of redemptive history. Secondly, it is unreasonable to believe that the antediluvian men—before the increasing effects of genomic decay set in, and prior to the physical changes in man's environment that occurred during and after the flood—were unable to produce sons until they were advanced in years (187 years in the case of Methuselah, or 500 years in case of Noah). There were no (significant) fertility issues prior to the flood. This is indicated by the refrain in this chapter, "other sons and daughters". Mankind populated the earth quickly with large families in the 1,656 years before the flood, fulfilling the procreative mandate (Gen 1.28) given to Adam and Eve. This genealogy reports the appointed heirs of the blessing of God, leading to mankind's first saviour—Noah; a type who pointed to Christ (Mt 24.37-38; Heb 11.7; 1 Pt 3.20; 2 Pt 2.5).

The only women mentioned in Genesis, prior to this account, other than Eve, are the wife of Cain (Gen 4.17); the two wives of Lamech, who are named (Gen 4.19); and the named sister of Tubal-Cain (Gen 4.22). This genealogy does not name any women, but it does mention that daughters were born to each patriarch. This reference is not superfluous. It is important since it answers the question of where Cain got his wife—she was one of his sisters or a daughter of one of his siblings. However, there is a more fundamental reason for the mention of daughters. They, like Eve, played a key role in procreation (Gen 3.16; 1 Tim 2.15). It would be one of their sons who would fulfill the promise of the redeemer given to Eve (Gen 3.15). It would be through a daughter of Eve (Mary, the blessed mother of Jesus) that the fulfillment of the promised blessing would be eventually realized.

The structure of this genealogy (e.g., the mention of ages), the refrains (e.g., "when ... had lived, he fathered", "other sons and daughters", "and he died"), and its rapid pacing serve to emphasize continuity and constancy in human affairs. It presents an uninterrupted succession (ten generations, emphasizing completeness) of the Divine image (Gen 5.3) in mankind from generation to generation. Although sin has been introduced into the world, and men who have no fear or respect for God have despoiled it (Gen 4.5-24), the world is marching with a steady beat toward its redemption. God is displaying his mercy to the line of Seth through the regularity of birth, life, and death. Each named patriarch plays a role in the ongoing chain of human existence and the realization of the promised blessing through the birth of a key son who is in the line of the Messiah (Lk 3.23-38). Interspersed in this genealogy are additional hints of the blessing that God intends for mankind. Enoch is mentioned as having "walked with God" (Gen 5.22, 24), Lamech makes a prophecy that his son Noah will bring relief from painful toil (Gen 5.29), and Noah's three sons are identified since they would go with him into the ark and become the fathers of all the nations (chapter 10).

A basic interpretive principle applied throughout these meditations is that the Bible is historically accurate. Therefore, this genealogy presents the line of descent from Adam to Noah's sons with enough detail to anchor it in history.

• *It Provides a chronology* – We are given an objective and absolute method for calculating the age of the earth. There is no other method. Contrary to what some scientists claim, methods which use relative concentrations of radioisotopes are not an objective measure for calculating the age of the earth and mankind's inhabitation of it. We will consider the topic of 'dating' in more detail in future meditations.

• *It Positions Christ* – Why the ancient patriarchs maintained genealogical records is not easy to explain. Later, after the Jewish settlement of Palestine, records were kept to associate families with their land inheritance. The ultimate answer lies in God's superintendence of history. God intended that this genealogy would be preserved through the flood so that Jesus, in his human nature, could be traced through every generation to Adam; and thus, the promise to Eve could be unequivocally demonstrated to have been fulfilled about 4,000 years after it was delivered.

Long-Lived Patriarchs [July 14] (Gen 5.3-32)

One of the most difficult concepts in Genesis chapter 5 for many to accept is the long life spans recorded for the patriarchs. People are so conditioned by the belief that what we observe as present conditions—i.e., the fact that few people live beyond the age of 110, and the average person lives 70-80 years—are the only possible conditions. They conclude that the recorded ages must be wrong because men do not live to be 900 years old and do not father children when they are over 100 years old. It is ironic, that many of the people who do not accept Genesis chapter 5 as reporting actual life spans, fall for the myths which declare that someday science will conquer diseases and provide new body parts, and thus allow individuals to live hundreds of years.

Various suggestions have been used to explain away the long ages assigned to the patriarchs, for example:

- The ages do not refer to individuals but to clans, families, or dynasties that were initially headed up by the named patriarchs.
- The Hebrew text is incorrect, and we should use the Septuagint (the Greek version of the Old Testament) as the basis for determining the ages of the patriarchs.
- The ages have been mistranslated from an archaic Sumerian numbering system, similar to Roman numerals. The ages should be divided roughly by 10. For example, Methuselah did not live to be 969 years old but died when he was about 96.
- The ages are merely mythical, much like the ages found in the Sumerian king lists, which give thousands of years for the reign of each king.
- Those who lived before the flood were not actually 'old' because the ages assigned to them are symbolic.
- Those who recorded the ages of the patriarchs honored their forefathers by ascribing long lives to them.
- An astronomical interpretation should be applied, and thus the life spans correspond to the synodic periods of different planets.
- Earth-years before the flood were shorter than years are now.
- The ages are based on a mystical numerological system yet to be found.

There are a number of reasons why we should dismiss all these explanations and accept the words of Genesis at face value, including:

- The Bible is the word of God and is therefore without error. If we do not accept the ages recorded here as historical fact, then why should we believe any part of the Bible?
- The calculations are accurate. The age of each patriarch at the time of the key son's birth when added to the rest of the years of each patriarch's life gives a total for his life.
- The lives of the patriarchs overlap, yet there is no overlapping in Genesis chapter 5 with the flood. Lamech (Noah's father) died five years before the flood and Methuselah (Noah's grandfather) died in the year of the flood. Either the account in Genesis chapter 5 is a cleverly concocted hoax or it shows that God's timing was such that neither of these two godly men had to suffer the ordeal of the judgement by floodwaters.
- The postdiluvian chronology (Genesis chapter 11) gives a near-perfect geometric decay curve, from a starting point of the average life span of the pre-flood patriarchs, supporting the contention that the ages of the pre-flood patriarchs in Genesis chapter 5 are recorded accurately.
- This account was written before the flood, so precedes the founding of the Sumerian civilization, and therefore cannot be based on their sexagesimal (or any other) system of numbering.

Those who believe that none of the antediluvian patriarchs died before he had reached his eight-hundredth year note that Adam and Eve were created with perfect bodies which were designed to live forever and that they lived in a salubrious environment. Their immediate descendants inherited their strong physical constitutions and lived in much the same conditions as in Eden. Therefore, various reasons are proposed for why these patriarchs were able to live so long; including: a healthier diet, greater resistance to disease and illnesses, different climatic conditions, and a vapour barrier protecting the earth from radiation. Similarly, they propose various environmental changes that occurred after the flood which contributed to the decline in the maximum age to which people can live. Proposals include: genetic decay, building up in each generation; increased radiation from within and beyond the earth; heavier hyperbaric pressure; increased susceptibility to disease; and changes in human physiology. It is possible that all of these reasons are legitimate secondary explanations for the long ages before the flood and the shortened ages after the flood. However, one factor that does not seem to be addressed by writers on this subject is why the ages after the flood declined to a stable 70-80 years (Ps 90.10). Logically it would seem that if the pre-flood and post-flood reasons are valid the asymptotic decay would not have stopped at 70-80 years (and remained stable for over 4,000 years) but would have continued to decline to zero, and mankind would have died out. We must not ignore God's direct providential governance in this matter. God determined that man's lifespan after the flood would be limited, possibly to control his hubris and abilities to erect long lasting tyrannical systems. Simply, God resolved to limit the number of man's days (Job 14.5; Ps 39.4; Ps 90.10; Acts 17.26).

The Dating Game [July 15] (Gen 5.1-32; Gen 11.10-32)

There is only one means of determining when the world was created and how old it is—that is, to use the genealogies (with associated chronologies) which God has provided in the Bible. The first instance is found in chapter 5. When we connect the genealogies in this chapter with those in chapter 11, and with a few key date markers given elsewhere in the Bible (e.g., Ex 12.40-41), we can then connect the Biblical account with extra-Biblical records and known dates for key natural events (e.g., solar eclipses), and can calculate, within a few years, when the world was created—about 6,000 years ago.

This approach for calculating the age of the earth (and universe) is laughed at by almost every scientist and professor in secular and 'Christian' universities. The belief that the earth and universe must be very old (i.e., ~4.5B years and ~14B years, respectively) is so entrenched in their thinking that any suggestion that it could be otherwise cannot be considered. They respond with the claim that radioactive decay measurements *prove* that the world must be considerably older than 6,000 years.

When we considered Genesis 1:1, we noted some of the problems that have been encountered when applying radioactive techniques for calculating the age of the earth. We noted that the use of radioactive decay rates to calculate a 'date' for rock strata depends on three key assumptions: 1) that the initial ratios are known (i.e., the non-existence of the daughter elements), 2) that the decay rates have remained constant, and 3) that rocks containing the elements have been completely isolated from any external influences. It is impossible to prove these assumptions to be true.

Contrary to what most scientists believe, there is considerable evidence to show that the use of radioactive 'dating' techniques is mere speculation and guessing. Some of the problems with the use of these techniques include:

- When two or more methods of using radioactive isotopes are applied to the same rocks, they invariably give different 'ages'—often with order-of-magnitude differences. The scientists applying the different techniques select the results which conform to their preconceived notion of what is the correct 'age' for the rocks.
- Radiocarbon isotopes are found in coal beds throughout the world. Where the layers of coal are interspersed between layers of rock, and the 'ages' of the layers are calculated, the results are astoundingly different. For example, the coal may be 'dated' at 50,000 years using the ratio of carbon-14 isotopes to carbon atoms. In contrast, using one of the other radioisotope techniques such as uranium/lead, potassium/argon, or

rubidium/strontium provides 'dates' in the hundreds of millions or billions of years. With the half-life of carbon-14 being less than 6,000 years it is impossible for any measurable amount of carbon-14 still to be present in coal if it is more than ~100,000 years old.

- Diamonds found deep within the earth's crust contain significant levels of carbon-14, similar to the levels found in buried organic material such as coal—suggesting that the diamonds were formed around the same time as the organic material. The rocks in which they are found are 'dated' by other radioisotope methods at hundreds of millions or billions of years old. Diamonds are very resistant to contamination; and being buried deep in the earth they could not have absorbed carbon-14 from the atmosphere. However, these rocks should, according to the modern geological consensus, contain no carbon-14 (it should have decayed long ago).
- Assuming that the rate of generation of carbon-14 by cosmic rays striking the earth's atmosphere before the flood was similar to that of today, the presence of buried material with carbon-14 provides an upper limit on the age of the earth. The current levels of carbon-14 suggest that much of the material was buried about 4,400 years ago. The presence of carbon-14 supports the date for the flood calculated using the Biblical genealogies.
- A by-product of uranium decay is the production of the radioisotope polonium, which in turn decays with an average half-life of less than 140 days. Rocks (e.g., granite) found throughout the world show significant remnants of polonium decay as radiohalos. However, to account for the observed remnants of polonium decay, the decay rate of the associated uranium would have to have been equivalent to about 100 million years' worth of decay (at today's observed rates) occurring over a much shorter time, as the rock they are found in was forming—an acceleration of the uranium decay rate by at least an order of magnitude.

The best explanation for the presence of the apparently millions and billions of years' worth of radioactive decay is that God used, as a secondary means of causation, accelerated rates of decay to generate heat which triggered the major tectonic events associated with the flood. For a scientist to say that radioisotope decay rates could not vary, and that God could not vary the rates if he chose to, is to rely on another assumption which cannot be proven. This is a particularly dangerous assumption since the explanations of how and why radioisotopes decay is highly theoretical today with very little empirical evidence to guide the development of a model. Instead of playing the dating game, we accept the reality that the Genesis genealogical accounts provide the only reliable chronometer that we have for measuring the age of the earth. They were given by God as a means of providing an accurate measure of the age of the earth to leave the critics of the Bible without an excuse before God.

God's Chronometer [July 16] (Gen 5.1-32; Gen 11.10-32)

A chronometer is a portable clock that is so accurate that it can be used to determine standard time—for example, to establish what time it is at the Greenwich meridian compared with local time, in order to calculate longitude. God has provided us with a 'chronometer'—the genealogies in chapter 5 and 11. These genealogies, tied with a few key date markers given elsewhere in the Bible (e.g., Ex 12.40-41) allow us to establish, within an accuracy of a few years, when creation occurred and when key events in the Bible (e.g., the Exodus) happened.

Scholars today often dismiss these chronologies as an accurate reflection of history. They claim such things as: the ages given for the patriarchs cannot be valid because no one can live to be 969 years old, the chronologies mimic king lists from the nations around Israel, and the chronologies identify only a few key individuals and leave gaps. The reasons that the genealogies are not accepted as historical accounts are:

- It is not popular to consider the Bible in its plain sense and accept its statements to be accurate.
- The Septuagint (Greek OT) versions give different ages in chapter 5, varying from a total of 1307 to a total of 2402.
- They do not support the long-ages view popular among scientists, since earth would not be old enough to permit evolution from microbes to man to have supposedly occurred.

In contrast, there are many reasons for accepting the Genesis genealogies as an accurate statement of historical fact,

including:

- They are the word of God, which we are to accept at face value (in its plain sense) as accurate truth, since God does not lie.
- They are written as history in an historical context (the Book of Genesis). They are not written in a poetic style and there is nothing in the context or elsewhere in Scripture which would suggest that they are metaphorical or typological (as, for example, is much of the Book of Revelation).
- There is nothing in the Bible that even hints of their not being historical. This is an 'argument from silence', but there is no 'signpost' to show how we should read the genealogies as anything other than actual history.
- Other genealogies (e.g., in Chronicles) are accepted as history, so should these be. It is inconsistent to claim that one part of the Bible is history and reject another part, merely because it is older or does not, apparently, conform to the facts as interpreted by modern 'science'.
- The lives of the patriarchs overlap, yet there is no overlapping in Genesis chapter 5 with the flood. Lamech (Noah's father) died five years before the flood and Methuselah (Noah's grandfather) died in the year of the flood. Jewish tradition says that Methuselah died seven days before the flood. Either the account in Genesis chapter 5 is a cleverly concocted hoax or it shows that God's timing was such that neither of these godly men had to suffer the ordeal of the judgement by floodwaters.
- The ages of the patriarchs recorded in the genealogies are not like the absurd ages given in the ancient Sumerian king lists.
- The age of each patriarch at the time of the key son's birth when added to the rest of the years of each patriarch's life gives a total for his life. The additions are all accurate and indicate that the ages for the patriarchs are an integral part of the chronology.
- The account in Genesis chapter 5 is repeated in 1 Chronicles 1.1-4, indicating that the Jewish chronicler (possibly Ezra) accepted the account as actual history.
- The account in Genesis chapter 5 is repeated in Luke 3.36-38 indicating that the NT writer (Luke) accepted the account as literal.
- Jude 14 states that Enoch was the seventh from Adam. If he was the seventh, then the genealogy is complete and accurate. If he was not, then Jude is mistaken, and Scripture is in error.
- The Genesis chapter 5 and 11 genealogies are different from other genealogies in the Bible—they provide both genealogy and chronology, giving an absolute measure of time. Other genealogies provide only lists of names, father to son. These genealogies also give the ages of the father at the birth of the key son in the genealogical chain. The writers give us more information than only a genealogical list—they are *chronologies*, intended to be understood as providing meaningful information for the reader. If the writer did not intend to provide chronologies, then it is hard to imagine what reason he had for recording the ages in a chronology.
- Our English versions are translated from the Hebrew OT the version of the Bible endorsed as Scripture by Jesus; not the Greek OT. Versions of the Hebrew text are consistent and do not vary; giving the total number of years from Adam to the flood as 1,656 years.
- Questioning their historical accuracy and completeness is a recent idea. It has only been since the middle of the 19th century that professing Christians have questioned the historicity of the genealogies, showing that they are influenced by evolutionary ideas and 'higher criticism'.

It is ironic that many people who claim to be Christians accept various forms of radioisotope measurements and ages of fossils attributed to geologic strata as 'gospel truth' but are unwilling to accept Gospel Truth as accurate. The only historical chronometer mankind possesses for the first 2,000 years of the earth's history is found in the Genesis chapters 5 and 11 genealogies.

Extra-Biblical Support for the Genesis Genealogies [July 17] (Gen 5.1-32; Gen 11.10-32)

In a previous meditation, we noted that the Genesis genealogies are validated by internal evidence within the Bible—e.g., they are considered to be statements of historical fact by later writers of Scripture (1 Chron 1.1-4; Lk

3.36-38; Jude 14). There is also extra-Biblical evidence which supports the belief that the Genesis genealogies provide a record about men who actually lived and became the fathers of the named sons.

One example is a genealogy preserved among the Miautso, a minority group who live in south-central China (numbering about ten million today). They have a traditional poetic account (see, Edgar Truax, *Genesis According to the Miao People*) which has been handed down for centuries. It has been recited consistently at funerals and weddings and on other public occasions. The poem is structured with a number of parallel couplets, much like Hebrew poetry, which makes it easy to memorize. The first part of the poem covers the creation account, opening with the creation of the heavens and the earth followed by the creation of light. The remainder of the first part follows an order for the classes of creation similar to that found in Genesis chapter 1, except that it lists the creation of vegetation after the creation of animals.

The creation of man is recorded as follows: "On earth he created a man from the dirt. Of the man thus created, a woman he formed." The man's name is given as 'Dirt'. In the Hebrew account, the word '*adamah*' is one of the words for ground (clay or dirt). The word translated in English, as 'man' as well as the personal name 'Adam' are both derived from the Hebrew word for 'ground'. The Miautso account includes the creation of the woman from the man. The account lists the genealogy of descent from Adam as follows:

The patriarch Dirt begat patriarch Se-teh. [Seth]

- The patriarch Se-teh begat a son Lusu. [no clear connection between Lusu and any of Enosh, Kenan, Mahalalel, Jared, or Enoch]
- And Lusu had Gehlo and he begat Lama. [Gehlo may be a corruption of the last part of 'Methuselah'; Lama is likely Lamech]

The patriarch Lama begat the man Nuah. [Noah]

- His wife was the matriarch Gaw Bo-lu-en. [Noah's wife is named here and in Jewish tradition]
- Their sons were Lo-Han, Lo-Shen and Jah-hu. [i.e., Ham, Shem, and Japheth].

Following the genealogy from Adam to Noah's sons, there is an account of the wickedness that was prevalent in the pre-flood world, which supports God's observation (Gen 6.5) about the state of mankind: "These did not God's will nor return his affection, but fought with each other defying the Godhead. Their leaders shook fists in the face of the Mighty." While the account has mythical components (e.g., Dirt estimating the weight of the earth and the heavenly bodies), it is evident that the Miautso people carried the account of the earth's early history with them as they migrated east after the events of the Tower of Babel and that it predates the authorship of the book of Genesis by Moses.

There are legends from some cultures which include cycles of kingdoms and heroes stretching over tens of thousands of years. These invariably display significant mythical elements. However, the genealogical records from some ancient cultures, which claim to record actual history, offer indirect support for the Genesis genealogies by providing estimates of the age of the world which are of the same order of magnitude as is derived from the chronologies in Genesis chapters 5 and 11. For example, the pre-Christian *Irish Chronicles*, without direct knowledge of the Bible, state that Ireland was colonized in what would have been 1448 BC, the 2,520th year after the creation (placing creation at about 4000 BC). The early Anglo-Saxon records held that the world was created about 5200 BC. One record gives the number of years from Adam to the flood as 2,242 winters.

Early Christians accepted the Genesis genealogies as recording history. The dates they give for creation and the flood vary depending on whether they used the Hebrew version of the OT Scriptures or Greek translation. However, there is no instance of a Christian writer prior to modern times who suggested that the records in Genesis chapters 5 and 11 are anything other than strict chronology. In contrast, they argue against the rejection of their historicity. Origen, in his book *Contra Celsus*, says that "Celsus, from a secret desire to cast discredit upon the Mosaic account of the creation, which teaches that the world is not yet ten thousand years old, but very much under that, while concealing his wish, intimates his agreement with those who hold that the world is uncreated." Methodius, writing in the 3rd century, in his book *Work of Things Created*, makes an interesting observation about the age of the world,

"For when a thousand years are reckoned as one day in the sight of God, and from the creation of the world to his rest is six days, so also to our time, six days are defined, as those say who are clever arithmeticians. Therefore, they say that an age of six thousand years extends from Adam to our time. For they say that the judgment will come on the seventh day, that is in the seventh thousand years." It has been only since the theory of evolution has gained acceptance that Christians have questioned the genealogies as complete and as literal chronologies. This is clearly an example of letting the world set the agenda for Christians.

Death Begins to Consume the Human Race [July 18]

(Gen 5.5-27)

"And he died" appears in the Hebrew text as a single word, which is repeated eight times as the final word of the summary of each patriarch's life (except for Enoch's). When the text is read aloud, as it was intended to be, the word echoes through the ages as a drum, beating out an ominous refrain. However, before men began to hear the drumbeat of death, a significant death had to occur—the death of Adam, at the age of 930 years. There had been shocking murders (Gen 4.8, 23), but death was probably a rare occurrence until the second generation on the earth had lived almost a millennium. Adam may have encountered very few deaths during his lifetime (possibly other murders and some accidental deaths), and his own death may have been the first death from what we call 'natural causes'. So, we can imagine that his death would have been in all the news channels of his day. It is likely that his funeral was the most well-attended in all of history because of his status as the first man, the rarity of death to this point, and the incredibly large family that he would have had. The line of mourners must have stretched from the edges of the inhabited world to near the entrance to the Garden of Eden where he was likely buried—the equivalent of being buried in a church cemetery.

When Adam ate the forbidden fruit, he did not immediately die physically, but he did die at that time, spiritually, and he became mortal—the process of death began to consume him. As we noted previously, death is a separation of two things which should not be separated (e.g., God and man, body and spirit), which destroys an essential unity. The death that Adam introduced consisted of three stages: spiritual death, deterioration leading to physical death, and everlasting death. Physical death is the departure of the animating spirit from a living body. Therefore, Adam's entire life was a pause on physical death and a long wait for the sentence for his crime to be fully realized. Eventually, physical death caught up with him. From that point, death would have become increasingly common as the generations following Adam and Eve began to die off. The refrain in this chapter teaches of the inevitability of death—first for Adam to whom God said, "dying you shall die" (Gen 2.17); and then for us, for whom death is appointed (Ezk 18.20; Heb 9.27).

Men cannot explain why death is present in the world, without accepting the Biblical account, so they claim that it is natural and a part of life's processes, and not an enemy. But, death is unnatural and an abomination that has spoiled God's beautiful creation. Therefore, we should try to avoid using the term 'natural death'. Death is the last enemy of mankind (1 Cor 15.26). If anyone doubts that the wages of sin is death (Rom 6.23), he need only read this account. The battle between life and death is vividly displayed with each patriarch bringing sons and daughters to life and then giving up his own life to death. Even Methuselah, the person who lived the longest of all men (969 years), had to die. Death reached a climax for that age, and seemed to gain a significant victory, 1,656 years after creation when the floodwaters covered the earth. All of the antediluvian population (other than Noah and his wife, and three of their sons and their wives) kept their appointment with death in a great spasm of agony. Noah may have had other children in the first 500 years of his life. He would have probably prayed for them, and offered sacrifices on their behalf, as Job would later do (Job 1.5). If so, even these children perished in the flood, showing that death is no respecter of persons.

However, death is the last enemy, not the last victor standing. In this account there are signs of hope that death can be overcome:

- Each generation gave birth to more children than died, and the population of the earth grew large.
- None of the named pious patriarchs were killed in the flood of judgement. Lamech (Noah's father) died five

years before the flood and Methuselah (Noah's grandfather) died in the year of the flood (Jewish tradition says that he died seven days before the flood).

- Enoch was spared from death entirely and was taken directly into Heaven with a transformed physical body.
- Noah and the seven members of his family were spared the experience of cataclysmic death. Shem, Ham, and Japheth were born after Noah was given the command to build the ark in his 500th year (Gen 5.32; Gen 7.6), and they grew up in the context of the command and believed the word of God about the pending judgement or, at least, went along with their father to humour him.

Paul tells us that death reigned from Adam to Moses (Rom 5.14). But the Covenant of Sinai did not have a solution for the problem of death—in fact it required the slaughter of millions of animals to demonstrate that death was necessary because of sin and that no mere human death (or animal substitute) could provide the solution. So, with the failure of that covenant (Heb 8.7), death reigned until Christ (Rom 5.17-18). The only hope for conquering death was through the perfect death of the God-man, Jesus Christ.

There are a number of lessons we can derive from this chapter, but one in particular is that it teaches us to number our days (Ps 90.12). People before the flood lived ten times longer than we do and yet they all died. We have considerably less time before we face death, so we need to ensure that we have reckoned with God rightly and received Christ for our resurrection.

Gospel Names [July 19] (Gen 5.3-32)

In the previous meditation we noted that this account gives signs of hope that death can be overcome, including:

- Each generation gave birth to more children than died.
- None of the named patriarchs were killed in the flood of judgement.
- Enoch was spared from death entirely.
- Noah and his family were spared the experience of a cataclysmic death.

Another sign of hope can be found in the names given to the patriarchs, which had significance beyond being convenient labels. It has been noted by commentators that in many ancient cultures names were often assigned to commemorate events or to make polemical or prophetic statements; for example, Peleg's name means 'division' (Gen 10.25) and Isaiah named his sons as prophecies (Is 7.3; Is 8.3). The Puritans understood the importance of giving names to their children; although they may have gone a bit overboard with names such as, Fly-fornication and Job-raked-out-of-the-ashes. In the passenger list for the first voyage of the Mayflower these names can be found: Remember Allerton, Humility Cooper, Love Brewster, Wrestling Brewster, Oceanus Hopkins (born *en-route* to New Plymouth). Other Puritan names include (drawn only from the As): Abstinence, Aid-on-high, Amity, Approved, Ashes, Assurance. In modern North America parents usually assign names to their children for other reasons, which have little to do with recognizing the spiritual life of man. For example, parents may like the sound of the name or they may be following a current fashion. In general, names given to children today have no special importance. Although, occasionally names are given to children to honour a family member, or if the parents want to be seen as peculiar (e.g., naming their children after automobiles).

We have a sense that there is something significant and mysterious about names and their meanings. When Adam named the animals, it was an act of authority and creativity that displayed learning and knowledge (Gen 2.19-20). Upon meeting a new person, we ask his name as if it will tell us something about the person. Likewise, Moses asked God for his name (Ex 3.13) and God responded by giving his name, "I AM WHO I AM". We can only begin to understand the deep significance of such a name. Elsewhere he gives other names to himself as he deals providentially with mankind; and he names his Son Jesus, for he would save his people from their sins (Mt 1.21).

Lamech is the only person in this genealogy who provides the reason for the name he gave to his son (Gen 5.29).

However, there is likely a significant reason for all the names given in this list of pre-flood patriarchs. The exact meaning of each name is sometimes difficult to determine, and different opinions exist about how they should be translated into English and interpreted. The names assigned to the patriarchs and their possible meanings are as follows:

- Adam 'man' or 'mankind', and 'dirt'.
- Seth 'appointed' or 'supplant'. A renewed optimism about life and of blessing is proclaimed by Eve when she named Seth (Gen 4.25).
- Enosh 'to be weak', 'faint', or 'frail' or 'mortal frailty'. The reference seems to be to man's deep spiritual need.
- Kenan 'sorrow'.
- Mahalalel 'the blessed God' or 'praise of God'.
- Jared 'descent' or 'shall come down'.
- Enoch 'beginner', 'dedicated', 'initiator', or possibly 'teaching'.
- Methuselah 'man of the spear/javelin'; probably meaning 'to send forth' or 'his death shall bring' or 'he dies at the sending forth'; Enoch made a prophetic statement, fulfilled when Methuselah died in the year of the flood.
- Lamech 'strong', 'youth', 'warrior', 'conqueror' or 'the despairing'.
- Noah 'rest'; implying 'comfort' or 'relief' (the two words sound similar in Hebrew and are a play on the 'n' and 'h' sounds in both words). We are told (Gen 5.29) that Lamech made a specific prophecy about his son Noah. Noah's name alludes to lifting of earthly toils and sufferings which were the consequences of the fall by a deliverer (Noah himself, but pointing to Christ as the antitype).
- Shem 'name' or 'renown'. Noah expects this son (and his seed) to gain a reputation. As the ancestor of Eber (Hebrews), Abraham, David and Christ, this is certainly the case. Shem was not the oldest of Noah's three sons, but he was the one through whom the birthright passed.
- Ham 'to be hot' or 'to be dark'. Ham's dark passions led him into trouble and disgrace.
- Japheth 'extend' or 'spread'. Noah prays that God will enlarge the territory of Japheth (Gen 9.27). The descendants of Japheth became the most spread-out people of the earth.

The Gospel message is embedded in Genesis chapter 5. If we read the meaning of the names we find something like the following: "Man of dirt [is] appointed [to] mortal frailty [and] sorrow; [but] the Blessed God shall come down [for a new] beginning (or to teach); his death shall bring [the] strong (or despairing) rest (or comfort); his name (or renown) to the dark shall extend (or spread)." There is likely a degree of poetic liberty in this interpretation. However, there can be little doubt that God superintended the naming of these individuals to send a message of hope in the midst of an increasingly perverse age (Gen 6.5, 11).

Enoch Walked with God [July 20]

(Gen 5.22-24)

The genealogy from Adam, through Seth, runs for six generations, with the mention of the births of "other sons and daughters" followed by a patriarch's death. This appears to be the on-going lot of mankind. Then, in the seventh generation, the chronicler records in Scripture's often understated manner, a remarkable individual—Enoch. God sets up a contrast between the godless line of Cain, which by the seventh generation (Lamech) had reached the nadir of evil, and the holy line of Seth, which reached a zenith for godliness. We have already encountered an Enoch (the son of Cain) who was memorialized with a man-made city named after him. In contrast, the Enoch in the line of Seth is memorialized for seeking a city whose architect and builder is God.

Adam was a repentant sinner who believed in the coming Messiah; and all of the patriarchs, from Seth to Noah, appears to be recognized for their faith by the names they gave to their identified sons, pointing to the hope that they had in the coming Redeemer. Lamech and Noah are also recognized as prophets. This line stood out from the rest of humanity as being an island of virtue and holiness in an ocean of overwhelming wickedness (Gen 6.5, 11). Yet, even in a line that produced men like Noah, Enoch stands out as preeminent since he was the first man, since

the expulsion from the Garden, to walk with God—a fact that is emphasized by its being repeated.

Enoch's walking with God does not mean that he walked *after* God (Dt 13.4), that is, obeying the law of God; although it certainly includes that. It also does not mean that he walked *before* God (Gen 17.1), that is, keeping to the paths of righteousness; although it certainly includes that. It means walking *with* God, in his company or beside him. It may mean that God came down in a human form and walked and talked with Enoch—in a similar way that he met with Adam (implied by 3.8), appeared to Abraham in Mamre, and encouraged the three men in Nebuchadnezzar's fiery brick kiln. However, it may be a metaphor expressing spiritual interaction through prayer and words of comfort from the Holy Spirit. The form of the word 'walked' in Hebrew implies an ongoing and intense activity. It means that Enoch had intimate communion with God, obeyed God, lived in separated holiness from the debauched lives of his neighbours, and did everything with an eye to pleasing God. Of course, he was not sinless. Rather, when he sinned he brought reconciliation sacrifices and asked for forgiveness. Among his generation he was known as one who took God at his word, waited upon God, and looked for the coming of the Lord's Anointed (Jude 14).

Enoch stands out from all his contemporaries and even, to an extent, from the others in his family line. They were all undoubtedly witnesses, through their pious lives, to the reality of God as Creator and to his righteous requirements. However, the extent to which they spoke prophetically to their generations is unclear. Enoch was the father of Methuselah whom he named with prophetic intent, as Isaiah would later name his sons (Is 7.3; Is 8.3) as a witness to his generation. The name 'Methuselah' probably means something like 'he dies at the sending forth'— meaning, as mankind discovered, that after Methuselah died God would send a flood of judgement. Later Noah would be a preacher of righteousness (2 Pt 2.5). But Enoch had already been active condemning his generation for its wickedness and by declaring God's law to them (Jude 15). There is an academic debate about how Jude could quote Enoch's words when they are not recorded in Genesis and the writings attributed to Enoch are considered by the Church to be apocryphal, but his words could have been handed down through the flood in writings which were not included in Scripture by Moses. Regardless, since the Scriptures are without error, we believe that Jude records accurately what Enoch said to his contemporaries.

However, the contemporaries of Enoch, who lived for nearly a millennium, probably felt that they were invincible. So, there was no fear of God among them and they would have treated Enoch with hatred, and his message with scorn. God spared Enoch from ridicule by removing him from the clutches of his enemies—not through death but through immediate translation into his glorious presence. Enoch was 365 years old when he was taken, which would have made him in the prime of life. Some think that each year of his life represented a day in the solar year, symbolically showing that he had lived a full life. He was taken because: 1) he pleased God (Heb 11.5), 2) his assigned work in this world had been executed faithfully, 3) this world was not worthy of him (Heb 11.38), and 4) as a reward for his true piety. His family would have missed him when they looked at his portrait on the dining room sideboard and may have been unable to comprehend why God had done it. But God knew what he was doing, and uses the life and translation of Enoch to teach us: 1) To trust him, even if he removes our believing loved ones in the prime of their lives. 2) That the quantity of a person's days on the earth are insignificant compared with the quality of that person's life before God.

Enoch's translation was a sensible encouragement to the faith and hope of all believers prior to the flood. At the time of his translation, all of the patriarchs were alive except for Adam (he had died 57 years before this event), who had his own sensible evidence to the veracity of God's word, since he had lived in the Garden of Eden and walked and talked with God in human form. Adam knew, and Enoch's translation declares, that God had plans to restore paradise and to re-create a holy people who would dwell with him forever.

Enoch, Contrasted with His Generation [July 21] (Gen 5.22-24)

Walking can be a pleasant pastime. It cleans out 'cobwebs', tones muscles, subdues tensions, and brings new

pleasures of sight, sound and smell. For some, however, walking is an 'evil' to be avoided. They would prefer to sit before a TV or drive a car to the corner store. Walking tires them because they have avoided walking for so long. If this is the situation in the physical realm, how much more so in the spiritual realm?

We are told very little about Enoch in the Bible. Yet we are told very much! What little we are told about this man of faith, is enough to teach us four lessons which illustrate the importance of walking with God. Each can be presented in the form of a contrast.

Jude 14 tells us that Enoch was a prophet and that he was seventh in the line from Adam. Without Jude's comment we would not know that Enoch was a prophet, but we could determine that he was seventh in the line of Adam, since we can count the names. It is significant that he was the seventh in the line of Adam. He held a key position, since the number seven is often used as a symbol of completeness. For example, the seventh day completed the week of creation and was set aside as a holy day. The disciples thought that an act of perfect forgiveness was to forgive someone seven times. Jesus of course corrected them by teaching that they should forgive seventy-seven times. It appears that God planned that the seventh in the line of descent from Adam would represent the complete man, a righteous man (although not without sin)—the man set apart for a special relationship with God. Enoch's life is set before us as a contrast with Lamech's (Gen 4.17-19), who was also the seventh from Adam. Lamech was the first reported polygamist and a boastful murderer. He walked in the paths of evil; Enoch walked in the paths of good. Lamech lived in the *City of Man;* Enoch lived in the *City of God*.

For most people their desire to live a long life is greater than their realistic expectation. They might wish to live to be 100 but realize that they probably will not live much beyond 80 (Ps 90.10). For Enoch, his realistic expectation was to live more than ten times as long as we can expect. The life spans given in this chapter are to be taken literally since mankind's body had been designed to live forever, genetic decay had not accumulated in the genome, and God had not yet set an upper limit on the life span of man. God permitted the antediluvians to live long lives to demonstrate the real direction of man's heart (Gen 6.5). A long life will not lead a sinner to wisdom and righteousness. It leads a person only into more sin, piled on sin! In contrast, Enoch lived *only* for 365 years. This demonstrates that the important consideration is what a man does with the years that God gives him. Enoch lived a short life (a third of a lifetime) by the standards of his age. But his life had much greater value than that of his contemporaries, because he walked with God.

Throughout Genesis chapter 5 we read that each individual "lived", after he had fathered the named son. But, in Enoch's case we do not read this. Enoch didn't merely live, he walked with God! This may mean that God came down in a human form and walked with him. However, it is probably a metaphor expressing spiritual interaction through prayer and words of comfort from the Holy Spirit. Thus, to walk with God, means to walk by faith not by sight. Enoch is included in the gallery of the faithful in Hebrews 11.1-40. Immediately after his name is mentioned, the writer says, "… without faith it is impossible to please him, for whoever would draw near to God must believe that he exists and that he rewards those who seek him." This provides a commentary on Enoch's faith. To walk with God means more than merely living. The brute beasts live. A non-Christian woman who rides the commuter train every morning may be attractive, receive a good paycheck, go for a daily workout at the club, and enjoy dinner with her boyfriend. She lives, but she does not walk with God. To walk with God, she must do more than live. She must bear the image of God in active, creative, loving service for God. The gulf between mere living and walking with God is great.

The final contrast is the most obvious. The repetition of the phrase "and he died" in this chapter can be heard through the centuries. However, this is the first time we encounter 'natural' death (two murders have been reported; Gen 4.8, 23). Adam who was created to live forever, died! Imagine the world as it was in those days. As the years went by, people seemed to grow older and older. Then one day, in Adam's 931st year, a little child went in to see her great-great ... grandfather. She yelled "Hi grandpa!" But there was no answer. She prodded and shook him, and then ran out yelling: "Grandpa Adam has turned to stone!" Death was beyond that child's experience. Death was not intended to be. Death was abnormal. It was not the end for which man was created. It became an aberration in the

perfect order of the universe, as God had created it. In contrast human death is common in our experience. As the final curse against sin it has become one of the most significant factors in our lives. But Enoch was the exception. He did not die. He is a sign and a promise that there is hope beyond physical death and that death is not final after all—for those who have put their faith in God. There is life after this life, through a resurrection that has been purchased by Christ. For those who walk with God, the drawing of the curtain is nothing more than the end of the first act. There is more to come, and the second act is about to begin—eternal life in a resurrected body.

Enoch's Translation, a Resurrection Promise [July 22] (Gen 5.24)

How does anyone enter Heaven? We know, from the perspective of merit, that no mortal man, born in sin, can enter heaven. Sin's pollution makes him unfit to live there and he would have absolutely no desire to be in that holy place. The only way to enter Heaven is to be clothed in the proper robes of holiness—i.e., Christ's righteousness, which is applied to a sinner when he repents of his sins and believes that Jesus died on the cross on his behalf. There is no other means of gaining access—not through fervent pleading, not by being scrupulously moral, not by deeds of penance, not by selfless living. However, that is only part of the answer to the question. How does a believer in Christ arrive in Heaven, whether in a disembodied state or with a body? Before we answer that question, we must consider two things about Heaven, which are relevant for our consideration of Enoch's translation:

- 1) Heaven is a created place. It is the place where God now makes his presence known, and he dwells in it. But it has not existed forever, since only God is eternal. Heaven was likely created on the first day of the six days of creation, along with the angels.
- 2) Heaven is a place where physical entities can exist. It is not part of this physical universe, but it is a place with some form of physicality. Jesus left the earth with his glorified physical body and entered Heaven. His body continues to exist in that place.

We could not build a transporter like that used on the *USS Enterprise* to beam ourselves into heaven. Nor could we traverse a wormhole in the space-time fabric to reach Heaven. Heaven is not accessible through any means available in this current physical universe. Some people who have had near-death experiences claim that they have seen angels escorting believers, in a disembodied state, into Heaven. However, we can enter Heaven as complete beings (body and spirit) through one means only—God (specifically Jesus, the God-man) will take us into Heaven (1 Thess 4.16-17).

We read that, "Enoch walked with God, and he was not, for God took him." It is clear that he did not die, since this statement replaces the refrain that is applied to eight of the other patriarchs mentioned in this chapter. Not only did he not die, but he also did not go into some form of long-term sleep while he waited for the resurrection. He was translated body and spirit directly from the earth into Heaven (Heb 11.5). This means that as he was translated his body must have been transformed from an earthly, mortal body subject to decay, into a spiritual body (this does not mean a spirit 'body', but a body fit for heaven) suited to both the different physicality of Heaven and to the sinless state (1 Cor 15.44). Although it was necessary for Enoch to shed his corruptible body to enter Heaven, he did not have to experience the violent separation of body and spirit which constitutes death. His translation into Heaven was a gentle and joyful departure out of this world.

Enoch's translation and the belief in a real, physical Heaven are dismissed as silly myths by today's 'scientific' community. However, it is incredibly ironic that many who would scoff at the idea of Heaven as a parallel physical place, postulate the existence of multiverses to get around the impossible odds of this fine-tuned universe popping into existence by chance. They are blind guides who spit out a gnat but swallow a camel! (Mt 23.24) In this real, alternate universe there are at least three bodies currently present—Enoch's, Elijah's (2 Ki 2.3-12), and Jesus' (Acts 1.9-10). In addition, the saints who were raised from the dead at the time of Christ's crucifixion (Mt 27.52-53) may also have been taken into Heaven with transformed bodies rather than having to die again. It is also possible that Moses was shown with his new permanent body at the time of the transfiguration of Christ (Mt 17.4).

Enoch's translation was given to the antediluvian patriarchs as a resurrection promise. It showed them that there

was more to human existence than merely living out a millennium or so in a mortal body, dying, and passing out of existence. The patriarchs realized that his body existed somewhere, other than in this space-time realm. Thus, his translation proved that humans continue to exist beyond this present life. While his body was not actually raised from the dead, as in the instances¹⁰ prior to Christ's own resurrection, his translation provides a first hint of the eventual resurrection of all men (Acts 24.15). The doctrine of the resurrection would become more fully understood as God progressively revealed it through examples and prophetic word. By the time of the Apostles, a bodily resurrection had become the hope of believers.

Enoch prophesied about halfway through the time between Adam and Noah. Elijah prophesied about halfway between Noah and Christ. Both prophesied in times of widespread apostasy, and both escaped death through translation. They are witnesses to God's ultimate plan—to provide a restored paradise to all who believe in the promised seed of the woman. In the context of chapter 5, Enoch's translation declares that death will not have the final victory; it can be defeated! The drumbeat of death will be silenced! Enoch is alive today, he is proof that eternal life, which Adam forfeited, is possible. It is confirmation that God's plan is to show mercy to mankind and to provide a means of redemption from the curse of sin. And, it is evidence that all who honour God in this life will receive the everlasting blessing of a better life.

Lamech's Prophecy [July 23] (Gen 5.29)

In the movie version of *The Hunger Games*, President Snow asks Seneca, the games' master, "Why do you think we have a winner?" Seneca is perplexed by the question. Snow continues. "Hope. Hope, it is the only thing stronger than fear. A little hope is effective, a lot of hope is dangerous." Collins and Ross have expressed an idea that is consistent with Biblical truth—hope can be revolutionary and world changing. The important question should be, what is our hope? In Genesis chapter 5 we encounter Lamech, the son of Methuselah, who at the birth of one of his sons expresses a hope for redemption from the curse.

The contrast between the violent line of Cain and the godly line of Seth continues. There were two Enochs. One was memorialized with a man-made city named after him, the other was memorialized for seeking a city whose architect and builder is God. There were also two Lamechs. The first placed all his hope in the power of his avenging sword, the second placed his hope in God's mercy. Even the 777 years which the second Lamech lived, provides a point of contrast with his namesake's seventy-sevenfold vengeance (Gen 4.24).

In hope, Lamech named his son Noah. The name 'Noah' is derived from the Hebrew word for 'rest'. Lamech uses a play-on-words as he equates the name of his son with another Hebrew word for 'relief' or 'comfort'. The two words sound similar in Hebrew with vowels applied to the 'n' and 'h' consonants. As Lamech explains the connection, he voices a prophecy about the state of the world and his son's pending role in it. God had given direct prophecies (Gen 2.17; Gen 3.15), and people had expressed a confident hope in God when they named their children, but this is the first time a human makes an explicitly predictive prophecy. Thus, the repeated pattern in the genealogical account is interrupted to call attention to the words of Lamech and his prediction.

Lamech ties his prophecy to the curse that fell on the entire created order as a punishment for Adam's sin. He speaks of the ground as having been cursed (Gen 3.17)—a figure of speech called a synecdoche in which a part represents the whole—to speak of the curse which brought corruption and decay into the entire physical universe (Rom 8.22), and thus resulted in man's work being arduous and painful. Lamech gives expression to the general feeling of anxiety and fatigue that rests heavily on all the godly as they pass through this world. They cringe when they see ongoing evil that ranges from inflamed passions to enraged violence (Gal 5.19-21). They sigh at the consequences of this evil when it is displayed through oppression, a misplaced emphasis on rights instead of responsibility, endemic poverty, illiteracy, and malnutrition. They weep over the rejection of truth as given in the Bible and as

¹⁰ 1 Ki 17.22-23; 2 Ki 4.32-35; 2 Ki 13.21; Mt 9.25; Mt 27.52-53; Lk 7.14-15; Lk 8.54-55; Jn 11.43-44.

personified in Jesus. And, they are almost in despair over the apparent ineffectiveness of any means of corralling evil. Lamech had known his godly grandfather Enoch for over 110 years. After Enoch's departure, Lamech likely pleaded with God to remove him also from the miserable condition into which mankind had fallen. Likewise, all true saints of God today come to the point where they desire to leave this miserable scene as soon as possible (Phil 1.23). God honoured Lamech's request and he brought him over into Glory earlier than his predecessors (living only 777 years compared with the others, who all lived for about 900 years, or more). God also spared him from suffering from the judgement on the earth brought by the flood, by removing him five years before the rains began. However, through his removal he did not see the temporal fulfillment of his prophecy.

Lamech's prophecy exhibits a confident hope that Noah would bring about rest and relief from the painful toil of working the land to produce food, implying that there would be a significant reversal of sin's curse. To speak as he did about his son, Lamech must have had a communication from God-direct revelation or a sense instilled in him by the Holy Spirit-that informed him that there would be something special about Noah. However, the relief that he speaks of does not arrive as he probably thought it would. After the flood, mankind did not return to the Garden of Eden. So, the manner in which Lamech's prophecy was fulfilled, through Noah, isn't immediately clear. Our information about the environment before the flood is largely circumstantial. For example, the amount of plant material found in coal seams worldwide indicates that the earth produced massive quantities of lush vegetation, so mankind didn't need to worry about drought—although they may have had to continually prune and weed to protect their plants and trees. Other evidence points to the notion that the original continent was located in a temperate climatic zone, surrounded by a shallow sea, with vast floating mats of vegetation. Thus, it appears that prevailing conditions were considerably less harsh than we find them today (e.g., with volcanoes, earthquakes, hurricanes, tornados, floods, droughts, and snowstorms). So, it is unclear how Noah and the flood brought relief. Therefore, it seems that we are to understand the true nature of the hope to lie in Noah serving as a type for the ultimate salvation from the curse, that would be provided by Christ. Noah saved lives bringing them through the flood, but baptism into Jesus saves from perpetual fire (1 Pt 3.20-22). The meaning of Lamech's prophecy, when seen from a NT perspective, is that the deliverer who was promised to Eve was still promised and still coming. Therefore, Lamech's prophecy provides a second (the first being Enoch's translation) ring of hope which can be heard over the drumbeat of death-the Last Adam, Jesus, will conquer death and destroy sin.

Noah and His Sons [July 24] (Gen 5.28-29, 32)

The genealogical account in chapter 5 ends with Noah, while he is still alive. He is probably the individual who recorded this genealogy and chronology. It is likely that the information in the Bible which he recorded begins with the latter part of Genesis 5.1 and continues through to the first part of Genesis 6.9, assuming that the word 'generations' (toledoth) is being used as a concluding colophon in this instance. It is also likely that he recorded this genealogy shortly after he began to build the ark. If the ages of the patriarchs (when the named son was born, and the father died) had not already been written down by the time God's command came to him to build the ark, he needed to consult only with his grandfather (Methuselah) or father (Lamech) to obtain the information. Methuselah's life overlapped with Adam's by 243 years and Lamech's overlapped with Adam's by 56 years. So, between them they would have known all the patriarchs and would have had the facts about their births and deaths. Because this genealogy was composed by Noah, and focuses on him, the recorded names do not necessarily include the firstborn in each previous generation, but only his direct forefathers. This conclusion is supported by the fact that Seth is not a firstborn son. Also, Shem and Ham are mentioned before Japheth, indicating that the order of birth is not a consideration. Japheth was the firstborn, although he is mentioned last; Shem was one hundred years old, two years after the flood (Gen 11.10); Ham was the youngest (Gen 9.24); therefore, the son who was born when Noah was 500 must have been Japheth. [The ESV and NASB have likely translated Genesis 10.21 incorrectly; compare the translations in the NKJV and NIV.] From Noah's perspective, the individuals named in the genealogy are important because of their role in redemptive history—leading to the Messiah—not because of their birth order.

When Noah was instructed to build the ark, he knew that God had planned momentous-truly earth shattering-

events (Gen 6.13) and that he was to be a key player in God's unfolding plans. Thus, he uses this genealogy to report the appointed heirs of the blessing, leading to mankind's first saviour—Noah himself—who would be considered by NT writers to be a type who pointed to Christ. So, Noah, under the guidance of the Holy Spirit, wrote down the line of descent from Adam to himself as a permanent record to be added to the earlier part of Scripture which had been preserved by Adam (Gen 1.1-5.1a). Noah may have been instructed directly by God to take this developing archive with him in the ark as a memorial of what God had done from the time of creation to the time of the flood. It is possible that he took additional writings with him (e.g., a record of Enoch's prophecies; Jude 14) which Moses chose not to include when he wrote Genesis.

At this point in the record, Noah is just over 500 years old, suggesting that he was about halfway through his expected life—based on the ages at death of his ancestors. So, the chronology does not end with the formulaic birth of the key son and then his death, but with the birth of three sons. The genealogy will be completed with the standard formula in Genesis 9.28-29, and then connect Shem to Abram in Genesis 11.10-26. Moses, as the author of Genesis, has an overarching goal of tracing the line of the promised seed, and anticipated blessing, to his own day. But, at this point, Moses suspends the genealogical record while he covers the account of judgement on the old world.

The consensus among commentators is that Noah had only these three sons, and no daughters. They argue that the repetition of the names of the sons later in Genesis supports this view and that we are to understand Scripture to teach that Noah's entire family was preserved from the flood. This is possible, God may have prevented Noah and his wife from having children for hundreds of years. However, it is more likely that Noah had many other children in the first 500 years of his life (and possibly others after the flood). But, they refused to repent, and perished in the flood; as Noah's own siblings (Gen 5.30) would have perished in the flood. If this is a harsh conclusion, we can consider a similar case from the ancient world. Job was a righteous man (Job 1.1), much like Noah (Gen 6.9). He had seven sons and three daughters. All of them, along with his extensive possessions, were destroyed within a few hours. Noah's children may have been among those who had fallen into temptation (Gen 6.2). Noah probably prayed for them, and offered sacrifices on their behalf, as Job would later do (Job 1.5), but they continued living in their rebellious ways (Gen 6.5). No names are mentioned for any of Job's first children. However, after his trials are concluded he is given a new family of seven sons and three daughters. From this latter family, the names of the three daughters are recorded. In addition, none of the other sons and daughters of any of the patriarchs are mentioned. So, the fact that the names of Noah's three sons are mentioned later in Genesis is not evidence that they were Noah's *only* sons.

The sons named in this account grew up after Noah had been told to build the ark. They witnessed Noah's efforts, and probably helped him to build it. They believed the word of God about the pending judgement or, at least, went along with their father to humour him. Noah probably knew the year in which the flood was to occur because the LORD had announced that mankind would be given 120 years before it met with judgement (Gen 6.3, 7). As the time for the flood drew near, Noah encouraged his sons to marry. He knew that through his sons the world would be repopulated. Thus, all three are mentioned, rather than only the son (Shem) in the line of the promised seed.

Lessons from the Genesis Genealogies [July 25] (Gen 5.1-32; Gen 10.1-32; Gen 11.10-32)

Why are these genealogies included in the Bible? The Holy Spirit had a purpose for including them so that they could serve for our instruction (2 Tim 3.16-17). At least the following reasons can be given to answer the question:

1. The genealogies show that God takes pleasure in recognizing his people. He gave names to the estimated 100 sextillion stars (Ps 147.4). Of much more importance to him are the names of his people! The account of the godly line descended from Seth (Gen 5.1-32; Gen 11.10-32) is given in more detail than the line descended from wicked Cain—which is only a list of names (Gen 4.17-22). Not only are the names of the sons of God given, but also the length of their lives is included, because, "The memory of the righteous will be a blessing, but the name of the wicked will rot." (Prov 10.7).

- 2. The genealogies give an independent corrective to the purported evidence for cosmological and biological evolution. We can connect a complete chain from Adam to Abraham, and beyond, that allows us to calculate, within a few years (because the birth of the son could have been at any time during the year), the age of the earth—at around 6,000 years old. Many people ridicule Bishop Ussher of Ireland who calculated that the earth was created in 4004 BC. Yet when we take God at his word, and accept the genealogies as accurate, we can know, within a few years, when God created the universe, the world, and man.
- 3. The genealogies present a precise record of history, including the only accurate chronology of events prior to the time of Abraham. We must not reject them, or accept the notion that they contain gaps, because 'archaeology' claims that civilizations go back to 5,000 years before Christ, or even to 10,000 BC. Rather, the genealogies are the standard against which the Egyptian king lists, Sumerian records, and layers of household detritus found in urban settlements, are to be calibrated.
- 4. Because the genealogies record history, and tie Adam and Noah into history, they teach us to watch out for theological clay. Many Evangelical Christians would claim that we must accept key doctrines about Jesus such as his virgin conception, resurrection, and deity (i.e., that he is fully man and fully God), as they are taught in the Bible; regardless of what 'science' might say on the matter. Modern 'science' rejects a belief in miracles and rejects all three of these truths about Jesus. Yet we are to accept them on faith and believe that the miracles actually occurred. If we do not, we cannot be considered Christians. Yet, when it comes to the historical events recorded in the first 11 chapters of Genesis (e.g., creation in six days, the worldwide flood, and the confusion of languages at Babel), these same people get bogged down in the mire of unprovable geological and evolutionary theories. We must reject the theological clay that can take any shape a person wants and teaches contradictorily that we are to accept by faith the miracles related to Christ but can reject God's clear teachings about what occurred in pre-Abrahamic history.
- 5. The genealogies inform us that mankind is a single family, descended from Adam and secondarily from Noah, with a mandate and blessing to fill the earth. Adam was not the first humanoid, differentiated from an ape-like creature. Paul used the truth about mankind being one in his sermon to the city leaders in Athens (Acts 17.26) where he taught that all men are descended from one man. Elsewhere he emphasizes that the Church has only one kind of people—believers in Christ who are the true children of Abraham—regardless of their backgrounds (Gal 3.28; Col 3.11). This is a glorious truth. The Church is made up all ages, nations, languages, socio-economic groups, intellects, and educational levels. The curse of sin divided men and caused them to be scattered (Gen 11.9). But, the grace of Jesus brings together what men and Satan desire to see at odds. The genealogies teach that any form of phenotypic prejudice or ethnic pride is wrong. They also teach that cultural ghettos in the Church are far from God's ideal (Jn 17.21-23). Churches organized around language, country, skin colour, etc. should be left to wither and die.
- 6. The genealogies show that God's sovereign purposes must be fulfilled. The bracketing of the flood account by the genealogies in Genesis chapters 5 and 10 demonstrates that above all the uncertainty of temporal events is the unchanging intention of God, which cannot be frustrated by evil. The genealogies show God's sovereign control over history driving toward the advent of the Seed of Promise, the Messiah.
- 7. The genealogies remind us that death is the enemy. Each patriarch's life is measured in years and then followed by death. Even Methuselah, who lived the longest, eventually died. There can be no doubt that the wages of sin is death (Rom 6.23). This teaches us to number our days that we may obtain a heart of wisdom (Ps 90.12). Yet, in the midst of this reminder of the curse, we find signs of hope, including: the birth of many sons and daughters, generations of on-going life, the Gospel names of the pre-flood patriarchs, and the promise of the resurrection hinted at by Enoch's removal from this world without experiencing death.

Population Multiplication [July 26]

(Gen 6.1)

It may seem to be obvious that when the human population began to multiply, daughters would be born. Today, slightly more than half of all births are males, if we exclude skewing caused by sex-selected abortion of females. This slight natural difference compensates for a higher infant mortality rate among males. It is valid to assume that prior to the flood the number of male and female births would have been essentially identical, since God's original plan was that every man would have his own wife, and infant mortality rates would likely have been lower than today. So, we are led to ask why the writer of this account (probably Noah) mentions the fact that daughters were born. Reasons for the birth of daughters receiving mention might include:

- The genealogical accounts are patrilineal, although chapter 5 mentions that each patriarch had daughters. Noah may be reminding us that man consists of two sexes, male and female (Gen 1.27), who are equally mankind. The mention of the birth of daughters may offer a corrective to an increasingly abusive patriarchy which had developed before the flood. Although men have a covenantal headship role before God in marriage, they are not to treat their wives cruelly, as Lamech did by demanding obeisance from them (Gen 4.23-24).
- It is possible that one of the grievous pre-flood sins was sex-selected infanticide—today abortion serves the same wicked purpose. It was a common practice in Godless patriarchies where women were treated as chattel and of less value than men. It was used throughout the post-flood ancient world, and continues today in countries dominated by Hinduism, Islam, and totalitarian governments (e.g., China). Thus, despite the practice before the flood, daughters were being born and allowed to live.
- Population growth depends on the presence of women. The number of daughters which are born is the determining factor in the number of possible births, not the number of males; particularly when dominant males take multiple wives—as Lamech did (Gen 4.19) and males in the line of Seth may have done (Gen 6.2). The mention of daughters reinforces the point that the population was multiplying
- The presence of many daughters would have increased the temptation for males in the line of Seth to take for themselves attractive mates from the line of Cain (Gen 6.2).

Some commentators suggest that it is unnecessary to consider the matter of how large the antediluvian population became. However, this is not an irrelevant consideration, since the extent of evil seems to increase with larger concentrations of population—e.g., cities usually have higher per-capita rates of crime than do rural areas. Most people seem to think that prior to the flood there were a few thousand people, living in primitive settings—e.g., dwelling in stone or peat huts with thatched roofs in clearings carved from a hostile forest, with a vegetable garden and pens for a few cattle and sheep. This is not the correct representation. With long life expectancies and with each woman able to bear many children (Gen 5.4) over her lifetime (a girl is born with over 5 million oocytes), earth's population prior to the flood was likely in the hundreds of millions or even billions. Using a simple exponential growth model, with t (time) set to 1,656 and r (rate) set to a low .012, the population would have grown from the initial pair (Adam and Eve) to over 800 million before the flood. Cain built a city (Gen 4.17) early in human history. It is true that the word 'city', in the OT, can apply to smaller walled settlements. However, the antediluvian population was inventive, developed a specialized, industrial economy (Gen 4.20-22), and had at least one reason (their long lives) to develop strong, permanent cities. Reading verse 1 in the context of the subsequent verses in this section (Gen 6.1-7), we see that the increasing population is viewed as a *causal* factor for the increase in evil (Prov 29.16). The massive increase in the population size resulted in a correspondingly massive increase in man's ability to invent more ways of sinning. The entire human race was intent on nothing but inventing new perversions (Gen 6.5, 11); setting themselves up for the judgement of God by water.

Although the number of sinners increased, and sin increased even more, there are positive indicators in the account:

- *The population increased.* God continued to bless mankind by allowing them to be fruitful and multiply (Gen 1.28). In contrast, today, God seems to be removing the blessing of procreation. As nations become steeped in humanistic materialism their birth rates generally decrease and their populations begin a precipitous decline.
- *The human race will survive*. Extensive immorality and moral corruption are not enough of a hindrance to population growth and do not wipe out entirely the human race. Even the most hardened of sinners will produce

children and provide for them so that there will be a next generation.

- *The righteous prospered*. Although members of the covenant line of Seth were in a minority, they continued to exist to the 10th generation from Adam. God preserved and protected the Church and the line leading to the Messiah, in the wilderness of pervasive wickedness. The legions of Hell cannot destroy the Church at any time!
- *God's general grace is displayed.* God shows that despite extensive sin, he causes the sun to rise on the evil and good and provides rain for the just and unjust (Mt 5.45). His goodness along with his patience gives men the opportunity to repent (Acts 17.30).

The Sons of God Took Wives [July 27] (Gen 6.2)

This verse engenders considerable debate. There are essentially four views held among Christian interpreters; the 'sons of God' were:

- Members of the (royal) family line of Seth—sons of God by adoption (i.e., under the Covenant)—who married wives from the pagan family line of Cain or married multiple wives from womankind generally.
- Members of tyrannical (royal) families (i.e., like Lamech in Cain's line) who married commoners; with the 'sons of God' being interpreted as 'sons of kings'.
- Angelic beings (demons), the Nephilim (Gen 6.4) and supposedly giants, who had sexual intercourse with women and left progeny.
- Angelic beings (demons) who possessed selected men to spawn a line of tyrants—the Nephilim.

In addition, many unbelieving interpreters claim that this verse is derived from ancient legends (e.g., found in Sumerian, Babylonian and Greek myths) in which the gods or demigods have sexual intercourse with mortals. With respect to this claim, we need to remember that Moses did not compose this section of the OT. This account was probably written by Noah about the state of the world in his day, before the flood. Moses included this account when he wrote Genesis. So, this account precedes all myths and legends (which must be postdiluvian, since all human populations were destroyed in the flood). The myths of gods or demigods visiting women may be derived from this account, based on the faulty third and fourth interpretations above.

The idea that angelic beings had sexual intercourse with women is defended by observing that the term 'sons of God' is used in the Bible to refer to angels (Job 1.6; Job 38.7), by references to the apocryphal book attributed to Enoch, and by the suggestion that NT passages (Jude 6; 2 Pt 2.4) refer to angels taking mortal woman as their partners. However, the term 'sons of God' (although not identically worded) is also used to refer to men (Dt 14.1; Hos 1.10; Rom 8.14). Appealing to apocryphal works [e.g., *1 Enoch*] which record myths to determine how to interpret the Bible, must be rejected—the Bible can be used to validate the claims of extra-Biblical documents, but not the other way around. Also, the NT passages which supposedly refer to this event actually refer to the fall of the angels when they participated in the Satanic rebellion.

To suggest that angelic beings had sexual intercourse with human females, and produced children, is simply grotesque. It is true that angels can take on human forms. However, this does not mean that they have genital organs, including sperm, and that their human forms have DNA compatible with human DNA. Angelic-human breeding is impossible (Mt 22.30), more so than even animal-human breeding. Angels are spiritual beings, who do not have human flesh-and-bone bodies (Lk 24.39 with Mt 8.16; Eph 6.12; Heb 1.7, 13-14). Paul indicates that each kind of creation is unique (1 Cor 15.38-41). In addition, if it were possible to have an angelic-human creature its status under the curse of sin, and with respect to Christ's representation in salvation, would be compromised—how could Christ's death be credited to such a creature, when angelic beings who sinned have no opportunity for redemption (Heb 2.16)? In addition, angels are not mentioned in Genesis 1-11 (except in Genesis 3.24)—a record of their creation, and the rebellion of some, is entirely missing from the account. Even the temptation of Eve does not mention an angelic creature but attributes her temptation to a beast (which was an instrument of Satan). This part of Genesis deals with man's rebellion and punishment by the flood. It is man's sin that is to be punished, not angelic

sin that resulted in a supposed angelic-human hybrid.

Some raise an objection to counter the view that the 'sons of God' were from the line of Seth. The question is asked, didn't women from Seth's line also intermarry with Cain's line? The person asking such a question shows a lack of understanding of God's covenantal model. Males are mentioned, even though women are also culpable, because males represent humanity before God. The fact that the genealogies (Gen 5.1-32; Gen 10.1-32; Gen 11.10-32) only list males supports this understanding of the covenantal model and male representation.

From the immediate context, it is clear that the covenant line from Seth is in focus. The genealogy from Seth to Noah's sons (Gen 5.3-32) was reported as a contrast to Cain's line (Gen 4.17-22). Then, immediately following, notice is given that members of Seth's line have fallen into sexual sins. The sexual sins under consideration include inter-marriage between members of the covenant family with unbelievers, which God frowns upon (Dt 7.3-4; 2 Cor 6.14). Although it seems unlikely that God would have destroyed the antediluvian population only because believers married unbelievers; it is possible, since the progeny of marriages between parties of opposing religious beliefs often sink into depravity. The account appears to be structured to parallel Eve's temptation—she *saw* the attraction and *took* (Gen 3.6). So, it seems to be dealing with some form of sexual perversion of a magnitude similar to Eve's sin—such as polygamy and the assembly of harems (although the words "took … wives: does not necessarily mean that each man had multiple wives, it seems to be implied), or participation in some form of cultic sexual practice associated with fertility rites. This account informs us that sexual sins became so pervasive that the antediluvian world was like the later Sodom and Gomorrah, and almost everyone, including those in the covenant line, had succumbed to temptations to satisfy their lustful base instincts.

Sexual Sins [July 28] (Gen 6.2)

In the previous meditation we concluded that this verse speaks about members of the covenant line from Seth (the 'sons of God') becoming entangled in alliances with descendants of Cain. However, this verse may not be speaking only of the kind of intermarriage that displeases God (Dt 7.3-4; 2 Cor 6.14), although it includes that, but of perversions of marriage such as polygamy and the assembly of harems. Sexual sins likely became pervasive in the antediluvian world and even those in the covenant line had succumbed to temptations to satisfy their lustful base instincts.

Sexual sins have been present from the beginning of history. After the sin of Adam in the Garden of Eden, the next sins recorded in the Bible are false worship (Gen 4.5, 7), murder (Gen 4.8, 23), and polygamy (Gen 4.19). Sometimes people make the claim that the oldest 'profession' is prostitution. Of course, it is not—Adam was a gardener, Abel a shepherd, Cain a farmer—but their point is that from the earliest times men have had strong desires to satisfy their sexual urges. Besides prostitution, which includes fornication and often adultery, other sexual sins appear early in human history, including polygamy, homosexual practices, group sexual orgies, and bestiality.

It appears that a primary reason why God sent the flood was because of the rampant sexual sins in the pre-flood world (Gen 6.5). However, the flood did not wash away the problem in man's sinful nature. Immediately following the flood there may be a record of a homosexual offense (Gen 9.21-24) and Sodom and Gomorrah were destroyed because of their homosexual practices. All of the nations of the ancient world became embroiled in sexual sins. Consider a few examples: Sumerian, Babylonia, and Canaanite veneration of female deities such as Ashtaroth and associated fertility cult rituals which included shrine prostitutes; incest within Egyptian families that extended beyond the royal family and nobility; Balaam's introduction of sexual deviances with Moabite women in an attempt to deflect Israel from God (Num 25.1; Rev 2.14); homosexual practices, in particular pederasty, in ancient Greece and Rome (as depicted in carvings and frescos); and debauched orgies throughout the ancient world from Babylon (Dan 5.1-4) to Rome.

The world today is as full of sexual sins as it was at any time in its history. A catalogue of sexual sins would be

endless. However, we note how sexual sins are venerated rather than rebuked: today's *glitterati* bask in the attention they receive from their adulteries and divorces; producers of movies and television shows think that telling a well-crafted story is not sufficient and that their productions must include sexual innuendos, nudity, and depictions of sexual acts; ICANN agreed to introduce the xxx generic top-level internet domain for pornography; and any city that does not endorse an annual 'gay' pride parade is considered to be prudish and intolerant.

God endowed mankind with strong sexual urges. Males, by the time they are about 13, start to feel the effects of testosterone surging through their gonads and begin to think about what it would be like to be with almost every girl they see. Females are affected differently; their urges are more influenced by their monthly cycle and by their emotional state and feelings of connection. These urges are natural (i.e., part of the constitution of man as he was created) but have been adversely affected by the introduction of sin and are abused today. At least two reasons can be postulated for why God made man this way: 1) to encourage mankind to fulfill its mandate to be fruitful and to multiply (Gen 9.1), and 2) to bring together husband and wife in intimacy (Gen 2.24).

There are factors in our modern world which have exacerbated the prevalence of sexual immorality and the abuse of natural sexual urges, including sophisticated methods of birth control (e.g., the 'pill'); abortion, which is often used as a form of post-coitus corrective; and government social policies and programs which encourage the separation of sexual acts from family settings and from the consequent conceptions which may follow. Our society is steeped in the concepts that sex is 'making love', sex without commitment is standard protocol, and sex without the possibility of procreation is normal. In the West we have seen dramatic declines in reproductive rates. A number of causes may be postulated—from individual selfishness to a misplaced concern for the environment—but surely a key causal factor is the ability to separate more easily the sexual act from procreation.

Christianity stands out among all of the world's religions with regard to its emphasis on sexual purity. Most ancient religions (excluding the teachings of the OT) included sexual acts as part of their cultic practices. Today, Islam accepts sexual deviance with its explicit endorsement of polygamy (up to four wives at a time), implicit endorsement of fornication through easy divorce, and a blind-eye to pederasty. The Bible's teachings are clear. Proverbs warns young men to avoid the adulterous tempter. Both the OT and NT teach that the *only* place for sexual intercourse is within the married relationship of one man and one woman (Gen 2.24; Heb 13.4). Paul warns Christians to flee from sexual immorality (1 Cor 6.18; Eph 5.3), with the full knowledge of how strong sexual urges are, and encourages young men and women to fulfill their sexuality within the context of marriage (1 Cor 7.9) and avoid sexual sins which are signs of the unrighteous who will not inherit the kingdom of God (1 Cor 6.9).

Bounded Patience [July 29]

(Gen 6.3)

The LORD announced that judgement was coming on the ancient world. In all of the instances where God spoke previously, he spoke directly to entities within his creation. This is likely the first instance where he spoke to people through a prophet. By this time, Enoch had been taken from the earth, so the message might have come through Methuselah, Lamech, or Noah. Noah is referred to as a preacher of righteousness (2 Pt 2.5), so it was probably through him that the message was delivered. In his 480th year, Noah declared to the pre-flood world the message of God's judgement on their wickedness.

The first part of the message indicates that God's patience with mankind's sinful behaviour was running out. There are various translations of what God said: "My Spirit shall not ... abide in/remain with/contend with/strive with/rule in ... man forever." The root of the Hebrew word that underlies these translations is probably the word for 'dwell' (although some suggest that it is the word for 'shield'; i.e., 'protect'). Therefore, the idea being expressed could be:

- God would discontinue his work of general grace in mankind's hearts, by which he limited their sin, and instead would give them up to their lusts, to sexual impurity (Gen 6.2), and to dishonoring their bodies among themselves (Rom 1.24).
- God the Holy Spirit would no longer convict and admonish their consciences so that they might turn from their

sin to the living God.

- God would no longer suspend judgement of their sins and instead would bring them before his judgement tribunal.
- God would withdraw his animating, or life-giving, Spirit from all men; which he did on the day the floodwaters covered them (Gen 7.21).

The reason given for God's change of behaviour toward mankind is that man is 'flesh'. Obviously, this does not mean that because man has a physical body God would punish him. God had given Adam his physical body and it was originally perfect. Jesus also had a physical body while he walked among men, and still has a resurrected physical body. There is no room for the idea that physicality is intrinsically evil. The use of 'flesh' also does not mean that man was mortal or weak. Helplessness may result from sin, but it is not sinful in itself and does not warrant punishment—otherwise Jesus would have been culpable when he was an infant and when he faced death. The term 'flesh', as it is used here, is speaking of the ethical state of mankind—it is the first time 'flesh' is used in this manner. The use of 'flesh' in verse 12 corresponds with this meaning. The translation 'flesh' is therefore better than the translation 'mortal', as in the NIV. Mankind is called 'flesh' because of the prevalence of depraved sexual sins; in particular those committed by the sons of God (the line of Seth) who took women from the line of Cain as their wives (Gen 6.2).

From the perspective of a wicked person at this time, it may have appeared that God did not directly punish sin or even punish it at all through secondary events. He had told Adam that on eating the fruit of a particular tree he would die. Yet Adam had lived 930 years. It did not seem that Cain's punishment for murdering Abel was too onerous, despite Cain's complaint about it being heavy. Lamech's boast of murdering a rival for his wives' affections did not result in a rebuke from God. And, everyone seemed to be able to do anything wicked he wanted to do (Gen 6.5) without there being any repercussions. We can imagine that when Noah came along and told his contemporaries that after 120 years God was going to punish them, they were incredulous and laughed at his message. They would have used the same retort that people today use when the return of Christ and the final judgement of the world are proclaimed—"Where is the promise of his coming? All things are continuing as they were from the beginning of creation." (2 Pt 3.4)

God's patience with man's wickedness had reached its limit and he was preparing to act in judgement. However, rather than immediately terminating all human life, God gave mankind a 120-year warning that he was unwilling to permit their sin to continue indefinitely. This extension on their lives and society may have had various purposes:

- Noah needed time to build the huge ark. Although the command to build the ark would not be given by God for another 20 years, God anticipated the time needed for its construction (1 Pt 3.20).
- God intended for the message of pending judgement to be proclaimed widely. It is possible that for 20 years Noah travelled throughout the inhabited continent calling men to repentance. Then, while he was building the ark the news would have spread, and people would have asked about its purpose. Noah would have declared again that judgement was coming. Yet there doesn't seem to have been a change of heart among any of the millions alive at that time. Noah was among the most unsuccessful missionary evangelists in the history of the world!
- God is immensely patient with mankind. His desire is to see men repent, not that they suffer everlasting damnation (Ps 86.15; Ezk 18.23; 2 Pt 3.9).
- God did not permit man any excuses. Men could not say that the flood came as a surprise. When judgement finally came, they knew that they had been warned and had chosen to reject the opportunity to repent.

God has given us the same kind of warning—Jesus is coming back, and we will have to appear before him in judgement and give an account of our lives.

The Tyrannical Nephilim [July 30] (Gen 6.4)

Giants are found in the myths and legends of many ancient societies and cultures, such as: the Sumerian Humbaba the Terrible, the son of Utu the sun-god; P'an-Ku in the Chinese creation myth; Orion and the Olympian and Titan demigods in Greek mythology; and Ymir in the Norse legends. Modern myths also include giants such as Marvel Comics' Giants of Jotunheim. And, the comic-book hero Superman is the equivalent of some of the ancient giants, although not in stature, with his heroic exploits. It seems that we all have a fascination with giants. As evidence, which of us isn't intrigued by the account of Goliath in the Bible?

The King James translation of this verse has contributed to this fascination with giants by stating that they inhabited the antediluvian world, "There were giants in the earth in those days." (Gen 6.4) The King James translators followed the Septuagint (Greek OT) translation which supplies *gígantes* for the Hebrew *nephilim*. Modern translations (such as the ESV, NIV, and NASB) do not provide an interpretive translation, but transliterate the Hebrew word into English. The translation 'giants' has led many people into confusion. For example, some Christians accept the claim presented in a Jewish writing from before the time of Christ, the *Book of Enoch*, that the Nephilim were a species of giants born from the union of (fallen) angels and men. Some of these people go on to claim that there has been a cover-up to withhold the *Book of Enoch* from the Church.

The Nephilim were not human-angelic hybrids. This verse (Gen 6.4) states that "the Nephilim were on the earth in those days", implying that they were already on the earth when the sons of God took wives from the daughters of men, and when the 120-year warning of pending judgement was given to mankind through the prophetic preaching of Noah. There is no causal connector (e.g., an 'and' or a 'thus') connecting verses 2 and 4 in the text and there is no mention of the Nephilim being the offspring of the unions mentioned in verse 2. Also, the Nephilim cannot be the spawn of demons, since Nephilim also existed after the flood (Num 13.33). To suggest that the Nephilim survived the flood is a direct contradiction of Scripture which states that every living creature on the earth was destroyed by the flood (Gen 7.21). Also, to suggest that a tribe of Canaanites (who were humans descended from Noah) were human-angelic hybrids is simply ridiculous.

Other, apparently, Christian writers who have been fooled by evolutionary theories, state that the giants were a pre-Adamic species of creatures which were not *Homo sapiens*. As evidence, they point to fossils of considerably larger human footprints than would be produced by humans today. It is certainly possible that fully grown humans prior to the flood were larger than people are today—the antediluvian environmental conditions appear to have supported larger body structures, as demonstrated by the many fossils found of large instances of animal species represented today in smaller forms; and the human genome included the possibility of larger human bodies, as shown by the fact that Goliath was about 50% taller than an average person is today (1 Sam 17.4).

The Hebrew word *Nephilim* appears only in Genesis 6.4 and in Numbers 13.33. This limited usage makes it difficult to determine its exact meaning. Some attempt to infer that the Nephilim living in Canaan at the time of Moses were giants from the fact that the spies claimed that they felt like grasshoppers before them. However, the faithless spies reported that all the people of the land of Canaan were of a great height (Num 13.32). Also, most interpreters of these verses, with a solid understanding of Hebrew, state that the word *Nephilim* is a noun form of the common verb 'to fall'. Therefore, the Nephilim were those who fell upon other people (for example, Job 1.15; Josh 11.7); in particular those who fell upon others with the intent of subduing them. The term *Nephilim* has nothing to do with their stature but rather with their ferocious aggressiveness. Thus, the Nephilim became renowned as warriors because of their violence. Wherever they went they raped, plundered, and pillaged and they left devastation and carnage. If we are to translate the word *Nephilim*, probably it is best to translate it as 'despots' or 'tyrants'.

The pre-flood Nephilim acted in ways similar to marauding Vikings, who earned their reputation as fierce and fearless combatants by burning crops and villages and taking hostages as slaves. But, the Nephilim went far beyond the Vikings in their evil ways, because they used their domination to extend direct control over mankind as the first empire builders in history. They were the antediluvian equivalent of Attila the Hun, Genghis Khan, Hitler, and Mao Zedong. However, they were far worse than any of these men, because they lived for hundreds of years. We can only imagine the evil which they were able to perpetrate as they consolidated power and went to war with one

another for centuries. The Nephilim relied on their strength and became excessively proud of the empires they built. They displayed no fear of God or man as they executed their designs with lawless abandon. Therefore, because the earth was filled with their violence (Gen 6.13), God determined that this was another reason to put an end to mankind through the flood and to shorten human life to 70 or 80 years (Ps 90.10) so that no human could ever again wield such power and inflict such violence on his fellow humans.

Pervasive Perversion [July 31] (Gen 6.5)

Superlatives fail to describe the extent of the wickedness in the earth prior to the flood. The moral situation has been described as "abnormally depraved", a "terrible morass of wickedness and corruption", "prodigious wickedness", "unprecedented corruption", and "incorrigibly wicked". God informs us that "*every* inclination" of mankind was "*only* evil *all* the time". The extent of the wickedness included a desire to satisfy physical appetites (Lk 17.27), a passion for entertainment (Gen 4.22), a focus on economic and technological advances (Gen 4.17, 22), abuses of marriage (Gen 4.19; Gen 6.2), corruption (Gen 6.12), violence (Gen 6.11, 13), honour being given to notorious tyrants (Gen 6.4), rejection of God's word (1 Pt 3.20), professed atheism (Jude 15), and false worship (Gen 4.5-7). The account of early mankind's fall into depravity is a catalogue of pervasive perversion.

You might think that the antediluvian state of affairs was not very different from how things are today. Paul certainly seems to suggest that the situation in the last days (i.e., today) is similar to that in the first days (Rom 1.28-32; 2 Tim 3.2-5). The breadth of depravity appears to be the same in all ages. So, it would seem that God is describing our own day in his observation in Genesis 6.5. However, the depth of depravity was far worse in Noah's day than it is today. It is hard for us to imagine how bad things were then, because we live in the post-resurrection age in which Satan is bound (Rev 20.2), and evil is limited by God's general grace to a greater degree than it was. Factors which made the situation significantly different then are, at least, the following:

- The long, healthy lives that people could expect to live resulted in bodily decay being delayed and the threat of an imminent personal natural death being far from their experience. Therefore, people could live hedonistic lives and postpone the effect of aging, like Dorian Gray. Moral dilettantes could experiment with all forms of evil without suffering repercussions.
- During their long lives, tyrants could consolidate considerable power and amass armaments with which to wage war for centuries. In relative terms the superpowers of today are mere amateurs compared with the empires that arose in the first-world.
- The righteous were rare on the earth. Noah (Gen 6.8-9) and his immediate family appear to be among the few that retained a reverence for God and his law. True worshipers of God today represent a considerably larger percentage of the world's population. There was little of the leaven of Gospel influence in Noah's day.
- Collective sin became so bad that God's patience ran out. From God's perspective human society and institutions were beyond redemption. God has not yet reached that point with modern man.

Solomon tells us not to say that the former days were better than now (Eccl 7.10). Rather, we should be thankful that our situation is far better today in many respects. It includes: Christ's completed purchase of redemption for his people, God's provision of his final revelation to mankind in the Bible, and the reality that a great number of mankind is being ransomed daily from sin.

The root cause of this pervasive perversion was the human heart. In the Bible, the heart stands for what we today would call the 'mind' or the 'will'—the place of thought and volition. Each person was consumed by a compulsion to conceive and prosecute only evil all the time—it was entirely deliberate, with no possibility of an excuse of ignorance. The worldwide flood did not clean the heart of mankind; it only temporarily removed the pollution caused by the antediluvian depravity. The heart of man today is as desperately wicked (Jer 17.9; Rom 3.10-13) as it was before the flood. This verse (Gen 6.5) provides the first explicit statement that all of mankind is entirely sinful. There is no good thing in natural man. Contrary to the claims of philosophers like Rousseau, who believe that man is born innately good and that society corrupts him, man is born innately bad and corrupts everything he

touches. And, contrary to the portrayal of the fantasies of people like the painter Gauguin, the natives of Tahiti did not live in a state of innocence. Wherever man travels, whether by outrigger canoe or supersonic jet, he takes the designs and devices of his evil heart with him. Without the merits of the sinless blood of Christ applied to the human heart, without a change of heart, without a bowed heart, without a repentant heart, the best works of men are godless works.

The LORD saw mankind's wickedness and it stirred him to action. This does not mean that God is like some distant watcher who has to turn his attention to events on the earth in order to discern what is transpiring. Nor does it mean that the currently popular idea (called 'open theism') that God's knowledge is contingent on observing human behaviour is correct. God has total, intimate foreknowledge of every thought that passes through our heads and of every action we take with our bodies. Some reasons why this verse says that the LORD *saw* the state of mankind, are to: reinforce the truth that God was fully aware of what men were thinking and doing; inform us that God was paying attention; and remind us that although God does not act in haste, even his patience has a limit and he must act in justice.

Despite the pervasive perversion that filled the world to the brim, there were still signs of hope. The godly line of Seth, to Noah's sons, had been protected from the enemies of God, and God had given mankind 120 years (Gen 6.3) to heed the preaching of Noah and repent.

Gourmands Abounded [August 1]

(Gen 6.5)

Jesus tells us how the people before the flood lived: "For as in those days before the flood they were eating and drinking, marrying and giving in marriage, until the day when Noah entered the ark." (Mt 24.38) He uses "eating and drinking" as a synecdoche for all of life—meaning that people went about their daily lives totally clueless about the destruction which was to come upon them very soon. However, it seems rather obvious that people would be eating and drinking before the flood—a simple necessity to stay alive. So, there is probably a deeper meaning to what Jesus says. He often spoke in hyperbolic terms—e.g., about cutting off a hand or plucking out an eye—but in this instance, he may be speaking in an understated manner and using "eating and drinking" as a *double entendre*. Mankind's inclination to continually pursue evil would have included a passion for entertainment and partying. A key component of a party is the availability of a variety of food and drink. Thus, when Jesus speaks about the eating and drinking of these antediluvian people he may be speaking of more than their consuming food for sustenance. He may be speaking of an obsession with food and drink and may be giving a veiled reference to their debauched lifestyle.

We can use post-flood history as a corollary. From the behaviour of later 'civilizations' we can extrapolate to help understand man's continual sinful intentions and to determine the kinds of things which may have transpired in the pre-flood "eating and drinking". The Sumerians, one of the earliest post-flood civilizations, held special feasts on the day of the new moon, and at other times, determined by lunar and solar events. Daniel 5.1-31 records a debauched Babylonian feast—likely associated with Belshazzar's birthday. The Greeks are reported to have held bacchanalia—wild and mystic festivals for the wine god Bacchus. The term has since come to describe any form of drunken revelry. The Greek poet, Archestratos, is reported to have written (c. 350 BC) a poem *Hedypatheia (Life of Luxury)* which advised a reader on the best food in the Mediterranean world. The Romans also placed an emphasis on feasts associated with triumphs and quasi-religious events. The sumptuous banquets of high-ranking Roman officials and the wealthy are notorious and went to extremes including such oddities as stuffed mouse and sow's udders. In addition, if we understand Seneca correctly, vomiting seems to have been a standard part of fine dining—to make room for more food intake. Cicero indicates that Julius Caesar took a "precautionary emetic" so that he could eat and drink "heartily and unrestrainedly" from a well-served dinner. He used emetics to keep his weight in check without having to refrain from indulging.

Today there is an equally significant emphasis on "eating and drinking". Many events—from the supposed date for

the birth of Christ to the closing minutes of a year—are used as an excuse for holding extravagant "eating and drinking". To illustrate the extent to which "eating and drinking" is engrained in our culture, consider how many TV shows deal with the subject. I knew that 'reality shows' dealing with food and drink existed. I had watched a few episodes of a series dealing with food processing and production and I had seen members of my family watching a show called Cake Boss. Then I looked at the Food Network website and found about 125 shows listed, with names like: Ace of Cakes, Barefoot Contessa, Cooking for Real, Dessert First, Extreme Chef, Glutton for Punishment, Iron Chef, My Life in Food, Sugar Rush, and Worst Cooks in America. We might have concluded that North Americans are obsessed with sex. But on second thought, they are obsessed with food. The levels of obesity in North America are indicative of the number of gourmands who are excessively fond of eating and drinking.

Mankind's problem with an obsession with food started in the garden when Eve saw that the fruit of the forbidden tree was good for food and a delight to the eyes and she took and ate. Another example of how a food obsession can corrupt is Esau, who despised his birthright to fill his belly. Later, Isaiah speaks to the situation in Jerusalem—they should have been mourning in sackcloth, but instead they were feasting and drinking—when he states what the people will say, "Let us eat, drink, for tomorrow we die." (Is 22.13)

The eating practices of the pre-flood population may have traversed the line of propriety into the unlawful and macabre. At creation God had provided the produce of the field—fruits, vegetables, grains, nuts (Gen 1.30)—as food for men and animals. After Adam's sin, some animals became carnivorous—there is evidence of animals eating other animals in the fossil record. It is possible that men also began to eat animal products, starting with milk and eggs, and then consuming meat and thereby became 'beastly'. Since God does not provide for a change in human diet until after the flood (Gen 9.3), eating meat would have been a direct challenge against God's law. It is also possible that the antediluvian inhabitants of the earth included cannibalism in their rebellious behaviour—eating the brains or drinking the blood of one's conquered enemies is likely not a practice confined to postdiluvian pagans.

Thus, when Jesus indicates that the people before the flood were "eating and drinking" he is probably indicating that their behaviour had significant moral implications. However, God intended "eating and drinking" to be a blessing. Life in the new paradise—the new heavens and earth—will include feasting (Rev 19.9). So, God will restore not only the created physical order but is also going to redeem even eating and drinking.

God's Regret [August 2] (Gen 6.6-7)

If you had purchased a luxury car and enjoyed driving it, you would be very disappointed if it suddenly began to break down every time you drove it and you had to pay to get it towed. Your disappointment would be caused by the car not meeting its promised potential and your expectations. This illustration provides an, imperfect, analogy for the regret that God had about mankind—created perfect, but dramatically failing to meet his design objectives.

However, the use of the words 'regret' and 'sorry' or 'grieved' [NIV] should not be understood as God's saying that he had made a bad decision when he had created mankind. The interpretation of these verses is difficult because we are confronted with the inadequacy of human language to convey concepts outside of our finite experience. As an illustration of this deficiency, consider Paul's statement 'before the beginning of time' [NIV] (2 Tim 1.9; Titus 1.2). From one perspective, this is meaningless since nothing can be 'before' when there is no time. So, God's regretting that he had made mankind does not mean that he had changed his mind or purposes or felt that it had been a mistake. It also does not mean that God wished that he had not created mankind. These ideas cannot be part of the meaning, since God does not make mistakes and his purposes are as changeless as his nature (Mal 3.6; James 1.17). Instead, it means, as an approximation, that God was sorrowful over mankind's escalating wickedness (Gen 6.5). There will always be difficulties when we use human words to describe God, but these are the only words we have. God uses our words to communicate his intentions to us, or otherwise all communication about his nature would be meaningless and we could not know anything about him. He deigns to reveal his inscrutable and

mysterious nature in terms that we can understand.

Someone might attempt to address the conundrum of God's 'regretting' by suggesting that he didn't know that man would sin, or sin so badly. However, that suggestion would neuter God and make him finite. The reality is that God not only knew that man would sin, but decreed it. Man's wicked actions are no surprise to God. We can, again, use an imperfect analogy to help understand God's purposes. Before a couple undertake to have a baby, they may think about the fact that their child will at times be disobedient and require discipline. This does not stop them from reproducing. They look beyond the 'terrible twos' and the 'rebellious teens' with an expectation that their child will become a productive member of society and possibly be of great benefit to mankind, for example, by making an important discovery. God, likewise, looked beyond mankind's childhood to his ultimate maturity in Christ. God had a great plan to show his infinite love through a redeemer, by conquering death and saving a great multitude who would dwell with him forever in a better paradise than the original in the Garden of Eden.

We notice that God was grieved to his heart. As we saw previously, the heart stands for what we today would call the 'mind' or the 'will'—the place of thought and volition. The heart, in Scripture, is also associated with the seat of our emotions (Ps 73.21; Prov 15.13; Song 3.11). This indicates that man's sin elicits an 'emotional' response from God. Again, the passage requires the use of an anthropomorphic concept to explain God to our finite minds. God's divine nature cannot be subject to passions as humans are, since he is immutable and imperturbable in his mind. Nevertheless, Scripture attributes a number of human emotions to God, including: grief (Ps 78.40; Eph 4.30), anger (Ps 7.11), love (Jn 3.16/), and, indirectly, joy (1 Ki 10.9; Neh 8.10). Of course, Jesus as the God-man experienced human emotions while on the earth (Jn 11.35; Heb 12.2). However, God's 'emotions' are not equivalent to human emotions in their nature or realization. For example, God does not react to transpiring events in an uncontrolled manner (e.g., excitement, panic, fear, or unjust anger) as men and women often do.

The attribution of the passions of regret, sorrow, and grief to God because of man's wickedness teaches us about:

- 1. *God's engagement with his creation*. God is not an aloof watcher who put in place matter, motion and attracting forces and allows the universe to unfold according to natural laws. God is intimately interacting with his creation by instantaneously sustaining (Col 1.17; Heb 1.3) and governing (Ps 99.1; 1 Chron 16.31) it.
- 2. God's aversion to sin. God's holy and just nature requires that sin be dealt with decisively, with absolute fairness.
- 3. *The extreme seriousness of sin*. God is insuperably patient, yet eventually he is brought to the point where he must deal with mankind's continual evil (Gen 6.5) and blatant rebellion against his holy law.
- 4. *God's love for mankind*. That God can be caused incomparable anguish by man's sin indicates that he has a great concern and care for mankind. Man was created holy and to be holy. God's heart is broken when he sees his beautiful creation being spoiled by man's sin, and his image-bearer not living up to his created potential.
- 5. *A vicarious substitution*. Pain was a concomitant aspect of the curse on sin (Gen 3.16-17). But while man takes pleasure in his sin, God absorbs the pain with sorrow (Is 53.3) and chooses to suffer for mankind's sin. The ultimate substitution occurs in the fact that while we were still sinners Christ chose to die for us (Rom 5.8).

God's Determination to Judge the Earth [August 3]

(Gen 6.7)

In older neighbourhoods, some houses are considered not worth renovating; rather, they are purchased as teardowns which must be completely rebuilt on an empty lot. This illustrates the situation with the household of mankind before the flood. Its wickedness was so grievous and pervasive that God determined that the only way to deal with it was to tear it down and start over on an empty earth. God's determination to take such an extreme action indicates that there was no other possible way of dealing with sin than physically washing away its perpetrators and their legacy.

The principle that sin must be punished by death was first stated by God in the penalty associated with the prohibition given to Adam against eating from the fruit of the tree of the knowledge of good and evil (Gen 2.17).

Ultimately, in God's eyes, all sins are capital crimes, and deserve death. This principle held firm throughout the antediluvian era and continues to this day (Ezk 18.4). As a result, every person who sinned in the antediluvian period eventually died, as will everyone living today (assuming that Christ does not return prior to their death). However, God determined that a more immediate punishment of sin was required than just eventual death—which could have been postponed for many by nearly a millennium.

We have no means of determining what institutions of government were in place prior to the flood. However, we can suggest that any governments which existed were military autocracies (Gen 6.4). In addition, it appears that God had not delegated capital punishment to civil magistrates prior to the flood (Gen 4.11-15; Gen 9.5-6). If these inferences are correct, then it would seem that prior to the flood there was a limited and inconsistent administration of judgement and punishment for crimes. If we can extrapolate from postdiluvian examples of tyrannical regimes, the concepts of legal rights and due process would have been non-existent. The people living in the days before the flood would have cowered in terror as they were surrounded by moral and societal anarchy, vigilantism, and arbitrary despotism.

God determined to fill the worldwide judicial void and to execute retributive justice against the serious crimes of that era—i.e., with capital punishment. Thus, he reveals his thinking that it was necessary to blot out mankind from the face of the earth. He also provides the warrant for his decision—he created mankind. As Creator, God has the right to end a person's physical life as much as he has a right to give a person physical and spiritual (i.e., non-material) life. His determination to blot out mankind was to punish them in a manner suited to their crime and to bring an early end to their perpetual rebellion. Every one of the unrepentant individuals who died in the flood did not cease to exist. They have been consigned to an endless, conscious existence in Hell. God's right to destroy his own creation—i.e., to undo his creative work—is not equivalent to the behaviour of human despots. God's authority is absolute; human authority is derived and delegated. God's authority is principled; human authority is arbitrary and capricious. The term used for 'blot out' has the sense of 'erase' or 'wipe clean'. It does not have the sense of 'annihilation', but of cleansing something so that it can be reused. God's determination was not to destroy mankind completely, but to punish him according to the nature of his crimes.

We might wonder why God undertook to cleanse the earth and to start over with Noah and his family, when he knew that every intention of the thoughts of man's heart was only evil continually (Gen 6.5). The answer lies in covenantal continuity. If God had annihilated mankind—what all men deserve for their rebellion—whatever God would have put in the place of mankind would not have been *man*. God's promise to Eve was that one of her own offspring would rescue mankind and conquer Satan. God had determined to show the greatness of his love by not only sparing Noah and his family but by sending the God-man to be the redeemer of mankind. Ultimately, God receives the greater glory through a dispensation that combines judgement with love.

Covenantal continuity also explains why the animals were to be blotted out with mankind. Animals were created for man's benefit, placed under his authority (Gen 1.26), and designated as his servants. They suffered when the curse placed on Adam was extended to the entire creation (Gen 3.17-19). In addition, animals were held to be indirectly accountable for man's sin, as accomplices in it and by being used to further his schemes and lusts—for example, cows provided milk which men used to fortify themselves so that they could carry out their evil plans, horses were used as instruments of war, and undoubtedly some animal kinds were used for man's sexual perversions and others were trained to attack and kill men. Also, as there is collateral damage during a war, when God punishes—by flood, famine, plague, armies of conquest, etc.—both man and beast suffer.

All of Noah's ancestors died before the flood. It is possible that the only persons alive, among the millions living before the flood, who believed in God's promised Messiah were among the eight who survived the flood in the ark. However, if some people believed besides Noah (Gen 6.8) and his immediate family, they were wiped out by the flood along with Noah's siblings and Noah's other children. They suffered as collateral damage as the animals did.

Noah Found Favour with the LORD [August 4]

(Gen 6.8-9)

In Scripture, we often find important 'buts'—such as Adam was permitted to eat from any tree in the garden, *but* one; the animals were brought to Adam, *but* none was a suitable helper for him; and Abel's sacrifice was acceptable before God, *but* Cain's was not. Here (Gen 6.8) we find a 'but' that sets up a significant contrast between Noah and his contemporaries. This contrast consists of God's regret and resolve, followed by his regard for Noah and Noah's response.

Considering the comprehensive wickedness consuming his beloved creature (Gen 6.5-6), God determined to rectify the situation by removing the stain of sin from the world and starting over. As we know, the re-start did not rectify the situation; man's heart continues to perpetrate only evil. It is not that God did not know what the results would be. Rather, he used the re-start as an object lesson to show that there could be no change in the human heart unless the promised offspring of the woman restored righteousness.

Finding no one innately righteous, God planned to punish mankind (Gen 6.7). Yet, at the same time, he determined to display his amazing love by showing his favour to a portion of the human race which he would save by grace. Noah is specifically mentioned as finding this grace (favour)—although there may have been others alive at that time who believed in the coming Messiah and had repented of their sins, including his father and grandfather and three of his sons. Noah is one of the few persons in the Bible explicitly described as finding favour with God—Abraham (Gen 18.3), Moses (Ex 33.17), Gideon (Judges 6.17), and Mary (Lk 1.30) being others. These individuals are all described as instances of the work of God's grace. However, Noah is singled out from his generation as an exemplar of saving faith and of the contrast between the wicked and the godly (Ezk 14.14, 20; Heb 11.7).

Prior to this point, the Biblical account is silent about Noah's belief and piety. He was not naturally more righteous than his contemporaries—that we later find him drunk and lying naked (Gen 9.21), demonstrates this point. The reason that he found favour with God was not because of anything that he had done prior to being singled out by God, but because of God's elective grace. As with God's promise to the woman about the seed to come, God's favour begins with his own will and purposes. We must read the account in the order it is presented (verse 8 before verse 9; not the other way around). The reason that Noah was righteous and blameless and walked with God was because his salvation started with God's favour. The whole world was wicked, but God acting with free grace chose to show undeserved favour to Noah. In this there is hope—in the midst of human perversity in every generation, God turns his eyes toward some and saves them from their depravity (1 Cor 15.10; Eph 2.8-10).

The result of God's looking favourably on Noah is that he was justified and sanctified and continued to persevere by faith. He stands out as the first person in history to be declared righteous—although, Adam and others before Noah, such as Seth and Enoch, were also justified and saved by faith in God's promise. Noah was declared righteous—his forensic standing before God had been changed from guilty to innocent. He took God at his word and believed the warning that mankind would soon be judged (Gen 6.3, 7)—that is, he was justified by faith. Thus, in an age of unrestrained evil, Noah stood out from his contemporaries as one who was in a right relationship with God.

His justification was accompanied by his sanctification—he was blameless in his generation, and his behaviour differentiated him from them. He was not perfect, but he lived a life characterized by comprehensive holiness and piety. This means that he would have been known by his contemporaries for his commitment to his wife and avoidance of the sexual sins they practiced, for his honesty in business dealings as he purchased supplies for the construction and outfitting of the ark, for his sincere preaching about God's righteous requirements and the coming judgement (2 Pt 2.5), and for his acceptable worship of God with the sacrifice of ceremonially clean animals (Gen 7.2).

The word, in the Hebrew, translated 'generation' in the ESV (Gen 6.9) is different from the previous word in the same verse translated 'generations'. The first word, 'generations', could be translated as 'account'. The second

word, 'generation' is actually a plural form and should probably be translated 'generations', meaning 'successive generations'. Noah stood out in the eyes of the many generations who were his contemporaries but found favour from none of them. Instead they hated his holy example and his convicting preaching. It was only by the grace of God that he was not surrounded and assailed by wicked men, as Lot almost was (Gen 19.4). Noah walked with God, as had Enoch before him (Gen 5.22). While surrounded by moral filth and wickedness on every side, he refused to give in to compelling temptation and undertook the strenuous battle of living in holiness through centuries of overt perversity. He displayed a remarkable consistency in his practice day by day, as he persevered in his faith.

Thus, Noah is presented to us as one who withstood the force of the immoral currents of his day. The account of his life serves as an exhortation to holy living and persevering faith in the face of prevailing degeneracy.

Noah's Generations [August 5] (Gen 6.9-10)

The history of the early world was recorded by Adam (Gen 1.1-5.1a) and Noah (Gen 5.1b-6.9a). Noah's account ends at verse 8, and he signs off with the first sentence of verse 9. A new account, recorded by the three named sons of Noah, begins in the second part of verse 9 and continues through 10.1. This new account covers the period of transition—from the early world, through the flood, to the new era when men began to repopulate the earth. A key component of this account is the record of the flood, which takes up the bulk of the account. However, the account of the flood is a backdrop to key events in the life of Noah and included to highlight his faith. His sons recorded this account because they wanted all mankind to know about their father's:

- *Piety* Noah was a righteousness and blameless man in stark contrast to his contemporaries who were consumed with wickedness (Gen 6.5, 11-12).
- *Preservation* Noah persevered by faith as he built the ark and was preserved by faith through the flood by entering the ark (Gen 6.13-8.19).
- *Pact* Noah was the recipient of a new enactment of the covenant between the Creator and mankind (Gen 8.20-9.17).
- *Problem* The flood could only cleanse the physical earth; it could not cleanse the heart of man, which remains a problem as it continues to spawn evil, even from righteous Noah (Gen 9.20-27).

The three sons on Noah begin their account with a summary of their father's piety, and then introduce themselves as his sons, who would survive the flood by accompanying him in the ark. Noah stands out from his generation¹¹ and is credited with a strength of faith that few in history have displayed. We noted previously that Noah's piety consisted of three parts:

- *Justification* He was declared righteous through faith.
- *Sanctification* He lived a blameless life. He was not perfect, but lived a life characterized by a desire for holiness.
- *Perseverance* He walked with God, displaying remarkable consistency through centuries of overt perversity around him.

He is an exemplar of saving faith (Ezk 14.14, 20; Heb 11.7), and lived a life that contrasted markedly with the lives of those who were drowning in the flood of their moral filth. His righteousness is a proximate reason (the ultimate reason being God's grace) for why Noah was warned about the pending punishment of the world by the flood (Gen 6.3, 13, 17).

At the time of Noah, the number of believers was proportionally very small compared with the number of the wicked, because every intention of the thoughts of their hearts was only evil continually (Gen 6.5). Thus, Noah's piety stands out as a rarity among his contemporaries. But what makes Noah stand out even more is the fact that he stood for the truth about the flood. There are 'nut cases' who stand out for their belief in a flat earth, for refusing to

¹¹ More accurately, 'generations'; many generations, over six hundred years, until the flood came.

pay taxes, or for their spiked hair dyed in rainbow colours. But people rarely stand out for belief in truth. The truth Noah stood for, and expected people to believe, was that a worldwide flood was coming. His generation would have scoffed at him and called him a fool. Standing for the same truth today is one thing that differentiates people from the rest of this generation. Christians who hold to the truth that there was a worldwide flood are scoffed at and called fools, even by many in the 'Christian' academic community. Belief in the flood is as much an intellectual watershed now as it was in Noah's generation.

Noah's insistence that there would be a flood was not established by majority consensus. The truth he believed was based on the word of God. Thus, Noah stood out for his belief in absolute truth. Today the Church is confronted with the same challenge—either it stands for truth or concedes ground in matters such as: God having created in six natural days, man being a distinct kind of creation, the worldwide flood, marriage as a relationship between one man and one woman, the unnaturalness and sinfulness of homosexual practices, the evil of abortion, and the physical resurrection of Jesus from the dead.

Shem, Ham and Japheth were born after Noah received the warning of the pending punishment and the command to build the ark. They grew up hearing Noah preach and likely helped him build the ark. By God's grace they also likely believed the message and so were granted preservation through the flood and given the privilege of being the progenitors of all of mankind after the flood. This is one of the reasons why they are named for a second time (the first is in Genesis 5.32) in the historical record.

The account recorded by the sons of Noah is bracketed by the listing of their three names at the start (Gen 6.9) and at the end (Gen 10:1). This account is unique, being the only one in Genesis which is attributed to more than one person. This is significant since there is probably no account in the Bible which is dismissed and ridiculed as often for its claims to be an historical account. However, the account indicates that it is from three eyewitnesses, giving it a form of legal credence (Dt 17.6; Mt 18.16)—the three effectively authenticate it with their verbal seals. Through this written account. Shem, Ham, and Japheth inform their progeny that there was a worldwide flood that destroyed every living land-based creature not in the ark. They tell us that the account we are about to consider is history, not myth!

Corruption Filled the Earth [August 6] (Gen 6.11-12)

We considered previously that God had declared that the all-consuming wickedness of mankind—filling their thoughts continually with evil (Gen 6.5)—was the reason that he planned to blot them out from the face of the earth (Gen 6.7). As Noah's sons begin their account, they again note the wickedness of mankind as the reason for the flood; and present this wickedness as a contrast to the righteousness of their father (Gen 6.9), who would be preserved through the destruction. In these two verses (Gen 6.11-12), they use the word 'corrupt' three times, and also the word 'violence'. Thus, they inform us that the immorality before the flood was so complete and pervasive that there was no hope of reform, and God's plan to punish all of mankind was entirely justified. Looking back after the flood, they must have marvelled that they had escaped the flood; but they had no reservation in stating that the flood was the necessary consequence for the evil that they witnessed for about a century.

Their account does not identify the specific types of corruption which filled the earth. However, the reference to 'flesh' hints at the nature of this corruption. Also, in the immediate context, mankind's corruption is presented as antithetical to the righteousness of Noah and his walk with God. We can, therefore, conclude that there were three classes of corruption before the flood; which are also exhibited by men today. First, men who live without an explicit acknowledgement of God and his righteous standards fall quickly into idolatry. Men by nature are not atheists, contrary to the claim of some—they are anti-theists, i.e., anti-God. They turn against the true God and replace him with gods of their vain imaginations and worship those gods through idols (Rom 1.21-23). If Paul found Athens "full of idols" (Acts 17.16), he would have found the cities of the antediluvian world drowning in them.

Second, the pre-flood world was full of every form of perversion. When men reject God, the primary form of idolatry they espouse is narcissism, an inordinate self-love which leads to the pleasure principle—if it feels good do it. The antediluvian world would have been filled with all manner of sexual deviancy; including fornication, adultery, polygamy, group sex, homosexual practices, and bestiality. If Paul found the people of the greater-Rome of his day to be given over to lusts (Rom 1.24-28), he would have found the population of the pre-flood world to be panting after its next abomination. In addition, they would likely have discovered many ways to induce intoxication using alkaloids and alcohol. In seeking their stimulation, they would have denied God, defied him, and dared him to stop them.

Thirdly, lusts lead to violence—which filled the pre-flood world. The word 'corrupt' used in these verses includes in it the idea of destruction and ruin. The violence of men at that time added to this corruptive destruction. Some writers suggest that there was no form of organized government prior to the flood and this contributed to the violence—i.e., there was not an equivalent of the police, and people did whatever was right in their own eyes. This may have been the situation. However, it is more likely, if postdiluvian history through the centuries can serve as an example, that men of violence formed militias and tyrannical quasi-governments. Thus, the antediluvian world was likely filled with dynastic empires which warred with each other for centuries—pursuing tactics or rape, rapine, scorched earth, and genocide. The shed-blood filled the streets, and the land cried out for relief and recompense (Gen 4.10; Num 35.33). If Paul concluded that men living under the *Pax Romana* were particularly given to violence (Rom 1.29-31), he would have found the organized and sanctioned violence before the flood to be appalling.

God had blessed mankind with the gift of procreation and with the command to fill the earth (Gen 1.28). Instead, men were destroying themselves and one another as they filled the earth with corruption and violence. The extent of this wickedness was unimaginably bad. We live in a day of victory and grace. Satan has been defeated by the resurrection of Christ; he is bound (Rev 20.2) and the extent of his damage is severely controlled and limited by Christ. So, even the worst of licentiousness and despotism today cannot rival the extent of the evil before the flood.

At least three lessons can be derived from this consideration of the corruption and violence which filled the earth, including:

- *Measure* God saw the corruption and violence. This implies that the verdict on man's behaviour was measured relative to God's standards. The sons of Noah, and all members of the antediluvian population, knew what defined corruption and violence because they knew what God had defined as right and wrong.
- *Myth* The corruption went from bad to worse. The myths of man's innate goodness and of his moral progress are merely vain imagination. Men cannot move under their own power to a utopia. When there is no fear and honour of God, men live as beasts and behave toward one another as demons.
- *Means* The only means of stopping universal corruption and violence is when God intervenes. With respect to the first world, he intervened by blotting out all mankind (but the few with Noah). This did not solve man's problem; evil quickly returned—the heart of man was not changed by the outward cleansing. In the new world, God intervened by sending his Son and changes hearts through the indwelling Holy Spirit.

Pending Punishment Announced [August 7] (Gen 6.13)

Before the flood, the whole earth (meaning, the majority of its millions of inhabitants) was corrupt and filled with violence (Gen 6.11-12). In the 1,500+ years from creation men had increasingly acted as if there were no God and no temporal or spiritual consequences for their actions. They had suppressed the knowledge of God to such an extent that their consciences could no longer exercise any checks on their wicked behaviour. Men may have erased God from memory, but God had not forgotten them or ignored their rebellion; the time had come for him to hold mankind accountable for their behaviour.

God visited Noah and revealed to him his intention of punishing mankind for their wickedness. There was nothing that *required* God to give this warning, other than to display grace and love for mankind whom he created. He could

have simply acted. However, his greater intention was that the true nature of his character would be revealed to the rational creatures he had placed on the earth. We have already seen that God had deliberated over mankind's state and determined to exact punishment on them (Gen 6.7). This earlier deliberation may have been revealed to Noah as part of the communication which now occurs; as this is the first recorded instance of God speaking with Noah.

God took Noah into his privileged confidence by announcing to him the pending punishment of mankind. This announcement probably came as a welcomed surprise to Noah, although Noah's sons do not provide us with any insight into their father's thoughts. They focus, rather, on the communication from God, which included the reason for the pending punishment and God's provision for Noah through the ark. To that point, there had not been any indication or signs that God was going to act against man's wickedness. Men continued to race along in their wanton ways, assuming that the future would be like the present—a common mistake which all men make (e.g., ignoring 100-year storms and building on flood plains, dismissing catastrophism in geology and extrapolating from present process rates, and succumbing to the inductive fallacy in logic). As a righteous man (Gen 6.9), Noah would have been grieved by the actions of his peers and likely wondered why God was not doing anything about it. We undoubtedly think the same thing when we see the perversions around us. However, we have the advantage of historical examples—eventually, in his own time, God acts against sin (Heb 9.27).

We should note that God identifies the violence of all flesh—mankind in their sinful nature—as the reason for the pending punishment. The violence which God observed in human behaviour was relative to his own character and his law (which is a reflection of his character). Men often accuse God of violence (e.g., inciting the Israelites against the Canaanites or decreeing the execution of homosexual offenders). In reality, God is absolutely holy and without any sin—there is only goodness in his nature. It is men who execute violence. God does not identify in this account the nature of the violence which men were committing; yet we know innately what this term encompasses, because we know our own sinful tendencies to lust, greed, anger and vengeance. However, we can infer from the usage of the word 'violence' elsewhere in the OT that it included murder, physical abuse (including rape), drunken fits, deceit, disrespect of parents, oppression, and profanation of holy things.

God's goodness requires that he be angry at sin which defames his character, disregards his commands, and destroys his creation. It also requires that just punishment be exacted for any breach of his law. Therefore, his righteous anger against violence and his execution of punishment is not capricious or unjust. To the contrary, God gave the antediluvian world over 100 years to repent and correct its ways—from the announcement given here to the time that Noah had completed building the ark. God used Noah as a messenger of pending judgement and punishment, but men chose to ignore the warnings.

God decreed that the earth (i.e., 'land', rather than 'globe') and the animals which lived on the land were to be destroyed along with mankind. The earth had been morally polluted by man's sins, so it had to be wiped clean of every remnant of man's edifices to materialism, false gods, and sexual perversion. Animals had been used to further mankind's wicked schemes—animals prior to the flood were tamer than they are now (Gen 9.2) and were thus likely abused by men for wicked 'sport' and sexual 'entertainment'. Even though animals are not morally culpable, they suffered along with mankind (Gen 3.17-19; Rom 8.20-21), their covenant head (Gen 1.26). In addition, as we noted previously (Gen 6.7), like collateral damage during a war, when God punishes—by flood, famine, plague, armies of conquest, etc.—both man and beast suffer.

Today, people behave as mankind did prior to the flood—although in this day of grace there are proportionately more believers in the Christ who has come, than there were in Noah's day who believed in the Messiah who was to come. Men create false religions of every description, ignore God's law, and rut like beasts. And, like the people of old they assume that God cannot, or will not act, against their sin (2 Pt 3.4-7). However, as God did not ignore the wickedness before the flood, so he will not ignore it today. He has announced judgement against men who persist in their perversions and the return of Jesus to execute judgement on all sin (Mt 24.36-44). When he comes, he will once more, and finally, wipe the earth clean of all evil (2 Pt 3.10-13).

Measurement Standards [August 8] (Gen 6.15)

God gave Noah directions for building the ark based on dimensions which used the cubit. To be of any use, the cubit had to be a standard size or Noah would not have known how big God expected the ark to be. The cubit of the antediluvian era was likely standardized on the length of the forearm of Adam, the first man.

The use of measurement standards may seem obvious to us today. We give them little thought, except when we cross the border and have to convert kilometers into miles or degrees Celsius into degrees Fahrenheit. However, the use of measurement standards for such things as length, area, volume, mass, density, and speed is essential for construction and manufacturing activities and the smooth processing of economic transactions. The first measurement standards were instituted by God in the domain of time: the day and year (Gen 1.14) and the week (Gen 2.2-3). Here, we find the use of a standard for measuring length. No other measurement standards are referred to prior to the flood. However, undoubtedly, the antediluvians had invented measurement standards for at least mass (or weight) and volume, and possibly area, so that they could conduct business (e.g., trading goods or selling a plot of land).

The invention and use of measurement standards indicate that mankind has significant abilities to think abstractly a feature of mankind which makes him uniquely distinct from animals. A measurement such as a cubit is an abstract concept which describes an attribute of a physical object. Prior to the invention of an abstract measure for length a stone mason, for example, would have had to align a rod beside the wall he was building, make marks on the rod, and then carry the rod to the quarry to cut out a stone of the correct size. With the invention of the concept of a standard cubit the stonemason could just send information about what sizes of stones were needed and the stonecutter could supply stones of the right size.

After the flood, many of the measurement 'standards' men used would have been variable, if multiple people defined them. The cubit based on the length of a forearm, a span based on the extended width of a hand, or the inch based on the thickness of a man's thumb would have likely been defined by a king or tribal leader, and master templates kept in a central location, with copies supplied to craftsmen and tradesmen. However, a nearby kingdom or tribe would have used a different set of measurement 'standards'. Measurement 'standards' like the pound and the foot varied during the Middle Ages. Liquid measures were fluid even until recently (e.g., the former Canadian gallon and the US gallon were different). In the late 8th century, Charlemagne, on moral grounds, attempted to standardize weights and measures used in Europe—through the business transactions of the abbeys—as did other later kings.

In 1670, Gabriel that our true happiness, the vicar of St. Paul's Church in Lyons, proposed two possible 'universal' standards for determining length. The first was that a meter should be one minute of arc (a nautical mile, or 1,852 meters) of a great circle on the earth. This would have given a longer meter than we have today. A proposed alternative was the swing-length of a pendulum with a frequency of one beat per second (this would have resulted in a meter about half the size of our current one). In 1791, the French Academy of Sciences selected the definition of the meter as one ten-millionth of the length of the earth's meridian along a quadrant, which is the distance from the equator to the North Pole. Over time the definition of the meter was refined. Until 1983 a meter was defined as 1,650,763.73 wavelengths in a vacuum of the orange-red line of the spectrum of Krypton-86. Since then, it has been equal to the distance travelled by light in a vacuum in one three-hundred thousandths of a second. A second is defined by the duration of a number of cycles of radiation associated with the transition of the Cesium-133 atom. Similarly, in 2011 the Système Internationale d'Unités redefined the definition of the kilogram in terms of Planck's constant, *h*, which is a constant ratio between the energy of a photon and the frequency of its electromagnetic wave.

The transition of measurement standards from being based on variable human dimensions to international definitions based on universally available natural objects is founded upon a subtle assumption—that nature is constant and consistent. The irony is that if we live in a universe that is the product of chance events, there is no

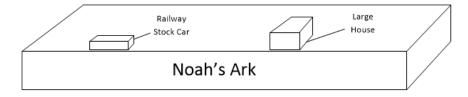
rational reason for men to assume the constancy and consistency of nature. The only valid reason for assuming constancy and consistency is if the universe has an ultimate objective standard behind it—the mind of God. The fact that we can measure things and communicate those measurements accurately to others is evidence for the existence of God.

God utilized a human-based system of measurement to communicate the dimensions of the ark to Noah—showing his gracious accommodation to Noah's current circumstances. However, the fact that Noah understood God's instructions about how large the ark was to be, indicates that God expected Noah to use a standard-sized cubit. This implies that God expects that we base all our measurements on standards, and that ultimately the concept of measurement standards must be derived from God himself. This is why God requires that we use honest standards when measuring and condemns the misuse of measurements (Lev 19.35-36).

Noah's Ark – Specifications [August 9] (Gen 6.14-16)

God instructed Noah to make an ark in which he was to preserve his family, and two of each kind of land-based animal, from the flood, which God would use to punish mankind and to cleanse the earth of every remnant of man's sin. The Hebrew word translated 'ark' (from the Latin *arca*) is used in the OT outside of the flood-account only in one other place (Ex 2.3). It probably should be understood to be speaking of a 'chest' or 'box' shaped object. Thus, the ark looked more like a large barge than a rounded ship, as it is often portrayed in children's books.

The physical dimensions of the ark were probably around 140m long by 23m wide by 14m high—there is much debate about the size of the cubit used by Noah. The sketch below shows the ark's size (using an approximately .46m cubit) compared with a railway car for carrying livestock and a large house. It can be seen from the sketch that the ark was a very large vessel. No water-borne wooden vessel has ever been made as large. It has only been since the advent of steel ships that larger vessels have been constructed.



The ark was built of gopher wood. The word 'gopher' occurs only in verse 14, and has been transliterated from the Hebrew, since it has not yet been possible to determine the word's meaning. Some of the ancient translations of the Hebrew OT suggest that the word 'gopher' referred to the form of the wood—as squared timbers—rather than to the type of wood from a particular tree (e.g., cedar, cypress, pine, or another wood). The ark contained three interior decks which would have included living quarters for Noah and his family, pens ('rooms') for the various kinds of animals which came into the ark, and storage rooms for food and supplies for the occupants of the ark. Around the top of the ark, under its roofline, was an opening about .5m high which would have allowed air, and some light, to enter the interior of the ark. The ark also included a window (Gen 8.6) and a door, which was probably above the water line and provided access to the ark at the level of the second or third deck. The ark was coated inside and out with a plant-based resin (pitch) such as a tree sap, rather than a bitumen-based material that became available after the flood. The resin coating provided waterproofing for the wood that would be immersed in water for almost a year.

Building such a large vessel out of wood would have required considerable technological sophistication and many man-hours of labour. We are not to think that Noah made the ark using primitive tools. He would have had access to iron axes, adzes and saws (Gen 4.22). The level of technology just prior to the flood would have been at least as developed as the Egyptian technology, which produced the pyramids a few centuries after the flood. And it was

probably more developed than the technology of the Greeks and Romans who produced the Parthenon and aqueducts. It may even have been comparable to that of the late Middle Ages, which was able to construct cathedrals such as Notre-Dame de Paris. It is likely that it took Noah and his three sons, and any additional hired labour, threequarters of a century to construct and outfit the ark. This implies that Noah had access to considerable wealth or he could not have devoted such effort and expense to the work of building the ark.

A large vessel was required to accommodate two of every kind of animal, seven pairs of animals of the clean kinds such as sheep and goats (Gen 7.2), a year's supply of food and water for eight people, and a year's supply of fodder, water, and bedding for all the animals. The carrying capacity of the ark can be estimated from God's instructions. A standard two-decker railroad stock car (used to carry animals such as cattle) has a usable volume of about 75 cubic meters. The Ark had the equivalent capacity of 600-900 of these railroad stock cars (depending on the size of the cubit). The average animal size is less than that of a sheep. 240 sheep can be carried in a standard two-decker railroad stock car. Therefore, the ark could have accommodated around 200,000 animals of the size of a sheep, or 100,000 pairs. Even without taking into consideration the fact that there are probably many more species today than there were Biblical kinds, there would have been room for all known species, including the extinct ones that died out shortly after the flood. However, there probably were no more than 25,000 pairs of kinds that needed accommodation. Remember that Adam was able to name the kinds in less than a day (Gen 2.19), so there could have been as few as a few thousand kinds which Noah had to accommodate. Some suggest that many of the animals hibernated during their time in the ark. Even if they did not, there was plenty of room in the ark for the animals and for their food, water, and bedding.

About 75 years before the flood (since Noah's sons had wives; Gen 6.18), God gave Noah instructions about how to build the ark. In his infinite wisdom, he knew what would be needed and what would be best suited to carry the survivors through the flood so that they could repopulate the cleansed earth.

Noah's Ark – Suitableness [August 10] (Gen 6.14-16)

How would an engineer design a massive container which would meet the following specifications?

- Accommodate and protect a family of eight, and thousands of animals.
- Provide storage capacity for a large quantity of food and supplies, needed for a year.
- Withstand severe earthquakes and volcanoes caused by tectonic plates shifting and continental breakup and the resulting tsunamis.

Any land-based building, on the surface or underground (like a bomb shelter), would not be able to survive this kind of devastation. So, the engineer would think of designing either a water-borne or a flying vessel. The latter option would quickly be ruled out because of the incredible quantity of fuel required to keep the vessel airborne for a year. Only if the vessel could be sent into space, to overcome gravity, could a flying vessel avoid the cataclysm on the earth. The only feasible solution to meet the initial specifications would be to develop a waterborne container. Once that had been decided, additional specifications would have to be met:

- Float on rising floodwaters as they began to surround the container.
- Maintain structural integrity while flexing due to hogging (riding across the crest of a wave) and sagging (riding across the valley of a wave) through a continuous onslaught of large waves (at least 30m high).
- Be nearly impossible to capsize.
- Remain waterproof for an entire year, without springing a leak.

Designing such a vessel would require a high degree of engineering skill and ingenuity. After much analysis, an engineer would probably determine that the best design would be a large floating flat-bottomed rectangular barge. It would be constructed of wood, because of wood's natural ability to flex when placed under stress. In addition, it would have a strong roof—not merely for protection from weather but as a structural element. The vessel would have to be coated inside and out with a flexible waterproof material that would protect the wood from ocean salt

water and seal its seams against leakage.

Modern engineers have examined the design for the ark and have found it difficult to improve upon. As a floating vessel, rather than as a vessel which needed to move directionally through water, the ark meets the specifications identified above. Therefore, it should not surprise us that God, the master engineer and creator of the universe, would design the perfect vessel to meet the challenge of bringing Noah and his family safely through the flood. The ark not only had a perfect design as a stable floating box, but it had other design components which made it an ideally suited container for its intended purpose. It was not like a cargo ship with a giant empty hold. Rather, the interior had three decks or floors that were divided into rooms or pens. The decks were, on average, 4.5m apart. The three-deck design would have allowed for one of the decks to be higher than the other two to accommodate tall creatures such as a pair of giraffes or sauroposeidon (possibly a young pair or a smaller cousin within the kind). One of the decks could have been lower (e.g., slightly above a man's height) and used for storage. These three decks would have allowed for functional separation-keeping large animals separate from the supplies and the smaller animals and human inhabitants. The three decks may not have extended from wall to wall as floors in a typical building in North America. Rather, the decks may have surrounded a central open 'court' (from floor to roof), similar to the design of buildings in the ancient Middle East. The decks could have had balconies looking into the centre of the ark. This would have allowed air and light from below the roofline to reach most parts of the interior of the ark.

It appears that the ark also had a ~.5m opening extending around the top of the walls under the overhang of the roof, interrupted only by the posts supporting the roof. This opening provided fresh air and allowed some light into the interior of the vessel but was high enough above the water line to limit entry of water into the ark. It also had a window (Gen 8.6) which could be used to provide a view onto the flooded world, and eventually onto the land as the waters began to recede. It is possible, given the probable extent of technological innovation achieved before the flood, that glass had been invented and that the window had a thick glass covering. The window could be opened, and Noah was able to send out the birds through the window. The ark had only a single door, thus minimizing the area needing a waterproof seal. This door was probably above the water line and provided access to the ark at the level of the second or third deck. Finally, the ark was coated inside and out with a plant-based or animal-based resin such as a tree sap or shellac to make it watertight. Although the Hebrew word is translated as 'pitch', it was likely not a bitumen-based, substance. Bitumen is a liquid or semi-solid form of petroleum that is likely a by-product of the flood.

When we consider the ark from an engineering perspective, we marvel at the ingenuity of its design. This should lead us to bow in awe before the one who designed it. God could have used various means to preserve Noah, but he chose to use a means that required a secondary agent. He gave to Noah a design that it was possible for him to build and which was ideally suited to the purpose for which it was intended. This reminds us that God did the same thing in creation—making a purpose-built earth for human habitation.

Noah's Ark – Substantiality [August 11] (Gen 6.14-16)

The Biblical account of Noah's building the ark, and of the flood, is not derived from a centuries-old pre-Hebrew source such as a Sumerian legend about an extreme seasonal flood on the Mesopotamian plain. Rather, the Biblical account is the original, historically accurate, source for information about the worldwide flood. It was recorded by the three sons of Noah (Gen 10:1) who assisted in building the ark and who were preserved in it through the flood. After the flood, as the human population grew, and as mankind was scattered across the globe as a punishment for its attempt to build a tower to heaven (Gen 11.8), people carried with them a cultural memory of the true account of the flood. As a result, vestiges of the Biblical flood account can be found in the legends of nearly every ancient culture from around the world. The extra-Biblical example most often cited is found in the *Gilgamesh Epic*, from ancient Mesopotamia. However, the story of the flood (in various forms) can also be found in the lore of most cultures. For example, it is buried in the long Sanskrit poem called the *Mahabharata*, in the legends of the scattered

ancient peoples of Asia, in the ancestral stories of most of the aboriginal natives from Greenland to Tierra del Fuego, throughout the tribal traditions of Africa and the Pacific, and in some European myths (e.g., Greek, Norse, and Welsh). In many of these accounts, the basic elements of the Biblical story have been retained: a 'hero' and his crew, a cargo that included pairs of animals, a vessel which transported them through the flood (whether worldwide or local), the settling of the vessel as the floodwaters receded, and the dispersion of the inhabitants of the vessel after the flood. However, the legends generally include fanciful elements—for example, in some, the vessel is a basket or a log canoe; or the vessel was built in 30 years or even three years by one person.

When we consider God's directions to Noah and compare the ark's design to the vessels described in the flood legends, we find a stark contrast. Although the details about the design of the ark in the Biblical account are sparse, its spatial dimensions and the major components of its design (e.g., the type of wood used, the three decks divided into rooms or pens, the presence of a roof for protection and structural stability, a skylight under its roof, the single door, and its coating of pitch) have the feel of authenticity and of a record of firsthand experience. Modern engineering testimony to the ark's seaworthiness and the feasibility of constructing it strengthens our view about the accuracy of the Biblical account—the Biblical ark would actually work as a floating container, which could comfortably accommodate two of each animal-kind. However, the vessels in the various flood-legends would not accommodate a large number of animals, protect their inhabitants from severe weather and waves, or survive a cataclysmic flood. For example, the vessel described in the *Gilgamesh Epic* is a cube, 120 cubits in each dimension. Besides being considerably larger (a volume almost four times greater) than the real ark, such a vessel would have tipped over (due to its high centre of gravity) and quickly sunk as water gushed in through the opening under the roof. The accuracy of the engineering details and the designated size for the ark, given in the Biblical account, could not have been invented by an ancient bard with no experience of large-ship design and the challenges of surviving on the open ocean for a year. Only God, the master engineer, could have designed such an ideal vessel.

The Biblical account presents a substantial design for the ark which can stand up under the scrutiny of engineers, scientists, and historians. Yet, many scholars raise objections about the reality of the ark, such as:

- *Noah didn't have sufficient technology available to build such a vessel.* The level of technology available in Noah's day is underestimated because critics assume that cultures evolve from a stone age to an iron age to an industrial age through many millennia.
- *Noah and his sons couldn't have built such a large vessel*. Over the period of 75 years they may have been able to build it. However, there is nothing in the Bible which precludes the idea that Noah hired workers.
- *The ark couldn't accommodate two of every kind of animal*. Critics assume that modern species are equivalent to the Biblical kinds; but in fact, species have developed from considerably fewer kinds.
- *Eight people could not have cared for all the creatures on board the ark.* This objection is based on the faulty notion regarding the number of pairs in the ark. Adam was able to name all the land-based animal kinds in less than one day, indicating that there are far fewer kinds than today's species. It would have been feasible for eight adults to feed and care for the original generic kinds. In addition, it is possible that the animals were in a state of hibernation or lowered metabolism while in the ark.

God tells us in the Genesis account of the flood, that an ark (exactly as it is described here) was actually built (Gen 6.22) and used to protect its inhabitants from the worldwide cataclysm. What he says must overrule every objection raised by people who think that they have more reasonable explanations of reality than what God presents. In addition, Jesus (Mt 24.37-39), Peter (1 Pt 3.20), and the author of Hebrews (Heb 11.7) clearly state that Noah constructed the ark and entered it to be preserved through the flood. The construction of the ark is an historical fact that no person who claims to be a Christian can deny or question without undermining the authority of God's word.

Noah's Ark – Sign [August 12] (Gen 6.14-17, 22)

The statement that God created the world in six natural days (of 24-hours), about 6,000 years ago, is one of most

despised ideas in 'Christian' academia. A close second is that there was a worldwide flood, about 4,400 years ago, which deposited most of the sedimentary rocks around the world and encased the animal carcasses which now make up the fossil record. Anyone who holds to the 'young earth' position is considered to be an uneducated simpleton. Yet, the reasons why so many in the academic world dismiss the worldwide flood are because they: 1) have been fooled by 'science's' claim to have a monopoly on truth, 2) want to be respected by the world, 3) are not willing to face the challenge of being ridiculed, and 4) are not willing to take God at his word and accept what he says happened in history.

In contrast, Noah exercised faith by believing the word of warning given by God about the pending flood (Heb 11.7). His faith extended to believing in "events as yet unseen". It is not necessary to conclude that Noah had never seen rain and built the ark under continually blazing skies.¹² Rather, Noah believed God when he said that he would send a *flood*. No one had seen an earth-destroying flood before and probably had never seen any kind of flood, because of the salubrious environment in which they had lived for centuries. However, Noah did not believe God without evidence; he believed without *experience*, accepting the truthful word of God.

Noah did not trifle with God. He understood that God's anger against sin had reached its limit and that God was going to judge man's wickedness (Gen 6.7, 12-13). He knew that God is to be taken seriously, and in reverent fear he constructed the ark. This would have been tough work, even with the help of his sons and hired labourers, since the ark was a huge vessel—about 100 medium-sized houses could have fit inside of it. It was undoubtedly the largest edifice erected before the flood. Noah showed incredible dedication as he worked on this construction project for probably over 75 years.

As the decades passed, his project would have attracted tourists and gawkers. Families would have planned picnic outings, and teachers would have taken their classes on field trips, to see what Noah was doing. Some would have stood silently watching, others would have scoffed and laughed, but some would have asked what he was doing and why, and who had told him to undertake such a major project. Noah, a righteous man, would have answered politely. Some of those who asked about the project would have argued with him, claiming that his ideas were foolish. They would have asked him to be reasonable; since there had not been a flood, there could never be one. They would have fallen into the classic logic fallacy that concludes that the future must be like the present or the past. Others would have claimed he was insane for believing that he had heard the voice of God speaking to him. During that time, Noah would have had to deal with his own doubts and remind himself that he believed the LORD. He would have also had to deal with his wife's complaints as he emptied their money jar and she told him to get a 'real job'. He undoubtedly also had to encourage his sons daily to persevere in the work, even if they didn't believe that a flood was coming.

As the rumours spread, during the 75 years in which he undertook the construction project, people throughout the world would have gossiped about what the 'kook' was doing over near the gate to the Garden of Eden. The result was that his work condemned the world, through his:

- *Actions* The adage is often true, actions speak louder than words. Noah displayed confidence in God's word and obedience to God's command. His example was a rebuke to his generation, which had cast out God's commands and lived only to satisfy its lusts. His faithful perseverance, while facing ridicule and many rigours, was a witness to the watching world of his day; and to our generation, which can't stay focused on any project for more than a day.
- *Attitude* We can imagine the ridicule and mockery that people would have heaped on him. Youths would have pelted him with dino-dung. However, Noah did not call down judgement upon them, for he knew that that was already coming. Rather, he prayed that God would forgive and convict his contemporaries of their sin so that they would repent.
- Answers To those who asked seriously about what he was doing, Noah was prepared to give a reason for his

 $^{^{12}}$ We addressed the question of whether there was rain before the flood, when we looked at 2.5.

belief, yet with gentleness and respect (1 Pt 3.15). Through his words, as a herald of righteousness (2 Pt 2.5), he honoured the LORD as holy.

From a simplistic perspective, Noah was the most unsuccessful missionary evangelist in the history of the world. Apparently, no one from the hundreds of millions in the old world believed his message and repented. But he understood the importance of believing God's word without displaying any doubt, regardless of what others might have thought about him. He also knew that he was called to live in obedience to God's commands, regardless of the outcome. He perceived that his good example and words could lead to either the conversion or condemnation of sinners. His work of building the ark is a sign to the world of the deceptive power of unbelief.

Noah's Ark – Symbolism [August 13] (Gen 6.14-17)

Why did God command Noah to build the ark? We might respond with the obvious answer, "To preserve him and the animals from the flood." But the question requires a deeper answer. God could have used many different means of dealing with the wickedness of the antediluvian world. For example, he could have instantaneously executed every unrighteous person and left a few people, such as Noah's family, to establish a new order of mankind. Or, he could have had angels transport Noah and the animals to a temporary abode (e.g., another planet) while he cleansed the earth of its moral pollution. So then, why did he give Noah a task which took about 75 years to complete, bring pairs of animals to Noah, and flood the earth for about a year? Often, we cannot fathom the reasons why God does things in the manner he does. Ultimately, we must conclude, with the *Westminster Shorter Catechism*, that "The decrees of God are, his eternal purpose, according to the counsel of his will, whereby, for his own glory, he hath foreordained whatsoever comes to pass." However, we can give some proximate reasons for why God commanded Noah to build the ark and ordained the flood, including:

- *Noah's ark was built for our instruction*. Those who were alive at the time of the flood, and perished during the flood, are in Hell today. They know precisely what they did in their rebellion against God and why they were punished. The building of the ark was a warning to them that they ignored. However, the fact that the account of its construction and use to preserve Noah and his family is recorded in Scripture means that God intended that the ark would also be for our instruction (2 Tim 3.16-17).
- *Noah's ark displays God's patience with sinners.* Peter gives an example of how longsuffering God is, by pointing to the building of the ark (1 Pt 3.20). God waited patiently, allowing the antediluvian inhabitants of the earth to repent before he finally unleashed his wrath against their sin.
- *Noah's ark indicates that men have a role in God's providences*. God acts directly in the affairs of men (Acts 17.28; Col 1.17), but he also acts through secondary means. Thus, he chose to assign Noah the task of making the means of his own preservation. In the same way, we are called to work out our salvation with fear and trembling (Phil 2.12). We cannot save ourselves and we cannot be saved by works. But we also cannot be saved without works (James 2.17). Faithful obedience in the work we are assigned by God is evidence of our salvation.
- *Noah's ark symbolizes Christ as our ark.* Calvin passes over what he calls the 'allegorical application' of the figure of the ark as the body of Christ discussed by Augustine in two of his books. He also mentions that Origen went too far in his allegorical interpretations. He says that it is best to "adhere strictly to the natural treatment of things". He admits that the ark could be an image of the Church through which we are saved, applying 1 Peter 3.21. However, it would seem that a better application of 1 Peter 3.20-22 is that the ark symbolizes *Christ* into whom we are baptized by water, rather than the Church—of course the Church is figuratively Christ's body, of which he is the head. Like Noah, we must enter the ark (i.e., enter into Jesus) through faith in order to be preserved from the coming flood of judgement on all of mankind.
- *Noah's ark teaches of perseverance in faith.* The writer of Hebrews (Heb 11.7) speaks of Noah as a witness to persevering faith. It took him about 75 years to build the ark in the face of ridicule and harassment. He is a witness to the reality that God can, and will, supply his people with the faith and endurance that they need to meet every challenge which they encounter when they are acting in obedience.
- Noah's ark is a witness to what God can accomplish through men. When Satan challenged God, God directed

him to consider Job (Job 1.8). Satan scoffed at this example and suggested that Job would curse God if his difficulties became serious enough. But, through the grace of God, Job remained faithful. In the same way, Noah's obedience is a great witness to the grace of God; to the consternation of Satan and his demon hordes.

- *Noah's ark is a sign of the final judgement*. As Noah built the ark, he would have used it as an object lesson to support his preaching (2 Pt 2.5) about the temporal judgement which was coming upon the world and of the need to seek safety from the coming floodwaters. The record of the ark remains to this day as a sign of the reality that everlasting punishment is coming and that this world will be engulfed once again—this time, not by water but by fire. The scoffers in Noah's day laughed at the idea that God would call them to account. Likewise, scoffers today ridicule Christians who warn them that all mankind must stand before the judgement seat of Christ (Rom 14.10; 2 Cor 5.10; Heb 9.27). The flood came unexpectedly; likewise, the final judgement will come just as suddenly, and all scoffers will perish in the conflagration (2 Pt 3.3-10).
- *Noah's ark brought the survivors to a new world.* As a reward for his faith and righteousness, Noah received an inheritance (Heb 11.7). At first, he inherited a new world that had been purified of sin and was full of the prospect and hope of a new beginning. However, that inheritance was only temporary, since the world immediately became polluted again with sin and Noah eventually died and did not hold the new world as his permanent possession. The new world which Noah inhabited after the flood was a token of the better world to come, which Peter speaks of as the new heavens and earth (2 Pt 3.11-13).

Noah's Ark – Safety [August 14] (Gen 6.17-18)

God told Noah to build an ark (Gen 6.14) and then provided the reason why the ark would be needed—to provide safety when the earth was destroyed by a "flood of waters". He announced the flood with a 'behold'. The flood was going to be a wonder—something new and unheard of in the days of Noah. Many people suppose that men had never seen rain before the flood (based on a misinterpretation of Gen 2.5). So, they think that when Noah began building the ark people ridiculed him for suggesting that water would fall from the sky. Rather, what people had probably not experienced was a *flood*, due to the design of the original single continent (sloping from Eden, at a relatively central point, to the surrounding shallow sea) and the storm-dampening effect of large masses of floating water-based vegetation on the oceans. It was the idea of an 'impossible' flood, and especially a world-devastating and life-destroying flood, that made this announcement a wonder.

The Hebrew that opens the announcement can be read as, "For I, behold, I am bringing the flood of waters." God's involvement is placed at the beginning of the declaration and his causal action is emphasized. The flood was not unplanned or merely the result of extreme 'natural' weather phenomena. The initiation of the flood was an explicitly deliberate action on the part of God. Without question, God would use secondary causes to carry out his work during the flood—like a carpenter uses a hammer—such as volcanoes and earthquakes, and currents and waves. But the flood was to be initiated at the direct command of God. The initiation of the flood is in the same class of action as God's creating the unique components of the universe over six days.

There is an important reoccurrence of words from verse 13, in verse 17—"all flesh", "earth", and "destroy" indicating that the flood was going to be brought on the earth as a direct result of man's violence. Mankind pursued violence, so God was going to bring their pursuit to a violent end with a great cataclysm. This indicates that the immediate reason for the flood is attributed to human wickedness; making mankind collectively culpable for the destruction of the world and all its human inhabitants and land-based animals.

God stated that everything on the earth would die; but, 'everything' was given in the context of his previous statement, "all flesh with the breath of life", and is mitigated by the 'but' that opens verse 18. As we concluded previously (Gen 2.7), the expression "breath of life" is used to refer to a particular class of higher-order creation which God defines as being 'alive', and therefore subject to death. Only men and certain animal kinds have the particular animating principle called "breath of life". All those animals living on the face of the earth—that is, on the land rather than in the water—were to be destroyed along with man. This was part of God's judicial decree as

well as a consequence of the floodwaters. Man had an assigned covenant role to rule over the animals but had abused his responsibility by including animals in wicked practices (e.g., pagan sacrifices, 'sport', or sexual 'entertainment'). Even though animals are not morally culpable, they suffered along with mankind, their covenant head. Wherever men pursue their wicked directions there is collateral damage—both man and beast suffer.

Despite the announcement of a general catastrophe which was to affect *everything* on the earth, God identified some from his living creatures who would not be subjected to death by flood—Noah and his family and pairs of land animals. This raises a number of questions; we can address a few today:

- *Was Noah better than everyone else in his generation?* Noah was recognized as being a righteous and blameless man (Gen 6.9). However, he was not sinless, and any righteousness he had was the result of faith—a gift from God—in the promised Messiah and his total righteousness. The reason Noah was selected to obtain safety in the ark had nothing to do with his own attributes or merits. He was not saved because of his piety but because of God's grace.
- Were there no other persons alive who were believers? It is probable that Noah's immediate ancestors and descendants were the only believers in the Messiah and the only ones who took God's law seriously. However, it is possible that some others believed (e.g., among Noah's siblings). The righteous often suffer with the unrighteous when calamity strikes.
- *Were all the other seven who survived in the ark true believers?* It is possible that not all were true believers in the Messiah. However, God demonstrates in this example that he often deals with people through covenantal relationships. As many may suffer because of the sin of one person, so many may benefit because of the righteousness of one.
- *Does God play favourites*? It would seem that since God selected some, and very few at that, to survive the flood that he was playing favourites. However, God shows no partiality (2 Chron 19.7; Rom 2.11; Acts 10.34). We have difficulty understanding why God chooses to save some and condemns others to punishment. Regardless, we must believe that he is entirely fair and knows what he is doing for his glory and our good.

God displays his amazing mercy. While all men before the flood were sinners and deserved to die, Noah and his family were saved from punishment. God does not wish any to perish (1 Tim 2.4) and he continues to exempt many from everlasting condemnation through faith in Christ, our ark of safety.

Universal Judgement by Flood [August 15] (Gen 6.17)

The word (*mabbul*) used here for 'flood' or 'deluge' is used only to refer to the flood for which Noah was required to build the ark—it occurs twelve times in Genesis 6-11 and in Psalm 29.10, where it refers to this flood. Different words are used in the OT to refer to other types of floods (e.g., Ps 69.2). A unique word is used to describe the flood of Noah's day because this flood was unique. When the OT was translated into Greek before the time of Christ, the word used for this flood was *kataklusmos* (also used in Mt 24.39; Lk 17.27; and 2 Pt 2.5; 2 Pt 3.6), from which we get the English word 'cataclysm'. Until the advent of modern models of geology (starting with a paper by James Hutton, presented to the Royal Society of Edinburgh in the late 18th century), which claim that millions of years were required for processes to form the geologic strata and topography which we see today, it was widely accepted that the Genesis flood was different from all other floods that have occurred. Yet people persist in dismissing the flood as either a total fabrication or an embellished legend which was based on a local, but severe, flood in the eastern Mediterranean seaboard.

However, this verse informs us that the flood was not a local flood. No local flood would have destroyed all living flesh under heaven. God ensures that we are properly informed about the extent of this flood by adding that *everything* on the earth was to die. No twists or turns of rationalizations can get around the fact that this verse speaks of a worldwide flood. This is why most people who comment on this verse say that it has a strong universal emphasis. Yet many go on to make incredible claims to the contrary, such as:

- We should understand 'earth' as 'land' (a legitimate translation of the Hebrew word; e.g., Gen 41.56) and the writer only means that everything in a particular land was to be killed by the flood. However, God ensures that this suggestion cannot be supported by stating that all life under heaven was to be destroyed. The sky (heaven) extends well beyond the boundaries of any local land—and is truly worldwide.
- The use of *earth* is hyperbolic or phenomenological (like we say, 'the sun rises', while in fact the earth turns) relative to the perspective of a local ancient people who did not understand that the earth could encompass the entire globe. This is pure cultural hubris with not a stitch of evidence to support it. Ironically, since there is considerable evidence that there was a single continent prior to the flood, the perspective of the antediluvian people was that *every* person on the earth lived in a single land.
- People had not yet filled the earth, as is evidenced by the fact that God scattered them after the events associated with men attempting to build the Tower of Babel. This is a specious point. The events at Babel take place *after* the flood, after all men had been wiped off the face of the earth. It was the revived postdiluvian, disobedient, population which had to be scattered across the face of the earth by different language groups, not the antediluvian population.

God does not leave this verse as his only witness in the flood account to the fact that the flood brought universal judgement on all mankind and destroyed all the beasts living on the land. He informs us that the highest pre-flood mountains were covered to a depth of about seven meters (Gen 7.19-20) and states that all animals left on the earth died (Gen 7.22). Since water 'seeks its own level' and will drain away into valleys, the only possible way for all the high mountains under heaven to be covered by so much water is if the flood was worldwide. A response that is often made to this argument is that if the highest mountains were those of Ararat, then the water would have had to have been at a depth of over 5,000m above sea level—but if the world were entirely smooth, the water of the oceans would not reach a depth of 4,000m, thus there isn't enough water to cover even Mount Ararat. However, Mount Ararat is a dormant compound volcano that was probably formed during the late stages of the flood and did not exist prior to the flood. The original single continent sloped from Eden, at a relatively central point, to the surrounding shallow sea, so the pre-flood mountains were likely not as high as what we think of as high mountains today. Today's high mountains did not exist prior to the flood (as evidenced by sedimentary layers, often with fossils, on the tops of many of them). The high mountains of today were formed by significant global tectonic activity during, and after, the flood that caused ocean basins to sink, continental plates to collide resulting in mountain uplift, and volcanoes to erupt.

If God had intended for the flood to be only a local, even if severe, flood, there would have been no need for Noah to spend about 75 years building the ark. God could have told him to move from the area which was going to be inundated. He and his family could have walked entirely around the world seven times after the announcement of the pending flood, at a pace of 10-11 kms per day. Also, there was no reason for pairs of animals to come to him to be preserved in the ark. Those not in the floodplain would have survived the flood.

Isaiah (Is 54.9) and Peter (1 Pt 3.20; 2 Pt 2.5) both testify to the truth that the flood was worldwide. And, Jesus states that everyone who was not in the ark was destroyed by the flood (Mt 24.37-39). There is no rational way that a person can defend a local-flood view and at the same time claim to believe the Bible to be the word of God. If one does not accept the truth of a uniquely extreme worldwide flood, based on this verse, he declares God to be a liar.

God Announces the Covenant with Noah [August 16] (Gen 6.18-19)

It is commonly claimed by scholars that the covenant model in the Bible—in particular the covenant made at Sinai, with Moses as the mediator—is *based on* the Hittite suzerainty treaties found in the buried archives of their ancient capital of Boghazkoy (in modern Turkey), believed to date from around 1300 BC. While there are similarities and parallels between the Hittite form of covenant treaties and the structure of Deuteronomy, there are differences. However, the conclusion that the Biblical form *follows* the Hittite model is mistaken. Both the Sinaitic Covenant and

the Hittite covenants utilize elements and forms which predate them both. The first covenant between God and man—the Covenant of Creation, although not explicitly called a covenant—included key elements of later Biblical covenants such as the naming of the two parties, an announcement of the duties, blessings and curses, a sign or seal, and a ratification ceremony with a meal (see, *The Covenant of Creation* [March 30]). In addition, God announced to Noah before the flood that he would make a covenant with him. This is the first mention of the word 'covenant' in Scripture. Whether or not God formally administered the covenant with Noah prior to the flood, he certainly did immediately after the flood (Gen 9.8-17). The postdiluvian administration predates the Hittite treaties by over 1,000 years. Therefore, human treaties and covenants made after the flood are based on concepts handed down from the days of Noah. Covenant making is not a human invention, but rather it is a divine institution.

God says that he will establish "my covenant". The covenant that he would make with Noah was not just any pact or treaty between two parties. It was an explicit administration of one overarching covenant which underlies all of God's redemptive work and all of his relationships with mankind. The first administration of this covenant, established by God as the Eternal Covenant (Heb 13.20), was formulated among the persons of the Trinity. This original administration includes the Father's governance of the plan of redemption and the Son's obedient fulfillment of the covenant obligations. The Covenant of Creation was the first administration of the covenant between God and man, and was made with mankind's covenant mediator, Adam. The second administration of the covenant was made between God and Noah, the second representative of all mankind, from whom all people are now descended.

The announcement of the covenant to be made with Noah comes after God announced the punishment which would be visited on the unbelieving world. Mankind had broken the covenant by rebelling against its obligations, so God was prepared to enact a new administration of the covenant. The specific duty that Noah had to perform, related to this covenant administration, was the construction of the ark. If he was obedient, and applied himself to fulfilling his duty, a blessing would follow. The blessing would be that God would preserve Noah (and his family) from the catastrophic devastation of the flood.

Most commentators conclude that at this time (~75 years before the flood, since Noah's sons were old enough to have had wives) God only *announced* the covenant he would make with Noah, but the ratification of it occurred after the flood. Later covenant administrations in Biblical history include a solemn oath ratification ceremony of some kind. However, before the flood, it appears that God only made a promise to Noah that he would provide for him and did not include a sign of his commitment. Nevertheless, since God understands the frailty of sinful human nature, he announced his covenant and its blessing in advance. Noah was embarking on a ~75-year project to build the ark and God understood that he needed assurance that he and his family would be preserved during the flood. Noah took God at his word, and by faith (Heb 11.7) carried out his particular obligations of this covenant administration, but the covenant wasn't ratified until after the flood.

There are two key elements of the general covenant between God and man that are associated with the administration of this covenant. First, because of Noah's righteousness and obedience, his immediate family was going to be blessed by being saved from the consequences of the flood. This theme of family blessing appears in subsequent administrations of the covenant. For example, the promises made to Abraham extended to his seed (Gen 17.7), and blessings associated with the New Covenant are extended and applied to the children of believers (Acts 2.38-39; 1 Cor 7.14). Second, the element of covenantal sub-sovereignty assigned to mankind through Adam (Gen 1.26) was also included in the Noahic administration of the covenant. God indicated that Noah would be the agent of preservation for land-based animals. Noah was therefore assigned the duty of caring for and sustaining God's creation, as Adam had been.

God's dealings with mankind from the beginning have been structured as a covenant relationship. The covenant began with God's gracious dispensation of gifts and the announcement of obligations and blessings. If men apply their gifts (including the gift of saving faith) toward obedience, they will receive the promised blessings—ultimately everlasting life—if not, they will be cursed. God also assigned himself obligations under the covenant—to be the

God of his people and to provide for them and protect them. Because of man's failure to keep the covenant obligations, a final administration was required—this is the New Covenant with Jesus as its mediator.

Two of Each Kind [August 17] (Gen 6.19-20)

Noah was told that two of every kind of flesh—animals with the breath of life (Gen 6.17)—would come to him to be kept alive in the ark. God would directly take care of the plants and sea-life during the flood, but representatives of the animals which lived on the surface of the land (including birds) would be directed by God to appear before Noah, and to enter the ark. Noah would then have to place them in their respective holding pens in the ark for their care and protection during the flood. The fact that representatives of the animal kinds had to be brought to Noah, is compelling evidence that the flood was not a local phenomenon. There would have been no need for animals to seek protection in the ark if the flood was going to cover merely a portion of the eastern Mediterranean seaboard.

The general guidance given to Noah was that two of each kind of animal, a male and a female, were to be preserved. This indicates that God was faithful to the blessing he had given at creation that the animals were to be fruitful (Gen 1.22) and to fill the earth. Despite man's wickedness, God was going to sustain life so that animals could replenish the earth after the flood. Noah's role was to act as a second Adam, as a covenant mediator, and as the one from whom all people on the earth are now descended. God's bringing the animals to Noah, is reminiscent of his bringing them to Adam so that he could give them names. Once the animals were on board the ark, Noah was responsible for their preservation, fulfilling an element of man's covenantal sub-sovereignty originally assigned to mankind through Adam (Gen 1.26).

The preservation of the animals is a sign of hope. Universal judgement by floodwaters had been decreed; nevertheless, God provided a sign of hope for mankind. Usually when God declares punishment for man's sin, he embeds in the midst of the curse a promise of hope—beginning with the curse on the woman and the promise of the Messiah (Gen 3.15). God's ultimate purpose is to save a great multitude of mankind, who will be with him forever in a restored paradise. So, God turns immediately from the message of impending doom (Gen 6.13, 17) to one of hope for man (Gen 6.18) and beast; thus, emphasizing that God is foremost gracious and forgiving.

God uses here a classification scheme for the animal kinds that is reminiscent of creation (Gen 1.21, 24-25). God's form of taxonomy is not primitive or scientifically naïve, as some suggest—it is just different from the way that Western tradition has determined that animal life should be classified (e.g., mammal, reptile, etc.). God had a purpose for originally classifying animals into 'livestock', 'creeping things', and 'beasts' which may not be entirely clear to us today. For example, he may have used this form of classification to distinguish between ceremonially clean animals (Gen 7.2) and unclean ones, or between animals which could be domesticated and those which could not be.

God also refers to 'kinds' in his instructions—the 'kinds' must not be equated with 'species'. The created kinds are considerably broader than our concept of species. A single kind likely included animals which now can interbreed—whether or not the hybridized offspring are fertile—and may have included species today that can no longer interbreed. For example, horses, zebras, and donkeys are probably all of a single kind. Similarly, llamas can be bred with camels, and lions with tigers, thus they likely are included in two of the generic kinds. It is even possible that the original feline kind included all forms of cats that we know of today, from lions to domestic shorthairs. Likewise, cattle, buffalo, bison, and yaks appear to be from a single kind; and a killer whale and a bottle-nosed dolphin have been known to produce offspring. The created kinds do not correspond to species but probably to the family, and possibly the order, level of our modern taxonomic classification.

The inclusion of kinds in the ark, rather than modern species indicates that far fewer animals had to come to Noah and had to be preserved by him in the ark. The number of unique kinds of land-based animals must have been considerably fewer than the roughly 40,000 species of land-based animals (including birds) alive today or identified

from the fossil record, since Adam was able to name all the kinds in a single afternoon (Gen 2.19). We noted (Gen 6.14-16) that the ark could have easily accommodated around 100,000 pairs of animals the size of a sheep. Thus, the ark had plenty of space to contain pairs of all the animal kinds.

The fact that 'all flesh' and 'every' (used 3X) kind of animal was to come to Noah indicates that there was nothing intrinsically evil about any of the animal kinds—including serpents which must have been preserved on the ark or they would not be alive today. God is thus reinforcing the truth that every class of animal that he had created was very good (Gen 1.31) and that ultimately the distinction between clean and unclean animals would be annulled when its temporary spiritual application—as a symbol of the separation of God's people from the world—was replaced by the inclusiveness of the Gospel, with the calling of the Gentiles (Acts 10.10-16, 34). The preservation of all the kinds also indicates that God had a purpose for bringing each kind through the flood. Since he created the world for mankind, the preservation of the animal kinds was also to be for our benefit. We will consider the implications of the preservation of the kinds in a future meditation (Gen 8.19).

Provisioning Food for Consumption During the Flood [August 18]

(Gen 6.21)

Sceptics, who say that they do not believe that there was a global flood and that Noah took two of every kind of land-based animal into the ark, often suggest that eight people could not have cared for all the creatures on board the ark—providing their food and mucking their stalls. This objection is based on a faulty conclusion about the number of pairs of animals in the ark. In addition, some scientists, who accept the Biblical account of the flood, counter this objection by suggesting that, during their time in the ark, many of the animals instinctively went into a lowered metabolic state because they were confined to pens and had reduced energy demands or that they went into hibernation as a response to the bad weather. However, while it is possible that less food was required by the animals in the ark than if they had been in their natural state, it is not necessary to postulate this in order to make the account acceptable to the sceptics. As we have noted previously, Adam was able to name all the land-based animal kinds in less than one day, indicating that there are far fewer kinds than species. It would have been feasible for eight adults to feed and care for the original generic kinds.

God certainly could have provided food for Noah and his family and all the animals in a manner similar to how he provided the manna for the Israelites for 40 years in the desert. However, he had determined that he would not provide directly the food, but instead he would make Noah responsible for providing for their subsistence. God's reasons may include the following:

- Obtaining and storing food and bedding for thousands of animals would have required considerable planning. Noah would have had to provide at least a year's worth of supplies, since immediately after the flood the earth would have been barren, and plants would not have started to grow again. Noah would have had to study the different kinds of animals to determine what food was best for them—even the animals that were vegetarians did not all eat the same thing; some would have needed grass; others, grains; and others, roots; etc. And, after the curse on creation some animals became carnivorous. Noah and his family would have had to harvest or purchase; dry, smoke, salt, or pickle; and store vast quantities of food over the years leading to the flood. God treated Noah as a king (Prov 25.2); giving him responsibility for learning about the needs of animals and organizing matters to meet a significant challenge.
- In addition to the effort required to build the ark, Noah and his sons had to continue providing for their own needs during the period before the flood, and they had to outfit and provision the ark. Also, during the year of the flood, it is likely that many nights they all collapsed wearily into bed. Through their sweat-inducing work, God reminded them that the curse on work (Gen 3.19) was still in place and that the wickedness which they had seen around them (Gen 6.5) was the fruit of Adam's sin.
- Despite the curse on work, work is still a blessing for mankind—even if it is 'back-breaking' manual labour. God provided employment in the form of physical work (Gen 2.15) to be a component of our created nature. Life without a productive purpose becomes life without meaning. By giving Noah and his family the task of

provisioning the ark and caring for all the animals, he ensured that they would not have much opportunity to become overly introspective and despondent. It would be good if our paternalistic governments would follow God's model. Instead of handing people food (directly, or in the form of vouchers) and giving them numerous disincentives to work, governments should remove every form of sustained 'handout' and hold people responsible for providing for their own, and their families', needs (2 Thess 3.10; 1 Tim 5.8). God's model is clear; man was created to work for God's glory and for his own benefit.

- Work provides another blessing—through reflection, with satisfaction, on a well-done job. God has instilled in mankind a creative spirit which needs to be exercised and cultivated. So, in building and provisioning the ark Noah would have been able to look at it with a proper pride as it neared completion and as the storage bins were being filled with the best produce of the earth.
- By assigning Noah the responsibility for feeding the animals on the ark, he reminded Noah that mankind has a sub-sovereignty that was originally assigned to mankind through Adam (Gen 1.26). We continue to see this responsibility worked out today when we care for animals on a farm or feed our pets.
- By being assigned the responsibility of providing for the needs of the animals while they were in the ark, Noah was required to extend his focus beyond his own needs. Our selfish generation needs to heed this lesson and learn to care for the needs of others even if it requires hard toil and the expenditure of financial resources.
- God's command to provision the ark with food indicates that God cares for all of his creatures—feeding even the sparrows. Jesus reminds his hearers that since God cares for the sparrows, which have little monetary value to men, he will certainly care for his people who are of much greater value.
- We must also note that the ark can be viewed as a type for Christ. As Noah, a covenant mediator, provided for all aboard, so Christ, *the* covenant mediator, provides for all those who flee to him for safety.

The command to provision the ark with food was not only to meet practical needs; it had deeper psychological and theological purposes.

Noah's Obedience [August 19] (Gen 6.22)

When children were slaughtered in an elementary school in Connecticut, many politicians launched a campaign for stronger gun control—ironically, Connecticut already had a firearms control law, considered strong by US national standards. Others called for more supervision of mentally disturbed individuals—ironically, it appears that the gunman had been incited to kill because his mother wanted him committed to an institution. Some people attributed the shooting to his use of violent video games and TV shows. And, some blamed God, asking why he would allow this to happen to innocent children. Outside of a few, faint, Christian voices no one seemed to be willing to deal with the real problem—men do not obey God (Ex 20.13). All of man's troubles began when Adam did not do what God had commanded. Since then, every form of wickedness—the list is endless—comes down to a very simple factor: mankind does not want to obey the Ten Commandments.

There are only two possible ways to eliminate outbreaks of evil such as that displayed in Newtown in December 2012. One is to introduce draconian laws and a police state which would regulate every aspect of behaviour—the Taliban would look like mascots at Disney World in comparison. The issue with any form of police state, as history has shown, is who is responsible for controlling the controllers? The other option is to change the hearts of men so that they obey God's law. This can only happen through conversion effected by the Holy Spirit, repentance, and belief that Jesus Christ died for our sins. It is only when a critical mass of the population in a nation is truly Christian, that there can be any hope of experiencing civility in a society.

Noah did all that God commanded because he was a converted man, he knew that he was a sinner who needed to repent, and he was looking forward to the arrival of the Messiah who would conquer sin and Satan and introduce a new kingdom of righteousness. Since most of us have grown-up in, or now live in, the West, we have experience with a degree of civility in society which can only be attributed to the pervasive influence of Christianity over the

past 1,700+ years. Thus, for us, the statement "he did all that God commanded him" does not appear to be extraordinary. If we have had any encounter with true Christians, we know of some outstanding ones of whom such a statement could be made. However, we are seeing a dramatic and rapid decay as our politicians reject any form of allegiance to God's law and as atheism, paganism and the teachings of false religions gain more adherents. Such a statement about a man is becoming rarer. However, in Noah's day such obedience to God's commands was remarkable, for a number of reasons:

- Due to the corruption of man's nature, men today are prone to invent and commit all kinds of evil. But evil may have been considerably more pervasive in Noah's day than in our own (Gen 6.5).
- It appears that after God cursed Adam, there had been no instance of God exercising his judgement on evil. A 'rational' man would have concluded that God did not punish sin and that there was nothing to fear from God. The idea of obeying God to avoid judgement was absurd to Noah's peers.
- Obedience to a God who had apparently not revealed his will for over 1,500 years about events yet unseen (Heb 11.7), would have seemed irrational to the typical empiricist of Noah's day. Logic ruled against it.
- Noah had a very limited Messianic support structure. Although his ancestors believed God's promises and called upon God in worship, he appears to have lived without an encouraging covenantal community.
- What Noah was commanded to do—building probably the largest single structure of the age—would have overwhelmed and discouraged most sensible and diligent men.
- Persevering in the construction and outfitting the ark required significant labour from many men for about 75 years. Noah had to persevere in this task for more years than many of us will live.
- The pressure from Noah's peers to cease from his efforts would have been almost overwhelming; public opinion railed at him, his 'friends' ridiculed him, his preached message was rejected, and neighbours raged against him for consuming their forests and crops for his foolish project.

No man could have obeyed all that God had commanded Noah, without being endowed with faith. The grace of faith which God gives is able to overcome any hurdle or block which Satan, wicked men, or our own minds can erect. Grace is stronger than gall, faith is stronger than fear.

Noah's obedience was exact and complete—he did *all* that God commanded him (Gen 7.5, 9, 16). In the Hebrew, this verse opens and ends with the statement 'he did', emphasizing that Noah acted as a responsible agent in working out his obedience. This implies that he didn't question God, didn't present any challenges to what he was asked to undertake, and neglected nothing. He was told to do a certain thing and he did it, exactly as instructed. A similar commendation is given with regard to the work Moses performed when building the tabernacle and instituting the Levitical ceremonial system (Ex 40.16). The commands of God must be obeyed with exactness if we are to expect to enjoy his blessings. We are to obey, even if we don't agree with a command or understand why God gave it. Jesus said, "If you love me, you will keep my commandments." (Jn 14.15) May we follow the example of Noah's witness (Heb 12.1) and have our epitaph read: "<istent command and the top of top of the top of top of top of top of the top of top

Noah's *Radical* Obedience [August 20] (Gen 6.22)

This verse states that "Noah did all that God commanded him." This is the first instance in the Biblical record where it is reported that a person obeyed a command from God. However, we can infer from elsewhere in Genesis that some people from the antediluvian population were obedient, since they called on the name of the LORD (Gen 4.26). Also, Enoch walked with God (Gen 5.24). However, to this point, the world and mankind had been in existence for over 1,500 years and there had been no explicit reference to anyone obeying God. Noah's obedience is therefore presented as being unique and radical in a society that was filled with wickedness and evil (Gen 6.5).

We should not think that the reason that most people were not obedient to God at that time is because he had not yet given any formal commands (e.g., as he did on Mt. Sinai) which people were to obey—that is, they didn't obey because they didn't know what God required. In an earlier meditation (see, <u>Universal, Innate Knowledge of God's</u> <u>Moral Law</u> [April 9]) we noted that mankind had considerable understanding of God's moral requirements long

before a summary of the moral law was inscribed on the tablets of stone. The reason that there has not been much notice given to obedience to God's law, thus far in the historical record, is because men were overwhelmingly disobedient. God had determined to permit them to pursue their own lawless ways to demonstrate the true inclination of the human heart (Gen 6.5), and to demonstrate definitively that without his help, through a redeemer, mankind cannot rise above the level of the beast.

In our culture, we expect people to be law abiding and, to an extent, this is what we see. Even when people don't agree with a particular law there is sufficient peer-pressure to encourage most people to conform to it. For example, when a bylaw was enacted in Toronto in the 1980s outlawing smoking in all public places, there were initially stubborn individuals who tried to sneak a smoke behind the bleachers in an arena or in the washroom of a restaurant. However, today you rarely see anyone attempting to light-up except in designated areas. With the prevalence of peer pressure and outward compliance, we find it difficult to understand the extent of the lawlessness which gripped the antediluvian world.

We live in a society which is outwardly more civil than was the situation prior to the flood, because people are generally 'law abiding'. However, our society has radically redefined law. Law is no longer derived from a higher source—i.e., from God's law. Law today is merely politically correct convention, majority opinion, or the enforced dictates of an elected elite. For example, our society has defined 'sin' to include the use of incandescent light bulbs or plastic grocery bags, but if someone suggests that pre-marital sex or homosexual practices should be illegal—because they break *God's* law—he is considered to be evil. Or, if a company in the US refuses to fund a drug plan which includes abortifacients it is considered to be breaking the law and could be fined millions of dollars a day, but doctors who murder hundreds of thousands of babies in their mothers' wombs are considered to be defending the rights of women to choose. No wonder Isaiah declared woe on those who call evil good and good evil (Is 5.20)!

Noah's obedience is reported because this is what God desires from mankind. Obedience to God's law is not something to be practiced only by Christians. God is the Creator and Lord of all mankind, and his law, as stated explicitly in the Bible, applies to all mankind—regardless of what their opinions or beliefs are about God's law. This means that the *sharia* of Islam and the civil codes of Western nations are legitimate only to the extent that their provisions are consistent with God's law given in the Bible.

Many Christians claim that Biblical law was relevant only for the OT Jewish nation until the time of Christ and that we now live in an age of grace and are not under law. Or, they claim that the law applies only to Christians and that we should not try to force Biblical law on those who do not accept the Bible as their standard. The more that the Church falls under the spell of the claim of the limited applicability of Biblical law, the more lawless it becomes. Professing Christians do not understand the relevance of the law for Christian life. Jesus and authors of the NT books spell out how professing Christians are to relate to God's law. Jesus says that righteousness is to be evidenced by an exact observance of the law (Mt 5.17-20). He also indicates that anyone who wants to be considered his friend must do what he has commanded (Jn 15.14-15). Paul tells us that the law is good (Rom 7.12) if used lawfully (1 Tim 1.8)—not to earn salvation but to live out our salvation. And, James tells us that we are accountable for keeping the entire law (James 2.10).

Noah is singled out from the millions of inhabitants in the pre-flood world because he obeyed all that God commanded him (Gen 7.5, 9, 16). If we, as professing Christians, are to be singled out from our generation it will be only when we commit to radical obedience to God's commands and drive out any tendency to rationalize away its applicability—for example, claiming that parts of the moral law no longer apply. Obedience to God's law is not optional; it is what God required from the beginning (Gen 2.16-17). The only reason that the world was in such a mess before the flood, and is in such a mess today, is because mankind is not obedient to what God commands.

"Go into the Ark" [August 21] (Gen 7.1)

It has been claimed by many scholars that the use of the words *God* and *LORD* in Genesis indicates that the narrative was woven together, late in the history of the Jews, from source material of different origins. Moses did use source material when he assembled Genesis—for example, this portion of the text is derived from the record of the flood handed down from the three sons of Noah. However, the use of different names for God does not reflect different sources for the material but, rather, that the Holy Spirit intended that we focus on different aspects of God's nature. Notice for example, the use of *God* (Gen 6.22) and LORD (Gen 7.5) in essentially identical observations about Noah. The former instance occurs in a context where God is presented primarily as the august creator and judge, whereas the latter occurs in the context of a father who intimately and lovingly cares for his children who obey him. Thus, this section opens with the use of the personal name of God, Yahweh (translated as LORD), since God is dealing with Noah on a personal level.

It is generally assumed that God had not communicated directly with Noah for over 75 years—from the time of the command to build the ark until this point at which it was completed, and Noah and his family were told to make final preparations to enter the ark. We don't need to engage in a debate about whether God gave Noah additional direct verbal guidance about how to build the ark or about what to proclaim to his generation, or simply to encourage him. If God did provide additional communication during the period leading to the flood, it was not deemed to have permanent relevance for inclusion in the record of Scripture. The amount and types of revelation which God gives to mankind is always sufficient for man's current needs. There have been times in history (e.g., from about 400 BC to 30 AD and from about 70 AD to the present) when God has not provided direct revelation which was to become part of his written record. However, at all times, God's word, as recorded in Scripture, has revealed all that men need to know; but only what they need to know. There has never been anything lacking in his word, nor has there been anything superfluous. Thus, at no time in history has a man been able to accuse God of not providing enough information—for example, by saying, "God if you had only told us *x*, we would have believed."

At an appropriate point, God again revealed his will by speaking directly with Noah and commanding him to enter the ark. Noah had laboured for about 75 years, with perseverance and commitment, on the project that he had been assigned by God. Now he was going to be given the opportunity to reap the fruit of his labour. Even though the ark was finished, Noah did not enter for the final time until he received God's direction to do so. We learn from Noah's example that we should never attempt to force God's work into our timetable or schedule. But, when we receive his word of guidance, we are to obey it immediately, without question.

By this command God demonstrated again that he is not a silent watcher detached from his universe; rather, he is actively engaged in governing it, while remaining longsuffering with respect to mankind's rebellion. God's word reassured Noah that he had not abandoned him and that he was finally going to act on his prophetic promise to end the wickedness of the people among whom Noah had had to live for so long.

God states the reason why Noah would be allowed to enter the ark—he was righteous before God. Of course, Noah was not sinless, and his righteousness did not earn him salvation. Rather, it was because of his faith in God's word (Heb 11.7) that he was declared to be righteous. Since Noah was saved from the flood because he was righteous, this means that his contemporaries were unrighteous before God and were thus left outside the ark. This contrast reminded Noah that the reason for the flood was moral—to punish wicked mankind who refused to acknowledge God's sovereignty. Noah's immediate family members were also to be included in the safety of the ark because God deals with mankind through a covenant relationship which extends to families (Dt 5.9-10; Acts 2.39; 1 Cor 7.14). This does not mean that all the members of his family were righteous—Ham's later actions (Gen 9.22) demonstrate the contrary. However, it does show that even wicked children can experience temporal blessings because of godly parents. It also reminds us that cleansing the earth with a flood was not going to clean the hearts of men, and that in every family and congregation of God's people there can be a mixture of bad and good (Mt 13.24-30). There is no perfect community this side of death.

Jesus refers to mankind's behaviour in the days before Noah entered the ark as a warning to his generation (Mt 24.37-39). He says that the people were eating, drinking and marrying; and were unaware until the flood came and

swept them all away. Our generation is clueless; it indulges its passions with borrowed money and consumes the moral capital of a former generation; it ignores the warnings of Scripture, including the example of the flood; and it drowns out urgent preaching with *American Idol* and the *Super Bowl*. Jesus is coming back to this earth, to call all mankind before his judgement seat, as surely as the flood is an historical fact. From a human perspective, it seems to be impossible to get people to heed this reality. Nevertheless, we must warn everyone to go to Jesus, who is the only 'ark' in which they can be saved from the final outpouring of God's wrath against all the wickedness of men.

Reasons for Obedience [August 22] (Gen 7.1-3)

In previous meditations we have encountered God issuing commands. For example, he told Adam not to eat from the tree of the knowledge of good and evil (Gen 2.17) and Noah to make the ark (Gen 6.14-16) and to go into it (Gen 7.1). We considered Adam's disobedience (Gen 3.6) and Noah's obedience (Gen 6.22). However, we haven't yet addressed *why* we must obey God's commands. Some reasons are as follows:

- *God has ultimate authority* We know innately that valid authority is to be obeyed, even if we chafe against it because of our rebellious hearts. If we command a horse to stop it had better do so, and we expect a child to obey us when we tell him not to put his hand on a hot stove. Likewise, we know that if a captain commands an infantryman to fire his rifle, he is expected to do it. Our relationships—man to animal, parent to child, supervisor to subordinate—are analogues of the ultimate relationship—God to mankind. As our creator and master, God has ultimate authority over all mankind, his commands trump human commands, and therefore he must be obeyed (Acts 5.29). His authority extends beyond the God-to-man relationship to the entire created realm. He commanded the universe into existence and his word is authoritative over angels and demons.
- *Out of love* If we love God, we will want to keep his commands (Jn 14.15; 1 Jn 5.3). We will obey because we are thankful for all that he has done for us by giving us many blessings in this life and saving us from a perpetual hopelessness. True love does not expect anything in return, so if we obey out of love, we won't do it with any expectation of additional reward. We also will obey out of love because we do not want to bring disrepute to his name (Titus 2.5) but rather praise (Mt 5.16).
- *It is profitable* Obedience to God, at times, may seem arduous and like wearing a straitjacket. Yet, when we properly understand the nature of God's commands, we begin to see that they are designed for our benefit. Strict obedience to God's commands will never harm us, but will always bring about good results (Dt 5.33; Is 48.17-18; Jn 13.17). While we live in this sin-polluted world, God's commands give us guidance in every area of life and keep us out of trouble. When his commands are followed, we can avoid many of the consequences of sin—e.g., sexually transmitted diseases, bodies damaged by drugs, or poverty resulting from profligate lives. The Psalmist understood how profitable God's commands are (Ps 119.1-176)—God's ways are always better than our ways.
- A *threat of punishment* Adam was threatened with death if he ate the forbidden fruit (Gen 2.17). Since then, God has often accompanied the deliverance of his commands with threats of punishment for disobedience and as an incentive for obedience. The greatest threat of punishment is the prospect of a perpetual hell for those who continue to live a life of willful disobedience.
- A promise of reward God told Cain that if he did well—bringing an acceptable sacrifice—he in turn would be accepted (Gen 4.7). Although a primary motivation for obedience must be love and not because of the prospect of any reward which we might receive, there is no doubt that, as a secondary and legitimate motivation, rewards are associated with obedience. Just as the commands of God are often accompanied by threats for disobedience, they are also often accompanied by promises of reward for obedience (Eph 6.8; Heb 11.6). For

example, the curses and blessings which the people of Israel were to deliver on Mount Gerizim and Mount Ebal listed punishments for disobedience and rewards for obedience (Dt 27.11-28.68). The ultimate reward for obedience is Heaven (2 Tim 4.7-8). This is not to suggest that we can earn salvation or Heaven through obedience, since salvation is through faith alone, not by works (Eph 2.8-9). Nevertheless, obedience leads to rewards (Mt 25.21).

- *To be of service* When we obey God, we set an example to others and may lead them into the Kingdom. This obedience is to start in our own families. When we obey God diligently our children see that we take God's word seriously and they come to trust his word. Our neighbours and friends also see our example of obedience and love and may have second thoughts about their own behaviour and their standing before God. This may be the means that the Holy Spirit uses to open a door to their hearts and lead them to salvation. The worst form of disobedience is of a Christian whose profession is hypocritical—a person who says, "I believe God's word", and then does as he pleases.
- *To destroy the works of Satan* A great reason for obeying God is that Satan hates it. The battle of wills between Satan and Job illustrates this. Satan claimed that Job only obeyed because God had hedged him in (Job 1.9-10). So, God let Satan have a free hand, nearly to destroy Job's life and to tempt him to disobey God. But Job stood firm. Satan's perverse desire is that every person will disobey God and end up in Hell with him. If we want to send Satan into a conniption, we need to resist his temptation and be obedient to God. Satan will fume and pout as he sees us living victoriously over sin (1 Jn 5.3-4).

Pairs of Clean Animals [August 23] (Gen 7.2-3)

When God had directed Noah to build the ark, he had told him to take two of every kind of land-based animal into it (Gen 6.19). About 75 years later, when it was complete and Noah was told to enter, God adds more detail about the animals which are to be taken into the ark. The general requirement, to take a pair of all the animal kinds, continued to apply. However, now God adds a requirement to take a greater number of each type of clean animal. There is a difference of opinion about whether Noah was to take three pairs of each kind of clean animal and an extra for a sacrifice, or seven pairs (as given in the ESV translation). Some have suggested that six animals were for man's use and the seventh for God's tribute (like one of the seven days of each week); however, it is equally possible that six pairs were for man's use and the seventh pair for a tribute-sacrifice. Regardless, the suggestion that one of the animals, or one pair, was to be a tribute to God misses a key point. When Noah sacrificed animals after the flood, he did not use only the seventh unpaired animal or one pair—he offered "*some* of every clean animal and *some* of every clean bird" (Gen 8.20). It may be best to conclude that the seven pairs constituted a full number, indicating that they were, as a class, dedicated to the service of God, even if they were also available for man's use.

The distinction between clean and unclean animals did not arise at the time of Moses, when the Levitical sacrificial system was established (Lev 11.1-47). Noah offered an animal thank-offering (Gen 8.20) and substitutionary animal sacrifices were performed by Abraham (Gen 15.9; Gen 22.13). This indicates that the distinction between clean and unclean animals has an ancient origin. The distinction is not obvious from the inherent nature of the creatures, as some suggest. It is not obvious from looking at, or studying their life patterns, why animals that chew cud and have a cloven hoof are ceremonially any cleaner than different kinds of animals. For example, a cat would be considered by most people to be an outwardly cleaner animal than a goat. Also, it is not because the ceremonially clean animals are more suitable for domestication than the unclean animals—a dog is far easier to train than a sheep, and a parrot than a dove. Nor was the definition of clean and unclean animals left for Noah's discretion—God does not leave the regulation of the elements or forms of worship to sinful human proclivity. We can be certain that since the clean animals were those which God specified as suitable for sacrifices, he informed the pre-flood patriarchs of which animal kinds he considered to be ceremonially clean. We noted when we considered Genesis 4.3-5a that God had established animal sacrifice from the flock (i.e., sheep or goats) to be an acceptable form of worship; with the sacrifices being a sign pointing to the Messiah and his substitutionary atonement. This is why no definition of what

constitutes a clean animal is given to Noah; he already knew which classes were clean because his ancestors had offered acceptable worship to God.

God does not give Noah a reason for why he was to take extra ceremonially clean animals into the ark. However, the primary reason is obvious once we understand that the clean animals had been used for sacrifices for over 1,500 years. Noah could not have sacrificed any of the clean animals after the flood if he had taken only one pair of each kind into the ark—it would not have been possible to "keep their offspring alive on the face of all the earth". Indirectly, by having Noah take these extra ceremonially clean animals into the ark, God was reminding Noah that man is a religious creature who must remember to observe the ceremonial practices which God has established (Ex 20.8; Heb 10.25). The true worship of God is not to be neglected in good times or bad. It is especially important that we take efforts to preserve the discipline of regular worship when there are times of emergent catastrophe.

It is also possible that God was anticipating a change in the human diet after the flood (Gen 9.3) and provided extra animals so that there would be a larger breeding stock to produce meat supplies more quickly. As we will see, man would be required (not just permitted) to eat meat after the flood. Even though all kinds of animals would be given to mankind for food—the exclusive dietary distinctions later associated with Israel are symbolic of their being called out from the world as a holy nation—Noah and his family would be required immediately to eat meat from the clean animals that were sacrificed. That God would 'think ahead' about a change in the human diet, should not surprise us—he has foreordained whatever happens, thought out every intricate detail of the design for the universe, told Noah about 75 years in advance to prepare for the flood and gave him detailed instructions for the construction of the ark.

The overall consideration of the instruction given to Noah, a week before the flood finally arrived, was that he was responsible for the preservation of the land-based animal life. If Noah did not act, the offspring of the animal kinds would not be kept alive after the flood. While the power over life and death ultimately belongs to God, God assigns to Noah (and all mankind as his sub-sovereigns) the significant responsibility of preserving animal life. There is also a latent promise in the instruction to preserve the animals so that they could produce offspring. The flood would be coming in a week. Noah would be enclosed in the ark for about a year. If he began to get restless and wonder when it was all going to end, he needed only to reflect on the promise that once again animals would be alive on the face of all the earth.

A Week of Grace [August 24] (Gen 7.4, 10)

God gives a final seven-day warning of the pending flood. An obvious reason for this warning is that Noah needed to know when the flood would begin so that he could load the animals into the ark. He would not have wanted to load them too soon or he would have had to begin feeding and caring for them, without knowing how long that would be necessary. Even though Adam was able to name the different kinds of animals in less than a day, it may have taken more than a single day to get all the pairs of kinds into the ark and into their respective accommodations—Noah and his sons would have had to lead them to their assigned decks and pens or cages and ensure that they were comfortable and 'locked' down.

However, Noah probably did not require seven full days for loading the animals. Therefore, we need to look a little deeper for possible reasons for the seven-day warning. Methuselah died in the year of the flood (Gen 5.27-28). An ancient Jewish tradition claims that he died a week before the flood began, and that God waited to send the flood until after this godly man had died a 'natural' death so that he would not have to experience the horror of the flood. It has been suggested that Noah then observed a week of mourning over the passing of his grandfather—as Joseph mourned over Jacob for seven days (Gen 50.10). There is no indication in the Biblical account that the patriarchal mourning period of seven days originated before the flood; however, it is certainly possible. A number of ancient teachings and traditions were not recorded in the OT but are mentioned later, in the NT (2 Tim 3.8; 1 Pt 3.19; Heb 12.16; Jude 9, 14-15). So, this could be part of the explanation for the seven-day delay. Another explanation which

has been offered is that Noah and God observed a time of mourning for the old world.

An explanation which most commentators seem to miss is that the seven days covered an entire week. The announcement of the seven-day delay probably came to Noah on a Sabbath when he was at worship. It is unlikely that God would have required that Noah execute the work of loading the ark on a Sabbath. So, to ensure that this was not necessary, God provided Noah six days in which to undertake the final labour of loading the ark. Then, on the following Sabbath, when Noah was sealed into the ark and at rest, God began the physical cleansing of the earth of its sinful inhabitants—giving the earth a rest from the wickedness which had consumed it for over 1,500 years. Noah's name means 'rest'—he was at rest in the ark on the final Sabbath of the old world, and the world was going to experience a sanctifying 'sabbath' of rest to compensate for the abuse of God's creation by rebellious mankind. A later precedent supports this idea—the land of Israel enjoyed a sabbath of seventy years to make up for the rebellion of the Jews (2 Chron 36.21).

In addition to the reasons for the seven-day warning considered above, it is evident that the one-week warning serves as a reminder that God's word is absolutely certain. When God had spoken previously to Noah, about 75 years before this day, he had told him that he was going to destroy the world by a flood (Gen 6.17). This announcement, a week before the flood, vindicates God's word as fully reliable. When God declares that something will happen in the future, it actually will happen. Comparing verses 4 and 10 we see this principle reinforced—God had given the world one more week, and at the end of that week the floodwaters came upon the earth, as God had indicated they would years before. God's word is equally reliable when he says, through the angels, that Jesus will come again in the same way that he was taken into heaven—on the clouds (Acts 1.11). This announcement of the imminent fulfillment of the prophecy about the flood also reassures Noah that his trust in God's word had not been misplaced. We, likewise, should not be discouraged by increasing wickedness around us and the apparent delay of God's acting to wrap up these last days. We do not need to let the scoffing of the sceptics disillusion us—when they say, "Where is the promise of his coming?" (2 Pt 3.4) We know that God will act in his time.

Finally, the seven-day notice provided a week of general and Gospel grace for the world. After Peter speaks of the scoffing sceptics in the last days (our days), he then says, "The Lord is not slow to fulfill his promise as some count slowness, but is patient toward you, not wishing that any should perish, but that all should reach repentance." (2 Pt 3.9) Every day that God withheld the waters of the flood was another day in which he showered blessings on wicked mankind, rather than consigning them forever to Hell; and another day in which they could hear the Gospel. We can be sure that during that last week before the flood Noah urgently warned all who would listen, to repent of their sins and believe in the coming Messiah. He believed that God is graciously forgiving and would find a way to provide for any who humbly came to him. Previously, divine recompense had seemed far off, but now it was only a week away. It is no different today. Every day that God delays the final judgement is a day of Gospel grace. Every time people walk or drive by a congregation at worship God reminds them that that is where they belong. Every time they hear Luke's account of the birth of the Christ, they hear of the God-man. Every time you invite one of them to a Bible study or church service you act as a witness to the truth about Jesus the saviour. That final week of the old world was a sober respite for the world. We live now in a similar period of pause—a calm before the final storm of God's wrath.

Justice [August 25] (Gen 7.4, 10)

In December 2012, the *Economist* contained a cover story entitled: "Hell: Into everlasting fire". The leader for the article said, "For hundreds of years, Hell has been the most fearful place in the human imagination. It is also the most absurd." The editors may not have seen the irony of their publishing in their Christmas edition an article which misinterpreted, in order to dismiss, the teachings of Christ about hell. That men misinterpret and dismiss the Bible's teachings about hell is not surprising, since they have first rejected God's demand for justice, and his right to execute justice upon wicked men.

Most people are disturbed, to at least some degree, when they read anything about hell (e.g., Mt 13.42; Mk 9.48) or hear a sermon which mentions hell's fierce flames (e.g., Jonathan Edwards' *Sinners in the Hands of an Angry God*). Likewise, any person who is not sadistic must cringe when he thinks about the reaction of mankind as the floodwaters came on the earth. Initially, people would have run for shelter to protect themselves from the heaviest rain they had ever encountered. After a few days of continuous rain, some would have ventured out again. As the ebb-and-flow of the increasing floodwaters began to cover the coastlands, most people and the animals would have started to migrate inland to the higher land of Eden. Those who lived near where Noah had built the ark might have had second thoughts; Noah wasn't such a fool after all. Some of them might even have pounded on the side of the ark would have been too deep for people to wade in, and the last remaining humans would have been cowering far from the ark. After some time, the few remaining people, who were clinging to floating debris, would have expired from exhaustion and hunger. When the last plaintive cry of beast and man was silenced, the only sounds heard were of the pounding rain and roaring wind on 40,000 km of uninterrupted water in every direction.

Any description of mankind's last days in the old world is harrowing. Many people dismiss it as a myth, as they do the Bible's teachings about hell. One reason that they dismiss it is that they think that such treatment of men by God is unfair. They even go as far as to accuse God of being brutal and wicked for subjecting men to such a prolonged and painful death. God, on his part does not shrink from taking responsibility for the cataclysm. He says, "I will send rain" and "I will blot out" every living thing. Yet he also makes it clear that the reason for the flood rested with man's wickedness—he had announced this previously (Gen 6.5-7). He also reiterates that the root cause for the flood was man's wickedness when he contrasts Noah's righteousness (Gen 7.1) with the lives of the rest of his generation. Thus, the reason for the flood was because of man's sin, which God deemed necessary to punish; not because God was being unjust, cruel, or evil.

Men want justice and punishment of wickedness, as long as it does not come down on their own heads, and as long as they *feel* that it is a proper dispensation of punishment for a particular crime. When confronted with the appearance of excessive evil—e.g., genocide of a significant portion of an ethnic group, or the slaughter of office workers in a NY tower—men demand justice. However, in general they do not want justice as God gives it. Men think they are smarter than God. So, when God determines that the best and proper way to punish wickedness is by a worldwide flood, people react with complaints about God's injustice and lack of fairness.

God defends his right to determine appropriate punishment for mankind's wickedness. He says that he will blot out "every living thing that I have made". His defense for taking the life of the wicked is that he is their creator and the one who provided them with life. Elsewhere in Scripture, he defends his general rights to deal providentially with mankind by using the analogy of a potter and clay (Is 64.8; Jer 18.1-6; Rom 9.20-23). Thus, Paul tells us that we have no right to question God's ways of dealing with mankind. Rather than questioning God's fairness when he punishes mankind, we need to learn to glory in his judgements—all his ways are righteous and just. Men need to stop pretending to be more merciful and righteous than God!

The conclusion of the article in the *Economist*, mentioned above, states, "But when a place becomes too awful for even its adherents to tolerate without escape routes, its days are numbered. In Hell's case, it should have been sunk long ago by the weight of its contradictions. ... Just as there can be no light without dark, and no sound without silence, so everlasting celestial joys depend on a contrast of everlasting horror. Without Hell, you can't have heaven." The reality is that God provides an escape route of his devising, not of man's vain imagination. Noah preached to his generation for many years to repent and live, but no one listened. In the same way, any person who repents of sin and relies on Jesus' substitutionary death will escape from hell. The justice which God dispensed in the flood is a reminder of the flames that are coming on all mankind if they do not flee to the ark who is Jesus. Also, it is not necessary to have an image of hell in order to believe in heaven. The original paradise in Eden existed without hell—when all was created good, there was no need of hell. However, now the flood serves as a reminder that God is going to wipe all sin from the earth and restore paradise forever.

A Worldwide Flood [August 26] (Gen 7.4, 10, 22)

The readers of a national newspaper such as the *Wall Street Journal*, the *National Post* or *The Telegraph* would be surprised if an article appeared tomorrow entitled, "The Case for Leprechauns". They would think that the newspaper had become a grocery-store tabloid and that editorial space should not be allocated for myths and legends. Given the antipathy to the Bible and its historical record, it is therefore surprising that articles appear often which purport to provide evidence for Noah's flood. However, on examination, the articles turn out to consist of attempts to debunk the Biblical account. The 'scientific proof' that the articles present is usually of a massive flood that occurred in the eastern Mediterranean seaboard five to ten thousand years ago. For example, one article might suggest that the Black Sea was originally a freshwater lake of glacier melt-water. The natural dam (composed of ice or earth) holding back the water suddenly broke and the water flooded into the Middle East. However, as we will consider in a future meditation, the flood was not the result of the ice age coming to an end; rather the ice age was a result of natural phenomena which followed the worldwide flood.

It is ironic that men who claim that they do not believe the Bible would spend any time explaining how the 'myth' of the flood arose. They wouldn't make the same effort to explain how myths of unicorns or trolls arose. The reason that they expend effort explaining the origins of the flood 'myth' is because in their deepest minds they know that God's word is true and that there actually was a worldwide flood. However, in their rebellion against God they suppress his truth and look for rationalizations for their unbelief.

Even if there was not a single piece of circumstantial evidence for the flood, we could, and should, believe that it actually occurred, since God says that it did. Consider a parallel example. We cannot find evidence outside of the Bible that supports the record of God's delaying the setting of the sun for about a full day (Josh 10.13). Most physicists would claim that it would be impossible to stop the earth, which is rotating as a speed of 1,667 km/hr. They claim that if the earth were to be stopped instantly, the atmosphere would continue to move as fast as it did, and the exceedingly high winds would scour the earth entirely smooth. Also, catastrophic tectonic events (earthquakes and volcanoes) would follow. They ignore the possibility that God, who created the entire universe over a six-day period by speaking, could preserve the earth while its rotation was temporarily stopped. Likewise, since God says that there was a flood that destroyed all life on the earth, we must believe it and not throw up all kinds of 'reasons' for why the flood could not have occurred. In this meditation, we will consider the Biblical evidence for a worldwide flood. In subsequent meditations, we will review the significant circumstantial evidence for a worldwide flood. The Bible is clear; there was an extraordinary worldwide flood:

- 1. God says that there was a flood that blotted out *every* living thing on the face of the ground.
- 2. A model consisting of known natural phenomena and parameters cannot be devised to explain how a local flood could have been caused by rain that fell for forty days and nights. The Genesis flood was unique.
- 3. Local floods do not last for over a year. The water from even the most severe natural floods runs off within days
- 4. The highest mountains were covered for about 70 days to a depth of about seven meters (Gen 7.19-20). Since water 'seeks its own level' and will drain away into valleys, the only possible way for all the high mountains under heaven to be covered by so much water is if the flood was worldwide.
- 5. An ark would not be needed if the flood was local. Noah and his family could have walked somewhere else with only a few weeks of warning.
- 6. The pairs of animals did not need to come to Noah for safety in the ark if the flood was local, they could have fled over a nearby mountain range.
- 7. The ark landed in mountains (Gen 8.4), not on a plain or in a valley. Large vessels do not settle in mountains after local floods.
- 8. Men and land-based animals were commanded to repopulate the earth (Gen 8.17), because all life had been destroyed.
- 9. God made a covenant with Noah that he would never again destroy the earth with a flood (Gen 9.14-15). Since there have been thousands of devastating floods since the days of Noah, God's word and honour are questioned

if the flood was only local.

10. Jesus and NT writers assume and declare that there was a worldwide flood. Jesus likens the end of the world to the flood in Noah's day which "swept them all away" (Mt 24.36-39; Lk 17.26-27). Peter states that the "world that then existed was deluged with water and perished" and that the world is reserved for a similar judgement, but by fire (2 Pt 3.3-7). The writer of Hebrews (Heb 11.7) says that Noah's faithful actions saved his own household but "condemned the world".

The only consistent way to deny the worldwide flood is to deny that Genesis 1-11 provides an historical account and to claim that Jesus, Peter, and the writer of Hebrews were naïve in accepting it as history. But there was a great worldwide flood that destroyed all mankind and all land animals and birds, and many sea creatures. The geological changes that occurred during this flood were catastrophic, changing the face of the earth so that it was completely different after the flood.

"Come Hell or High Water" [August 27] (Gen 7.4, 10, 22)

When faced with a disaster, such as a flood, the inclination of most people is to call it an 'act of God'. But when they win the lottery or land a job, they attribute the outcome to luck or their own amazing skills. If they are going to blame God for disasters, then they should also thank him for their blessings. If they want to attribute positive outcomes to something other than God, then they should also place the blame for disasters on something, or someone, other than God. From a Christian perspective, we can understand that causation rests with both God and man (Gen 50.19-20; Acts 2.23; Acts 4.27-28). Behind all events is God's sovereign providential decrees (Is 45.7; Amos 3.6). However, a proximate causation can be found in the created realm, and often direct responsibility lies with an individual (e.g., he suffers from the consequences of his own sin and rebellion; Ezk 18.1-32; Rom 6.23).

Men display an extreme arrogance when they blame God for disasters, and yet excuse their own sins. However, an even greater degree of arrogance is shown when they boast about the future and ignore God. In the early summer of 2013, parts of Alberta experienced the worst flooding on record. The Saddledome, an arena where Calgary's hockey team plays and the Calgary Stampede holds events, was flooded. The dressing rooms below the stadium seating were filled and water reached to 10th row of seating. Bob Thompson, a Stampede executive, said that the Stampede had never been cancelled in its 101-year history—not by the Depression or by two world wars. He also said, "We will be hosting the greatest show on earth come hell or high water."

We can imagine the men of Noah's generation, on the day before the flood began, saying to one another, "The Sabbath be damned, tomorrow we will throw a 500th birthday party for Kalmi. It will be the greatest party ever!" Others could have been heard saying, "I will meet you here tomorrow at noon. If you bring your best bear skins, I will bring my gold jewellery and we can make a trade." Solomon would have warned the men of Noah's day, as he does us, "Do not boast about tomorrow, for you do not know what a day may bring" (Prov 27.1; see also James 4.13-14).

When the flood-rains arrived the next day, earth's inhabitants would initially have been surprised at the intensity, but probably thought that the rain would end soon. However, as the water level began to increase and tsunamis crashed onto the shore, the survivors began to become more concerned. They would have soon dropped their pretentious assurance that they were in control of their lives. But even as they fled inland and up the mountain valleys, very few of them would have been thinking of turning to God in repentance. Their hard hearts were filled with anger and blame casting against God.

The Premier of Alberta suggested that it would take ten years to repair the damage from the flood. However, the devastation of the flood in Noah's day was so far beyond the flooding of the Bow River that we have no means of making a comparison. No other disaster equivalent to the flood has ever hit mankind. But the flood was nothing compared with what is coming at the end of time, and beyond time. At the end of time the entire universe will be

consumed by fire (2 Pt 3.10) and every unrepentant sinner will be cast into an everlasting fiery Hell (Rev 21.8).

Men, like Thompson, use expressions that include the word 'hell', with little awareness of what they are actually saying. The word 'hell' is used casually in our society as an exclamation point. For example, it is a rare movie that does not include at least one utterance of the word. And many business executives and managers of sports teams use the word in an attempt to galvanize their employees and teams. But people generally have no idea of what Hell is like and treat spiritual realities with contempt.

The concepts of everlasting punishment and of a place of torment were revealed to mankind gradually. God indicated to Adam that he would die if he ate the forbidden fruit. The death that Adam died included spiritual estrangement from God and the eventual separation of his soul and body. But it appears that Adam did not know much about the nature of Hell. The antediluvians were given hints about another life after temporal life—such as from the translation of Enoch. However, the reality of the antipode of an everlasting paradise was not revealed to them, nor was it revealed with any clarity in the remainder of the OT. The full revelation about Hell, as a place of everlasting punishment is given in the NT, with more than half of the references from the mouth of Jesus. God used the flood as a prototype for Hell, to warn men of the coming judgement. With the completion of God's revelation, we now know that being consigned to Hell would be far worse than experiencing even the flood of Noah's day. Therefore, a flood, like that which engulfed Calgary, should remind us to flee from the wrath of God against sin—not to arrogantly boast that we can stand against Hell! Rather, than declaring the invincibility of the Calgary Stampede, Thompson should have declared in the news conference that the high water experienced during the previous week should have given a reason for the residents of Calgary to remember why God sent the greater flood in Noah's day. Thompson should have called for the city to repent of its arrogance and he should have humbly stated that the Stampede would proceed only if God willed it so (James 4.15).

Noah's Total Obedience [August 28] (Gen 6.22; Gen 7.5, 9, 16)

Noah's obedience is reported four times in the Genesis narrative that records events leading up to the flood—three times in Genesis chapter 7 and in Genesis 6.22. Each time, it is stated that Noah did all that God commanded him. This repetition is not, as critical scholars have suggested, due to the account being assembled from disparate sources. This account (Gen 6.9b-10.1a) is a continuous written record of events which the three sons of Noah personally witnessed and handed down to subsequent generations. Thus, there must be other reasons for the repetition of the observation about Noah's obedience. The reasons for the repetition may be explained as follows:

- Noah's sons, under the superintendence of the Holy Spirit—the ultimate author of Scripture—wanted all mankind to understand clearly that their father had been consistently obedient to the commands of God. Their intent was to show that Noah did more than obey a specific command; obedience to God was the overriding principle that guided his life.
- The references to Noah's obedience are not placed arbitrarily in the text. Rather, they are placed strategically in the developing narrative, at each major stage of the construction of the ark. This observation is thus similar to the refrain, "And God saw that it was good," which occurs at each stage in the creation account. The first commendation is given after Noah received the initial command to build the ark. The second is given at the point when the building of the ark was complete, and Noah was given a week's warning to undertake the final preparations for the arrival of the flood. The third occurs after the animals have been loaded into the ark. The fourth commendation is given when Noah had entered the ark for the final time and God had shut him in. Thus, the repetition indicates that the entire process—from first axe-swing to first raindrop—was governed by the principle of total obedience to God.

We can observe that in three of the commendations we are told that Noah did all that *God* had commanded him. In the second instance the commendation says that he did all that the *LORD* had commanded him (Gen 7.5). Since no word in Scripture is superfluous, the Holy Spirit had a specific purpose for using a different name for God at this point. It may be that this difference lies in the position in the account in which this commendation occurs. About

seventy-five years had passed since the initial command to build the ark. During that time, Noah may not have received any direct communication from God. So, at the completion of the ark, God again spoke directly with Noah (Gen 7.1). At this point we are told that it was the LORD who spoke—rather than 'God' as in Genesis 6.13. God presents himself, not as the sovereign creator and judge but as the personal God who is grieved by the events which are about to transpire. He also emphasizes that he is personally engaged in the events which were about to transpire and that he will be Noah's friend and protector.

In no instance in the account are Noah's personal feelings mentioned. If Noah had any doubts about the likelihood of the promised flood or about God's reasons, he never voiced them-or at least they were never recorded. There are other places in Scripture where obedient servants of God raise questions about God's purposes—Job, Asaph, Jeremiah, and Habakkuk, for example. Noah was human, and a sinful human, and likely did have doubts at times for example, when he was being ridiculed by his neighbours during the arduous years of ark construction. However, God's purpose was to establish Noah as an example of unconstrained obedience. As he said to Satan about Job, he could say about Noah, "Have you considered my servant?" Noah is therefore presented to us as a model of faith (Heb 11.7) who took God at his word and acted obediently in reverent fear. Noah's faith was not a 'blind faith' he saw the invisible world with the eye of faith. His faith depended on the words of a reliable source. In this respect, he did nothing different from what every one of us has to do to live out our lives. We all have to act on the words of sources—for example, we put in two weeks of work believing the word of our bosses that we will be paid at the end of the period; we take medicine because we trust the words of our doctor and pharmacist; and we rely on the words of news reporters to determine what is happening in the world. In every area of life, since we can only experience a tiny sliver of reality, we have to rely on the words of others to function. The question is not, will we trust the words of others—it is the only possible way to accomplish anything—but, rather, whose word we are willing to accept. Noah, in contrast to his contemporaries, was willing to accept the word of God above the words of other men or his own inner thoughts.

Noah is presented as an example of what obedience to God's word means. He obeyed every command and did not voice any objections or rationalize why he did not have to obey a particular command—as Adam and Eve had done. Thus, he is established as a second Adam who would be the father of a new mankind—sadly the outer cleansing of the world would not cleanse the heart of mankind, and the Last Adam (1 Cor 15.45) would be required to provide the means for changing the hearts of men. Noah's example teaches us that we are to be scrupulous and precise in our obedience to God. We are not to decide which commands we like and which we don't like, or to choose which we will obey and which we won't—like many professing Christians do with the second and fourth, of the ten, commandments. Our obedience is not to be defective or partial but total; doing all that the LORD commands.

The Animals Went In, Two by Two [August 29] (Gen 7.8-9)

Animals have been endowed by God with instinctual behaviours associated with breeding and to avoid adverse weather conditions and other dangers. The most well-known example is that of migratory birds which head toward the poles for the breeding season and the summer, and head toward the equator for the winter. Animals can also sense pending changes in weather, forest fires, and earthquakes and know to flee from these dangers. Many commentators appeal to this kind of instinct as the causal factor behind the animals coming to Noah. However, instinctual behaviours are likely not responsible for the animals leaving their place of habitation to go to Noah. First, the flood was a unique event and likely therefore a response to its pending arrival—even if it could be sensed—had probably not been programmed into the animals' genome. Second, only two animals of each unclean kind (and seven pairs of clean animals) came to Noah. If all the animals of a kind were programmed to behave on instinct to a particular stimulus, then hundreds of animals of each kind would have assembled before the ark. The fact that only two of each kind came to Noah indicates that some other factor caused their action.

Some commentators suggest that the animals had to overcome a natural fear of man in order to come to Noah. They think that the animals became docile because they could sense the pending flood. These writers appeal to examples

such as a mother duck leading humans to her trapped ducklings or a wild dog that brings her pups to be cared for by a human. However, prior to the flood, animals were not afraid of man, since this part of their genetic makeup had apparently not been changed from their original created status in the Garden of Eden, where the animals were Adam's 'friends'. It was only after the flood that God instilled in the animals an instinct to fear men (Gen 9.2). Nevertheless, the animals which came to Noah did have to move outside of their instinctual patterns. After the introduction of sin into the world by Adam, carnivory appears to have become part of the curse upon animal kinds. Evidence of carnivorous behaviour is found in the fossil record (e.g., the fossilized stomach contents of some animals contain parts of other animals, and bones of some animal remains show teeth marks)—although it is possible that this evidence is the result of extreme conditions as the animals attempted to survive during the first 100 days, or so, of the flood, as they were fleeing from the rising waters and became desperate to find food. So, the hostile behaviour of animals which are natural enemies of one another—e.g., sheep and wolves—was constrained so that they could all come together to Noah.

Some people ridicule the account of the animals coming to Noah and attempt to show that it would not have been possible for the marsupials in Australia or the monkeys and llamas from South America to have reached the ark. However, those who claim that this account is absurd are not considering all the facts. First, the distribution of animals around the world today is a post-flood phenomenon. The distribution of animals prior to the flood was likely quite different. It is possible that animals of every kind intermingled in the relatively benign pre-flood environment and had not settled and differentiated into extreme niches. So, representatives of every kind could have lived within a few days' walk of Noah. Also, it is quite probable, as we have considered previously, that the antediluvian world contained only a single continent, surrounded by a large shallow sea. So, all the animal kinds, regardless of their geographic distribution, were able to reach the ark with a seven-day trek.

The animals came to Noah because God intervened directly and led particular animals to Noah. It must have been quite a sight as animals from across the continent suddenly began to move toward Noah. As the animals got closer to Noah's homestead, people must have lined up to see the spectacle—a new happening, never before seen. God used the march of the animals as a witness to his purposes and sovereign control. The animals showed that they were obedient to their Creator. They also informed, by their action, the watching crowds that God truly was going to bring about the flood that Noah had been warning them about for the approximately 75 preceding years.

God directed selected male and female representatives of each animal kind to come to Noah. These would have been animals with an acceptably diverse genetic makeup within their kind-class. Any animals which had lost some of the original genetic diversity of the kind, through inbreeding, would not have been selected by God. God's purpose in selecting a breeding pair was to ensure that there would be animals to multiply and fill the earth after the flood had killed off all the rest of the animals.

Verse 9 indicates that the animals came to Noah as God had commanded *him*. Yet Noah did not have to go out and trap the animals with nets and snares in order to assemble them. The animals came willingly to Noah because of Noah's obedience—his faith was of greater value than all the rope in the world. God blessed these animals with preservation of their lives because of Noah's obedience. God also brought the animals to Noah for preservation, for the future benefit of mankind, because of Noah's obedience. This demonstrates the scope of representation of the covenantal relationship and the fact that mankind has been given a sub-sovereign role to rule over the animal kinds.

The Year of the Flood [August 30] (Gen 7.6, 11)

The genealogies in Genesis (5 and 11), with a few key dated events given elsewhere in Scripture (see, <u>When Was</u> <u>the World Created?</u> [February 9]) and the extra-Biblical date for the destruction of Jerusalem in 586 BC, provide us with a date for creation of around 4000 BC. We must be careful not to make absolute statements about the date of creation since events occurred within particular years—for example, each son in the genealogies could have been born at any time during the year, and not on the birthday of his father.

We are told in Genesis chapter 7 that the flood occurred in Noah's 600th year, or when the world had been in existence for about 1,656 years; which would place the flood at about 2345 BC. This means that *all* human artifacts found above the flood's sedimentary strata *must* be dated after 2345 BC—including Sumerian remains, Egyptian dynastic chronologies, the construction of the pyramids, and discoveries in archaeological digs. It also means that any artifact 'dated' with radiocarbon isotopes must be calibrated to take into account the historically accurate data provided in Scripture. This declaration is scoffed at by almost everyone in the secular scientific community and by many Christians in academic institutions. They simply reject the idea that there was a worldwide flood about 2345 BC. However, they reject it based on presuppositions—e.g., that the world must be older than about 6,000 years, the dating methods used by unbelieving scientists take precedence over the world of God, or that the flood was not a worldwide flood—rather than basing their belief on any factual evidence.

Extra-Biblical factual evidence supports the Biblical date for the flood. No historical records are older than the Biblical date for the flood. For example:

- Support for the Biblical date for the flood may be found in the ancient record of solar eclipses. The first recorded solar eclipse occurred in China in October 2134 BC. Another old eclipse record is found on a clay tablet uncovered in the ancient city of Ugarit (in what is now Syria), with two plausible dates usually cited: May 3rd, 1375 BC or March 5th, 1223 BC—the latter being favoured by most recent authors on the topic. It is clear that by the 8th century BC, the Babylonians were keeping a systematic record of solar eclipses and may even have been able to predict them fairly accurately based on numerological rules. If civilizations were around as far back as 5000 BC, as some contend, then there should probably be older solar eclipse records. Some might claim this is an argument from silence. However, the silence is telling!
- The oldest calendars are the Chinese and the Mayan, other than the Biblical/Jewish calendar. Any *accurately datable* events associated with the Chinese and Mayan calendars are later than the Biblical date for the flood. Legend has it that the Emperor Huangdi invented the Chinese calendar about 2637 BC. This would place the start of the Chinese calendar before the flood—the ancestors of the Chinese people probably brought a memory of pre-flood events with then after the dispersal from Babel. Yet, the earliest actual calendar (astronomical records on oracle bones) is from the Shang Dynasty (dated c 1750-1050 BC). The Mayan's calculated their origins from the time of *creation*, which they placed in 3114 BC. Their calendar gives a date for creation that is less than the date given in the Bible. Again, if civilizations are as old as 5,000 years, why does no calendar start before the Biblical date for creation?

The dating of Egyptian dynasties is often appealed to as 'evidence' that the world is older than a plain-sense interpretation of the Biblical genealogies suggests. The writings of Manetho, a Greek priest (c. 285 BC) often serve as the basis for dating the dynasties. In one version, he lists 561 kings who reigned over a period of 5,524 years. However, Herodotus said that there were as many as twelve contemporaneous kings in Egypt. It is difficult to obtain accurate dates for this era. Will Durant (The Story of Civilization: Our Oriental Heritage; 1954), following Herodotus placed Cheops at 3098-3075 BC. However, Compton's Encyclopedia (1998) placed Cheops at about 2700-2200. This is a variation of over 500 years. John Ashton and David Down (Unwrapping the Pharaohs) redate Cheops to after 2000 BC. They redate the earliest Egyptian dynasties to the 21st century BC rather than the 27th-30th centuries BC; i.e., putting them well after the flood. One possible means of obtaining a date for Cheops appears to be available from the construction of the pyramids. Based on the precession of the earth (wobble of the axis, on an apparent 26,000-year cycle), it is claimed that it is possible to calculate within five years when the foundations of the pyramids were laid. This assumes that the builders aligned the eastern side of the pyramids with celestial north. Using this method, the Great pyramid of Cheops is dated at 2467 BC. Apparently, pyramids built before Cheops are skewed to the west, later ones to the east, largely in accord with Earth's precession. However, dates for one king (Cheops) have, so far, been reduced as much as 630 years. This date is still about 100 years too early if we date the flood at 2345 BC. But, given a history of date changes for Cheops, it will not be a surprise if it is 'discovered' that the foundation of his pyramid is still dated too early.

Regardless of the claims, no civilization date that is older than about 4,300 years can be proved with any form of

objective measurement. The Bible provides the only accurate dates for history prior to about 1500 BC.

Noah was Six Hundred Years Old When the Flood Began [August 31]

(Gen 7.6, 11)

When we meet people for the first time, one of the questions we often ask is, "What is your occupation?" We also sometimes want to ask how old they are; although, because of polite convention we avoid asking that question directly. Age and occupation seem to be defining attributes which are of interest in all cultures—even about Jesus we are told that his ministry began when he was about thirty (Lk 3.23) and that he was the son of a carpenter (Mt 13.55), and a carpenter himself (Mk 6.3). We know that Noah spent about 75 years building the ark and was likely an accomplished woodworker; and we are also informed that he was a "man of the soil" (Gen 9.20)—at least after the flood. We are also told twice that Noah was 600 years old when the flood commenced. With these statements about his age (Gen 7.6, 11) at the start of the flood and with other references to his age (Gen 5.32; Gen 8.13-14; Gen 9.29) we must dismiss any notion (for example, the silly suggestions that the ages in chapter 5 are to be understood as counting months or as having been multiplied by 10) that Noah did not live for 950 actual years, as reckoned by the revolution of the earth around the sun. Noah really was six hundred years old when the flood began.

We are informed of Noah's age at the time of the flood for multiple reasons. An important reason is to give a commendation to Noah. A seed of 'faith' may sprout quickly but then also die as quickly (Lk 8.5-7), indicating that no real and permanent faith was present. Even some believers who show great promise and potential, such as Solomon (1 Ki 3.5-14), can become distracted by earthly temptations as they grow older (1 Ki 11.4). In contrast, Noah's faith did not decline as he grew older. Rather, he persevered as he built the ark, for longer than a lifetime for many people today, and exercised his faith in the reliability of the word of God.

Today we use dates which are measured relative to the approximate date for the birth of Christ. Dionysius Exiguus seems to have made a mistake in 532 AD calculating the date of Jesus's birth, relative to other events in history, when he prepared a set of Easter tables. He was off by about four years. Later calculations put the birth of Jesus at 4 BC. Since Dionysius' calculations, we, in the West, have used dates relative to the birth of Christ—designated with BC (before Christ) and AD (*anno domini*; year of our Lord). Secular historians do not like dates that reference Christ and use instead designations such as CE ('common era') and BCE ('before the common era'). Ironically, they cannot avoid recognizing Christ since a date such as 2000 CE, is still 2,000 years since the birth of Christ. The Jewish calendar uses dates which, according to their records, are counted from the year of creation (AM, or *anno mundi*, 'year of the world'). Ancient Rome dated events from the founding of the city (AUC, *ab urbe condita*, 'from the founding of the city'). Muslims use dates relative to Mohammed's flight to Medina (AH, *anno hegirae*, 'year of the hijra'). In this account, a momentous event—the flood—and its aftermath are related to Noah's age (AN, *anno Noe*). The beginning of a new era is dated from the age of Noah. This is a great honour, placing Noah at a focal point in redemptive history. He is a proto-Messiah (Gen 5.29), a covenant mediator (Gen 6.18; Gen 9.9), and a saviour of mankind (Gen 7.7; 1 Pt 3.20).

Another reason why we are informed of Noah's age is that God wants us to know that the account recorded by Noah's sons is history and not myth. Each significant event in the flood is dated precisely, relative to Noah's age (Gen 7.11, 24; Gen 8.3, 13-14). Myths do not have dates which anchor them in real time and history. Rather, they are dated from "once upon a time", in some murky past. In contrast, the Genesis account of the flood is a record of what happened about 2345 BC. From the ages of the fathers given in Genesis we cannot calculate the exact date (on the Gregorian calendar) for the creation or the flood. The reason is, that in Genesis chapters 5 and 11 we do not know at what point during the year of each father his key, named, son was born. The cumulative effect of portions of years makes any declaration of a precise date suspect—such as stating that the world was created on October 23rd, 4004 BC. However, God intended for us to know exactly—to the day—how long the earth was flooded and provides duration-counters relative to the age of Noah.

We are told that the flood began in the second month, on the seventeenth day of Noah's six hundredth year (Gen

7.11). Many interpreters attempt to place this reference within the context of one of the later Hebrew calendars (the religious and secular calendars begin at different points in the year). For example, some conclude that the flood began in the spring, since the divinely appointed religious calendar begins in March. Why it would be important that the flood began in the spring versus some other season is generally not stated by the interpreters. Also, if what we have considered previously about the layout of the early earth is correct, seasonal differences would have been much less pronounced than many experience today. The earth's single pre-flood continent likely straddled the equator, and the entire continent had salubrious climatic zones, ranging from tropical or subtropical rain forests and moist savannahs in the interior to a moderated maritime climate in the seaward portions of the land mass. It seems that a better way to understand this reference to the month is relative to Noah's age—the flood began in the second month, on seventeenth day of Noah's six hundredth year. This, again, shows the importance of Noah's life as the baseline against which the timing of events of the flood are measured.

Noah Entered the Ark [September 1] (Gen 7.7, 13)

We have all had situations where we greatly anticipated an event, and then the day of the event finally arrived. Sometimes the anticipated event was looked forward to with hope—such as a graduation, a departure on a vacation in the Caribbean, or a wedding. At other times, the anticipated event was not welcomed since it was looked on with dread—for example, major cancer surgery or an appearance in bankruptcy court. For Noah, the day he entered the ark was as anticipated as any event in history. He had been looking for its arrival for about 75 years. In his case, he looked forward to this day with both hope and dread, or with faith and fear.

The day Noah entered the ark was the fulfillment of his hope. He had placed all of his trust in God's word and had undertaken the long-term project to build the ark. Throughout the time he had been at work he had been ridiculed and undoubtedly had asked himself the question, "What if God is playing a cruel joke on me, or the idea to build an ark was nothing more than my imagination playing tricks on me?" Yet, in faith (Heb 11.7) he persevered in the work and brought it to a conclusion. Then, when the pairs of animals began arriving, by appearances, of their own accord during the week of his entry into the ark, he began to see the reward for his faith. The very day he entered the ark for the final time (after entering many times to load it with supplies and then with the animals as they arrived), it began to rain, and his faith was vindicated. The thought probably crossed his mind that those who had doubted his prophetic words were now proven wrong.

However, that day was also filled with dread. Noah was a man of God and a preacher of righteousness. He cared for his neighbours and for mankind in general. He had faithfully preached to them and encouraged them to repent and avoid the coming disaster. He did not wish for any of them to perish in the coming flood. Even those who had showered him with insults, he did not wish for them to face such a fearful death. Like Isaiah, who wept over the pending destruction of Judah's neighbour Moab (Is 15.5) and Jesus who lamented over the pending destruction of Jerusalem (Mt 23.37), Noah faced the coming flood with dread. He knew that all of mankind, including all of his extended family and his friends and neighbours, would die within the next few days. No person with any understanding of the divine image in man and of God's original intention of creating mankind to live with him in paradise could have been as callous and cold as not to have been grieved over what was going to happen.

Noah's faith was personal and was instrumental in his escape from the flood. However, there is no mention in the Bible that any of his sons had his explicit faith. Shem may have been a true believer in the Messianic promise, but there can be doubts about Ham's belief, based on his later behaviour. We can only guess whether any of Noah's wife or daughters-in-law believed. From one perspective, we do not need to consider if they believed, since it is Noah's faith, and God's rewarding him for his faithfulness, that is under scrutiny. Nevertheless, we are informed that Noah, along with his sons, his wife, and his sons' wives went into the ark. They escaped the flood because of Noah's faith. Noah's family is the first recorded instance of a gracious principle—even unbelievers are blessed by the presence of believers in the Messiah (now called Christians). We see examples in Potiphar who prospered when Joseph was his servant and Rahab's family who were saved from the destruction of Jericho because Rahab believed

God's word. Jesus indicates that believers are the salt of the earth (Mt 5.13), indicating that their presence in the world brings a blessing on all. Noah's family escaped the flood for the sake of Noah, not for their own sake. They were given to Noah as a reward for his obedience. They were also saved from the destruction because God had an appointed task for them—to be the founders of the new-world population.

Noah entered the ark specifically to escape the flood. However, he did not have to rush into the ark barely to be saved. He was not like a refugee who was fleeing from a war-torn country and had only time to gather a few items. Rather, taking God at his word, he understood that he had been given a week to make final preparations (Gen 7.4). Once he had completed boarding the animals and housing them in their designated pens and cages, he probably took one more pass through his homestead to see if there was anything else (a tool, cooking implement, or wagon) that he wanted to take with him in the ark. He likely also walked around the ark to check it out one last time. Then, he deliberately walked up the ramp into the ark—not rushing with a sense of urgency but striding boldly into the future with God as his hope. God withheld the first drop of rain until Noah and his family were safely onboard.

Noah's entry into the ark was the fulfillment of a 120-year-old promise. God had declared his intentions for Noah and the world, and now they were being realized. In the same way, God has promised that a new world is coming (2 Pt 3.13). As the promise to Noah was kept, so will be this promise. Noah's entry into the ark is an example for believers in Christ. When they are nearing death, they do not need to panic. Rather, they can walk boldly through the portal leading from this life into the next. It is also an example for all who are alive at the end of time. When Christ returns, those who have not placed their faith in Jesus will be in a panic. But those who are believers will walk boldly and deliberately up the 'ramp' to meet Jesus coming from heaven.

"On That Day" [September 2] (Gen 7.11, 13)

Certain dates stand out in secular and religious history. For example, among the Commonwealth nations and in the US, November 11th is remembered as the end of WW I. In a Christian context, December 25th is viewed by many as an important date. For Noah and his sons, for the 350 years that Noah lived after the flood, and likely thereafter for many generations in the line of the Covenant family, the seventeenth day of the second month, measured from Noah's birthday, would have held greater significance than Noah's birthday. It was the day on which the old world came to an end. From an historical-redemptive perspective, it is one of a handful of truly significant dates—including the sixth day of creation, when God created man; the Sabbath day that he declared holy; the Friday when Jesus was crucified; and the Sunday on which Jesus arose from the grave. If it were possible to associate that day from Noah's life to a specific day of the year in our calendars, it might be appropriate for us to observe, as a memorial, a moment of silent prayer at 11:00, and ask God to remind us of the horrific judgement which came upon all of mankind and the earth because of their continually wicked behaviour.

The fact that the events of the flood—the date on which the flood began and the later recorded dates (Gen 8.4-5, 13-14)—are stated relative to Noah's birthday is a great honour for Noah. In ancient times, events were usually recorded from the ascension of a king to his throne—for example, as the dating of events in Cyrus' reign (Ezra 1.1). No person from the ancient world, other than Adam, is of more importance than Noah, so it is fitting that as the founder of a new, postdiluvian, humanity that events were measured relative to his life.

The precise identification of the date on which the flood began and the later dates, recorded relative to Noah's birthday, anchors the flood with historical specificity. The account of the flood is not a myth, like the *Gilgamesh Epic*, nor are the dates relating to flood events uncertain like those relating to the birth or death of Siddhartha Gautama (Buddha). God intended that we accept the account of the flood as an accurate record of the cataclysm which destroyed all of life on the earth, other than those preserved in the ark. It is not surprising when non-Christians reject the Biblical account of the flood as pure myth—after all they reject the historical existence of Jesus and the significance of his redemptive work—but no professing Christian has a right to question the historicity of the flood and its worldwide devastation.

The precise identification of the date on which the flood began, also indicates that God is intimately involved with every detail of his creation. After Charles Darwin's books were published in 1859 (*On the Origin of Species*) and 1871 (*The Descent of Man*), many professing Christians followed the lead of prominent preachers, such as Henry Ward Beecher, and scientists, such as Asa Gray of Harvard (who is reputed to have been an orthodox Congregationalist), and argued that God retained only a general role as an overall guide of human history and that he used mechanisms for mankind's development from lesser creatures, such as by evolutionary processes. Thus, a movement began within the Church to diminish God's providential "preserving and governing all his creatures, and all their actions," and to incorporate a form of Deism into Evangelical thinking which has since influenced how many interpret the earliest chapters of Genesis. Charles Hodge, of Princeton, countered Darwin in his book, *What is Darwinism*? He argued that Darwinism is atheism and that a belief in evolution undermines God's ultimate authority. We must not follow the false teachings of Beecher and Gray. Rather we must understand that the specificity of the dates given here, and the detailed account of flood events, permit only one conclusion—God is working out his providential governance of the universe in every detail.

God gave Noah a week's warning before the flood was going to begin (Gen 7.4). We can infer that this announcement was given on a seventh-day Sabbath, when Noah was resting from his work of building the ark and was in the act of worshipping God, since it is unlikely that God would have instructed Noah to undertake manual work during a series of days which would have included a Sabbath. God was serious when he set apart the seventh day and blessed it as a day of physical and spiritual rest (*sabata*), and would not have instructed Noah to desecrate the Sabbath by undertaking the labour associated with loading the ark and housing the animals. Thus, the day that Noah entered the ark for the final time was also a Sabbath. The Sabbath, which was originally a memorial of creation, has now become a memorial of earth's cleansing from moral pollution. For Noah and his family, it also served as a memorial of their temporal salvation. Through Noah, whose name means *rest*, the world was given relief, as prophesied by his father, Lamech (Gen 5.29).

The specificity of the date for the start of the flood and of the punishment of antediluvian mankind, also reminds us that God is as precise when it comes to the day of the final judgement. Paul told the Athenians of his generation that God has fixed a day when he will judge the world through Jesus Christ (Acts 17.31). Modern sceptics scoff at this prophecy, just as many in the Areopagus treated Paul's teaching with scorn. However, the reality is that *on that day* a second universal judgement of mankind is fixed by God and it is coming soon (2 Pt 3.3-7).

World's End [September 3] (Gen 7.10-11, 13)

Imagine that you could have been the metaphorical fly-on-the-wall on the last day of the old world. What would you have seen? On that Sabbath day, Noah and his family gathered for worship. Noah preached his final sermon, but it fell mostly on deaf ears. Then, he offered up a slaughtered lamb as a sacrifice of atonement and thanksgiving, asking God to forgive their sins of doubt over the past few years. The family then ate a meal together and took a few moments to look around at their compound and to say goodbye to a few neighbours who came by to see them enter the ark—but who were actually there because they were sceptical and were only interested in seeing Noah embarrassed by the failure of his prophecy about the coming flood. The family then walked up the ramp into the ark and waved a final time to the small crowd, who saw the door of the ark as it closed and shut-in Noah and his family. The people stood outside the ark for a few minutes waiting to see what would happen. As they were turning to leave, it began to rain—a rain much heavier than anything they had ever seen. The crowd quickly scattered to find shelter. At that moment each of them had a queasy feeling of nagging doubt in his stomach as he thought, "Maybe Noah was right after all!"

Meanwhile, what was happening elsewhere? Beyond the immediate vicinity of Noah's compound, hundreds of millions or even billions of people dragged themselves from their beds. This Sabbath day was no different from the six preceding days that had passed. For the inhabitants of the old world, each day was essentially the same. They barely aged from year to year, having the prospect of living nearly 1,000 years. The minds of everyone were set on

two simple goals: minimize the pains of labour (to overcome the effect of the curse, the result of Adam's sin) and maximize the pleasures of lust.

Even though it was a Sabbath, and a day of rest instituted at the beginning, they gave no thought to the worship of God or even about his existence. However, since man is, by nature, a religious being, a few of the people went through an oblation ritual—ringing a bell, lighting a stick of incense, and placing a bowl of fruit in front of a carved image set up in the centre of their courtyard. Then, they set out to increase their possessions so that later in the day they could consume some of them in partying. Jesus tells us, in understated terms, how they all lived: "For as in those days before the flood they were eating and drinking, marrying and giving in marriage, until the day when Noah entered the ark." (Mt 24.38)

Then, it started to rain. The rain itself was no surprise. They had seen rain before. What was different on this day was the intensity of the rain. No one could remember it raining so heavily before—because it had never done so. Those who were indoors did not venture out. Those outside quickly ran for shelter. After a few days of continuous rain, some would have ventured out again. As the floodwaters began to seep under their doors they would have packed up as many belongings as possible and headed inland to higher ground. Carrying their possessions as they slogged through the mud would have become difficult, and all along the trail they would have seen discarded 'valuables'. A few of these people would have recalled the rumours which had spread during the past years of a crazy fellow who was building a funny wooden structure and who proclaimed the end of the world by a flood. They would have begun to wonder if, after all, he hadn't been so crazy. But for most of the people, they would have had no idea why it was raining so hard and what the outcome was going to be. For everyone, the only thing that now mattered was fleeing to the hills to save their 'hides'.

Jesus uses these events, of the last days of the old world, as a warning about the coming of the son of man and the world's end (Mt 24.37–39; Lk 17.26–27). He says that in the last days, at the coming of the Son of Man, the people of the world will be living in the same way as they were in the days of Noah. His prophecy has become realized in so many ways. While there is still much poverty—most caused by unjust governments and ill-conceived economic and fiscal schemes—mankind as a whole is living in more and more sumptuous conditions. In much of the developed world, particularly in North America, even 300m² homes are considered too small, every teenager expects to have his own car, no pre-teen would be caught without a smartphone, each person continually uses the energy equivalent of 70 servants, and the average person consumes 50% more calories per day than he needs. Life for most has become a quest for pleasure. In general, there is no fear of God, no thought of God, and no striving for holiness. Life is nothing more than a game of gusto.

Jesus states that the people of the old world were unaware that the flood was coming. He uses this as an example and warning about his return to earth. For the majority of humanity his return will be entirely unexpected. For those who do not believe that Jesus exists or that he is coming back, his return will be a total surprise. For those who have defined a timetable for events in the end-times, his return will also be a surprise. They will have been expecting that a temple would be built in Jerusalem before Jesus returned, or that a world dictator would amass a vast army. Jesus is coming again, not when people expect him, but when he is most unexpected (Mt 24.44). He will return and, as it was in the days of Noah, the world's end will be a total surprise to most of humanity.

'God of the Gaps' [September 4] (Gen 7.11)

God set the flood in motion—he 'pulled the trigger' to initiate processes which we call 'natural', such as tectonic shifting of the continental plates, volcanoes, and tsunamis. Materialistic naturalists respond and claim that the assertion that God triggered the flood is an example of an appeal to a 'god of the gaps'. They claim that Christians invoke God's causation and miracles only when they cannot explain, with natural laws, what happens in the universe. They claim, further, that as science advances, scientists will be able to explain the workings of the entire universe with just the 'laws' of physics, chemistry, astronomy, geology, biology, and psychology. Their contention

is that someday, science will arrive at a complete understanding of the workings of the universe and rule out the possibility of the existence of God.

Many things that were mysterious to people in previous centuries, and appeared to be magic, can now be explained by applying the known 'laws of nature'. For example, the propagation of light was once a mystery which now is explained with the postulated quantum mechanical wave–particle duality. And, theories of matter and its transmutation have changed dramatically since Mendeleev's development of the periodic table of elements and the understanding that properties repeat across families of elements based on the behaviour of their electrons. However, our culture has naturalized everything and has lost sight of God's continual engagement with his universe.

In the past—particularly from about 1850 to 1900—it appeared that the universe was simple, and that comprehensive explanations and models of its operation would be relatively easy to develop. The naivety of folks in that half-century, about the nature of the universe was similar to that of the encyclopaedists of the 18th century, headed by Diderot, who believed that the sum of all knowledge could be captured in a multi-volume publication. The scientists of the 18th and 19th centuries would be overwhelmed by the explosion of information which has occurred in the lifetime of the readers of this meditation. Likewise, as our understanding about the workings of the universe has grown, we have come to appreciate that it is far more complex than any human ever could have conceived. Consider a few examples:

- The Copernican model of the solar system and Newton's model of gravitation are simplistic compared with Einstein's general theory of relativity, published in 1916.
- Cells are not amorphous blobs of 'jelly' as was supposed in Darwin's day, but living 'machines' which are more complex than any human system such as a super-computer or large urban agglomeration.
- We apparently no longer live in a three-dimensional universe, but in a hypothesized n-dimensional universe where time and space are warped into super strings and D-branes.
- The discovery of DNA introduced significant complexity into biology. But, the on-going project to decode the genome has demonstrated that the codebook of life has layers of astounding complexity, with numerous switches in 'junk DNA', which humbles the hubris of Watson and Crick.
- The relationship between mind and body is proving to be a more complex conundrum than any philosopher or psychologist ever supposed.

The gaps in our ability to explain the universe are increasing, not decreasing, at an accelerating pace. The more we discover about the operation of the universe, the more we come to understand how complex it is and how limited is our knowledge of it. As has been stated (with attribution to Werner Heisenberg, John Haldane, and others), not only is the universe stranger than we imagine, it is stranger than we *can* imagine. Science today is farther than it ever was from creating a 'theory of everything' or a 'general unified theory'. To the extent that men deny the truth that God is instrumental in every detail of the operation of the universe, to that extent they become moral and intellectual fools and move farther away from any hope of explaining any aspect of reality.

God does not govern the universe directly sometimes, and indirectly at other times through second causes. God operates all the time directly and through second causes. For example, when a baby is conceived God operates directly to create a new life and through secondary causes in the uniting of two sets of chromosomes. Every breath we take is combined causation—God wills each breath, and electronic pulses trigger the nerves in our lungs to contract. The moon stays in orbit because Jesus holds the universe together (Col 1.17) and because of gravity. Miracles are not extraordinary because they are the result of God's direct intervention in the world, but because they are not God's *usual* means of acting through secondary causes. God's direct causation is behind *every* event in the universe, whether triggering the flood or shifting your feet to bring you to the breakfast table this morning (Acts 17.28).

It is ironic that the scientists who claim that Christians appeal to a 'god of the gaps' are the same ones who create their own 'gods of the gaps'. They cannot explain the operation of the universe without appealing to fudge factors

such as multiverses, dark energy-matter, cosmological constants, random mutation and natural selection, and longages for geological processes. The 'god of the gaps' is not in Christian creationism. Instead, the 'gods of the gaps' are found in the wishful thinking of the materialistic naturalist's belief system.

Catastrophic Tectonic Failure [September 5] (Gen 7.11)

Researchers who specialize in flood geology hypothesize possible events which may have triggered the flood. Some suggest that it was triggered when the earth entered an asteroid belt. The barrage of asteroids hitting the earth would have caused significant damage, similar to what can be seen on the surface of the moon. Others suggest that the flood was triggered by a rapid increase in radioactive decay rates. There are valid reasons for entertaining either of these hypotheses, but there are also problems with both of them—for example, the need to dissipate large amounts of energy if the earth had encountered a barrage of asteroids, over a few months, at the same density that produced the moon's impact craters. However, it may not be necessary to seek such extreme causal factors to initiate the flood. Nor is it necessary to invoke direct intervention by God. Secondary causes within the way God created earth's mantle structure may have triggered the flood.

When the latex-rubber shell of a balloon, holding compressed air, is pricked with a tiny pin it does not collapse slowly or degrade gracefully, it explodes. It appears from the words "burst forth" that the antediluvian earth was in a similar state of compressed tension as an air-filled balloon. When the tension was released at a localized point the earth's entire tectonic structure exploded, exhibiting the features of a catastrophic failure with an associated total and irrecoverable loss of the former structure. As a small pinprick can trigger a balloon's explosion or the assassination of a minor archduke can trigger a worldwide war, so the trigger for the flood may have been something as simple as a small shift in a part of the continental plate. Like dominos falling in sequence, a first small earthquake may have triggered a series of massive earth-shattering events which opened, in rapid succession, a number of deep fissures throughout the earth's surface.

We must remember that when we are discussing the events associated with the flood, we are not dealing with phenomena which fall entirely into the realm of science. Science, understood correctly, is the systematic study of the physical world through observation and experimentation. The flood and all events which produced the earth's current mega-form are not subject to observation or experiment, and thus technically fall in the domain of history, not science. The best that we can do is to create models and 'test' them to see if the modeled inputs and forces could possibly have produced the landforms which cover the earth today. So, each suggested model for what triggered the flood, and what happened during the flood is, at best, a tentative hypothesis which may, to a degree, fit the *post* hoc observable facts. A possible scenario is that a series of earthquakes caused major fissures to open around the globe. This, in turn, caused volcanoes to erupt, ejecting magma and vast quantities of pressurized subterranean water and heated seawater ("the fountains of the great deep"). A remnant of these underground water reservoirs, on the order of 500,000 cubic kilometres, has been discovered beneath the north Atlantic. The hot water and steam flew skyward with geyser-like projections. The condensing steam and the hot water streamed to the ground as acidic rain. There are about 40,000 extinct volcanoes scattered across the earth—today, there are only about 1,500 active ones. If 40,000 volcanoes were active at the same time, during the early days of the flood, the amount of water vapour sent into the upper atmosphere, to return as rain, would have resulted in what we read, "the heavens were opened".

In this scenario it is not necessary to speculate that the rain from heaven came primarily from water stored in the atmosphere—the hypothesized vapour canopy. It is unlikely that the atmosphere could have stored enough water to cover mountains; and, if it had, the clouds would have been so thick that sunlight could not have penetrated to reach the earth's surface and it would not have been possible to have seen the moon and the stars (Gen 1.14-15). It is unlikely that there was a massive amount of water stored in the atmosphere. Rather, the majority of the rain during the flood came from underground or ocean water ejected as steam. The subsequent rain would have continued to fall for many days. But, as the earth's surface collapsed into the emptying subterranean aquifers, the land would

have become engulfed with seawater. Eventually, the rising water level would have flooded out volcanic caldera and the amount of water spewing into the atmosphere would have diminished, and the extraordinary levels of rain would have ended.

The catastrophic tectonic failure which triggered the expulsion of deep water into the atmosphere may have also initiated a process which eventually split apart the original single continent into the smaller continents of today. When the new continental plates began to separate, with associated subduction of the sea floor below the continental plates (raising the continental plates), deep basins would have formed into which the floodwaters could drain (Gen 8.1), producing the current oceans.

This flood was no 'normal' flood. It was the worst catastrophe ever to befall the earth, and the entire earth's physical features were drastically rearranged. No pre-flood geographic features survived the flood. So, nothing, including the Garden of Eden, the original rivers (Gen 2.10-14), and any hill or mountain, would be recognizable today. It is therefore not surprising that the record of the beginning of the flood is framed to evoke an image of the intensity and destructive force of the water. This brief summary is framed as a merism—waters from the "fountains of the great deep" and "windows of the heavens"—to suggest a reversal (an 'un-creation') of the created order (Gen 1.6-9) and the coalescing of the once-separated waters into a formless watery chaos.

Forty Days of Rain [September 6]

(Gen 7.12, 17)

Among people who believe the Biblical account of the flood, it is almost universally accepted that it rained for "forty days and forty nights" and then the rain causing the flood ceased. However, the account does not necessarily require that understanding—i.e., that the unnaturally heavy rain stopped after exactly forty days. It is not simple to construct a sequence of flood events; however, since it appears that the forty-day period mentioned in verse 12 is the same period as that mentioned in verse 17, we can derive a different understanding of the forty days of rain. Since verses 13-16 are presented as a parenthetical flashback, sandwiched between verses 12 and 17, the account mentions that the flood had started and that it rained for forty days. Then, it makes a digression to observe that Noah and his family and the animals with him had all entered the ark, and had been safely shut in, on the day the flood began. Then, the account continues to speak about the forty days of rain and its impact on the ark. Thus, the forty days of rain may be the period from the day when the rain of the flood began to fall everywhere on the earth at the same time, until the point when there was sufficient water to float the massive and heavy ark. The unnaturally heavy rain likely continued for many days after the forty-day period, until near the time when the flood reached its maximum point (Gen 7.24)—110 days after the ark began to float.

Noah had probably built the ark in an elevated inland location in the general vicinity of the Garden of Eden, where a river flowing from the mountains branched into the four rivers which traversed the entire continent (Gen 2.10). God probably planned that the construction of the ark should take place on an elevated plateau to protect it from the tsunamis which would have swamped the continental coastlands when the "fountains of the great deep burst forth" and to protect it from heavy streams rushing down the mountains.

The construction of the ark in the continental interior may have had another purpose. If Noah had been building a boat on the seashore, he might not have been ridiculed as much as he would have been when he built the ark tens of thousands of cubits from the nearest large body of water. To believe his prophecy about the flood, delivered to people living at a higher elevation in the continental interior, would have required considerable faith. Thus, God used the location of the construction of the ark, as well as the fact of its construction, to test the faith of the hearers. Given this scenario, it would probably have taken at least as many additional days (beyond the forty required to float the ark) of continuous rainfall to provide enough water to cover the highest mountains on the continent, with about 7m of water (Gen 7.20).

The forty days of rain is probably also the maximum number of days that life continued to exist on the surface of

the ground, after the rain began (Gen 7.4). The period of forty days appears often in Scripture and is associated with God's righteous demands and mankind's response to those demands (e.g., Moses on Sinai, Ex 24.18; Ezekiel's prophecy of punishment, Ezk 4.6; the period given for Nineveh to repent, Jonah 3.4; and Jesus' temptation, Mt 4.2). These later instances of forty days provide an allusion to the period of judgement at the time of the flood.

During the forty days of rain, leading up to the point at which the ark finally lifted off the surface of the earth, some people and animals may have been desperately clinging to life. When the first torrents of water gushed out of the earth and the heavy rains began to fall, many people living on the coasts were swept away. Those who escaped the initial tsunamis would have begun to flee inland to join others who were running for higher ground. Some of them would have passed by the ark, standing firm in the midst of fast-flowing streams and flows of alluvial sediment, being washed down the hills. For some time, Noah and his family may have been able to hear people banging on the door of the ark and to look out of the window of the ark and see the crowds attempting to seek shelter from the incessant torrents streaming from the sky. Noah would have been sympathetic to the cries of dereliction coming from outside, but there was nothing he could do about it. He could not have opened the door without jeopardizing his safety and the safety of his family. Nor could he have opened the door that God had shut (Gen 7.16) without being disobedient to God.

The flood did not instantaneously destroy all mankind or the land-based animals. Rather, God determined to deliver the punishment of the old world's inhabitants over a number of weeks. The people, who had ridiculed Noah for about 75 years, and had lived in debauched rebellion against God for centuries, were brought to temporal judgement over a period of time so that they would have an opportunity to consider what their depravity had wrought. God may have used this period as a means of tempering his judgement and calling them to repentance. Given their state of rebellion before the flood, it is unlikely that any did repent; but we will know only once we reach paradise. However, this forty-day period should serve as a wakeup call to our own generation. For example, when Christopher Hitchens, the avowed atheist, was dying of throat cancer in 2011, some Christian bloggers suggested that God was giving him time to repent. He would have scoffed at such a suggestion. However, God often allows people to die over a few weeks to give them time to consider spiritual realities, to repent, and to receive everlasting life.

Safely Stowed [September 7] (Gen 7.13-16)

In the account of the flood, the narrator has reported that heavy rain began to fall, which was caused by the "fountains of the great deep" bursting forth and the windows of heaven being opened (Gen 7.11-12). However, in this section (Gen 7.13-16) he pauses from his narration of the flood and inserts a flashback to the week preceding the beginning of the rain. The English translations of verse 13 usually make it appear that Noah and the animals entered the ark on the very same day that the rain began. However, a better translation may be, "had entered". So, when the rain began, on that very same day, Noah and his family, and the animals had already entered into the ark. This translation would support the context better—Noah had been given a week's warning to place all the animals onboard. Also, since the specific day on which the flood began was likely a Sabbath, Noah would have been sure to have completed all the loading so that he could rest and worship on the day the rain began.

Earlier in the narrative, we read that Noah and his family had entered the ark (Gen 7.7), and that the animals had gone into the ark to escape the flood (Gen 7.9). So, it might seem superfluous to repeat this information only a few verses later. This repetition is not, as some suggest, because the story was woven together from different sources. Rather, the repetition is provided under the direction of the Holy Spirit, who determined that it was important to remind us about the situation of Noah and the animals. God is assuring us that, even though the worst calamity the world has ever known had begun, Noah and his family and the pairs of animals were safely stowed. It is as if he is saying, "The flood has started; but don't be concerned about Noah, he and all those with him are safely aboard!"

Some people will claim that God is austere and cruel for punishing mankind with such a harrowing form of death as drowning. In response, it is important to remind them that it was mankind's extensive wickedness (Gen 6.5) that

made it necessary for God to punish the antediluvians. Death is the result of sin (Gen 2.17), and no form of death is pleasant. There cannot be anything unjust in the way by which God punishes, for he is completely just and good any punishment he executes is exactly suited to the crime and entirely deserved (Ex 34.6-7). However, lest anyone persist in his claim that God is cruel, we also remind him that God demonstrated his gracious spirit and kindness by offering his Son to die as a substitutionary sacrifice so that he can save many. In a similar way, and as a token of what he would do through Jesus, God demonstrated his love in the midst of a universal punishment by providing salvation for Noah and his family. There is no favouritism with God (Rom 2.11; Acts 10.34) with respect to his choices in election and his providential dispositions of general grace. Yet, he does show partiality to those who are his own—Christ died for them, they are adopted into God's household and declared to be sons and princes, and they have a promised everlasting inheritance beyond anything we can imagine. The principle that God cares for his own in a special way is shown in these verses where we find Noah and his family safely sheltered from the storm in the ark.

The fact, and extent, of God's love is emphasized by the personal attention which he shows to Noah and his family in the Biblical record. These verses indicate that each of them chose voluntarily to leave the world that was consigned for destruction and to enter the ark. In doing this, they had to renounce all that they were leaving behind wealth (Noah was undoubtedly wealthy since he had been able to finance the ark's construction), comfort, friends, and familiar routines—for an uncertain future, for an unknown time, based on the words of an unseen God. God's love for his own people is also illustrated by the record of the names of Noah's sons and the mention of the presence of their wives who accompanied them on the ark.

It is not an oversight or slight to women that there is no mention of the names of the wives who were saved in the ark. God deals with mankind through a covenantal relationship in which women and children are represented by their husbands/fathers. It is not that God views women as unequal to men as persons—he has recorded the names of women previously in the Biblical record (Gen 3.20; Gen 4.19) where they play an integral role in the unfolding drama. The names of the wives were simply not germane to the account of the flood; introducing them would have deflected attention from its primary focus— Noah's faith and obedience. Despite the silence of the Biblical account about the women's names, the question has been raised repeatedly. The *Book of Jubilees* (a copy was found among the Dead Sea Scrolls) provides a name for Noah's wife. It is possible that it is correct, since some ancient teachings and traditions were not recorded in the OT but later are mentioned in the NT (2 Tim 3.8; 1 Pt 3.19; Heb 12.16; Jude 9, 14-15). Another ancient writing, the *Book of Jasher*, and the pre-Christian *Irish Chronicles* give different names for Noah's wife. The names of Noah's sons are mentioned only here at the beginning of the flood and again in Genesis 9.18 when the inhabitants exit the ark, at the end of the flood. Their names are relevant because of their role as the progenitors of all the postdiluvian nations (Genesis chapters 10 and 11).

An essential message of this section is that God cares for his people, despite their particular sins. A second essential message is that God is saving a remnant from every generation, who will dwell with him forever.

The LORD Shut Noah In [September 8] (Gen 7.16)

The last time Noah saw the old world, as he had known it for 600 years, was when the door of the ark was closed behind him by God. As the rain began to fall, Noah could have gone onto the upper deck and looked out the window. But what he would have seen would have no longer been his world. Instead, he would have looked out on a scene of chaos and destruction. Desperate people, who had suddenly realized that disaster had befallen them, would have been crowding around the ark begging to be let in. God's action of shutting Noah into the ark—literally, "covering him around"—is not to be casually passed over. It has profound significance both with respect to the mechanical act of sealing the ark and with respect to its spiritual implications.

It is probable that Noah and his sons had constructed, hinged, and installed a large door to cover the opening in the side of the ark. We have already noted that their technology was likely comparable to that of the late Middle Ages,

which was able to construct cathedrals such as Notre-Dame de Paris. However, they could not have sealed the opening on their own—they could not have caulked the seams on the outside (Gen 6.14), to make the ark watertight. God had to intervene directly at this point to protect his people from the pending disaster. Until this point, Noah had not experienced, what people would call, a miraculous act of God—although the arrival of the pairs of animals at the ark was certainly not the result of ordinary behaviour. Noah had acted in faith and obedience for about 75 years as he built the ark, but it was only at the point that he had to be sealed in, that he was able to see God's hand working directly in his preservation. This demonstrates that ultimately it was not Noah's work of building the ark, or the ark itself, which would protect and save Noah, but the hand of God.

God's action at this point indicates that he is directly involved in managing everything that transpires in this universe. He usually governs through secondary means—ranging from 'natural forces' to human volition—but behind every event in the physical realm is his providential governance (Acts 17.28). That shutting Noah in is a personal and direct act on the part of God is indicated through the use of the name Yahweh (LORD). It is the Covenant-God, who has a personal relationship with his people, who acts to preserve Noah as a special object of his grace.

God demonstrates in the action of shutting Noah in, that he will ensure that his people are safe before he executes punishment on the wicked. We notice the same thing with regard to the destruction of Sodom and Gomorrah (Gen 19.22) and Jerusalem (Mt 24.15-21). This does not mean that no believer ever suffers collateral damage or death as a result of God's punishing the sins of unbelievers. However, even in those situations, God's hand is with his people—sometimes taking them directly to glory—because all things are being worked out for their good (Rom 8.28). But a general principle which we can observe from God's action is that he does not execute his judgement until he has provided for the security of his people (Is 57.1). In the same way, God is withholding the final judgement, and the associated destruction of the physical elements which make up this present universe, until the very last person whom he has planned to save has been brought into his kingdom. At that instant, the second great cataclysm will be unleashed on the physical realm and all mankind will see the return of Christ and know that their perpetual destinies are sealed.

The presence of righteous Noah on the earth held back the floodwaters while the ark was being constructed. At times, God withholds punishing the wicked because of the presence of the godly. Jesus says that believers are the salt of the earth (Mt 5.13). He is not speaking of salt as a seasoning agent, but as a preservative. It is not as if the world had a good flavour that could be made richer by the presence of Christians. Rather, the presence of Christians protects the world from putrefaction, decay, and total rottenness. As God would willingly have preserved Sodom from destruction if there had been ten believers in the city, so he preserves a city or nation because his people are there and are praying. Christians do not apply seriously enough this truth. If we did, we would see more Christians living in ways which would challenge our decaying culture and making known the hope of the Gospel, rather than wallowing in moral rot with the lost.

Until the point that God shut Noah in, anyone who had believed his preaching and had asked to be preserved in the ark would have been admitted. However, once the door was shut, it not only protected Noah and his family from the torrential rains and flooding but it kept out those who suddenly had a great desire to save their lives. This temporal situation is an example of what Jesus speaks of in the *Parable of the Ten Virgins* (Mt 25.1-13). The young women who were not prepared for the wedding came to the feast and found the door shut. They begged to have the door opened but it could not be opened, and they were told that they were unknown to the lord of the feast. As it was too late for those pounding on the door of the ark, so it will be when Christ returns and those who reject him will be forever shut out. However, those who have been shut in the spiritual ark—Jesus Christ—by the gracious hand of God, will be forever protected from the final calamity which will strike this earth (2 Pt 3.11-13).

The Ark Floated [September 9] (Gen 7.17)

You may have experienced the mixed feelings that often accompany any new undertaking—for example, riding on the world's largest rollercoaster—an excited expectation combined with doubtful dread. Noah undoubtedly had such feelings when he and his family had dwelt in the ark for many days watching and listening to the pounding rain. After the rising water began to lap against the base of the ark, Noah probably began to wonder if the ark would actually float and keep his family safe from the flood. At the same time, he would have wanted to get the ordeal over with—waiting six weeks to see if it the ark would float would have become a strain on anyone's patience. Also, Noah was in a situation where there was only one chance for success—there were no redundant systems and backup plans. Like a crew putting together a complex stunt for a movie, for which there cannot be any retakes, his emotions must have been highly primed waiting for the proof that the ark was going to work as designed.

Then, sometime shortly after the 40th day of rain and rising floodwaters, the inhabitants of the ark would have felt a different sensation. Rather than the constant pounding of muddy currents and waves, they would have felt a slight 'nudge' as the ark lifted off the surface of the ground. We experience this sensation when a train begins to accelerate and the forward coupling engages our car and it begins to roll out of the station, or at that instant when a taxiing plane obtains sufficient lift that the wheels on the landing gear separate from the runway. We can imagine that within seconds of 'liftoff' Noah and his family would have let out a joyous cheer and offered congratulations all around.

After the initial 'rush' of excitement and exclamations, they likely began to reflect, with a degree of surprise, on the fact that the ark was really floating. Their surprise was not the result of doubting God's word, but rather due to their lack of experience with such a phenomenon. The ark was undoubtedly the largest non-stationary object built in the pre-flood world. There may have been larger stone dwelling units—equivalent to castles or palaces—but if the antediluvians had built boats on the continental coast (e.g., for fishing), nothing comparable to the ark would ever have been constructed. So, they probably made statements such as, "I can't believe this thing actually floats!"

Their surprise would eventually have been replaced with gratefulness. At dinner that evening, Noah undoubtedly offered a prayer of thanksgiving and praise. He led his family in a consideration of the marvelous wisdom of God in giving them the design for the ark and of what God had done in preserving them from the cataclysm raging outside.

The ark was designed to be incredibly stable. Its basic shape made it nearly impossible to capsize and it could maintain its structural integrity while flexing due to hogging (riding across the crest of a wave) and sagging (riding across the valley of a wave). Yet, on the night after the ark began to float, its inhabitants would probably have had their first bout of seasickness. It would have taken some time for them to get their 'sea legs'. During those early days of floating, a few questions may have come to their minds, such as: Will the seams hold through the continuous onslaught of waves? How long will we be here? Where will all the water go? But the worst was over. As the weeks passed, they would have become conditioned to the floating sensation and to the creaking sounds as the ark flexed in the waves. Looking out on a dull brown sea of silt-laden water and on mats of rotting vegetation, their lives would have been filled with the routine of caring for the animals, while waiting on God for what was going to happen next.

Noah's faith in God, and in God's word, had been rewarded for a second time. After completing about 75 years of construction he saw the first sign of the reward for his confidence in God, when the flood-rains began to fall—God's word had been fulfilled (Gen 6.17; Gen 7.4), but he and his family were safely stowed in the ark. Then, about 40 days later, he saw the second payment toward his reward, when the ark began floating above the floodwaters.

Noah undoubtedly reflected on the important spiritual message that the floodwaters proclaimed (Hab 3.10). Those waters had destroyed all life on the land—by sometime around the 40th day, and certainly by the 150th day, no animal, bird, or human remained alive except in the ark. In addition, the farms, orchards, gardens, and dwellings which men had made were all in ruins and being wiped away or covered with sediment. Nothing remained of all of man's labour under the sun. Yet, the same waters which had destroyed everything left behind, provided safety for Noah and his family by lifting the ark above the calamity. Events which to unbelievers are a symbol of destruction

or death can be, for believers, a symbol of life (2 Cor 2.16)—consider, for example, the cross, an instrument of Roman torture, which became the means of everlasting life for mankind; or physical death, which is the last enemy for the unbeliever, but is the portal by which we enter a new life. In like manner, an economic collapse in the West might flush away man's vain hope in human systems and revitalize the Church. All events, even those which appear to be disasters from the world's perspective, work together for good for those who are part of God's household (Rom 8.28).

Dinosaur Footprints [September 10] (Gen 7.17)

All land-based animals and humans were probably not wiped out during the first few hours, or even days or weeks, of the flood. But certainly, by the 150th day of the flood, they were all dead (Gen 7.17, 21). However, it is likely that during the first 40 days of the flood, and possibly longer, some men and animals escaped destruction by fleeing inland to higher ground or survived for a time on large masses of floating logs and vegetation. Sometime between when the ark began to float on the 40th day, and the flood peaked on the 150th day, the last animals and humans not stowed safely in the ark, died out. A key piece of evidence, found in the sediment layers deposited by the flood, which indicates that animals continued to exist after the flood had begun, is the presence of fossilized footprints (especially from dinosaurs and birds).

The existence of these footprints cannot be contested, as there are thousands of them in the sedimentary strata deposited around the globe. What is debated, is whether the footprints were laid down during the first few months of the flood or, as most geologists and paleontologists claim, over millions of years. Michael Oard has proposed a model (in his book, *Dinosaur Challenges and Mysteries*) which can explain the presence of dinosaur footprints and also of other dinosaur remains such as bone beds, with the bones of a single or a few dinosaur species, and dinosaur egg deposits. In contrast, supporters of the theory of evolution have difficulty explaining how these dinosaur remains can exist without resorting to some form of local or global catastrophism—they are merely unwilling to attribute the catastrophe to the Biblical flood.

Although the flood was a worldwide catastrophe, the devastating effects were not equally catastrophic in all places at all times, during the first few months of the flood—until the waters had completely covered the earth by the 150th day. During the early stages of the flood, the water levels would have been continually rising across the entire continent. However, due to regular natural phenomena such as lunar tides and currents caused by the Coriolis Effect, the water level in a particular location would have risen and fallen many times before an area was completely inundated. Other contributing factors to changes in water level would likely have included tectonic uplifts and sinking crustal plates. Consider, for example, a large plateau. As the rising sediment laden seawater reached the lip of the plateau, it would have washed over the land as a sheet of water and would have deposited its sediments. After the water receded temporarily, the layer of deposited mud may have been exposed for a number of hours or even days. When the next wave of water covered the plateau, another layer of sediment would have been deposited. This could have continued for weeks, with some locations receiving hundreds of layers of sediment of various thicknesses. Eventually the plateau would have been permanently submerged. However, even after it was submerged currents would have continued to deposit sediment layers. In many places, fossils are found in lower levels of sediment with one or more additional layers of sediment on top, which are devoid of fossils. This indicates that the remains of most animals were covered with sediment during the early stages of the flood, but sediment continued to be laid on top of the earlier layers as the flood progressed.

In general, smaller animals, those which could not move quickly inland, and those which could not swim, would have been wiped out early in the flood. More mobile animals (e.g., many mammals, compared with reptiles) could have fled inland and survived later into the flood, thus their remains would appear later in the sediment layers. Larger animals, particularly those which could swim, would have survived the longest. Consider again the example of a large plateau. It may have been covered with a couple of meters of water in one oscillation of the rising sea level. A large dinosaur standing in two meters of water could have kept its head above the water level and would

have tried to run toward higher ground. As it ran, it would have left footprints in the deposited sediment layer. Alternatively, after the water temporarily drained off the plateau the dinosaur could have tried to walk or run away from the next wave of approaching waters. Eventually, the dinosaur would have died of hunger, exhaustion, exposure, or drowning and its remains would have been embedded in a next layer of sediment. It is ironic that scientists who do not support the model proposed by Oard have independently suggested a theory which is similar. A summary of research done by paleontologists in Australia, published on the *Science Daily* Web site (2013-01-08), stated that the "world's only recorded dinosaur stampede is largely made up of the tracks of swimming rather than running animals." We would not accept the idea that this is the *only* recorded example of a dinosaur stampede—since most preserved dinosaur tracks probably resulted from stampeding dinosaurs which were fleeing a floodwater oscillation. However, their independent findings support the idea that the dinosaurs were fleeing in water, in a hurry.

Men, ultimately, cannot suppress truth. The more they study the fossil record the more they have to reject their models which presuppose long-ages, and uniform processes. They have to accept a catastrophe model in which fossils were formed through the rapid deposition of successive layers of sediment. They will continue to try to tweak their models, but the only model which can adequately explain the facts is one that is based on a worldwide flood, which rapidly deposited many layers of sediment in less than a year.

Dinosaur Remains [September 11] (Gen 7.17)

In the previous meditation, we considered Michael Oard's model (presented in *Dinosaur Challenges and Mysteries*) which can explain the existence of dinosaur footprints and of other remains of dinosaurs such as bone beds and egg deposits. His model explains how the rising floodwaters could have temporarily covered an area of land, deposited their sediments, and then, due to regular natural phenomena such as lunar tides and currents and exceptional events such as tectonic uplifting, the water level could have fallen. This oscillation could have occurred a number of times before an area was completely inundated.

Some people suggest that the evidence found in the fossil record, in the sedimentary rocks, appears to be problematic for those who support a *global* flood. But, to the contrary, the evidence actually supports the flood model better than the models proposed by geologists and paleontologists who espouse the theory of evolution and the belief that the sedimentary rocks were laid down over millions of years, rather than in less than one year.

Some of the evidence, found in the fossil record, which supports the hypothesis that the floodwaters may have temporarily covered an area but retreated again to leave it temporarily exposed, includes the following:

- Millions of dinosaur tracks have been found in over 1,500 locations around the globe. In many places these tracks have been laid down by a single species of dinosaur, or a few species, suggesting a group of animals which moved through the area. Often the tracks appear to take a relatively straight path, indicating a directed purpose (e.g., fleeing from something, such as floodwaters) rather than a leisurely foraging pattern. Footprints of the same species are found in multiple layers of sediment—even in dozens, and possibly hundreds, of layers. It is beyond improbable that a group of dinosaurs of the same species could appear in the same location, multiple times, over millions of years, and that a record of each group's passing by be recorded as footprints in mud. It is far simpler to believe that the oscillating floodwaters deposited layers of sediment, over hours or days, and that a single small group of dinosaurs left their footprints in each progressive layer of sediment as they attempted to flee to a place of safety.
- Preserving animal tracks is far more difficult than making them. Their preservation must be rapid; otherwise, they would be eliminated by natural erosive forces. Thus, to preserve the tracks it is necessary that there be a rapid burial of the sediment layer containing the footprints. However, the burial cannot be of such a force that it would obliterate the impressions (including of delicate bird tracks and raindrops). The best explanation for the preservation of the tracks is a planer flow of water carrying a heavy burden of sediment. As it washed over the previous layer of sediment with embedded footprints, it would drop its sediment and fill the impressions. Subsequent chemically charged depositions of sediment, laid down in rapid succession, would begin to harden

into rock before the postdiluvian erosive forces came into effect.

- Dinosaur tracks have been found on the top of coal seams, which are embedded between sedimentary rock layers. A good explanation for this phenomenon is that a mat of floating, decaying vegetation was swept over an area where a water oscillation had previously deposited a layer of sediment. The dinosaurs left their footprints in the mat of vegetation before the next wave of sediment covered the vegetation.
- Dinosaur eggs (some containing embryos) and 'nests' are also found in the fossil record. What appear to be nests are actually egg clutches, but not necessarily true nests. A possible explanation for their presence is that during an oscillation of water levels, the female dinosaurs laid their eggs in a hollow in the bare sediment. There is little evidence of true nest building, as is displayed by other kinds of animals. For example, the fossilized clutches of eggs are not surrounded by vegetation, yet the eggs which have been preserved would have been more fragile than material used to construct nests. The evidence indicates that the eggs were laid in a situation of stress—such as would have been caused by the flood. The presence of multiple clusters of eggs in a locale does not indicate a 'rookery' of some sort, but rather that the animals had limited space and had to deposit their eggs somewhere. Also, there is little evidence that the eggs. This indicates that the eggs were broken from the outside, probably by hungry animals, during their brief period of exposure, rather than by hatching animals breaking out of their shells. The existence of these fossilized egg remnants supports the model which consists of sediment being deposited in layers over a brief period, in an energy regime that would not break or move the eggs—i.e., they were not covered by sediment form a flash flood or they would have been washed away and destroyed.
- Dinosaur bone beds (often from a single species) show evidence of scavenging (e.g., tooth marks), desperate feeding (e.g., wood fragments in stomachs), and few examples of juveniles. These factors all indicate that the last days of these large groups of dinosaurs was desperate, before they finally succumbed, and their remains were deposited by a flow of sediment washing over the land.

The Waters Prevailed Over the Earth [September 12] (Gen 7.18-20)

Some people think that they can discredit the Bible's account of the flood by asking, "Where did all the water come from?" and, "Where did it all go?" They claim that if the highest mountains were covered with water then the amount of water required to cover Mt. Everest would be considerably more than is available on the earth today. It is possible, of course, that God could have created extra water during the flood and then removed it after the flood. However, we do not need to appeal to direct intervention by God, when secondary causes easily explain the arrival and departure of the water which covered the highest mountains with about seven meters (fifteen cubits) of water.

A key mistake these people make is to base their argument on an invalid assumption, which is that the world's topography is essentially the same today as it was before the flood. They can present no evidence for this assertion, other than the unprovable claim that the mountains and ocean basins of today are hundreds of millions of years old. We know, from God's word, that the flood was not a local flood, that the entire world was inundated, and that every mountain was covered with water. We also know that the flood was initiated when great forces where unleashed within the earth's mantle, when the "fountains of the great deep burst forth" (Gen 7.11). The tectonic changes to the earth caused by cataclysmic crustal plate shifts, earthquakes, and volcanoes reshaped the surface of the earth during (and following) the year of the flood. The topography of the earth today is entirely different from what is was before the flood.

The original topography of the earth likely consisted of a single continent surrounded by a shallow sea. This original continent sloped from Eden, at a relatively central point, to the surrounding shallow sea; so, the pre-flood mountains were not as high as what we think of as high mountains today. Today's highest mountains did not exist prior to the flood, as evidenced by sedimentary layers, often with fossils, on many mountains—limestone rock specimens brought back from the summit of Mt. Everest in 1956 and 1963 contain fragmented *crinoid* (a sea animal) fossils.

Today's highest mountains, such as the Himalayas were formed during the late stages of the flood or soon after.

Water that was trapped in the crustal layer of the earth burst out at the initiation of the flood and continued to flow from the crust for months. At the same time, the continental land mass began to sink and break up as the water domes collapsed. During this process, the water level on land continued to rise—sometimes rapidly and sometimes more slowly, thus adding to the oscillations of water levels normally caused by tides and currents, which allowed for the formation of fossilized dinosaur footprints and other remains (Gen 7.21-22). If the surfaces of the earth were completely smooth, the water in all the oceans would cover the earth to a depth of about four kilometers. So, during the flood, there would have been plenty of water added to the original shallow sea, from the underground storage chambers, to cover the antediluvian high mountains. After the floodwaters peaked, the ongoing plate shifting, and tectonic changes resulted in a rapid formation of deep ocean basins (replacing the shallow sea) into which the sediment-laden waters drained.

Noah's sons were able to report that the waters covered all the high mountains, since they had probably lived near the centre of the original continent and observed the water rising to cover the mountains around Eden. In addition, they were able to report that the water increased to cover the mountains because they knew the draft of the ark and where its waterline was, and they observed that it floated over the tops of the mountains of Eden.

We noted previously that the flood covered the entire world (Gen 7.4, 10, 22). God ensures, by how this section is worded, that it cannot be used to support any other conclusion, without twisting words into meaningless sounds:

- The word 'all' may at times be used in a relative sense. So, 'under heaven' is added to ensure that it includes *every* mountain.
- Superlative terms such as 'greatly', 'mightily', 'prevailed' are intended to eliminate any doubt about the extent of the flood. The use of a double superlative ('exceedingly exceedingly'; Hebrew in Genesis 7.19) emphasizes this.
- Repetition is used to emphasize that the waters increased steadily to levels that would never be seen again and certainly not in any flood confined to one locale.

To claim that the flood was only a local event and that the account is mere hyperbole, is an absurd denial of God's explicit word. Regardless of what scientists may say about earth's current geology and topography, the Bible teaches that there was a universal flood of such a magnitude that it covered the entire earth to a great depth of water, destroyed all life and human artifacts, and left behind a mass of fossil evidence of its destructive force.

The fact that the highest mountains were covered with water informs us that fleeing to the mountains cannot provide safety (Ps 121.1; Jer 3.23) and that only God can provide salvation. Even the tallest person, standing on top of the highest mountain could not have survived the flood. Thus, in understated terms, God reminds us that men are mere creatures who cannot resist God's sovereign will, defeat his purposes, or stand in the face of his judgement.

The 'Cambrian Explosion' [September 13] (Gen 7.18-22)

When Canadian children study geography they learn about the Canadian Shield, also known as the Laurentian Plateau. It is a large area north of the Great Lakes which surrounds Hudson Bay and extends to the Arctic Ocean. It is composed of exposed bedrock consisting of igneous and metamorphic rock formations, covered with a thin layer of soil. About half of Canada's land area is included within this geological feature. Geologists call the rock which makes up the Canadian Shield 'Precambrian', which they claim is around two billion years old.

According to geologists, layers of sedimentary rock containing fossilized plants and animals were slowly deposited on top of the Precambrian bedrock, in other areas (e.g., in the Burgess Shell formation in the Canadian Rockies), beginning about 540 million years ago and continuing until the present. At the bottom of this multi-layer column of rock layers is a sequence 'dated' at 540-490 million years ago, and referred to as the 'Cambrian' rock formation.

The Cambrian rock formation supposedly existed during the period of the earliest evolution of complex multicellular plants and primitive animals. Although there are trace fossils in some of the rocks labelled 'Precambrian', the first occurrence of significant numbers of fossils in the geologic column occurs in the Cambrian rock layers. In these rock layers, fossils of many of the present plant and animal phyla have been found. Since very few fossils are found in the Precambrian rocks, and generally of only single-celled organisms, but numerous fossils of many types of plants and animals are found in the Cambrian rocks, the abundance of fossils in these rocks has been referred to as the 'Cambrian Explosion'.

The Cambrian Explosion is believed to show the rapid evolution and appearance of many kinds of life over a relatively short period of 50 million years, compared with the supposed age of the earth (~4.5B years). This raises a question about the abrupt appearance of fully formed complex multicellular life forms, apparently from nowhere—i.e., from no apparent earlier, intermediate, life forms. Various explanations for the Cambrian Explosion have been proposed, such as: changes in environment conditions (e.g., ozone formation, increases in oxygen levels, massive glaciation, or variations in the concentration of elements such as calcium in seawater), mid-ocean volcanic activity, modifications in epigenetic or genetic information which permitted many different body forms to develop, changes in predator-prey dynamics, and changes in the size and diversity of planktonic food. None of these explanations has received significant support from evolutionists, so the reason for the abrupt appearance of many diverse life forms in the lowest layers of sedimentary rock remains an unsolved mystery.

The Cambrian Explosion presents evolutionists with a number of major challenges which they cannot address adequately. For example, there is no evidence of evolutionary development (i.e., intermediate forms) prior to the Cambrian Explosion. If evolutionary processes had operated for millions of years before the Cambrian Explosion, we should expect of find a continuous sequence of fossils in rocks going back a billion-plus years. Also, any fossils identified as 'Precambrian' are too undifferentiated to be ancestral to all of the Cambrian phyla. And, the sudden appearance of many phyla suggests the occurrence of a unique event rather than a repeating gradual process.

The fossil biota found in the Cambrian rocks represents a range of water-dwelling organisms. The majority of the fossils represent plants and animals which are attached to the muddy sea floor or scavenge in the mud. A few of the fossils represent free-swimming organisms, including jellyfish and jawless fish (with vertebra) similar to eels. The occurrence of these classes of fossils makes sense when a catastrophic worldwide flood model is applied. As the "waters prevailed and increased greatly on the earth" massive amounts of erosion would have occurred. Sediments washed off the original continent into the surrounding shallow sea would have trapped the benthic creatures and covered them rapidly with successive current-driven layers of sediment. Many of the free-swimming creatures would initially have been able to navigate through the turbid waters and avoid being covered. Over time, as the waters continued to prevail over the earth, more of the free-swimming creatures would have become trapped along with land-based animals which could no longer find any elevated areas which were not inundated. The remains of the great deep" decreased. Thus, we would generally expect to find the fossils of fish, reptiles, birds, mammals, and men at higher levels in the sediment layers deposited by the flood—exactly where we find the majority of these classes of fossils.

Evolutionists struggle to provide an explanation for the Cambrian Explosion because they begin with a faulty presupposition—the idea that fossils in the lowest layers of the sedimentary rock column represent the earliest life forms and higher layers contain more advanced, evolved creatures. However, the simplest way to explain the origin of these fossils is to accept the fact that the flood occurred and that all the fossils in the geologic column are the result of the flood or immediate post-flood events.

Total Obliteration [September 14] (Gen 7.21-23)

Every land-based creature (mankind and animals) with the 'breath of life' (Gen 1.30; Gen 2.7) was obliterated by the flood—some of the animals living in the sea could have survived during the flood, even though the water contained a lot of silt and organic debris. In addition, plants (as roots, shoots, or seeds) could have survived the flood as part of floating, decaying mats of organic debris. If we used our modern taxonomic classifications, we would conclude from the statements in these verses that primarily amphibians, reptiles, mammals and birds, along with people, were all killed. However, our modern classification scheme is arbitrary and would have to be narrowed, since sea-based mammals (e.g., whales) were not carried in the ark. The Biblical account uses a different classification scheme for the animals that were blotted out, listing: livestock, beasts, swarming creatures, creeping things, and birds. We noted previously (Gen 6.19-20) that God's classification scheme, reminiscent of the creation account, is not primitive or scientifically naïve—it is just different from the way that Western scientific tradition has determined that animal life should be classified. God had a purpose for classifying animals in this way, which we do not entirely understand.

Every animal and man that moved on the face of the earth died. No statement could be more inclusive and absolute than what is given in this passage—the flood was a universal cataclysm that killed every living thing, which was not in the ark. Men and animals were unable to flee elsewhere to avoid the water, because the floodwaters were everywhere. Those who claim to believe the Bible but argue that the flood was localized to the Mesopotamian valley, have difficulty explaining the worldwide presence of animal and human fossils in the sedimentary rocks, because they are unwilling to take God at his word, and would rather believe the lies of men who have rebelled against God.

The extent of the destruction of life caused by the flood is beyond our understanding. We can obtain only a limited idea of its extent from the huge quantities of coal and fossils which are found throughout the world. These indicate that the pre-flood earth was very fertile and supported billions of animals. There were also likely millions of people alive at the time of the flood—possibly more people were alive before the flood than are alive today. Included among those who perished in the flood would have been Noah's friends, those whom he had hired to work with him on the construction of the ark, his brothers and sisters and nieces and nephews, and possibly other children which he had had before the birth of the three sons who were with him in the ark. This indicates that mankind's wickedness had become so all-consuming that God used the destructive force of the flood to blot out every remnant of the pre-flood life and civilization. The memory of the antediluvians, other than for the few brief statements given in the Bible (and possibly a few isolated artifacts found in coal or sedimentary rock formations), was erased from memory. God did this so as not to leave the ruins of any cities, temples, or idols (such as those of the Bagan Kingdom found today in the jungles of Myanmar), to survive through the flood, which post-flood peoples might treat as religious art and revere as sacred.

God's sovereignty over creation is displayed in this passage. God makes no apology for blotting out the vast populations of men and animals. He does not need to give an apology, for he is the author of life, who can dispose of his creatures as he sees fit. Also, he had already indicated (Gen 6.5-7) that the flood was a direct punishment for a level of wickedness that had progressed beyond the possibility of correction. The greatness and glory of God are displayed in the exercise of his retributive justice as much as in his loving protective care of the handful in the ark. God punished man and beast by the flood as a precursor of what is to come on the great last day of this created realm. On that day, he will bring about the destruction of this world, not by water but by fire (2 Pt 3.6-7). As no one could escape the flood, so it will be impossible for sinners to escape his righteous judgement when the elements melt away.

We might think that the statements in verses 21-23b are redundant and add little to the account of the flood given thus far in chapters 6 and 7. However, the repetition sets up a significant and climatic contrast with the statement, "Only Noah was left, and those who were with him in the ark" (verse 23c). The contrast has far less meaning if the world's pre-flood population was a few hundred or a few thousand, or even a million. But when it is only eight out of a possible billions who were saved in the ark, the stark reality is that Noah's righteousness (Gen 6.9; Gen 7.1) stands out as something incredibly rare. No one else alive at the time of the flood believed God's word or took his

threats seriously. Noah is singled out as being alive, in contrast to everything else that was obliterated—mentioned three times as 'died' and 'blotted out' (2X). While everything—all men, animals, and the vestiges of the pre-flood civilization—around him were obliterated, Noah alone remained alive as a memorial to the mercy of God. He and his family are the first remnant in a litany of remnants which God would preserve throughout history (Gen 45.7; Ezra 9.8; Is 10.21; Rom 11.5). God preserves his remnant out of every generation, from the host of unbelieving humanity and from the midst of those being punished because, in his mercy, he has always had a plan to save a regathered people who will populate his re-created earth, and who will dwell with him forever in holiness (Rev 21.3-4).

Dinosaur Extinction [September 15] (Gen 7.22-23)

Paleontologists who accept the ruling paradigm of biological evolution—natural selection occurring over millions of years, driven by random mutations—claim that most of the dinosaurs went extinct 65M years ago. The cause is debated, but, without exception, the idea that the dinosaurs (except for the few in the ark) were wiped out by a worldwide flood, about 4,400 years ago, is rejected. They claim, from their study of the fossil record, that the extinction of the dinosaurs was one of several similar mass extinctions. The first such extinction of much of the marine life, 440M years ago, was supposedly caused by dramatic fluctuations in the sea level. Another mass extinction of marine life caused by global cooling and a loss of oxygen in the oceans supposedly occurred 365M years ago. Later extinctions at 250M and 200M years ago, supposedly wiped out much of the marine and land-based animals.

More than a dozen hypotheses for what caused the extinction of dinosaurs have been proposed, including: climate change and a resulting ice age, radiation from a supernova explosion, a comet or giant asteroid hitting the earth, local floods, volcanic eruptions, overcrowding, poor diet, increases in methane gas, or a virus. The fact that so many hypotheses have been suggested indicates that the evidence for the cause is not clear—or the actual cause is being ignored because the evidence actually points to the worldwide flood described in the Bible. The proliferation of explanations also indicates that basing models on the underlying assumptions of evolutionary naturalism cannot provide an adequate explanation for what happened. In addition, each hypothesis has a number of problems, such as:

- They contain contradictions. For example, they cannot explain how crocodiles, which require warm temperatures, survived when apparently somewhat similar dinosaur species died out when the global temperature dropped; why large and small animals died out at the same time in some instances but not in others; or why the dinosaurs died out when birds, which appear to be more delicate, survived.
- They are based on false assumptions. The primary two false assumptions are: 1) that biological evolution has generated animal species rather than that species *de*volved from the created kinds, and 2) that the world is 4.5B years old rather than about 6,000 years old. No matter how good the analysis and description are of the fossil remains, if the facts are interpreted through faulty presuppositions then any hypothesized cause of the extinction of the dinosaurs will be wrong.
- They have to appeal to catastrophism. Many of their causal explanations rely on a catastrophe. However, they reject, without any consideration of the evidence, the idea that the flood reported in the Bible could have been the catastrophe which totally obliterated all of the land-based life on earth. It is inconsistent that scientists accept mass extinctions caused by many catastrophic events (including terrestrial or extraterrestrial causes) that are purely conjecture but are unwilling to accept a single mass extinction caused by one catastrophic event—the flood.

Paleontologists reject the global flood *only* because it is found in God's word; not because there is valid evidence which could be used to demonstrate that it did not cause the mass extinction of much of life. While they dismiss the Biblical account of the catastrophic flood as a myth, they make assertions like: "By now it is common knowledge

that the impact of an asteroid or comet brought the age of the dinosaurs to an abrupt end."¹³ Yet, when they are honest, they admit that they have no clue what killed off the dinosaurs.¹⁴

None of the hypotheses presented for the extinction of dinosaurs is more than conjecture, and none comes close to explaining all the nuances observed in the actual stratigraphic or fossil record—such as dinosaur and bird footprints, raindrop impressions, single-species bone-beds, massive bone-beds of mixed species, fossils of supposedly younger creatures found in layers below their ancestors, fossilized tree trunks extending through multiple sediment strata, coal layers intermingled with sediment layers, the lack of vegetation between strata layers, and limited evidence of erosion between strata layers. In contrast, the flood model can explain all these phenomena and many more. The flood model fits the facts, but proponents of evolution do not want to be confused by any facts, because that will undermine their fundamental belief that they are not creatures accountable to their Creator.

Today we will consider one example of how the flood fits the facts better than non-flood models, and others in later meditations. Many of the dinosaur and bird fossils (such as *Archaeopteryx*) show the remains of animals with their heads pulled back—sometimes referred to as the 'dead dino posture'. The *Wikipedia* article on "death pose" states that the cause is a matter of scientific debate and identifies some traditional explanations—of course, not including drowning in a flood. Experiments in which recently killed chickens were immersed in water showed that the bodies spontaneously went into the arched-back pose as a strong ligament along the spine pulled the head back.¹⁵ This experiment supports dinosaur die-off by drowning in the flood.

Flood-Maximum [September 16] (Gen 7.24)

After the "fountains of the great deep burst forth, and the windows of the heavens were opened" (Gen 7.11) the rain continued to fall for 150 days (five quasi-lunar months, of thirty days each). During this time, the water level of the original shallow sea continued to rise. This shallow sea surrounded the original single continent on which all human, and most animal, life resided. Initially, the torrents of rain would have caused flash flooding in the valleys and on the lower plains. As time passed, the sea level would have risen steadily, and the flood would have covered progressively more of the continent until the last mountain peak was finally covered (Gen 7.20).

Some interpreters conclude that the waters remained at peak levels for 150 days. However, the use of the word 'prevailed' (Gen 7.18, 19, 20, 24) indicates that during the 150 days, the floodwater was the most significant factor affecting everything on earth. At the end of the 150 days, the impact of the water began to wane. Thus, we conclude that the flood peaked at 150 days after the rain had begun; and from that point the waters began to recede from the newly forming continents.

Since water seeks its own level, and since the highest mountains were covered by about 7m of water at floodmaximum, continual rain, filling any valley for 150 days, would have overflowed any natural barrier. There is no conceivable way that the flood could have been a local flood. The only way to interpret this account, without twisting words into meaninglessness, is to accept the reality that the flood described in Genesis chapters 7 and 8 was a worldwide flood which had an unprecedented impact on the earth.

The Hebrew word translated 'prevailed' means 'be strong, mighty' in power. The choice of this word indicates that the flood was neither a flash flood that lasted only a few hours, or a gentle planer flooding caused by slowly raising water levels. The flood had a major earth-changing impact. However, it was not merely the water of the flood which changed the face of the earth. The breaking up of the underground aquifers, volcanic eruptions (there are about 40,000 extinct volcanoes around the world today), earthquakes, and the commencement of tectonic structural

¹³ David Kring, Daniel Durba, "The Day the World Burned," *Scientific American*, 2003-12.

¹⁴ Rachel Feltman, "Scientists still can't settle on what killed the dinosaurs," *Washington Post*, 2015-11-24.

¹⁵ Jonathan Sarfati, "Feathered' dinos—no feathers after all!" Journal of Creation, 26(3), 2012-12.

changes of the earth's crust contributed to the devastation caused by the flood. The pre-flood world was changed beyond recognition. This is one reason why the attempts of some to locate the original site of the Garden of Eden are a waste of effort—the topography of the pre-flood world was changed beyond recognition.

During the 150 days leading up to the point of flood-maximum, some men and animals would have remained alive, by fleeing to higher elevations or boarding masses of water-based vegetation or floating debris. We noted in previous meditations (see, *Dinosaur Footprints* [September 10] and *Dinosaur* Remains [September 11]) that during this time there would have been some fluctuations in the water level caused by forces such as currents and tectonic uplifting and collapses. Thus, some of the remaining animals would have left evidence (e.g., footprints in sediment) of their flight from the rising water levels. Eventually, sometime before the 150th day of the flood, the last humans and land-based animals died out. Either they died of starvation or were drowned, when the waters rose above the highest mountains or when the masses of decaying vegetation sank—much of the mass of water-based vegetation and floating organic debris was buried under sediment and compressed into coal.

During the 150 days of flood-advance the water would have been saturated with dissolved minerals and salts and suspended solids. These were deposited in layers across the continental land mass and on the seabed, as currents (e.g., caused by tides) progressed around the globe. Most of the sedimentary layers found around the world today were laid down during this period. However, some sediment layers (e.g., on the current continental shelves) were also laid down during the flood-retreat stage, and later when the earth was still barren of vegetation and there continued to be significant erosion. During the flood-retreat stage, the original continent started to break up and mountain building began. Today we are able to see the result of the two-phased flood—advance and retreat—in many ways, including:

- Similar sediment layers cross continental boundaries. For example, the chalk beds of southern England extend into Europe and the Middle East; similar sedimentary rock layers with the same kinds of fossils and in the same sequence are found in Africa and South America; and one rock layer in South Africa and Brazil contains white diamonds.
- Coal beds in the central and eastern portions of the US have been found to be the same as those in Britain and Europe. Similarly, the same coal seams are found in Australia, India, South Africa and Antarctica.

We will consider additional evidence for the worldwide impact of the flood-advance and flood-retreat stages in future meditations.

The waters prevailed over the earth for 150 days so that God could bring about, through secondary means, the obliteration of the old world—to wipe out all memory of antediluvian sinful human activity. The 150-day duration emphasizes the extent of man's evil and God's severe displeasure with it. In contrast the next time God reforms the earth (at the end of time) it will be instantaneous—under Noah's covenant, punishment was temporal; under Jesus', it is everlasting.

Flood Chronology [September 17] (Gen 7-8)

There are different views about how to structure the chronology of the events related to the flood. These different views are found even among scholars who believe that the flood described in Genesis actually occurred, and who accept the Genesis account as an historical record of a worldwide flood and not as a typological model. The reason for these differences is that it is not easy to determine the exact sequence of events, particularly since the account is not strictly chronological (e.g., the events described in Genesis 7.14-16a preceded those described in Genesis 7.10-11). Some scholars understand the account to indicate that the flood peaked at day 40 and began a slow decline thereafter, for 150 days. Others include the 40 days within the first 150 days and believe that the waters began to decline on the 151st day. Likewise, the reckoning of the total time, in days, for the flood can vary, depending on the calendar which each interpreter believes was used and whether he includes the seven days when the ark was being loaded with the animals.

Even though there are variations in the way scholars structure the details into their proposed chronologies, we need to understand that this is an intramural debate and certainly not on the order of debates about the nature of the Trinity, the virgin conception, or the resurrection of Christ. Nevertheless, we should still attempt to identify as accurate an understanding of the chronology of the flood as we can, in order to provide a foundation on which to base a model of the catastrophic events of the flood. For example, 150 days of flooding caused as "the fountains of the great deep burst forth" would have a significantly different effect on the pre-flood world than 40 days of flooding. Similarly, a model which has the floodwaters rising steadily for 150 days, with the ark beginning to float on the 40^{th} day, provides time for any surviving animals to leave remains, such as footprints, in sediment layers.

The table included below provides a chronology of the flood, based on a systematic, and mostly sequential, reading of the account in chapters 7 and 8. The number of elapsed days reported in the third column is based on a 30-day month. The 30-day month is implied by the reference to the 150 days which covered the period from the 17th day of the second month, of Noah's 600th year, until the 17th day of the 7th month—i.e., five months of 30 days. A quasi-lunar calendar with 30-day months, with an additional 'month' added periodically (to align with the solar year), appears to have been used throughout the Middle East for centuries after the flood. This may have been adopted from the pre-flood practice handed down by Noah's sons.

Event	Date	Days	Reference		
Command to begin loading the animals	Saturday Sabbath	-7	7.1-9, 14-		
into the ark			16		
Flood-Advance Stage					
 Noah and family enter the ark 	Noah's 600 th y	1	7.10-11, 13		
God shuts them in	2 nd m, 17 th d;				
Rain commences	Saturday Sabbath				
• 40 days of rain	Wednesday	40	7.12, 17-18		
Ark floated					
Rains continued	Monday	150	7.19-23		
• Flood reaches maximum,					
~7m above highest mountains					
Water prevailed over earth		1-150	7.24		
Flood-Reti	reat Stage				
Rain ceased	7 th m, 17 th d;	151	8.1-4		
Water began to recede	Tuesday				
• Ark grounded on the mountains of Ararat					
Water recedes continually from the		151-300	8.3		
earth/land					
Mountains became visible	10 th m, 1 st d;	225	8.5		
	Saturday Sabbath				
 Ark's window opened 	Friday	266	8.6-9		
 Raven sent out, did not return 					
Dove sent out, returned	Friday	273			
• Dove sent out second time, returned	Friday	280	8.10-11		
• Dove sent out third time, did not return	Friday	287	8.12		
Waters drained off earth/land	Noah's 601 st y	315	8.13		
 Noah removed covering of ark 	1 st m, 1 st d; <i>Friday</i>				
Earth/Land-I	Drying Stage				
Earth/land dried out	2 nd m, 27 th d;	371	8.14-19		

326

•	 Noah, and all with him, told to exit the ark 	Friday	(or 376)	

The table shows that the flood advanced for 150 days and then retreated for 150 days. During the advancing stage, most of the sediment layers would have been laid down. During the retreating stage the ocean basins would have formed, and mountain building would have started. At the same time, vast quantities of water running off the land would have formed topographic features such as the Grand Canyon. Once the waters had drained off, almost two months passed before the land was dry enough for Noah to exit the ark.

The Flood Fits the Facts – Geology [September 18]

(Gen 7-8)

The Bible teaches clearly that there was a worldwide flood, around 2345 BC. Yet, most geologists claim that the Biblical account is nothing more than an ancient myth. However, their rejection of the historicity of the flood account is not based on an objective consideration of the evidence. They ultimately reject the flood account because of their hatred against God and his word. As a result, they find it necessary to invent increasingly complex explanations to accommodate the evidence which supports the Biblical account better than their materialistic naturalistic models. The flood fits the facts better than their explanations in many areas, including the following:

- *Mass Extinctions*. The simplest explanation of mass species extinctions displayed in the fossil record is that provided in the Bible, by God—the flood. There is no need to introduce numerous extinctions caused by extraterrestrial (e.g., asteroid) or terrestrial (e.g., climate change) phenomena.
- *Fossils*. The formation of fossils today is rare. No process has ever been observed that can form fossils at anywhere near the quantity that exist in the sediment layers. In most cases, animals and plants decompose long before they would be fossilized. It is impossible to explain the worldwide presence of numerous fossils that resulted from massive extinctions of some species without resorting to a form of catastrophism. The catastrophe that best explains the formation of fossils in sediment layers is a worldwide flood.
- *Fossil Sequences*. In general, groups of fossils found together appear to represent the remains of plants and animals that lived together at the same time in an ecological zone, that were buried in rapid succession. During the flood, animals living in the seas were buried first, those from wet zones near the sea next, and those living inland or at higher altitudes were buried later. Sometimes animals were living (or were washed by the flood) out of their ecological zones and thus their fossils are found buried with other kinds of fossils. 'Misplaced' fossils present problems for evolutionists. The flood model fits the evidence better than the evolutionary model.
- *Worldwide Sediment Layers*. A flood of the magnitude of that described in Genesis chapters 7 and 8 would have had sediment-saturated waters. Applying the 'laws' of hydrodynamics, currents (e.g., caused by lunar tides or due to the Coriolis Effect) would have deposited sediments (according to their specific gravity and sphericity) in waves; with each directional wave depositing different materials on top of previous layers without disturbing them. During the months of the flood a series of sedimentary strata would have been deposited—in some cases to depths of hundreds of meters.
- *Rapid Sedimentation.* The layers of the sedimentary rocks appear to show rapid sediment deposition. The contents of a single sediment layer are generally uniform. Geologists might be able to explain how a single layer was laid down rapidly, e.g., by a local flood, but they cannot explain how multiple layers were laid down one on another, so smoothly, thousands or millions of years later. Evidence that indicates that the layers were laid down in rapid succession, includes:
 - Animal (particularly marks of soft body parts) and plant remains preserved before they could decay. For example, a dolphin-like ichthyosaur fossil shows a mother having almost completed giving birth. The baby was still in the birth canal.
 - The presence of ripple marks, rain drop marks, and footprints in some of the layers.
 - The absence of erosion between the layers. If a layer were exposed to the 'elements' for any period of time we should not see smooth inter-layer planes but evidence of erosion. In most instances, the gap between the layers is 'knife-edge' sharp.

• The lack of a soil layer between sediment layers. This indicates that there was no time for the surface to breakdown or for plants to grow.

The successive layers of sediment were laid down so quickly that the one below was not disturbed by events that normally occur over time.

- *Coal.* The pre-flood forests washed away by the flood, and likely islands of floating vegetation (like modern lilies) were deposited *en masse*. One current deposited some of its burden of vegetation, then another from a different direction deposited sediment. This created the layers that are seen in many coal deposits, with organic material in one layer covered quickly by inorganic sediment before it could fully decay. Non-Biblical geological theories cannot adequately explain the presence of coal seams via slow, steady processes. Neo-catastrophists need to resort to a calamity such as a massive meteor hitting the earth (but won't accept the flood catastrophe). Note: coal does not require millions of years to form; it can form in a short time under the right conditions of pressure and heat.
- *Polystrate Fossils*. Numerous examples of fossil tree trunks that cross multiple strata exist. These present a problem for the theories of modern geology because they often go through layers of different types of rock and coal seams (even through multiple seams). Since polystrate fossils are relatively common, geologists must resort to local floods (a form of catastrophism) to explain their existence. This exposes an inconsistency. Where fossils of this nature occur, they claim that the sediment beds were laid down quickly; elsewhere, the sediments were supposedly deposited over millions of years! They need to postulate extreme floods in many areas to explain these fossils. It is more consistent with the evidence to understand that these fossils were created by the flood.

Refuting 'Evidence' Presented Against the Flood (part 1 of 2) [September 19] (Gen 7-8)

Most geologists believe that the sedimentary strata found throughout the world were deposited over millions of years. They claim that they were formed by either slow processes or intermittent localized catastrophes. As a result of their presuppositions, they present a number of objections to the flood-deposition model. Today, we will consider a few of the more compelling objections to the flood-deposition model and provide alternative explanations which are consistent with the Biblical record. These considerations have been abstracted from Andrew Snelling's *Earth's Catastrophic Past* (ICR, 2009).

The most significant objection to the flood-deposition model appears to be the depth and number of the sedimentary layers (e.g., in the Grand Canyon). It is argued, based on current theories of sediment deposition, measured physical forces in flowing water, observed deposition rates, and examples of recent localized catastrophes, that it would require hundreds of millions of years for the layers to form. The fundamental problem with this perspective is that it rejects the possibility of an extreme catastrophe like the worldwide flood described in Genesis chapters 7 and 8. The forces at play in the flood were far greater than anything which can be observed today. The eruption of Mount Pinatubo in the Philippines in 1991 provides an illustration of how scientists' models may not account for even localized catastrophes. Previous models indicated that it would take three months for the fine-grained volcanic ash particles from the explosion to settle onto the ocean floor. In fact, an ash layer formed in three *days*. The models had not taken into account the fact that the ash did not behave as independent particles in suspension but coagulated into clumps which sank more quickly, and the sinking clumps produced currents which dragged down additional ash. Geologists have no means of modelling the devastating effects of a worldwide flood since its effects would be beyond any accessible observation or experiment. In the flood, many forces, at extreme levels, interacted to keep massive quantities of sediment in suspension and deposit thick layers in quick succession over a few weeks, rather than over millions of years.

In some places in the sediment and fossil record, there is evidence of a disturbance of the surface of sediment layers by burrowing sea creatures (e.g., clams and worms). It is claimed that such disturbance of the surface of one sediment layer would require weeks or months to form. However, this conclusion is based upon the expected normal behaviour of these creatures. In fact, where experiments have been conducted, it has been determined that some creatures can burrow rapidly in loose sediment (e.g., up to 1m per hour), although their usual rate is considerably slower. The extreme effects of the flood would undoubtedly have frightened creatures and caused them to depart from their normal behaviour, and to seek safety as quickly as possible.

It is claimed that it is impossible that the large deposits of calcium carbonate (chalk and limestone) could have been formed in a matter of weeks during the flood. Chalk is the remains of small algae with hard shells. Under current conditions it takes over a year for the shells to sink. At current measured deposition rates, it would require 100,000 years to form 1m of chalk. The chalk beds on the coast of England are believed to have formed over 35 million years. In addition, it is claimed, if all the creatures from which the chalk beds were formed had been alive at the same time before the flood, their biomass would have exceeded the carrying capacity of the earth—sufficient sunlight could not have reached them all and the amount of carbon dioxide they absorbed could not have been carried by the atmosphere. The reality is considerably different from the claims. Under certain conditions, algae blooms can occur rapidly, sometimes doubling in size within a day. With only 4% of the earth's surface and a high injection rate of nutrients, the current deposits could have been formed in under 2,000 years. During the flood, the heavy rain; excessive turbulence; vast quantities of decaying organic matter; injection of carbon dioxide, sulphur dioxide and iron from a large number of volcanoes; and warm water temperatures would have provided the necessary conditions for explosive growth of phytoplankton blooms on a large and repetitive scale. The deposits of chalk and limestone could have formed in a few months, not over millions of years.

If a person begins with the assumption that the Biblical record is a myth and that there could not have been a worldwide flood, then he can explain the current state of the world's rock formations based only on what he observes happening today. However, if he believes the word of God and accepts the description of the flood given in the Bible—i.e., a fracturing of the earth's crust, the breakup of a single continent, huge quantities of hot water blasting from the earth, weeks of heavy acidic rain, massive amounts of erosion, and waters reaching above the highest mountains—then he can have a very different approach for explaining how the world as we now see it could have been formed. Geologists, who reject the Bible, do not know what happened in the past and therefore cannot state definitively how the geologic formations arose. Geologists who believe the Bible to be a true historical record know that the flood was the greatest catastrophe to have ever hit the earth. Based on this truth they can look for reasonable ways to explain how the geologic formations arose. What one believes about the Bible and the flood is far more fundamental for explaining how things came to be than most people realize.

Refuting 'Evidence' Presented Against the Flood (part 2 of 2) [September 20] (Gen 7-8)

In the previous meditation, we considered a few geological formations which are often presented as evidence against the flood—the total depth of the sediment layers, the presence of animal borrows disturbing the surface of some sediment layers, and large deposits of chalk (e.g., on the coasts of England and France). It is argued that these formations could not have been created during the short period of the flood—371 days—but would have required many years to form—in some cases millions of years. However, as we noted, the long durations are required only if one assumes that only currently known processes were available to create the formations and dismisses the possibility that a cataclysm like the flood described in Genesis chapters 7 and 8 could have introduced forces which have never been observed since.

Other examples which are presented as apparent evidence against the flood, but can be explained as flood-related, or post-flood, phenomenon (abstracted from Andrew Snelling's *Earth's Catastrophic Past*; ICR, 2009), include:

• *'Evaporites'*. This is the name given to layers of salt between sediment layers or salts in large concentrations (e.g., salt domes). It is assumed that these formations were created through long ages of intense evaporation in undisturbed locations. It is also claimed that a massive flood would have presented an environment which is too cloudy, wet and tempestuous for evaporation to take place. However, evaporation of seawater is not the only way by which highly concentrated deposits of salt can be formed. Hot water (e.g., from volcanoes) can carry highly concentrated saline solutions. When the super-saturated hot water meets cold water, it cannot continue to carry the salts in solution and the salts rapidly precipitate and form solids. Thus, as the fountains of

the deep burst forth (Gen 7.11) they dropped their salts almost instantaneously. This model explains better than the slow evaporation of salty seawater, how large concentrations of almost pure salts of different kinds can form. Seawater has a different proportion of salts than is often found in these geological formations.

- *Polystrate Fossils*. We considered this form of fossil, extending across multiple strata, in a previous meditation, as providing evidence for the rapid deposition of strata layers. However, geologists continue to present buried forests as evidence against the flood. For example, they direct attention to a section of exposed stratigraphy in Yellowstone Park which supposedly has a succession of eighteen petrified 'forests'. They claim that each forest grew to maturity and then was wiped out with a lava flow. Other locations (e.g., Mt. Hornaday) have an even greater number of successive layers. However, there are features of the fossilized tree stumps which show that the trees grew in different location and were transported to their current location. Tree ring samples taken from trees in different layers indicate that they had been growing under the same microclimatic conditions—i.e., at the same time and in the same location. Branches and roots are usually missing, indicating that they were uprooted (as when a bulldozer clears a forest) and subjected to tumbling in water which stripped most of their branches and bark. Within six months of the Mount St. Helens explosion in 1980, Spirit Lake contained many tree stumps which had become waterlogged and sank, some with their root stumps sinking into the mud at the bottom, others lying horizontally on the lake bottom. Petrified forests show the same pattern of tree stump deposition as in Spirit Lake. In addition, experimental evidence (blocks of wood placed in alkaline springs) demonstrates that wood petrification (silica mineralization) can occur rapidly (e.g., ~1cm in 5 years), and does not require millions of years.
- *Coral Reefs.* Coral reefs are produced by tiny animals called polyps which anchor to a fixed object such as a rock outcrop or a sunken ship. They have a hard exoskeleton made of calcium (similar to a snail's shell). It is claimed that the large coral reefs such as the Enewetok Atoll in the south Pacific could not have formed since the calculated date of the flood (about 2345 BC). This atoll was formed around the top of a volcano's caldera. As the volcano mountain sank or the sea level rose, the coral polyps created a continually deepening calcium carbonate formation. The top of the seamount is now about 1,400m below sea level. Since coral cannot grow below a 60m depth (enough light does not penetrate) the coral polyps, according to popular thinking, began to form the reef about 100M years ago. If the seamount has sunk or water level risen since the flood, then the coral reef had to have been formed within 4,350 years—i.e., at an average rate of 32cm per year. It is claimed that such a rapid growth rate is impossible. However, published results from the direct measurement of reef growth (e.g., on recently sunken ships) have shown growth rates ranging from 12-43cm per year. The Enewetok Atoll could have easily been formed within the time since the flood ended.

We cannot address other 'evidences' which have been presented to discredit the flood. However, it is not necessary. As we can see from these examples, they do not refute the flood. Some of the supposed evidences can be explained by current known processes or by processes associated with an extraordinary flood. However, some of the supposed evidences actually are more difficult to explain with current 'scientific' models but are easy to explain as phenomena related to the flood. A person's starting assumptions colours how he interprets the facts. No *fact* of geology contradicts the flood.

The Flood Fits the Facts – Extra-Biblical Narrative Evidence [September 21] (Gen 7-8)

Geologists formulate hypotheses and models to explain how the sedimentary rocks were formed over millions of years. Yet, observable events, such as the explosion of Mount St. Helens in 1980, provide evidence which supports the claim of Bible-believers that the worldwide sediment layers were deposited rapidly, over a period of months, during the flood. The results of the rapid deposition of sediment in a valley adjacent to Mount St. Helens, and a gash that was subsequently formed through the sediments in 1982, show sediment layers which are remarkably similar (although on a smaller scale) to what can be seen in formations such as the Grand Canyon. Most geologists dismiss this evidence and persist in their claim that 'science' supports their beliefs. However, the truth about how the layers of sedimentary rock were formed is actually a matter of *history* not of science, since science deals with repeatable phenomena and empirical evidence and there are no observable examples of the formation of sediment

layers which support the geologist's models. The only historian who can tell us what happened is God, through the Bible.

We have seen that there is considerable geological evidence which supports the Genesis flood account. Similarly, there is strong extra-Biblical narrative evidence, found in the traditions of people groups from around the world, which corroborates the Genesis account. Typically, when it is suggested that the Genesis account is an historical record, someone will claim that the Genesis account was derived from an earlier Mesopotamian myth such as the Sumerian *Eridu Genesis*, or the Babylonian *Gilgamesh Epic* or the *Atrahasis Tale*. The claim that the Biblical account was derived from an earlier record is purely conjecture. In fact, it is the other way around. The extra-Biblical accounts of the flood were derived from memories of the original account, which the sons of Noah reported—as found in the Bible.

Although most scientists dismiss the traditions of ancient people as myths, the fact that people from every part of the earth have records of a global flood seems to point to a significant event in history that many people groups remember. The story of the flood (in various forms) is found in the lore of most cultures. For example, it is buried in the legends of the scattered ancient peoples of Asia, in the fables of most of the aboriginal natives from Greenland to Tierra del Fuego, throughout the tribal traditions of Africa and the Pacific, and in some European myths (e.g., Greek, Norse, and Welsh). There are more than 100 different flood legends; they permeate almost every culture, follow similar plot lines, and include a 'hero', a floating vessel, a crew, a cargo (usually including animals), a resting place for the vessel, and dispersion of the inhabitants of the vessel after the flood. It is highly unlikely that there would be such a similarity among these flood legends if they were entirely independent and based only on collective memories of local floods.

Richard Andree (1835-1912) a German geographer and his wife Marie, a folklorist, compiled flood traditions from over 80 different cultures and societies from all continents; of these, the authors claimed that at least 62 showed no evidence of direct borrowing. They documented one account from the Lenni-Lenape, an Algonquian Indian people, which has a significant degree of correlation with Genesis chapters, 7, 8 and 11. This record from the Lenni-Lenape history is preserved in the *Wallum-Olum* document—however, some have claimed that the document is fraudulent. We cannot debate the merits of this document here, but a separate, independent, legend from the Cree Indians (documented by R. D. Symon in *North by West*) supports the account in the *Wallum-Olum* document. Nick Liguori in his book, *Echoes of Ararat*, documents hundreds of accounts of the flood—as well as the Tower of Babel and the Garden of Eden—from the legends of North and South American indigenous peoples.

An account of the flood, which corresponds to the Genesis account in remarkable detail, is found in the traditions of the Miao (Miautso) people who at one time lived in inland China south of the Yangtze River, but were driven into the mountains of the southwest by the Han Chinese. Charles Martin, in his book *Flood Legends*, provides an analysis of how the flood legends dispersed by comparing the Genesis account with the accounts found in a long Sanskrit poem called the *Mahabharata*, and the legend maintained by the Karina people (of the Carib Indians of eastern Venezuela). He demonstrates how these legends may have developed from the Genesis account, which is the original. The worldwide spread of the flood account may be dismissed by many, but the evidence is strong that a flood-event occurred before all the people groups were scattered across the globe, and that this flood-event was of such a significance that a record of it was maintained in the cultural memory of most people groups.

While there is, at times, key points of similarity among the various flood accounts, important differences should be noted. The extra-Biblical accounts do not generally provide a reason for the flood; or if they do, the reason is found in explanations such as the gods wiping out their human slaves because they were too noisy. In contrast, the Biblical account of the flood is given within the framework of the covenantal relationship between God and man. The explicit statement of this covenant relationship first appears in the Bible within the narrative context of the flood (Gen 6.18; Gen 9.8-17). The flood is the result of mankind's sin, which must be punished by a just God (Gen 6.5-7). God's response to mankind's sin is not arbitrary or capricious and it is presented within the context of grief over sin (Gen 6.6), destruction of what mankind has corrupted (Gen 6.13), and saving grace (Gen 6.14-21) for a remnant

(Gen 7.23). The Genesis account is an historical polemic against all other accounts which are perversions.

God Remembered Noah [September 22] (Gen 8.1)

Imagine that you had been floating on the ocean, in a big closed box, for 150 days, surrounded by the noise of hundreds of animals and the smell of their excrement and you have been unable to go outside for a minute. Without a doubt, you would have begun to go stir-crazy and wonder when it was going to end. This was Noah's situation in the ark. As far as we know God had not given him an indication of how long the flood was going to last, so he had to live moment by moment with only his faith that God knew what he was doing. Noah's situation was somewhat extreme, but it has similarities to what each of us goes through in life. We all, at times, experience aspects of life which are repetitive drudgery and seem to be endless. Many also encounter difficulties such as a personal illness or caring for a disabled loved one, and don't know how much longer they can continue under the heavy load.

However, God knows exactly what each of us can endure and never pushes us to the point that our faith breaks (1 Cor 10.13). So, on the 151st day after he had been shut in the ark, Noah noticed something different—the wind changed, and the rain stopped. You can be sure that that evening hope was renewed in Noah and his family. Noah's sons, when they wrote the account of the flood, recorded that the change occurred when God remembered Noah. Noah had trusted God through about 75 years while building the ark, and through 150 days of equally difficult entombment in the ark, but through all this his faith did now waiver. We need to learn the lesson that God is not forgetful of any of his people, even when his providences seem to be difficult, and he will reward our faith in him.

When the account says that "God remembered Noah", we are not to infer that God had forgotten Noah and that it suddenly dawned on him; like we might forget to feed the cat and be struck by our forgetfulness in the middle of the night. God, of course, does not forget anything since he is omniscient. Also, as has been pointed out by many commentators, the word 'remember' is often used in a covenantal context (e.g., Gen 30.22; Ex 2.24; 1 Sam 1.19) and can be understood here as meaning something like "God showed special favour to Noah." We can be certain that God was watching over Noah and his family every instant of their time in the ark. He made sure that no wave capsized the ark, that no volcano shot its hot magma and steam into the underside of the ark, and that no seam on the ark, coated with pitch, failed.

God had made a promise to establish his covenant with Noah (Gen 6.18). We noted that this is the first instance in which the covenantal relationship between God and man is explicitly identified. God is now acting to fulfill his side of the covenant obligations, by being a faithful God to his people. At this point, the only people left on the earth among his covenant people were the eight in the ark. So, God is about to re-establish humanity and the blessings associated with the covenant, through Noah.

The first blessing associated with the covenant is the lifting of the punishment inflicted on the old world. The shutting off of the faucets of heaven and the start of the water draining from the land indicates that God has lifted his hand from the earth. Later (Gen 8.21-22), God will state his covenant commitment to mankind and will forever limit the extent of temporal punishment for breaches of the covenant. The second blessing associated with the covenant is the provision of a cleansed world that God would shortly make available to Noah, which his descendants would populate (Gen 9.1). The third blessing, implied in the word 'remember', is that God would bless his obedient people. We may not see this immediately; however, God would not have remembered Noah if his intentions were not to bless him. The Psalmist understands that God's remembering his people implies future blessing (Ps 115.12).

Even though Noah had been obedient to God's commands and had displayed admirable faith, it was neither his obedience nor his faith which resulted in the punishment being lifted and in the endowment of covenant blessings. The cause is attributed entirely to God—there is no mention of Noah's obedience. God intervened directly in the affairs of the physical world to display his ultimate purpose—to save a people for himself. Behind every event that transpires in the physical universe is God's action. God takes the initiative to bless mankind and the cause lies

entirely within his providential counsel and his grace. The turning point for the flood rests on God's remembering Noah—he took action to bring his people to their place of rest. So, the turning point for all things rests in God's remembering his people. Jesus died on the cross—the focal point for all of history—because God remembered his covenant promise to Adam and Eve to send a redeemer (Gen 3.15).

God's grace in action extends not only to mankind but to the rest of the created realm which he cares for in ways that we barely understand (Mt 10.29). The covenant between God and man extends to the animals because of man's appointed dominion over them. When men sin, animals suffer; when men are obedient to God's law the rest of the natural realm is blessed. Likewise, when God blesses his people on the last day, he will redeem all of creation, which has been groaning as it waits for its redemption (Rom 8.22). Thus, we await a new heavens and a new earth, in which the original paradise will be re-created in greater glory.

High Quality Literature [September 23]

(Gen 8.1)

In 2013, *The History Channel* premiered a series called *The Bible*, which some media referred to as an "obscure religious miniseries" and which, to the surprise of many, garnered a larger audience than *American Idol*. One news outlet said that the "ratings have confounded Hollywood's biggest decision-makers. Overt religious programming can be a notorious tough sell to the public, while American Idol has dominated television for the past eight seasons." At the same time, there was an announcement of the filming of a big-budget movie called *Noah*, which would star Russell Crowe and Anthony Hopkins and be released to theatres in 2014. A question many asked was why Hollywood would, after 50 years of essentially ignoring the Bible, begin to show an interest again in its stories. One analyst concluded that the primary reason was economic—the studios don't have to pay licencing rights to Marvel or DC Comics and the 'religious' audience is bankable.

The studios produce movies based on Bible stories in order to make money, which implies that there is sufficient interest in movie versions of the Bible's stories that patrons and advertisers are willing to pay for the production costs, particularly when the cinematic effects are high quality and the stories are recounted accurately. The reasons why stories taken from the Bible serve as effective source material for movies include:

- 1. *The stories are true*. Viewers know in their hearts that the Bible's stories are a record of what actually happened in history. Even if people make an outward show of disbelief, because they don't want to appear to be simpletons, they cannot suppress the truth that the stories which the Bible records are not fairy tales like *Cinderella* or *Snow White*.
- 2. The stories are compelling. Throughout history audiences have loved to hear stories of superheroes—whether they are about Hercules, Thor, or Iron Man. The Bible presents heroes who lived larger than life—for example, Noah, Abraham, David, Daniel, and Esther. The Bible also includes accounts of impassioned lust (Samson); gruesome murder, revenge, and a surprising resolution (Judges 19-21); endearing chaste romance (Ruth); intrigue and adventure (Moses); men grappling with the problem of evil (Job); and selfless sacrifice (Jesus). There isn't a significant literary theme found among the myths, legends, literature, and pop culture of every civilization which the Bible doesn't include. In contrast, few would consider Islam's *Qur'an*—an inferior imitation of the Bible—the Hindu *Vedas*, or the Buddhist *Surangama Sutras* as source material for a blockbuster movie production.
- 3. *The Bible is great literature*. Its stories are compelling because it is written with the best use of literary techniques, including: acrostics, allegory, alliteration, allusion, chiasmus, hyperbole, idiom, metaphor, metonymy, narrative, paradox, parables, parallelism, personification, poetry, puns, repetition, riddles, simile, symbolism, synecdoche, types, and wordplays. Lists of the world's great literature invariably include the Bible (or portions of the Bible, such as the book of Job) among the top 100 best books. Although we must not judge the Bible's relevance and value by human votes, the fact that it is included in such lists indicates that sinful men continue to realize that the Bible has literary merits regardless of their belief in its authority.
- 4. *God preserves his word*. God's word is eternal and cannot be eliminated from the world (Ps 119.89; Is 40.8; Mt 24.35; 1 Pt 1.25), regardless of what men do in their attempts to silence it. The account of creation and the flood

are the most ancient pieces of literature known to man and God intended that they would always be universally known. So, when a movie is made about the flood, God can use this to encourage people to inquire further about the source material for the screenplay, and thus keeps the Bible visible before mankind.

The account of Noah and the flood is an example of what makes a compelling story and excellent literature. The story has a strong theme—right triumphing over evil—and a faithful protagonist; it moves quickly from a set-up, through rising action, reaches a climax, followed by falling action, and a denouement. In addition, the structure of the account is highly refined. A number of writers have pointed out that it has a chiastic (like a wedge) form centred on a key turning point (Gen 8.1). One example, a near-perfect chiasm, has parallel verses to 16 levels deep.¹⁶ A second example identifies a chiasm with a broader scope. It begins with a prologue (Gen 6.1-16) mirrored by an epilogue (Gen 8.18-19), followed by the covenant promise (Gen 6.18) paired with its fulfillment (Gen 9.9-17), and then by subsequent parallel pairs of chronologies and flood events. Another writer has shown that the portion of the flood account which reports on the retreating waters uses similar language to the creation account in Genesis chapter 1and follows the same sequence with the acts of re-creation of the surface of the world: wind ('spirit') over water (Gen 8.1b-2a), sky (Gen 8.2b), dry land (Gen 8.3-5), [no need for re-creation of celestial luminaries], birds (Gen 8.7-8), land-creatures (Gen 8.17), and man (Gen 8.18). It is clear that the flood account is a single cohesive record of history which was composed by an intelligent author (or authors, as it is attributed to the three sons of Noah; Gen 10:1). The story of the flood is a premier example of the best-structured literature known to man.

Drying Wind [September 24] (Gen 8.1)

After God had created the earth, its initial form probably appeared as a globe made of water (2 Pt 3.5) or as a solid rock globe covered with water (the 'deep'; Gen 1.2). The Holy Spirit hovered over the waters (Gen 1.2) as the agent through whom God's creative power formed the solid substance of the earth (Gen 1.9)—either the core, mantle, and crust or the continents that extended above the seas. At the end of the flooding of the earth, the earth once again appeared to have the same form as at creation—a globe covered entirely with water. So, we also encounter a hint of the presence of the Holy Spirit playing a role in the re-creation of the world by hovering over the flood. The word 'wind' is translated from the Hebrew word which can mean 'wind' or 'spirit'. Even though the context seems to require the translation 'wind', there appears to be a *double entendre*. The Holy Spirit, in the wind, hovered over the waters as the land was re-created so that it could once again be populated.

Whether or not the double meaning is intended, it is evident that the renewal of the earth was caused by the 'breath' of God. This raises a question about how God uses direct means or secondary means when he works his creative and governing actions. God could have created the universe instantaneously but chose to create everything in a sequence over a six-day period. Similarly, God could have preserved Noah and his family while he wiped out all living beings and re-created the earth in an instant. However, God chose to use secondary means to punish mankind through the flood, and secondary means to cause the waters to drain from the land.

The explanation for why God uses secondary means lies ultimately in his secret councils. However, we can suggest a few possible reasons:

- For his own glory God obtains a personal holy satisfaction from using a variety of direct and indirect means for enacting his purposes (Gen 1.31). He is praised and worshiped by his creatures when they understand how he has acted through means such as in his acts of creation or providence which are carried out either directly (Acts 5.5) or through secondary agents (Dan 6.22, 26). God uses both direct and indirect means to bring about the maximum levels of praise and honour for his name and being.
- *To remind men of their responsibility* When God uses agents—whether angels, men, animals, or inanimate forces or objects—to carry out his purposes he reinforces the truth that men are not puppets which dangle on

¹⁶ 6.10a/9.19; 6.10b/9.18b; 6.14-16/9.18a; 6.17/9.11-17; 6.18-20/9.8-10; 6.21/9.1-4; 7.1-3/8.15-17; 7.4-5/8.12-13; 7.7-10/8.10-11; 7.11-15/8.7-9; 7.16/8.6b; 7.17a/8.6a; 7.17b-18/8.5; 7.19-20/8.4-5; 7.21-24/8.2-3.

strings hanging from God's fingers. Man is a responsible agent whom God expects to act volitionally, rationally, and morally.

• *To challenge unbelief* – Men have a general tendency to lean to one extreme or the other when considering God's providences—they either think in terms of fatalism and attribute all events to a direct causation by an abstract force, or they attribute absolute free will to mankind and limit God (e.g., as in 'open theism'). God's use of secondary means, such as wind and tectonic changes of the earth's surface, to dry the land, is a challenge to those who deny his governance of all things.

The healing miracles of Jesus provide an example that brings together God's use of different means for his glory, to reinforce human responsibility, and to challenge unbelief. Jesus used direct means such as a word or touch (Lk 4.39; Mt 20.34) and indirect means such as mud and washing (Mk 8.23; Jn 9.6-7) to heal people and to demonstrate that he was God. Jesus did not need to use intermediate means to heal but did so as a means of reinforcing the role of created entities in his purposes and for testing people's faith.

God's providential control over creation is illustrated by the statement that he made the wind blow. Behind every physical entity in the universe is the creative and sustaining power of God. He literally holds together the matter which makes up the universe (Col 1.17). In addition, behind every force and motion in the universe is the will of God. God caused the wind to begin blowing after the flood had reached peak stage. But God's action was not different from what he does when he causes the wind to blow in the jet stream, in a hurricane, or in a gentle breeze on a summer's evening. The wind that God caused to blow on the flooded world was no more of a miracle than all other winds are—all winds ultimately come from the breath of God.

God used wind to part the waters of the Red Sea, to dry out its seabed, and then to return the waters to their place to destroy the Egyptian armies (Ex 14.21; Ex 15.10). Likewise, after the flood, he used the wind to drive the waters into the new ocean basins that were being formed by continental plate movements and to dry out the land as the water receded. This wind may have been temporary and extraordinary. However, it is possible that the Holy Spirit guided the author(s) of this account to mention the wind to inform us of weather-pattern changes that were put in place after the flood. It appears that the early earth consisted of a single continent surrounded by shallow seas that may have been largely covered with vast floating beds of vegetation (like lilies). If this description is correct, then the large oceanic and continental air currents that we know of today may not have existed. After the flood, the wide-open oceans, and developing convection currents in the water and air, may have introduced new worldwide weather patterns. Initially these weather patterns may have been quite violent and erratic. Over time, as ocean temperatures reached equilibrium, the winds would have become more stable and predictable (e.g., the trade winds that blow out of Africa)

When the Rains Stopped [September 25] (Gen 8.2-3)

Some events in natural and human systems (e.g., stock markets) are triggered when the systems reach a tipping point. In colloquial language, we often refer to the "straw that broke the camel's back" as the circumstance which caused a catastrophic failure, when the forces previously in a state of equilibrium abruptly change. The flood was probably triggered when a tension point in the earth's tectonic infrastructure suddenly released (e.g., one plate may have shifted on another), causing an earthquake that precipitated a ripple of earthquakes, volcanoes, and artesian aquifer dome collapses throughout the world. These massive earth-shattering events opened, in rapid succession, a number of deep fissures throughout the earth's surface. Hot magma welled up and super-heated water was ejected from the earth at near supersonic speed. As the boiling water escaped from the earth it, almost instantaneously, vaporized. When the resulting steam reached the cooler upper atmosphere, it condensed into water droplets and began to fall in torrents.

Eventually the massive underground cisterns were emptied of their water (Gen 8.2). Thus, sometime shortly before the 150th day after the flood began, the flow of ejected steam was reduced to the point where the atmosphere was no longer supersaturated. Then, on the 151st day, the abnormal rain stopped, and a stable atmospheric water cycle

began to form.

Meanwhile, beneath the waters, the earth was being radically re-formed. It is not possible for us to determine the specific sequence of events. However, we can suggest some of the events which may have transpired, including:

- What had been the previous single continent began to break up, and its pieces began to separate as they 'floated' on the hot, semi-plastic, upper mantle.
- Some of the continental crustal pieces which had broken off were forced, by mantle currents, to slam into each other with incredible force. This caused the rapid formation of mountain chains. The result would have been similar to what happens when a car collides head-on and its metal body is crumpled in an accordion-like fashion. The Himalayas may have been created rapidly when the present Indian sub-continent slammed into the present Asian continent. The Himalayan Mountains have fossil-bearing sedimentary layers on their highest peaks, which indicates that they were at one time under the floodwaters.
- In other places, mountains may have been formed through volcanic action and lifted up along with other parts of the earth's crust as changing tectonic forces began to move toward a new equilibrium
- The basin of the former worldwide shallow sea may have formed part of the domes over the underground water chambers. As they were emptied of their water, they became hollow cavities. The weight of the floodwaters on top of their domes eventually became too heavy to be supported by the rock, and they collapsed, allowing water to fill the resulting depressions and drain off the new continents. This may have contributed to the formation of the new oceans.

Geologists, who believe that the worldwide flood occurred around 2345 BC, have different views about how the earth was re-formed during and after the flood. For instance, some suggest that the original continent was levelled smooth by erosion and that the continents we now see were not part of the original topography of earth. Others suggest that our continents were at one time part of the former seabed.

Notwithstanding the debates about the sequence of events which formed the current surface of the earth, God tells us that dramatic events occurred as part of, and after, the flood which reshaped the earth. In Psalm 104.6, we are told that the earth was covered with water and at the command of God the waters began to recede (Ps 104.7). Earth's topography was changed as mountains rose and valleys sank (Ps 104.8). The waters which flowed into the valleys are now constrained so that they can never again cover the earth (Ps 104.9).

Geologists, who do not believe that the Biblical account of the flood is true, claim that it required on the order of 40-50 million years to form mountain chains such as the Himalayas. They base their view on current observable phenomena and reject any suggestion that the earth's current topography was formed rapidly in conjunction with the flood and its aftermath. However, despite their rejection of God's word, the reality is that much of the earth's current topography was formed rapidly during the flood's advance and retreat. Some of the earth's current topographic features were formed subsequent to the flood, by events which resulted from the flood. For example:

- Extensive volcanism and a significant number of earthquakes continued to occur immediately after the flood. The number of new volcanoes and severe earthquakes appears to have declined on a standard decay curve as the earth's systems moved toward a new tectonic equilibrium.
- The ice age which followed the flood, during the period in which the oceans reached a new temperature equilibrium, shaped much of the most northern and southern parts of earth's new continental surfaces, leaving behind moraines and glacial till. The retreating glaciers are the last vestige of the postdiluvian ice age.

Milestones Marking the Flood's Retreat [September 26]

(Gen 8.3-5)

Genesis chapter 8 provides a number of dates and time periods as milestones for events which occurred during the flood-retreat and earth-drying stages. A key milestone is reached on the 300th day when all of the floodwaters had drained off the land. However, Noah had to remain in the ark beyond that point because the ground would still have

been muddy. The 300 days of the flood is divided into two periods, 150 days of flood-advance mirrored by 150 days of flood-retreat. Some people might react with scepticism to this symmetry and suggest that the two 150-day periods is too exact and must be merely a literary construct. Even though it is improbable that natural phenomena could explain this—for example, rain falling for an hour into an open pail would drain off in exactly an hour only if the exit valve was of a precise size—we accept it as a measure of what actually occurred, showing evidence of design.

There are no other references to 150-day periods in the Bible. However, based on using a 30-day month, each period of advance and retreat was 5 months. In Revelation 9.5, 10, the scorpions and locusts were given power to mete out punishment for a period of five months. We noted (Gen 7.24) that the 150 days was specified by God to ensure that all land-based life in the old world was obliterated and to emphasize the extent of man's evil and God's severe displeasure with it. It may be that the 150-day period of torment mentioned in Revelation is an apocalyptic allusion to Genesis chapter 7, and a reminder that sin must be dealt with by God.

There may also be both practical and theological reasons for the flood-retreat stage. From the practical perspective, the waters drained more slowly than we would normally expect because the earth would have been extremely hostile for human habitation—God delayed the drain-off as he was preparing the re-formed earth for repopulation. Below the waters, tectonic forces—extreme continental plate movements, mountain building, volcanoes, earthquakes— were reshaping the earth. From the theological perspective, the exact parallel of 150 days between the two periods reminds us that the flood was more than merely a catastrophic natural event. The flood was a work of God—through secondary means—designed to punish man's wickedness and to obliterate all vestiges of man's corruption from the face of the earth.

Noah would have observed a significant change when the extraordinary rain stopped (Gen 8.2), the wind patterns changed (Gen 8.1), and the skies cleared for the first time in five months. However, the ark would have still been floating on an endless sea. Nothing was visible, from which he could obtain information about what was happening below the water. The currents and waves would have felt about the same, and there would have been periodic heavy waves (e.g., tsunamis) from earthquakes. So, God sent Noah and his family two signs to give them hope that the flood was ending. On the 151st day after the flood had started, not only the skies cleared, but the ark grounded on a mountain (Gen 8.4) and settled (rested) in place. This does not mean that the water level had dropped by 7m (Gen 7.20) in one day. The mountains of the original continent were likely much lower than mountains we see today since the Garden of Eden was near the highest point on the continent (Gen 2.10-14). However, the mountains of Ararat are likely a new geological formation (Ararat itself is the remnant of a volcano), which were made during the flood. It is possible that the ark was pushed up with the mountains as they were being elevated, at the same time as the water was draining off the continents.

The second sign God gave to Noah, after 74 days had passed (i.e., on the 75^{th} day, halfway through the flood-retreat stage), was that the tops of the nearby mountains became visible. The ark's draft would have been above 7m (since it floated over the highest antediluvian mountains). This means that if the ark had grounded on the highest mountain in the Ararat cluster (i.e., Mt. Ararat), and Noah could see Lesser Ararat, and other mountains beyond, then the water had drained off by at least 1.25 km during the first half of the flood-retreat stage. The drain-off rate must have increased during the second half of the retreat stage, since Mt. Ararat is ~5.1 km above sea level. During the second half of the flood-retreat stage, the water level dropped by ~3.9 km—caused by a combination of continental uplift and sea floor subsidence.

When we considered the chronology of the flood, we noted that the flood likely commenced on a Sabbath day (Gen 7.11). Based on that assumption, the day that the mountains first became visible was also a Sabbath day. It is quite likely that God gave Noah a sign on the Sabbath, which had two messages: 1) of encouragement, sin had been punished and the flood was ending; and 2) of warning, men should not look to the mountains for their aid (Ps 121.1) since they were once nothing more than waterlogged piles of rock and mud.

It appears that the stages of the flood provided a pattern for what would later become the Hebrew religious calendar. The stages of the flood are reckoned relative to Noah's life (Gen 7.6, 11). Noah was prophetically to provide rest for God's people (Gen 5.29) and in the seventh month of his 600th year the ark rested on the mountains of Ararat. The new calendar baseline, marked from Noah's birth-month, placed the start of a new year around the vernal equinox (i.e., spring) and the seventh month marked the unveiling of the new world. Later, sacred convocations would be concentrated in the seventh month.

Earth's Topography was Shaped by Flood Events [September 27] (Gen 8.3, 5)

The floodwaters drained off the newly forming continents, for 150 days. During this time, rapid tectonic plate movement, earthquakes, volcanoes, and extensive erosion shaped the 'new' earth's topography. There is considerable geologic evidence that illustrates how the topography was formed; however, we can only consider a few examples:

- The sediment layers deposited during the flood-advance stage probably would not have hardened into solid rock in 300 days. So, during the flood-retreat stage the layers were still plastic and could easily be folded as the new continents, with mountain ranges, were being formed. Most geologists explain deformed sediment layers as the result of high pressure over long periods. However, in the Grand Canyon, we can see examples of sediment layers that have been thinned as they were bent. Hard rock cannot stretch in this way without cracking.
- According to standard geological thinking, the Grand Canyon formed over hundreds of millions of years. It is claimed that sediments were laid down by rivers flowing into a shallow sea. As the seabed sank, deposits accumulated. Then the entire formation was uplifted and (over millions of years) erosion slowly carved the canyon. This model cannot explain many features of the canyon, including the uniformly smooth layering between the strata and the large extent of the sediment layers (e.g., on the order of 500,000 square kilometers) which are the result of planer flows of water. The sediment layers are not wedge-shaped as if laid down in river deltas. A far more cogent explanation is that during the flood, the sediment-laden ocean currents deposited the strata layers. After the flood, the sediments were still soft. As the water drained from the earth, the massive amount of runoff carved the canyon. Abnormally heavy rains in central Texas in 2002 caused the Canyon Lake reservoir to overflow. The raging waters in the Guadalupe River demonstrated the power of water to carve a canyon. A paper presented in 2010 about this flood observed that the traditional view is that deep river canyons, such as the Grand Canyon, were carved slowly. The author conceded that such is not always the case: "some big canyons have been cut by large catastrophic flood events."¹⁷ And, he said, "There are very few modern examples of mega floods, and these events are not normally witnessed, so the process by which such erosion happens is not well understood."
- Mountain ranges were also formed rapidly. Estimates of the current rate of erosion in the Himalayas is 200cm/1,000 years. Assuming a constant rate, the Himalayas should not exist, since they are eroding far faster than they were uplifted, over a supposed 40-50 million years. However, a more serious matter is explaining how fossil-laden sediment can exist on the tops of mountains such as Mt. Everest. At current erosion rates, the sedimentary rock would have been eroded in less than a million years.
- Many geologists claim that under current average rates of water seepage it could take thousands of years for stalactites and stalagmites to form. However, stalactites and stalagmites can form quickly. For example, there is a 'curtain' of finger-thick stalactites in the basement of the 'watertight' Lincoln memorial, built in 1923. Slightly larger stalactites can also be found in the George Rogers Clark Memorial in Indiana; built about 1933 from local limestone. During the flood runoff period, huge quantities of warm water containing carbonic, and stronger, acids running through soft sediment could easily explain the rapid formation of caves and their interior limestone formations.
- Another example of the force of the rapidly retreating floodwaters can be seen in the smoothing and transportation of boulders. Very hard rock (e.g., quartzite) from the original continent would not have eroded

¹⁷ http://www.sciencedaily.com/releases/2010/06/100620155748.htm

as easily as the sedimentary (sandstone and shale) deposits. However, examples of large chunks of quartzite from the Rocky Mountains have been found hundreds of kilometers from their source. The resulting cobbles and boulders have been rounded, indicating a tumbling action in water. Some of these boulders weigh 200kg and are as big as an adult pig. The amount and velocity of water required to carry these boulders such a long distance, and across such a vast area, is greater than what has been observed in any modern flash flood.

The flood consisted of catastrophic and pervasive geological processes such as tectonic shifts, the breakup of the original continent into new ones and subsequent collisions (e.g., India into Asia), continental plate subduction and uplift, earthquakes, hot magma flows from volcanoes, vast quantities of sediment deposition, the presence of warm acidic water from hydrothermal eruptions and volcanoes, and massive amounts of rapid and severe erosion. These phenomena, and similar ones, can adequately explain all of the major geologic formations we see around us today including mountains, rift valleys, massive canyons, rock-layer folding, huge cave systems, extensive plateaus or mesas, sedimentary continental shelves, mountain-top fossils, and isolated columns of basalt lava (e.g., Devils Tower in Wyoming). Models based on slow geologic processes over millions of years do not come anywhere near being able to explain how even a portion of these features arose. Despite the capability of a flood-based model to explain observed phenomena, most geologists reject it without even considering its explanatory power.

The Ark Rested on the Mountains of Ararat [September 28] (Gen 8.4)

An expedition setting out to search for Noah's ark provides a good news story, particularly if it includes a former astronaut. Most of the expeditions looking for the site of the ark's landing have focused their search on Mt. Ararat, although some have targeted nearby mountains and sites at lower altitudes such as a locale called Durupinar, after a Captain in the Turkish air force. It is argued by some that this verse does not indicate that the ark landed specifically on Mt. Ararat, since it refers to a group of mountains. In addition, some geologists suggest that Mt. Ararat formed from a volcanic eruption that occurred *after* the floodwaters had drained. If this is the case, then looking for the remnants of the ark on Mt. Ararat would be futile. Others have pointed out that if we understand Genesis 11:2 as saying 'from the east' rather than 'eastward' (see the ESV footnote), then it is difficult to explain how Shinar can be west of Mt. Ararat. Thus, they suggest that the "mountains of Ararat" could have been the Zargos Mountains in western Iran—however, the lower Mesopotamian valley may have been under water after the flood drained and during the early ice age.

The long-held belief that the ark settled near the top of Mt. Ararat is likely correct, since Mt. Ararat is the highest mountain in the region, and the alignment of the Ararat mountains with the territory of modern Armenia (2 Ki 19.37; Is 37.38) received ancient consensus (e.g., in Assyrian records). If the ark had landed on a different mountain, or at a lower elevation, then the tops of other mountains would have been visible (Gen 8.5) for about 80 km, *before* the ark grounded.

Alleged sightings of the remains of the ark near the top of Mt. Ararat have been recorded for over 2,000 years. One of the earliest accounts, which referred to the ark, outside of the Bible, was written by Berossus (c. 275 BC) a Chaldean priest, as quoted by Josephus. He stated that the ark landed in Armenia and that people scraped pitch from the ark to make into amulets. Eusebius, a historian at the time of Constantine, mentions that a small portion of the ark remained in his day. There were other similar references during the Middle Ages and into the early modern era.

Expeditions assembled with the intent of searching for the ark on Ararat began in the mid-19th century. In the 1870s the British Viscount James Bryce claimed to have found a cut timber structure well above the tree line. In 1883 Captain Gascoyne, an English attaché of the British Embassy, claimed to have seen the ark—taking detailed measurements and describing the ark as extending from a glacier. Similar accounts followed through WW II. These often-included detailed descriptions of the climb up the mountain and of seeing a wooden object sticking out of a glacier. In a number of instances, the accounts were accompanied by sketches. Some of these accounts appear to be credible. Since many of them are entirely independent of the others, there is a surprising level of concordance among

the accounts and diagrams, suggesting that the reporters had actually seen something ark-like near the mountain top.

Since the Second World War, numerous expeditions have scaled Mt. Ararat looking for the ark. Few have been able to produce any solid evidence of its presence. In 2010, results of an expedition undertaken by a team of Christians from China and Turkey were published. The team claimed to have found and entered the ark. They published photographs of the interior of a structure, which shows wooden-plank walls and ceilings, and beams. The pictures also show the presence of ice around the wood. Their claim was dismissed by non-Christian publications such as *National Geographic*, which said that if they had found a structure it was a shrine that had been built on Ararat. The response from Christians varied, ranging from acceptance to incredulity. Some reviewers, such as Randall Price, Director of Judaic Studies at Liberty University, claimed it was a fake. Bob Cornuke of the Bible Archaeology Search and Exploration Institute said, "This is not Noah's Ark, this is a fake. It's a fraud and it's of the highest caliber according to what I can assess from the evidence and talking to eyewitnesses and people from Turkey."¹⁸

If the ark landed below the modern snowline of Mt. Ararat, then its remains may have been used for construction and kindling by Noah and his family (the earth was bare after the flood) or it rotted away. If it landed above the modern snowline, and its remains were left there, then it is unlikely that any of it still exists today. Alleged sightings of the ark often mention a glacier; but glaciers are very destructive and move relatively rapidly (centimeters per day). The ark would likely have been crushed and ground to dust long ago.

Debate about whether the ark has been found, or whether it will be found, is in the same class as whether the Shroud of Turin is real—intriguing but of little value. God determined that we did not need to know the exact location of the ark—thus the general reference to its landing site—possibly to keep people from turning the site into a shrine. Verifiable evidence of the ark's current existence would not convince a skeptic (Lk 16.31) and believers in God's word do not need extra-Biblical evidence to maintain their faith.

Continental Breakup [September 29]

(Gen 8.5)

When we considered the creation of the land (Gen 1.9-10), we noted that there is considerable evidence that the landmasses of our current continents were previously part of a single continent which broke up during the flood. This evidence includes:

- Matching geological trends on the east coast of South America and the west coast of Africa; and similar trends between Antarctica and Australia.
- Continuity of older mountain chains such as the Appalachian Mountains which appear to extend from the US to Greenland, to the Caledonides of Ireland and Britain, and into Scandinavia.
- The presence of similar fossil strata in distant continents which may have been adjacent when sediment layers were deposited, and fossils formed.
- The alignment of magnetic rocks, which would have obtained their properties when created or formed but are now in different orientations in their current continental positions.
- The pieces of our current continents appear to fit together as if they are parts of a large jigsaw puzzle.
- The animals, by all their kinds, were able to come to Noah and go into the ark—they would not have had to cross a body of water to reach Noah.
- The earth's continents are currently in motion. Today, the rate at which they are moving—on the order of a few centimeters per year—can be determined with GPS readings.

The commencement of continental breakup may have coincided with the opening of fissures which allowed mantle

¹⁸ <u>http://www.wnd.com/2010/04/146941/</u>

magma to escape from below the earth's crust. These fissures would have permitted water stored in subsurface cisterns to escape (Gen 7.11). As water from the cisterns encountered the hot magma it would have been ejected from the fissures as high-velocity steam which, as it cooled, quickly turned into heavy rain.

The pieces of the original continent continued to separate during the flood. Explaining how this occurred requires an understanding of plate tectonics and continental drift models, which would be too detailed for this meditation. However, we can review an outline of what possibly occurred:

- Large rocky portions of the original continental shelf broke off and began to sink into the semi-plastic mantle layer. These cool continental chunks picked up speed as they sank, reaching velocities of kms/hour.
- The subduction of the continental rock chunks pulled with them the sea floor (like a conveyer belt). A probable subduction zone is the 'ring of fire' along the Pacific coast of Eurasia and the Americas.
- Elsewhere, the seafloor was broken into separate plates, and hot magma upwelled at the plate boundaries to fill in the areas being evacuated by the subduction process (e.g., along the mid-Atlantic ridge). Multiple convection currents developed in the earth's mantle-crust interface. The tectonic plate boundaries today are highly accentuated, being marked by the remnants of volcanoes and on-going earthquake activity.
- Large chunks of the original continent floating on the mantle layer were forced apart by a combination of subduction and upwelling. Some chunks of the continental plates collided with one another (e.g., India into Asia and Africa into Eurasia) creating ragged mountain chains, including the Himalayas and the Alps.
- Cooling and subsequent changes in rock density, collapse of the ceilings of the empty large underground water cisterns, and on-going continental plate movement caused the ocean floors to sink and the continental plates to be thrust higher, allowing the floodwaters to run off the newly forming continents into the new, deeper, oceans.

The breakup of the original continent, and the start of the separation of the new continental pieces, would have occurred very rapidly during the year of the flood and not over millions of years as suggested by most modern proponents of continental drift—it was a sprint, not a drift. The continental separation probably slowed down following a standard geometric decay curve. Thus, immediately after the flood the continents were considerably closer together than they are today. This could help to explain how animals exiting the ark were able to reach Australia and other distant lands. It also may provide an explanation for why it appears that there was contact between the ancient Middle East and the Americas. For example, Plato's *Timaeus*, usually dated c 360 BC, describes a land (a continent, which he calls Atlantis) beyond the Pillars of Hercules. There are also many people who believe there is evidence that the Phoenicians and Egyptians had contact with people living in Central America—although many mainline historians dismiss this idea.

Continental breakup was originally proposed by Antionio Snider-Pellegrini (1802-1885) who proposed this theory in the context of the creation of a single land mass and the flood. Because he was a creationist, his views were generally ignored. The theory was re-proposed, in a non-creationist context, in the early 20th century and gained support through the century. Today, most geologists support some form of plate tectonics and continental drift. Ironically, there is debate among Christians, who hold to a strict creationist view and to a worldwide flood, as to whether the flood model should include plate tectonics and continental breakup.

Bird Tests [September 30] (Gen 8.6-12)

Canaries were once used in coalmines as an early warning system. The birds would succumb to toxic gases such as carbon monoxide or methane before it would kill a miner. If the bird showed signs of distress, the miners would know that their working conditions were unsafe. In a similar way, Noah used birds to test the conditions of the postdiluvian world, and to determine if it would be safe for human habitation. Birds were the ideal choice for the test since they could be released from the window in the ark and fly above the dereliction outside.

The window in the ark was probably on the top deck, under the eaves of the solid roof. We noted previously that,

given the probable extent of technological innovation achieved before the flood, the window was likely covered with glass. This would have allowed Noah to look out on the scene of wide destruction and, later, to have seen the mountain tops as the water drained off the land but would not have allowed wind-driven rain to enter the ark. If the window did not have a glass covering, there would have been no need to open it to send out the birds.

Noah could see that the water was gradually draining, as the mountains became more exposed. But he had not been given any guidance about how long the drainage process would take or when he would be able to leave the ark. It was necessary for God to provide explicit instructions to Noah about when to enter the ark or he would not have survived. However, it was not necessary for God to provide information about when he could exit the ark. After having been in the ark for almost nine months, we can be sure that the patience of Noah and his family would have started to become strained. God may have withheld information at this time to strengthen their faith.

After the waters had been draining off the land for 40 days, Noah decided to conduct a test to see how far the drainage had progressed. He may have chosen to conduct his first bird test after the ark had been grounded for 40 days because it had required 40 days of rain before the ark began to float. He may have reasoned that the drainage would take the same amount of time. We can probably conclude that this test was not inherently sinful—it falls into the class of our taking responsible action, such as checking the weather forecast before planting corn or testing the temperature of water before adding cooking ingredients. We should note that Noah did not leave the ark until he was given explicit directions to do so (Gen 8.16-18), even though his final bird test had indicated that the earth was dry.

The first bird which Noah sent out was a raven. It has been suggested by ancient Jewish commentators that the selection of a raven was appropriate because it was listed among the unclean birds (Lev 11.13-15), and Noah's expectation would have been that the ground was littered with human and animal carcasses, and other soggy organic debris. The Jewish commentators also suggested that since the raven is a scavenger it would have been attracted to the decaying flesh of the carcasses and would have been able to subsist on the carrion, and thus would not have needed to re-enter the ark. However, the bird continued to fly in the vicinity of the ark (possibly perching on the ark). This indicated to Noah that the bird was able to find food but not yet a permanent abode.

Noah waited seven days and then began a series of three tests with a dove—the 'another' in verse 10 implies that there was a week's delay between sending out the raven and the first dove. The dove was considered to be a clean bird under the later Jewish cleanliness laws (Lev 1.14). Even though these laws were formally introduced about a thousand years later, Noah also knew about the distinction between clean and unclean animals (Gen 7.2, 8). So, it is likely that the dove, a more delicate and naturally clean bird than a raven, was sent out to see if it could find a place that it would deem habitable. The first time, the dove returned quickly to the ark. The second time, the dove returned with a fresh olive leaf in its beak. This indicated that plant life had begun to revive. This would have been a great encouragement to Noah. But, the fact that it returned to the ark showed that there was nowhere yet that the bird could find that was clean enough to settle on. The third time, the dove did not return. From this, Noah was able to infer that at least some areas of the ground were becoming clear of carrion and mud, and that their time in the ark was nearly complete.

Some writers have suggested that the seven-day intervals between sending out each of the birds indicates that they were sent out on a Sabbath. The seven-day intervals certainly indicate that the week was a standard unit of measure from the beginning of time and that Noah followed it—and likely observed the Sabbath as a God-fearing man. However, based on the chronology we considered earlier, if the flood began on a Sabbath (Saturday), then the birds were sent out on a Friday. Interestingly, all of the other dated events in the remainder of chapter 8 also fall on a Friday. This seems to correlate well with subsequent events. Noah and his family would have left the ark at the end of their workweek, and the next day (a Saturday) they would have observed a Sabbath rest and honoured God with sacrifices of thanksgiving (Gen 8.20).

Drained and Dry Earth [October 1]

(Gen 8.13-14)

It may appear that there is a contradiction between the statements in verses 13 and 14. We are told that on the first day of Noah's six hundred and first year the face of the ground was dry. Then, we are told that, almost two months later, the earth had dried out. The difference is not, as some may suppose, due to an incompetent amalgam of material from different sources. In the first instance, Noah had removed the covering of the ark and he could see that the water had drained off from the land. However, even though the land was not covered with standing water, it was still sopping wet. The sediment layers laid down during the flood would not yet have hardened into rock, and a stable water table would not yet have been formed. Likely, the continents (other than on rocky outcrops) were covered entirely with a slough of muddy quicksand which could not have borne the weight of large animals like an elephant, *Apatosaurus*, or *Allosaurus*.

The Hebrew text uses two different words, in verses 13 and 14, which are both translated as 'dried'. Although they can be understood as synonyms, we may be able to discern a slight difference in meaning. The word used (twice) in verse 13 could be understood in the sense of 'emptied' of water (e.g., Jer 51.36; Nah 1.4)—thus 'drained'— whereas the word used in verse 14 could be understood to mean 'dried out' (e.g., Joshua 9.5). Older versions of the Bible translate both words with 'dried' or 'dry'. However, the NIV translates the second word as 'completely dried', and the ESV provides 'dried out' (Gen 8.14), to accentuate the distinction between the two Hebrew words.

We are also told that Noah removed the covering from the ark. This seems to be peculiar since there is no mention of a *covering* for the ark (other than its roof and the coating of pitch) in the instructions God gave Noah for building the ark (Gen 6.14-16). Some commentators suggest that Noah tore out part of the roof at this point. However, since the ark probably had a gently sloping (almost flat) roof (similar to those found on European passenger river barges today), it is more likely that Noah may have included during construction an interior ladder and an access hatch to get onto the roof of the ark. It is therefore possible that Noah pushed off the hatch's covering to gain access to the roof. From there he would have had a much better view of the ground around the ark, than he could have had through the window that was high in the side of the ark, under the eaves. From this prospect, Noah could see the devastation immediately below the ark.

Noah would initially have been encouraged to see that the water had drained off the land—he would have known that his tenure in the ark was drawing to a close. However, what he may have observed immediately upon removing the covering of the ark would have also had a discouraging element. He would not have seen a pristine world with vistas of forests and meadowlands. Instead he would have seen a post-apocalyptic disaster—mud, deep gullies caused by erosion, mangled mats of rotting vegetation, and masses of stinking carcasses. The human and animal carcasses would have been a seething mass of carrion flies and beetles which would have been a repulsive sight. Blow flies and flesh flies can locate a dead animal within minutes and can reproduce quickly when there is abundant food for their larvae. Within days, hundreds of thousands of fly larvae can be at work consuming a single carcass. On seeing such sights below him, Noah undoubtedly quickly closed the hatch and resealed the ark with a sigh.

At this point Noah had spent over 10 months in the ark. His adventure to the roof of the ark had occurred on a Friday. The next day, he and his family likely spent the Sabbath in worship, thanking God for bringing them safely through the flood and begging him to return the earth to a hospitable state as quickly as possible. But they had to continue waiting in the ark for the next 56 days (almost two months). During this time of waiting, the ground became firmer, as the sediment layers hardened into rock. Also, the flies and beetles—all of which have a worldwide distribution—were taking care of the rotting vegetation and carcasses. Vertebrate remains are ephemeral and will last only a few weeks in a warm moist environment. Therefore, by the time the 56 days had passed, and Noah and his family came out of the ark, they would have found an empty world with vegetation starting to sprout and a few dry bones scattered about.

Noah may have been somewhat discouraged by the slowness of the drying process. However, God knew what was best for them and was preparing the world for re-habitation. The bulk of the rotting organic material had been turned

into soil nutrients that would have mixed into the loose sediments. Immediately after the flood, the soils of the world would have contained far more nutrients and organic material than in most soils today. In addition, as we will note in a future meditation, there was likely considerably more rain for many years after the flood, than there is today. Thus, the post-flood world would have supported rapid plant rejuvenation and provided highly nutritious food for the human population as it once again multiplied and filled the earth.

Noah's time waiting in the ark for God to give the exit-call, as the earth dried out, provides a simple lesson: God knows what is best for mankind, and his timing is always perfect. It is good for us to be patient and wait on God.

God's Command to Exit the Ark [October 2] (Gen 8.15-19)

During the last days of the Roman Empire (c. 400 AD), Prudentius, a Christian governor wrote a poem called *Psychomachia* or 'Battle of the Soul', in which he described seven virtues battling against seven deadly sins. The Christian virtues win the battle and "With the defeat of vice, the virtues sing their psalms. The victorious army at last reaches camp." They go on to build the spiritual temple. The poem ends with these words, "How many times has sin been defeated and we have felt ourselves glow with God's presence; how often, then, have we cooled and given in to foul desire? ... The opposing winds of light and dark are at war and we, body and spirit, have desires that are at odds with one another until Christ, our Lord, comes to help." This allegory, in the spirit of *Pilgrim's Progress*, includes patience among the seven virtues and counsels us to strive for patience (Rom 8.25; 2 Cor 6.6).

The example of Noah at the end of the flood teaches how necessary it is for us to have patience when faced with the providences which God sends. Noah and his family had been confined to the ark for over a year (370 days). However, 56 days prior to God finally speaking to Noah and commanding him to leave the ark, the earth had appeared to be dry (Gen 8.13). But perceptions can be deceptive. God does not provide a reason in the text, and may not have given Noah a reason either, for why he made them remain in the ark for so long. We surmised that although the ground appeared to be dry, it was actually a post-apocalyptic disaster—a muddy slough of quicksand with mangled mats of rotting vegetation and masses of stinking carcasses.

Noah was a man who walked with God (Gen 6.9). Although he was a sinner and would likely have been tired of the confinement in the ark and wishing to breathe fresh air, he lived by the principles of faith, including obedience and patience. He had built the ark in strict obedience to God's command when the 'common sense' of his neighbours would have told him that it was a foolish venture. So, he was unwilling to take a step from the ark until God gave him a command to do so. He knew in his conscience that he needed to wait for an explicit instruction from God before he acted. His situation is unique since he had been given instructions at the beginning of the flood and therefore believed that God would bring the ordeal to an end also with instructions. We believe that God controls all events, as he did the events of the flood. However, in our situations God does not give each of us personal commands for how to act. Rather, we have explicit commands and clear principles, given in the Bible, which should guide our decisions and actions.

Noah undoubtedly desired to leave the ark sooner than he did. But God knew that what was best for Noah was not what Noah desired. For Noah, obedience and patience were twin sisters who coordinated their garments. So, Noah's patience overruled his desire and he waited for God to speak, so that he could obey. For Noah, walking with God meant waiting for God's instructions. He didn't do what seemed right in his own eyes (Judges 21.25), but what was right in God's eyes (Ex 15.26).

Noah's patience was rewarded; when the time was right God spoke. This is the third time (recorded in the account) that God spoke directly to Noah. First God announced the flood (Gen 6.13-21), then he commanded Noah to enter the ark (Gen 7.1), and finally he told him to exit the ark (Gen 8.15). In the first and third instances the account uses the word 'God'; in the second instance the word 'LORD'. It is possible that the usage of different names of God indicates a different context—in the first and third, God acts as the creator and sovereign ruler; in the second, he

presents himself as a personal friend of Noah.

Noah acted immediately on the command and brought out the animals (Gen 8.18). But he didn't only open the door of the ark and drive out the animals. He led them out, two-by-two (Gen 8.19), in an orderly manner. He continued to show the same dedication to his work as he had shown by undertaking the seventy-five-year task of constructing the ark. His disciplined action demonstrated that he took his duties seriously, as the Lord's agent appointed to protect the animal creation and to give them a renewed life on the earth.

The animals were given a purpose as they exited the ark—to be fruitful and to multiply. In this command, there is a message of hope and promise for Noah. He came out of the ark into an empty world, but animal life would soon re-fill the earth in a panoply of genera and species, for God's glory and man's use.

We noted previously, that is was likely that God gave Noah the command to enter the ark (Gen 7.4) on a Sabbath day. So, God shut in Noah, and the flood began, on a Sabbath day. The judgement of the old world and the salvation of Noah and his family began on the day that God had set aside as a holy day of rest (Gen 2.2-3). If this inference is correct, then the command to exit the ark came on a Friday. This means that Noah ended his tenure in the ark, and his workweek, by leading out the animals. That evening, he entered into his rest. Adam named the animals on a Friday and concluded his day by entering a day of rest. Both Adam and Noah spent their first full days in a new creation by observing a Sabbath. This is a magnificent symbol of what God has in store for all of his people. We will all end our work here as governors over God's creation and then enter into an everlasting sabbath of glory.

Swarming and Multiplying on the Earth [October 3] (Gen 8.17, 19)

Evolutionary biologists claim that the diversity of animals (and plants) arose by chance-based processes acting on initial 'primitive' genetic material, through millions of years. They claim that the process of accidental mutation, under selective pressures within the environment, resulted in the development of an increasingly more complex genome. In contrast, biologists, who believe what God says in the Bible, attribute the diversity of life to genetic information which is available within each created kind's genome.

Logically, there are only two ways for genetic information to arise. It either was created by someone—an intelligent designer, i.e., God—or it came into existence spontaneously. Evolutionary biologists are wedded to a basic presupposition that there cannot be a God who created the universe, including the diversity of life we see around us. Therefore, they must define a natural means of generating, from non-existence, the information contained in the genome, even if it is illogical. In other disciplines (e.g., engineering, computer programming, or creative writing) no one would accept the idea that an accumulation of errors in the specifications (e.g., a design drawing, a program written in Java, or a movie script) would retain its functionality or even improve its design. Yet, when it comes to the generation of the information specification for life, scientists suspend logic.

Since genetic information does not arise spontaneously, it must have within it both the information necessary for an entity consistently to produce more of the same—i.e., 'like gives birth to like'—and yet to allow for the generation of variety within a wide spectrum (e.g., consider the diversity of orchids or the different breeds of dogs). God created a marvel in the 'technology' of genetic information. This technology includes meiosis, a type of cell division which utilizes gametes (e.g., eggs and sperm).

In most animals (and plants) non-gamete cells contain a pair of chromosomes (an organized structure of DNA and protein)—each derived from a parent. When non-gamete cells divide (mitosis) the resulting cells contain identical genetic information, if no accidental mutations occur. However, gametes carry only a single copy of a chromosome, which is not a duplicate of the somatic cells of the individual. When the male and female gametes merge and divide (meiosis) the chromosomes undergo a recombination, which shuffles the genes to produce genetically unique 'daughter' cells. This is not random or accidental mutation of the base genetic material, as some suggest, nor does

it add new genetic information. Rather, it is a mechanism, designed by God, which utilizes the spectrum of genetic information available in the genome to produce variation and diversity among individuals of the same kind—within the limits of the pre-existing genetic information. The inherent ability encoded within the genome provides for adaptability across a range of environmental conditions.

The unique phenotypes which are produced by meiotic reproduction provide a basis for the development of species within the generic kinds—i.e., within the limits of the genotype. However, this is *not* evolution. Evolution proposes that genetic variety and complexity of the genome have *increased* through time. In contrast, what has actually been happening is that genetic variety has been *decreasing* since the flood, as species have developed.

When the animal pairs that exited the ark reproduced, their progeny quickly spread over the uninhabited earth. Some of their descendants became isolated in independent breeding populations—caused by separation of the continental landmasses, erection of temporary barriers during the ice age that followed the flood, or by populations inhabiting ecological niches. These populations became genetically differentiated through natural variety within the genome, which reinforced their isolation. Consider, as an example, llamas and camels which are placed in different genera (above a species) by modern taxonomic classifications—in contrast dogs, wolves, and coyotes are considered to be all in the same genera (*canis*), and dogs and wolves are in one species (*c. lupus*). Yet, at the Dubai's Camel Reproduction Centre researches have been able to produce, with considerable challenges, a hybrid between a male camel and female llama. The resulting *camas* are humpless, friendly like llamas, have the long fluffy coat of a llama, the long legs of camels, and partially cloven feet—a compromise between the camel's footpad and the llama's cloven foot. This is not, as scientists have suggested, an example of breeding two species that evolved separately for 30 million years. Rather, it is an example of how isolated populations have become genetically separate genera during the ~4,400 years since the flood. Camels and llamas are naturally unable to interbreed, and, over time, their genetic diversity has declined.

This example demonstrates how, from the Biblical kinds, genera and species were generated through a *loss* of genetic information. This information loss (decline) is consistent with the principle of decay that is the result of sin and the curse on the created order (Rom 8.20, 22). Life is not becoming more genetically complex as evolutionists contend, it is becoming *less* complex (with less genetic diversity) even as more species develop.

Interbreeding across the boundaries of the Biblical kinds is not possible. Thus, 'like gives birth to like'—within the limits of kinds (Gen 1.12) and their subdivisions (e.g., modern species).

Men and Dinosaurs (part 1 of 2) [October 4] (Gen 8.17, 19)

If you want to make an evolutionist laugh, assert that men and dinosaurs co-existed. This assertion, in their minds, is so absurd it cannot be entertained, let alone be possible. If we were to debate this assertion with an evolutionist, we would not deal with facts but with differing presuppositions. For example, evolutionists claim that dinosaurs died out at least 60M years before mankind came on the scene; so, from their perspective it is impossible for men to have seen, lived with, or hunted dinosaurs—however, their view is not based on fact but on a false interpretation of fossil evidence. In contrast, the primary facts are simple: 1) God created dinosaurs along with all other kinds of land-based animals on the sixth day of the creation week (Gen 1.24-25), the same day that he created mankind (Gen 1.26-27). 2) God directed pairs of each dinosaur kind (with a representation of the original generic diversity of the original created kind) to go to Noah and to enter the ark to be saved from the flood (Gen 6.19). The dinosaurs could *not* have all been killed off by man before the flood, or there would not be any of their bones in the fossil record left by the flood. 3) The pairs which left the ark reproduced and "swarmed on earth". 4) Therefore, man and dinosaurs did co-exist within the past 4,000 years, regardless of what the majority of scientists may state. Sadly, many people who claim to believe the Bible also believe that the dinosaurs died out long before man was created. They have been duped into believing a lie that contradicts the clear teaching of Scripture.

There is considerable evidence that dinosaurs existed after the flood, on every postdiluvian continent. Their existence, likely until the late Middle Ages or even into the early modern era, is undoubtedly the source for the legends and stories about dragons that are prevalent in many cultures throughout the world. The historical accounts of dinosaur (dragon) sightings are too numerous to list in this meditation. However, a few examples include: Alexander the Great reported seeing a dragon in India; Chinese accounts include reports of people raising dragons for food; Marco Polo recorded (in his *Travels*) seeing huge 'serpents', ten paces in length, with short front legs, each with three claws, and jaws wide enough to swallow a man; and the 1890 sighting, and shooting, of a large flying creature that, by the description of the cowboys who shot it, resembled a pterodactyl, but was much larger (this may have been an example of the creature the aboriginals called the Quetzelcoatlus, Wakinyan, or Thunderbird, of which bones have been found in Texas).

There are numerous examples of rock paintings, carvings, sculptures, mosaics, and drawings of animals which look like modern renderings of dinosaurs and do not resemble any living animal. For example, a painting in White Rock Canyon (in Natural Bridges State Park) near Blanding, Utah made by the Anasazi Indians (who lived there until about 1800 AD), appears to depict a *sauropod* (it is usually referred to as a brontosaurus); and Inca burial stones often include pictures of triceratops, stegosaurs, and pterosaurs interacting with men. Leonardo Da Vinci included a sketch of a dragon with his sketches of cats and lions. Evolutionists respond that these images are based on fossil bones that have been unearthed, and not on sightings of actual animals; are merely artistic inventions that are similar to our renditions of dinosaurs; or are hoaxes. It is difficult to believe that artists in diverse cultures, who lived before discoveries by modern paleontologists, could have rendered these images so consistently if they had not actually seen them.

The Bible also makes reference to dinosaurs living alongside of man. In Job 40.15-24 we read of Behemoth (the Hebrew word can mean something like "beast supreme"). We are to understand this to be a real, not mythical or hyperbolic, large land-based animal since Job is directed by God to consider it as one of the animals that he had made. The largest land-based animal living today is the elephant, another large animal is the hippopotamus (these are the possible identity of Behemoth suggested by the NIV's footnote). However, it is impossible to reconcile the large tail (Job 40.17) attributed to Behemoth with the scrawny tails of the two largest living land-based animals. The description in the Biblical account, including the size of its tail (like a cedar tree), its diet, and the place where it lived, fits exactly with our current understanding of the largest dinosaur family that includes *Argentinosaurus* and *Brachiosaurus*. God refers to this animal as the first among his works (Job 40.19). He cannot be referring to an elephant or hippopotamus as they are not anywhere near as large as one of these *sauropods*.

The editors of the ESV appear to have been unwilling to identify this beast and included a footnote saying that the exact identity is unknown. The reason that the NIV and ESV equivocate on the identity of Behemoth is that most modern Bible scholars have been so conditioned by the concept of long earth ages and evolutionary geology that they accept the view that the dinosaurs had died out millennia before man arrived. Regardless of what defenders of evolutionary naturalism say, the passage in Job tells us that dinosaurs lived after the flood, at the same time as the post-flood patriarchs (i.e., within the past 4,000 years). Post-flood conditions (the eventual cold associated with the ice age and less rainfall after the ice age) along with human hunting probably precipitated the extinction of many kinds of animals, including the dinosaurs. The presence of dinosaurs in the ark and after the flood tells us that there have not been millions of years of evolution on earth.

Men and Dinosaurs (part 2 of 2) [October 5] (Gen 8.17, 19)

An article that appeared in *National Geographic* (1993-01) declared that "No human being has ever seen a living dinosaur." How does the author of this statement know this? Clearly, he is assuming it, since he has not spoken to every person throughout all of history. He is also assuming it because he is mistaken. His view is an artifact of his *religious* persuasions based on the belief that evolution has occurred over millions of years and that dinosaurs died out at least 60M years before men walked the earth. However, anyone who believes the Bible to be the word of God

knows, without doubt, that this statement is false because Adam and Eve would have seen dinosaurs. The question of relevance to us today is whether dinosaurs were taken with Noah in the ark and then swarmed and multiplied on the earth after the flood.

In the previous meditation, we noted that there is considerable evidence that dinosaurs existed after the flood, on every postdiluvian continent. We considered a few examples which demonstrate the co-existence of men and dinosaurs. Dinosaurs likely lived, generally avoiding human settlements, until the late Middle Ages or even into the early modern era. Their co-existence with men is undoubtedly the source for the legends and stories about dragons that are prevalent in many cultures throughout the world.

There are numerous (dozens, and likely hundreds of) examples of sculptures, stone carvings, rock paintings, and mosaics that include animals which look like modern renderings of dinosaurs and do not resemble any living animal. This art ranges from ancient China (over 4,000 years old) to mediaeval Europe, to pre-Columbian Mesoamerica. For example:

- A stone carving in the 12th century Angkor Wat temple in the Cambodian jungle has a carving that looks like a *Stegosaur*.
- Carvings of 'salamanders' on the ceiling of the castle of Francois I, in France, have long necks and raised scales, which no amphibian has. The depicted creatures appear to be the dinosaur *Massospondylus*.
- The altar cloth (c. 1600) in a mediaeval chapel included in the Palau de La Generalitat (built from 1515-1547), in Spain, depicts an animal in the scene of *St. George and the Dragon* that looks, at first glance, like a crocodile. However, the teeth, which are remarkably detailed, show the front ones jutting out. The depiction appears to be of a *Nothosaurus*.
- In Carlisle Cathedral, in England, the covering of the tomb of Bishop Richard Bell has carvings of many easily recognizable animals (e.g., pig, fox, bird, fish, bat, and dog). There are however, two creatures with intertwined necks which are not known among modern animals. One of the creatures has a spiked tail. The carvings look like the *Shunosaurus* and *Vulcanodon* dinosaurs.

Evolutionists claim that these images are based on reconstructions of fossil bones and not on sightings of the animals, or are merely artistic imaginations which happen to look like modern renditions of dinosaurs. Yet, it is difficult to explain how artists across diverse cultures could have reconstructed bones, and created such renditions, including of soft-tissue components, without advanced skills in anatomy and physiology. Paleontologists, over the past 100 years, have been challenged creating models of how these fossilized creatures may have appeared. Yet, we are expected to believe that local artists could have rendered the extinct animals. It is far easier to accept the proposition that the artists created their images of the animals from what they had seen or from contemporary eyewitness descriptions.

Evidence for the co-existence of dinosaurs and men in the post-flood world is found in the impossibility of their fossils being millions of years old. In 1990 samples of bones from *Allosaurus* and *Acrocanthosaurus* were 'dated' at the University of Arizona using the presence of carbon-14 (C^{14}) isotopes. The tests were conducted using standard 'blind' procedures so that the technicians could not be biased. The bones contained C^{14} and were 'dated' at about 20,000 years. C^{14} would not have been present if the bones were millions of years old. Similarly, researchers gave a presentation at the 2012 Western Pacific Geophysics meeting in Singapore, in which C^{14} results from bone samples from eight dinosaur specimens were described. All the samples gave 'dates' from 22,000 to 39,000 years. Afterwards, their abstract was removed from the conference website by the chairmen because they could not accept the findings. In their letter of retraction, they state, "There is obviously an error in these data." Unwilling to challenge the data openly, they removed the report from public view. Similarly, discovery of soft tissue in fossilized dinosaur bones has confounded scientists. The *Smithsonian* magazine (2006-05) declared in bold headlines, "Dinosaur Shocker". If the bones had been buried tens or thousand years ago (let alone millions of years ago) there is no conceivable way that the soft tissue would not have been fossilized or the organic material (e.g., collagen, proteins, and blood cells) would not have decayed. In 2005, Dr. Mary Schweitzer reported results in the journal

Science. Finding this organic material in fossilized bones did not change her views about the age of the bones. She dismissed the possibility that the fossils could be less than millions of years old, and that the buried animals had lived at the same time as men. Thomas Kuhn noted, in *The Structure of Scientific Revolutions*, that scientists contort their models to accommodate divergent evidence rather than change their presuppositional positions.

A 'New' Humanity [October 6] (Gen 8.18)

A new world, a 'new' humanity. Noah and his family had been preserved in the ark so that a renewed human population could be founded out of the old stock. The identification here of the eight individuals who were preserved in the ark through the flood, indicates that there is hope for mankind. The fact that they had been preserved through the flood and arrived at the day on which they could disembark from the ark is an indication that God had a great purpose for them and for humanity. Also, since the animals were commanded to be fruitful and multiply (Gen 8.17), the implication is that mankind was to do so as well. This command is explicitly reinforced for mankind later, as part of the covenant renewal (Gen 9.1, 7).

Theoretically, instead of saving eight from the flood, God could have wiped out all of mankind with the flood, and created an entirely new, and sinless, form of creation to replace the fallen line of Adam. However, his purposes are grander than merely making sinless creatures—after all, animals do not sin. God's purposes include having creatures made in his image who will delight in worshipping him and fellowshipping with him. Angels do not qualify in this category. Although they are intelligent, rational, beings who worship their Creator, they were not created in the image of God.

The purposes of God go beyond having communion with his image-bearers. They include showing covenant-love toward them. This kind of God's love has been reserved for humankind alone. God never says that he loves angels or animals—although he does in a general sense, as their Creator. God made a covenant with Adam (Gen 3.15) that through the seed of the woman there would be redemption for fallen humankind. He promised to extend this covenant to Noah (Gen 6.18), which he renewed after the flood (Gen 9.9). God's purposes could only be fulfilled by retaining continuity between Adam and his descendants after him. For God's covenant-love to be realized, Adam's line needed to be redeemed—an alternate creation would not work. Thus, the eight in the ark were the recipients of God's blessing—first by being saved from the flood, and then by being the objects of his covenantal blessing.

Therefore, God took a righteous man, Noah (Gen 6.9), gave him a new world to populate and established him as the founder of a new, righteous, humanity. From man's perspective it might appear that God conducted an experiment—as if God said, "Oops! The first man failed, let me try again and see if I can make things better." This kind of thinking might appeal to those who believe that God created the seed of the universe and set it in motion but doesn't know what man is going to do and how he is going to react ('open theism'). They come to this conclusion because of their feeble desire to protect man's 'free will'. However, God did not undertake an experiment for his learning and benefit—as if he didn't know the outcome of the flood and of saving Noah. Rather, God sent the flood, and saved Noah and his family, to demonstrate to mankind that the new humanity was actually the old humanity in a new environment. Wiping away the outward exhibits of man's wickedness by a flood could not change the heart of man, like painting over rotten cladding of a barn does not cure the decayed wood. As we know, from later in the account (Gen 9.22-25), Noah's family was not entirely righteous even though they were all saved from the flood. The evil that was present before the flood continued to manifest itself immediately after the flood, as demonstrated by Ham's behaviour—the ark could take mankind out of the sinful world, but it could not take the sinful world out of mankind.

Politicians, academics, and policy makers need to heed this simple lesson from the flood: cleansing the outside of man or his environment cannot change his heart. But they like to think that they are like Professor Higgins in Shaw's *Pygmalion*, who claims that he can clean up the appearance—the language and clothing—of Eliza Doolittle and

change the inner person. The scene in Mrs. Higgins' drawing room proves how difficult it is. There, Eliza speaks of the weather and her family in beautifully modulated tones, but the substance of her discourse comes from the gutter. Likewise, the paternalistic elite of society think that merely by providing homeless vagrants, who sleep on subway vents, with taxpayer funded dwelling units or cell phones will change them into disciplined, clean-living, and hard-working citizens.

God has shown to mankind—through the example of the most extreme form of environmental cleansing imaginable, the flood—that nothing in the natural realm is able to deal with the problem of sin in man's heart. Man cannot be made new by an outward washing of his body or even by brainwashing—e.g., through some form of re-education. It would become clearer, once the Messiah arrived, that the only way that there can be a truly new humanity is when men are born again (Jn 3.3). To be born again requires a different form of birth—birth through the Holy Spirit (Jn 3.8/). God's plan established before the foundation of the world (Eph 1.4)—it was not a response to an unforeseen mistake when Adam sinned—was to redeem Adam's line by having one of Adam's own seed stand in his place as an entirely righteous man—wholly God and fully man. This man would not be Noah but Jesus Christ, the New Man (Eph 2.15), who would reconcile God and man and be the founder of the true new humanity. This new humanity would consist of those who are born again by the Spirit, through repentance and belief in the New Man.

Post-Flood Animal Dispersion [October 7] (Gen 8.19)

After Noah had led the animals out of the ark, they quickly dispersed around the world and inhabited various ecological niches. Any model we propose for how this population dispersion may have happened must be guided by these basic principles:

- Every land-based animal and bird, on every continent, is descended from animals which were with Noah in the ark during the flood. All animals, everywhere, not in the ark, had died during the flood (Gen 7.21-22).
- The flood occurred about 2345 BC. Therefore, every species, extinct in the recent past or alive today, developed within the past 4,400 years.
- The lack of fossils of a particular kind of animal in an area does not mean that that kind of animal did not live in the area at one time. For example, there is no physical evidence that wild lions existed in the Middle East, yet the Bible refers to their presence multiple times, from the time of Jacob and onward. The last Asiatic lion was reportedly killed in 1870.
- The vast majority of fossils were formed during the cataclysmic flood and cannot be used to determine where animals might have lived before the flood or in post-flood times.
- God 'programmed' animals to seek ecological niches suited to their natures. In addition, the kinds of animals which came to Noah had high genetic diversity, providing their descendants with the ability to adapt across a broad spectrum of niches; e.g., bears can inhabit tundra and ice floes (Polar), temperate deciduous forests (Black), mountain highlands in the Andes (Spectacled), tropical forests (Sun), and deserts (Gobi Brown).
- God superintended the dispersion of the animals after they left the ark so that they ended up in locations and niches suited to their natures.

It is common for those who do not believe that all animals are descended from the ones that were carried in the ark to question how the kangaroos got to Australia after the flood. However, any questions raised about population dispersion present issues for *both* creationists who believe in the worldwide flood and for materialistic naturalists who reject the flood. Materialistic naturalists have suggested a number of ways that the animals might have reached distant lands, including:

- The continents were once much closer together in the past and animals found it easier to migrate across the shorter distances of seawater.
- Temporary land bridges were formed, during the ice age, when water was frozen in continental glaciers and the sea level was lower than today.
- Temporary ice bridges were formed during the ice age.

- Animals were able to swim, and birds to fly, across open water.
- Animals floated on vegetation rafts. For example, green iguanas arrived on Anguilla in the Caribbean for the first time in 1995 about a month after a hurricane, when they were stranded on floating matted vegetation. They had travelled 300 km.
- Man may have introduced some of the animals to distant lands. This has happened in the modern era: rabbits to Australia, sparrows to North America, and pythons to Florida.

Any, or all, of these dispersion and colonization methods could provide part of the explanation for how animals arrived in distant areas of the world after the flood (e.g., Australia and New Zealand, the Falklands or the Seychelles). Since there are no historical records for how this dispersion occurred, we have to work with hypotheses that are impossible to prove or disprove.

A fundamental difference between the hypotheses of materialistic naturalists and creationists is with respect to how quickly the dispersion occurred. The materialistic naturalists claim that the dispersion took millions of years, whereas creationists assert that it occurred in less than 4,400 years. The fact that llamas from South America can be bred with camels from the Middle East is an example of evidence which suggests that the separation of their ancestral kind into species did not take place millions of years ago. Another class of evidence showing that colonization can occur rapidly is when a new volcanic island forms or when all life on an island is destroyed by a volcanic eruption, and the island is repopulated. For example, within 50 years of the eruption of Krakatoa in 1883 the island had been re-inhabited by ~270 plant species and ~30 species of birds and different kinds of lizards and snakes.

Animal and plant kinds may have initially been distributed fairly evenly throughout the world's geographies. However, some adapted better to their new habitats and provided too much competition for some of the other kinds. Some of the kinds, such as the marsupials (e.g., kangaroos, koala bears, and bandicoots) and edentates (e.g., sloths, anteaters, and armadillos), may have been driven by competition for resources to distant areas of the globe during the early years after the flood and became isolated as the means of dispersion became less available (e.g., floating mats of decaying vegetation left over from the flood, sank) or barriers formed (e.g., glaciers during the ice age).

It is worth noting that calculations place the geographical centre of earth's land area (i.e., the point that has the shortest average distance to all other points), in northern Turkey (NW of Ankara) about 1,000 km from Mt. Ararat. Thus, the animals leaving the ark began their spread throughout the world from a near-central location.

A Pleasing Sacrifice [October 8] (Gen 8.20-21)

Life began in the new world with worship. Noah's first act, after leading his family and the animals out of the ark, was to worship God. Some writers have suggested that the offering of sacrifices was a spontaneous celebration in response to their salvation from the flood. However, it is more likely that Noah, a disciplined and righteous man, remembered to keep the Sabbath day holy. God likely gave Noah the command to enter the ark on the Sabbath (see, <u>A Week of Grace</u> [August 24]). So, he was shut in, and the flood began, also on a Sabbath day. The judgement of the old world and the salvation of Noah and his family began on the day that God had set aside as a holy day of rest (Gen 2.2-3). Therefore, the command to exit the ark came on a Friday and Noah ended his tenure in the ark, and his workweek, on a Friday. That Friday evening, he entered into his rest. It is significant and beautiful that Noah's first concern was to begin his new life with an act of worship on the Sabbath.

Noah first built an altar on which to offer the animal sacrifices. Although this is the first mention of an altar in the Bible, this does not mean that it is the first time an altar was used. Noah was careful to wait for God's commands (e.g., to exit the ark), and would not have participated in a new practice of worship without God's authorization. Sacrifices had been offered before the flood (Gen 4.3-5), and it would seem to be obvious that the sacrifices were offered on a raised mound of some form. Noah's altar would have been a mound of earth and natural stone—

conforming to later instruction (Ex 20.25)—since it was made on the same day as it was used. Since trees had just started to grow again, and wood left over from before the flood would have been soggy, Noah may have used wood from the interior of the ark to provide fuel for the fire of the sacrifice.

The animals used for the sacrifice were drawn from the clean ones that he had been instructed to take with him in the ark (Gen 7.2). Many commentators suggest that Noah used the seventh clean animal and bird for this sacrifice (leaving three pairs of each). They then conclude that he gave one-seventh of his possessions back to God. However, there is a difference of opinion about whether Noah was to take three pairs of each kind of clean animal and an extra for a sacrifice, or seven pairs (as given in the ESV translation). It is possible that six pairs were given for man's use and the seventh pair for a tribute-sacrifice. Regardless, the suggestion that one of the animals, or one pair, was to be a tribute to God misses a key point. Noah did not sacrifice just the seventh unpaired animal or one pair—he offered *some of* (lit., 'from') every type of clean animal and of every type of clean bird. The key point is that he demonstrated the sincerity of his gratitude to God by willingly doing what God required in worship. He sacrificed only clean animals because God had designated them to be the only suitable form of offering (Gen 4.3-7), and he offered these animals even when it might appear that it would consume a significant portion of his valuable assets. Noah's sacrifices, as his first action in the new world, teach what later prophets declare: 1) Offering tithes to God in gratefulness will not impoverish us (Mal 3.10). 2) We need to have our priorities right, in this order: God and Christ, then family; followed by the Church and then our own homes (Hag 1.9). 3) True worship consists of doing the right thing, in the right attitude (Jn 4.24).

Sabbath worship before the flood likely often, or always, included an offering of an animal sacrifice. Therefore, Noah didn't do anything out of the ordinary on this particular Sabbath. However, we can be sure that after having been in the ark for over a year, this offering had special significance as it went up with the heartfelt thanks of Noah and his family for their deliverance through the flood. They may also have asked God to withhold similar judgement in the future—which he promised to do, in response. Noah understood that the offering of animal sacrifices was a symbolic act of atonement. The fact that the "LORD smelled the pleasing aroma" indicates that there was a connection with atonement (Lev 1.4, 9). Noah, as the patriarchal priest for his family (Job 1.5), brought the animal sacrifices as a reminder to all his family that their salvation from the flood was a gift from God, which depended on God's grace. It was also a reminder to God of what he had promised as the ultimate act of his grace—to send a future substitute for their sin (Gen 3.15).

Noah's sacrifice was a pleasing aroma to God because it was accompanied by a proper spirit of contrition and thanksgiving, and it was of the proper form—drawn from the clean animals—as God had instructed. Calvin points out that it is absurd to suppose that God could be "appeased by the filthy smoke of the entrails, and of flesh." It is not the smoke of burnt meat that delights God. The Hebrew word that is translated 'pleasing' indicates a deeper meaning to the sacrifice. The word is *nikhoakh*, which has similarities to Noah's name (*noakh*). Noah was given his name prophetically (Gen 5.29) because through him relief, or rest, would be provided from the consuming sin of the world. The sacrifice that he made after the flood was a soothing, or restful, offering that reminded God of his ultimate intention for mankind—to appease his wrath against sin, and to offer perpetual rest, through the acceptable sacrifice of his own son. It was not the smoke, in itself, that pleased God. Rather, it is what it symbolized—the death of his perfect son on the cross. God looks beyond the smoke to his son, as he looks beyond our sin to our substitute. It is what he sees in Christ, who restores humanity to sonship, that delights him.

The First Thanksgiving [October 9] (Gen 8.20)

Americans and Canadians observe a Thanksgiving Day—in November and October, respectively. On that day, we are supposed to reflect on the blessing of the harvest of the preceding year. American civic mythology speaks of the Pilgrims, who founded the Colony of New Plymouth in 1620, surviving a rough first winter with help from the local aboriginals. In the fall of 1621, after a good harvest, they supposedly celebrated the first Thanksgiving Day with turkey and pumpkins and invited the aboriginals to the feast. In reality, they held a three-day hunting party.

The first declared Thanksgiving Day was held in the colony in 1623. The official US-wide Thanksgiving Day was proclaimed by Abraham Lincoln, in 1863.

We noted in the previous meditation that the command to exit the ark came on a Friday. The next day, was the Sabbath day. So, Noah began his tenure in the new world by offering ceremonially clean animals and birds as a burnt offering to the LORD. Most of the burnt offerings of the OT ceremonial system, given through Moses, were intended to be substitutes for a person's sin—pointing to the permanent substitutionary atonement of Jesus. There were also burnt offerings which were intended as thank offerings (Lev 22.27-29). Abel's offering from his flock (Gen 4.4) may have combined both elements. In Noah's instance of offering burnt offerings, there may have been an element of expiation. However, the primary motivation for Noah's offering appears to have been thanksgiving. He undoubtedly thanked God for bringing him and his family through the flood, providing them with enough food to sustain them during their time in the ark, and for the provision of a clean, new world which lay before them in which they would have an opportunity to start over without the oppressive consequences of sin which had been so evident before the flood (Gen 6.5).

Noah knew the true God and understood how he was to be worshiped; and would not have been observing the superstitious practices of later pagans who attempted to appease and bribe their gods with sacrifices. Rather, he was offering back to God a tribute portion (like a tithe) of what God had so graciously given to him. Thus, the first Thanksgiving was observed by Noah on the first Sabbath after the flood. Noah's action provides lessons for us.

Paul tells us that mankind does not honour God or give him thanks (Rom 1.21), even though they know God, because their thinking is futile, and their hearts are darkened by sin. People today, particularly in North America, are blessed with many good provisions. Even a person who is officially defined as being poor has more than enough food—the highest obesity rates are among those with the lowest incomes—and other amenities such as refrigerators, entertainment systems, cell phones, and access to government-subsidized health care. Yet, the more material possessions people have, the less willing they appear to be to give thanks for what they have. Instead of acknowledging God's goodness, people attribute their blessings to their luck or fate, or to their own skills. They are unwilling to give thanks to God for several reasons including, pride, indifference, selfishness, and rebellion.

The word 'thanks' does not appear in Genesis 1-11. Yet giving thanks to God is implied by Noah's offering. In his offering, he acknowledged dependence on God and an understanding that God is the source of all that is good (James 1.17). We likewise need to offer thanks to God. But, since burnt offerings are no longer required or acceptable to God as a means of atoning for sin or for giving thanks to him (Heb 10.4-14), men today must give thanks through different means. The spiritual equivalent of the OT sacrifices of thanksgiving are prayer and praise (Ps 141.2; Heb 13.15). Just as Noah brought clean birds and animals as his burnt offering, so our spiritual offerings must be 'clean' before God. In the OT economy, the clean animals, acceptable for sacrifice, were the particular kinds which God had specifically identified. The prayer and praise which we offer must also be acceptable to God (Heb 12.28). Prayer which is acceptable to God is that which is "an offering up of our desires unto God (Ps 10.17; Ps 62.8; Mt 7.7-8), for things agreeable to his will (1 Jn 5.14), in the name of Christ (Jn 16.23-24), with confession of our sins (Ps 32.5-6; Dan 9.4-19; 1 Jn 1.9), and thankful acknowledgment of his mercies (Ps 103.1-5; Ps 136.1-26; Phil 4.6)." (Westminster Shorter Catechism, q. 98). The praise which we are to offer must also be acceptable and 'clean' (i.e., sanctified or holy). The only praise which is acceptable to God as worship and thanksgiving is the singing of the words of Christ given in the Psalms in their various forms-psalms, hymns, and odes¹⁹ (Eph 5.19-21; Col 3.16-17). Offering human compositions as praise is not acceptable to God because it attempts to pay the tribute which is due to him with wooden tokens of man's pride instead of the golden currency of the kingdom.

Noah offered his thanksgiving sacrifices on the Sabbath, so should we. The ideal day for offering prayer and praise is on the Lord's Day, the NT Sabbath. Every Lord's Day should be our Thanksgiving Day as we offer thanks in the

¹⁹ Paul references the Septuagint names for the Psalms, found in the body or headings of the Psalms, as follows: '*psalmos*' 70+ times, '*humnos*' 10+ times, and '*ode*' 40+ times. The heading for Psalm 75.1 (in the Septuagint) uses all three terms.

corporate assembly for the protection and provisions of this life, the sacrifice of Christ in our place, and the kingdom we are receiving (Heb 12.28).

God's Word is Reliable [October 10] (Gen 8.21-22; Gen 9.11)

In these verses, God makes an explicit promise which has a direct bearing on our lives every day. It is because of this promise that there has never been a worldwide catastrophe like the flood, or an annihilation of mankind on a global level. It is this promise which enables us to believe that outbreaks of new plagues (SARS, H1N1, MERS, Zika, etc.), a nuclear holocaust, rising sea levels, chronic famines, or 'climate change' will not affect the majority of mankind at any one time—although there will continue to be local, temporary, evidences of God's curse and judgement on man's sinfulness.

God expected Noah to take his word at face value and believe what he said. If Noah considered whether to believe what God said, he only needed to reflect on the promises which God had made previously to determine that God's word is reliable. For example, God had told Noah that he would give mankind only 120 more years before he would deal with their sin (Gen 6.3) and that he was going to blot out all of mankind and all animals living on the earth (Gen 6.7, 13). He also told him that the rains of the flood were to begin in precisely seven days (Gen 7.4). Noah's understanding of God's word was that it was entirely reliable since he had seen it fulfilled in exacting detail.

One of the ways by which we come to trust God's word is similar to how we come to trust the word of any person. At first encounter, we might be cautious—particularly if a person is telling us that there is \$1M waiting for us in a Nigerian bank account or that a 1996 Chevy with bald tires sitting on the dealership's back lot has only 30,000 km on the odometer. We might believe the word of some people when they first make a statement. However, if their word proves unreliable, we stop believing them—like the boy in the story who cried "Wolf!" too many times and was no longer believed when a wolf actually appeared. Over time, with consistent evidence of their truthfulness, people earn our trust and we will believe what they say the next time.

God made this promise in the context of the restatement of the universal covenant with mankind, with Noah as the human mediator of the covenant. Therefore, he expects us also to believe what he says. However, God knows that because of our sinful natures and tendency to sin, we are prone to question his veracity. So, he planned for his self-revelation to be provided to mankind in a progressive manner, with a continually growing weight of evidence to support his statements. God provided evidence of his truthfulness as he dealt with Abraham and promised him a son through Sarah, as he told Moses how Pharaoh would react to the ten plagues, and as he spoke through his prophets of impending judgements on Israel and its neighbours. The greatest proof of his being faithful to his word was evidenced when the promise made to Eve (Gen 3.15) was fulfilled about 4,000 years later when Jesus, the Messiah, arrived. In a similar way God provided evidence of Jesus being entirely truthful through the sign miracles he performed (Jn 10.37-38).

The promise given here covers a period of over 4,000 years. God says, 'never again' will there be a calamity of the scale of the flood as long as the earth remains—i.e., until time ends and God warps up this universe with the consummation of all things, at the return of Christ. Often God speaks of events which will occur in the future— near term, such as the seven days before the rains of the flood would begin; medium term, such as the pending destruction of various nations, as Isaiah prophesied; or long term, such as the arrival of the Messiah, and again of his second coming. He reveals the future in general terms—e.g., there will be times of distress—but with no indication of when or where, but also in explicit detail—e.g., a Persian king named Cyrus will make a decree in a couple of hundred years (Is 44.28; Is 45.1), or a king of the north (Antiochus Epiphanes) will arise in about 400 years, commit sacrilege, and persecute the covenant people (Dan 11.21-35).

God's revelation to mankind is now complete and given in the Bible—i.e., all that we need to know in order to believe in Jesus Christ and how to live lives which will please God. Therefore, we have ample evidence to believe

that every word that comes from God is true and that God cannot lie. However, while we may come to believe that God's word is reliable through a host of examples, we really do not need the examples. Men instinctively know that God's word is true (Rom 1.20) and God declares it so (Num 23.19; Titus 1.2; Heb 6.18); but they choose to suppress that knowledge and place their will above God's by claiming the right to test God's truthfulness (Gen 3.1-7).

God's word is reliable. Therefore, we can trust whatever he says; and we must believe it. This has a direct application for every person's future—the soul who sins will die (Ezk 18.20), but if you believe in Jesus you will be saved (Jn 3.16/). It also has an application in the context of this series of meditations on Genesis 1-11. What God says in these chapters happened and is exactly what happened. God has presented them as historical facts—"God said …", "God made …", "Adam knew …", etc. There cannot be an alternate interpretation that is not consistent with the historical facts presented in the Bible. In contrast, every man is a liar (Ps 116.11; Rom 3.4). This means that we must accept the account of creation, the ages of the pre-flood patriarchs, and the account of the flood as an accurate record of historical reality. We must take the word of God at face value because God's word is reliable.

Why God Cannot Lie [October 11] (Gen 8.21-22)

In the previous meditation we considered the fact that God's word is reliable. The reliability of his word is innately known by us, has been declared by him, and has been demonstrated by many historical examples. Thus, we can accept that what he promises (as in these verses) will be fulfilled, and that all of Genesis 1-11 is an accurate record of historical reality. A question which may arise from the preceding consideration is, why God cannot lie.

One answer we could give is that God cannot lie because he is holy. However, this does not actually answer the question, since we define holiness to include truthfulness. So, saying that God cannot lie because he is holy is a form of a circular reasoning—he doesn't lie because he is holy; he is holy because he doesn't lie. Also, we would have to ask why God is holy. Thus, we would end up pushing the answer about why God cannot lie into an infinite loop or an infinite regress.

The gods of the pagan pantheons were chronic liars. For example, Enki, a god in Sumerian mythology and patron of the city of Eridu (Ea in Akkadian and Babylonian mythology), is portrayed as being a perpetrator of mischief and seduction, even though he was said to be the "lord of abundance (whose) commands are trustworthy". In the myth of Io and Zeus, Zeus seduced Io. When Hera, Zeus's wife, discovered the adultery, she confronted Zeus about his relationship with Io, and Zeus lied by denying that he had had any contact with the young woman. This lie by an Olympian god, set a precedent for the lesser gods and men to lie about their romantic liaisons. The Greeks even had specific gods for lies—Apate, the goddess of deceit and fraud who was released by Pandora, the female counter part of Aletheia (the goddess of truth); and Dolos, the god of trickery and deception. In the Norse pantheon Loki is shown to be an inveterate liar. In contrast to the pagan gods who were capricious and deceptive, God is consistently truthful. Thus, Paul reminded Titus (Gen 1.2) that God never lies, as Titus was working among the Cretans who would have known that the gods of the Greek pantheon could not be trusted in their dealings with the other gods or with men.

To answer the question of why God cannot lie, and why truth telling is essential to his character, we need to determine why a person would tell a lie. We can consider a few basic reasons why someone might lie and notice that these reasons do not apply to God.

- *Pride* Many people lie because they want to appear more impressive than they are. They lie to boast about accomplishments or possessions. God has no reason to lie to try to impress men. He is the almighty Creator. Nothing which he could concoct to tell men about himself or about his actions would be greater than what he already did when he created the universe, does by sustaining mankind through his general grace, or did by sending a saviour to redeem mankind from sin. God doesn't lie because he isn't a proud being who needs an ego boost.
- *Guilt* Men lie because they have a sense of guilt for their sins and they want to deflect blame from themselves.

For example, people commit perjury because they do not want to be implicated in a particular crime. Or, they lie about having stolen money because they don't want to suffer the consequences of being discovered. God cannot commit crimes or sin by breaking his own laws. Therefore, he never has anything to hide and does not need to lie to cover up sinful behaviour.

- *Spite* Some people lie to take out their frustrations on people whom they dislike or of whom they are jealous. For example, in 2011 an Imam in Pakistan accused a mentally challenged boy of committing blasphemy by burning a copy of the *Qur'an*. He fabricated this accusation to settle a score with the boy's family. God does not need to make false accusations to deal with mankind's sin since he knows the intimate details of each person's sinful heart.
- *Covetousness* Lies are often told so that the perpetrator can gain an advantage over another person. For example, a person selling a product may lie to cover a defect in the product or to make it more appealing than it is. People also lie to obtain something they cannot get by acting morally. For example, they lie to further lustful urges. God is the owner of all creation, so there is nothing that he covets and thus no need to lie to obtain something.

God cannot lie because he cannot be tempted to lie (James 1.13) and has no reason to lie because of who and what he is.

Some people claim that the Bible shows examples of God lying by proxy (1 Ki 22.23; Ezk 14.9; 2 Thess 2.11) and that this indicates that there are contradictions in the Bible and that God is in fact a liar. God decreed sin, including lies, in his eternal plan. However, this does not make God the author of a lie, any more than God is a murderer, thief, or adulterer because men kill, steal, and fornicate. Nor do his decrees regarding sin mean that God approves of the sins that men commit. He holds each person accountable for his own sins (see, *Man's Moral Responsibility* [April 12]). And, he punishes men by making them susceptible to the spirit of untruth disseminated by Satan. Satan is the father of lies (Jn 8.44) and a perpetual liar—making sin appear sweet when it is bitter. He lies because he is anti-God—a proud, guilty, spiteful and covetous creature.

Limiting the Curse [October 12] (Gen 8.21-22; Gen 9.11)

The genre of apocalyptic and post-apocalyptic fiction includes hundreds of novels and movies. The catastrophes include nuclear holocaust (e.g., Nevil Shute's *On the Beach*), devastating wars (e.g., Suzanne Collins' *The Hunger Games*), a plague (e.g., *Æon Flux*), meteor impacts, alien invasions, economic collapse, and ecological disasters (e.g., caused by global warming). It is ironic that many people seem to have a fascination with this kind of fiction while rejecting the true account of the only worldwide catastrophe which has ever occurred—the flood. Some people even desire to see the advent of a worldwide catastrophe. They think that a kill-off of a major portion of the world's human population would take care of government folly and eliminate annoying neighbours; while allowing smarter, and more ecologically sensitive, people to start over. They ignore the fact that Noah and his family had the opportunity to start over, but within a year sin's ugly face had reappeared (Gen 9.22-25) and, within a few generations, tyrants such as Sargon the Great were busy building empires on intrigue, murder, and war.

Are global apocalyptic catastrophes something we need to fear? Should we all become 'doomsday preppers' and build bomb shelters, buy guns, stock up on emergency foods with a 25-year shelf-life, and store non-hybrid seeds? God promises that as long as the earth remains there will never again be a global disaster which will wipe out all of mankind. Although he speaks of a flood specifically, as representative of a global disaster, he refers to a curse on the ground and says that he will never again strike down every living creature. Thus, he will never again send, or permit men to perpetrate, a global disaster that will kill the majority of mankind.

However, we need to approach this promise with a full understanding of the Bible's teachings. After the flood, God did not annul the original curse placed on the created order (Gen 3.17-19). The flood was an *added* curse, beyond the toil and pain imposed for Adam's sin, because of man's overt wickedness (Gen 6.5-7). God will never again

send such an added curse. However, there have been, and always will be, regional and local disasters—famine, pestilence, war, earthquakes, floods, labour unrest, and collapse of banks (Mt 24.7; Rev 6.4-8, 12). There may also be global disasters, such as the Great Depression and viral pandemics, but they will not destroy the majority of mankind. We should be wise and prepare, within reason, for these kinds of disasters—not building houses on flood plains, eliminating personal debt, diversifying investments to include tangible assets, and possibly storing two week's worth of food to feed our family in the event of major supply chain disruptions.

The flood served as a once for all time lesson that man's sin deserves total annihilation and of the pending everlasting judgement on sin. The evidence of the seriousness of sin and its consequences lies in the postdiluvian fossils and rocky canyons. However, God promises that we do not need to fear a global catastrophe for two reasons—both reasons lie within his person and nature:

- *God accepted Noah's sacrifice*. Noah offered a pleasing sacrifice to God (Gen 8.20-21). However, there was nothing intrinsic in the sacrifice which made it pleasing to God: burning animal flesh stinks, man's sin cannot be appeased by slitting the throat of a bull, and man has nothing of value that he can offer to God. The reason that Noah's sacrifice pleased God was because of what it symbolized. It pointed to the ultimate once-for-all sacrifice which the God-man would offer as a substitute for the sins of his people (Heb 9.13-14). Noah acted as a priest on behalf of his family (and for all of his descendants) to bring them relief from the consequences of sin (Gen 5.29). In this capacity, he stood as a second Adam and as a type for the Last Adam, Jesus Christ (1 Cor 15.45).
- *God acted in mercy*. The expression "said in his heart" is an idiom that means "said to himself". Within the triune council, God determined that man was, in himself, unredeemable. He echoes the reason given for the flood (Gen 6.5) by restating the pervasive wickedness which infects the human heart. He had demonstrated that wiping out mankind and starting over with a still-sinful human contingent could not solve the problem of sin. If he were going to use global disasters to deal with sin, he would have to wipe out mankind and start over in every generation. This was not the solution to sin; so, God in mercy planned not to use this means but to provide the permanent solution through the death of his own Son.

The promise is dependent on God's goodness not on man's righteousness.

Rather than annihilating most of mankind in each generation, God determines to spare mankind and provide the blessings of regularity and continuity to supply physical sustenance for mankind. It is likely that included within this act of mercy, God limits man's wickedness. Before the flood, God permitted men to live out their long tenures with revolting examples of rebellion. After the flood, God reduced man's life expectancy and has put tighter controls on his wickedness. When we see examples of evil around us, we need to realize that the old days were not better than today, and things are not as bad as they were then (Gen 6.5) or could be if unrestrained by God (see, <u>Pervasive</u> <u>Perversion</u> [July 31]).

This promise of a limitation on the curse is not perpetual. The caveat is, "while the earth remains". At the end of time there will be a second global catastrophe that will assign everlasting death to all unrepentant sinners and destroy this world (2 Pt 3.7-12). God will then remove the curse and remake the earth and heavens into a sinless paradise (2 Pt 3.13).

Enduring Seasons [October 13] (Gen 8.22)

The radio announcer said, "Today it will be 18 degrees and tonight 9 degrees. Fall has arrived." Then he said, "The seasons are relentless." We can wonder if he had any idea of the profound philosophical concepts which lie beneath such a statement. Most people take regularity in nature for granted and do not realize that it is contrary to their philosophical presuppositions. Humanistic philosophies cannot answer the question, "Why is there regularity in nature?"

Most people believe in the regularity of nature because they have experienced a sample of classes of regularity (e.g., the sun rising or objects falling) and assume that they can extrapolate to all instances of events throughout the universe. However, a person cannot justify using his limited experience as the basis for his conclusion. If we live in a universe ruled by chance, somewhere water may behave differently and as the temperature drops, it could turn into a gas. Somewhere else in the universe planets may rotate one way today and turn around and rotate the other way tomorrow. Anyone who assumes regularity in nature commits a number of 'cardinal sins', from a philosophical perspective: 1) His belief is arbitrary and inconsistent—he accepts what he cannot prove; yet would reject belief in God because he cannot prove his existence. 2) His argument is a form of 'begging the question'—he cannot prove that the future will be the same as the past by pointing to the past. 3) He declares his own sensory experience to be the ultimate authority. 4) His belief is illogical, and therefore irrational, because regularity cannot be demonstrated deductively—the matter of regularity in nature falls under the classic 'problem of induction'. 5) He has to accept repeatability on faith.

Only Christianity can provide a satisfactory answer to why there is regularity in nature. We live in a universe in which everything has been ordered by God, through his providential decrees—as he decrees the regularity of the seasons here. This is why Western science developed from within a Christian worldview. The scientific method depends on our knowing that the universe is not subject to capricious fates but ruled by a God of order and consistency. Ironically, humanistic naturalism assumes that processes we see around us have been operating for millions of years. This assumption has been labelled uniformitarianism. However, God disrupted the processes that were formerly in place with the flood and re-established regularity after the flood. It is only because God governs the universe that there is regularity now. We can, on God's word, accept that natural systems will behave consistently. However, we cannot extrapolate the processes exhibited in those systems today into the past, beyond the flood. Nor can we extrapolate them into a perpetual future, since the promise of regularity only applies as long as the earth remains.

The regularity of the seasons, and all regularity in nature, is not dictated by a natural law, but by God's specific decree. Contrary to what is often claimed, nature is not self-organizing. The 'laws of nature' are *descriptive* of how God usually governs his creation; they are not *prescriptive*, governing his actions. If it were not for God's, and specifically Christ's, moment-by-moment governing of the universe (Col 1.17) it would fly apart into non-existence. The seasons are not gods, earth is not our mother. The seasons are God's servants, doing his bidding, to provide for the welfare of mankind on earth.

The promise of the enduring regularity of the seasons in the annual solar cycles, and circadian rhythm from day and night, is a part of God's provision for mankind that falls under the covenant he made with Adam at the time of creation. He established the seasons during the week of creation (Gen 1.14) and declared them to be good. He also explicitly states that the existence of day and night are a covenantal blessing that will remain until the end of time (Jer 33.20-21). These natural cycles fall under the Covenant of Grace. They assure us that chaos and destruction do not rule the universe. Instead, there is order and temporal blessing (Ps 67.6-7). Nature is not unpredictable, because God is good. This points to the spiritual provisions of the Covenant—those who are in Christ will not perish but live forever.

The covenantal blessing extends to the provision of sustenance for men and animals. God's general gracious provisions supply the daily cycles and the seasonal rains for all mankind—even though undeserved and even if they are not fulfilling their covenantal obligations (Mt 5.45). Thus, as long as the earth endures, there will be seedtime and harvest. This means that wicked mankind will not be permitted by God to create environmental disasters which would cause the destruction of the food systems of the world. For example, despite the prevalence of doomsday speculations, supposed anthropogenic global warming cannot override God's promise of regularity in food production.

There is a temporal condition in the promise. The blessings of seasons and food production will only continue as long as the earth remains. However, the earth will not exist for billions of years. At some point, it would theoretically

cease to function from a 'heat death' of the universe—a supposed fate in which there is no longer any thermodynamic free energy. However, the earth is only about 6,000 years old, and likely has less than 1,000 years left (see the next meditation, *The End is Near* [October 14]) before God wraps up history with the return of Christ. At that time, the seasons will end because the entire universe will be consumed by fire and reconstituted in a perfect new realm (2 Pt 3.10, 13).

The End is Near [October 14] (Gen 8.22)

God has endowed the earth with abundant physical resources which are available for us to utilize to provide for our needs—food, clothing, shelter, etc. In addition, he has endowed mankind with creative gifts which allow us to do more than barely survive. We can worship him; prosper materially; engage in intellectual pursuits such as science, philosophy, and music; and enjoy recreation and entertainment. It might therefore be concluded by some that the curse on creation (Gen 3.17-18) has been defeated. However, it has not been, making it necessary to consider this verse from a different perspective.

God has given mankind sufficient resources to allow for the fulfillment of the mandate: "be fruitful and multiply." However, if we were to extrapolate this to an unreasonable extreme, in which earth's population were to grow to ten trillion people, we would conclude that our resources are not in fact unlimited. Science fiction writers present a few scenarios for dealing with this problem: 1) Mankind will live out a miserable existence in a dystopian scarcity, where violence reigns, until all resources are consumed, and mankind dies out. 2) Mankind will live in an idyllic (though usually totalitarian) state with a stable population and sustainable ecosystem. Or, 3) Mankind will leave the earth in massive inter-stellar ships to colonize the galaxy's myriad planets, and then the rest of the universe, until we have consumed the resources of the solar systems of the estimated 100 sextillion stars.

In these scenarios, there is an underlying fundamental flaw in the thinking of materialistic naturalists which causes them to ignore an important reality. The flaw is that they believe that the universe is about 13.8B years old and the world about 4.5B years old, and that the world will continue to exist for many more billions of years. This belief is not merely academic but has ramifications in many areas of mankind's thinking. For example, when considering what to do with nuclear reactor waste, geologists look for rock formations which they believe have been stable for millions of years and will continue to remain stable for at least 20,000 years. Or, politicians use the belief that we will see the end of cheap fossil fuels soon (in this century, or at least within 200 years—notwithstanding the existence of vast quantities of hydrocarbons stored in tar sands, shale oil, and coal) to create dysfunctional policies such as subsidizing wind-powered generation of electricity.

The reality they ignore is that the world is going to end long before we run out of natural resources—including hydrocarbon fossil fuels. Even if the world's population were double or triple what it is today, we would not run out of natural resources before this world is consumed by fire (2 Pt 3.10-12). When we have a Biblical perspective on reality, we see that the universe (with the earth in it) is only about 6,000 years old, but decaying rapidly, as it groans under the effect of God's curse on the ground (Gen 3.17-19; Rom 8.22). We are more than halfway between the time of creation and the return of Jesus Christ. It is quite likely that Christ will return, and the physical creation will be re-created (2 Pt 3.13), well before earth reaches its 7,000th birthday.

There are multiple lines of evidence which support the view that mankind's tenure on this earth will end relatively soon; however, we can only consider a few. Measurements of earth's magnetic field indicate that it has been decaying at a significant rate. If the current rate remains constant, in another ~1,000 years, the magnetic field will have decayed to such an extent that for all practical purposes it will have ceased to exist. At that point, life will be at risk on the earth since the earth's atmospheric ozone layer could be destroyed. The human genome (base genetic material common to all people) started to decay after Adam sinned. In each following generation, transcription errors were introduced and carried to the next generation. Transcription errors continue to accumulate at a geometric rate. Within fewer generations than have already passed since Adam (~200), the number of errors in the human

genome will be so significant that any birth will produce only a 'monster', and the human population will have reached the point of extinction. In addition, the moral state of mankind seems to be reaching a tipping point (at least in the West) with widespread endorsement of homosexual practices (which is a sign of God's judgement; Rom 1.24-25) and other sexual deviances, increases in violence (including that undertaken in the name of Islam), drugging of the populace with 'reality' entertainment, stuffing our bodies with sensual pleasures, and political undermining of personal responsibility. The state of the world appears to be much as it was before the flood (Gen 6.5) when God said that he had had enough with mankind's sins and he would punish them with a flood. The next time, God will not use a flood but fire, and will bring this space-time universe to an end.

This consideration of the end of the world is not presented to discourage you or to suggest that we should give up and cower in a corner waiting for the holocaust. God is working out his purposes even in this day of spiritual darkness. He is saving a great multitude that no one can number (Rev 7.9) and he can overthrow false religions and bring about great revivals, even yet. Rather, that the end is near should encourage you. God will replace this tired world with a new one in which his righteous people will dwell forever (2 Pt 3.13). We need to focus on the vision of what will be, not on man's sceptical defeatism derived from false theories of the creation's origins.

The Ice Age [October 15] (Gen 8.22)

The flood was not caused, as some suggest, by an ice dam suddenly breaking or by a great melt at the end of the ice age. Rather, *the* (there has only been one) ice age developed as a by-product, and direct result, of the flood.

Although scientists who believe in evolution, and that life has been on the earth for millions of years, attempt to deny the truth that dinosaurs and man lived as contemporaries after the flood (within the past few thousand years), they cannot deny the fact that mammoths existed quite recently because paintings of them have been found in caves and spear points have been found in some of their remains. Various theories have been proposed to explain why mammoths became extinct including, that men hunted them to extinction, they succumbed to a highly infectious disease, or they were wiped out by a cataclysm such as a comet hitting the earth. A challenge to most of the theories proposed for their extinction is that many of the mammoth carcasses which have been found (about 50) are of animals that were apparently healthy and robust at the moment of their death. Some have been found frozen with food still in their stomachs and between their teeth. In addition, the wipeout occurred worldwide, and other animals (e.g., mastodons, sloths, saber tooth tigers, etc.) seem to have been wiped out at the same time.

Mammoth tusks have been found across much of the Siberian tundra. The mammoth remains were so numerous that 'mining' of ivory was an on-going enterprise in the late 1800's. In addition to finding remains of mammoths, remains of sheep, bison, camels and rhinoceroses have been found in the same areas. The presence of these animal remains raises many questions:

- How were these animals once able to live in an area that today has such an inhospitable climate?
- What killed them all so suddenly? Were they frozen to death, or did they die from some other cause and then were frozen in place—some were frozen with food still in their stomachs?
- What caused the cold weather and sudden deep-freeze?
- Why didn't the mammoths move to where it was warmer?

The explanation that seems to make the most sense of the physical evidence is that the postdiluvian ice age killed off the mammoths and other animals.²⁰

There was a single postdiluvian ice age, which ended within the recent historical period (i.e., within the past few hundred years, not many thousands of years ago). The remnants from that ice age can still be seen today in the

²⁰ Most of the contents of this meditation, and the next four, is derived from: *An Ice Age Caused by the Genesis Flood*, by Michael J. Oard, Institute for Creation Research, San Diego, 1990.

rapidly retreating glaciers, and in the Arctic and Antarctic seas' ice sheets which have been reducing in size. Some people attribute these changes to anthropogenic global warming caused by 'greenhouse' gasses. However, what we are seeing is actually the retreat of the ice age. For example, measurements of the size of glaciers on Africa's Mount Kilimanjaro, in the Alps in Europe, and in the Andes in Peru show that the retreat has been going on for hundreds of years. Therefore, the melt-off is likely the result of natural changes which have been happening for centuries and cannot be attributed to recent increases in atmospheric carbon dioxide concentrations.

There has been much debate about the cause of global warming, and if global warming is actually occurring. Much of the 'evidence' for global warming is based on faulty assumptions about the age of the earth (e.g., ice-core samples which are claimed to be hundreds of thousands of years old) or on faulty logic about correlation and causation—*if* a statistically significant correlation exists between atmospheric carbon dioxide concentrations and annual global temperatures this does not prove that carbon dioxide concentrations *cause* the changes in global temperature; it could be the other way around and increased temperatures could allow more carbon dioxide to be absorbed by the atmosphere; or both factors could be attributed to other causes. Careful research, not tainted by environmentalism's political correctness, indicates that changes in average annual regional (e.g., in Ontario and Quebec), and presumably global, temperatures over the past two centuries occurred before there were any major industrial activities which could have produced 'greenhouse' gasses, like carbon dioxide, which are blamed by some climatologists for the apparent recent rise in global average temperatures.

It is not anthropogenic global warming which is the primary cause of the worldwide ice retreat. Rather, the continental ice sheets began to melt about 4,000 years ago, and the final remnants are melting off today. Over 60 theories have been proposed to explain how an ice age could form, given current weather patterns—including decreases in carbon dioxide, volcanic dust, collapse of the Antarctic ice sheet into the ocean, continental drift, mountain building, a comet or meteor impact, and changes in the orbital pattern of the earth. None of these theories can explain adequately the formation of an ice age. The only viable option for explaining the cause of the ice age is post-flood events. Of course, the flood is rejected as a causal factor by most scientists without any consideration of the evidence—it is simply denied (2 Pt 3.4-6). In our next four meditations, we will consider how postdiluvian conditions caused the ice age and the die-off of the mammoths.

Commencement of the Ice Age [October 16] (Gen 8.22)

The climate conditions required to create an ice age are counterintuitive. Colder winters will not produce an ice age and warmer annual average global temperatures did not cause the ice age to end. Winters in Northern Canada, Siberia, Antarctica, and the high Alps in Europe are too cold today to produce an ice age. Today, ninety percent of the world's ice is found in Antarctica. This ice locks up about seventy percent of all the fresh water in the world. However, even though there is so much frozen water in Antarctica, it is a desert and one of the driest places on earth, with humidity levels about the same as the Gobi Desert—the average total precipitation in Antarctica is less than 200mm. The average temperature is -50°C but with so little precipitation glaciers would not form. One reason is that the colder the air, the less moisture it can hold. Also, colder winter temperatures cause more sea ice to accumulate and reduce atmospheric moisture, producing less snow, not more.

The primary requirement for creating an ice age with extensive continental glaciation is that more snow must fall each winter than can melt during the following summer; some snow must be left on the ground when the next winter arrives. Cool summers are required so that all the snow does not melt.

Immediately after the flood, the air probably contained thick fine-particulate dust from extensive volcanic activity, caused by the massive adjustments made to the earth's crust (continental plate movement and mountain building). The oceans would have been about 40m deeper than today because water was not yet trapped in the Greenland and Antarctic ice sheets. The water in the oceans would have been uniformly warm from all the mixing that occurred during the flood of the pre-flood water from the shallow seas with hot water ejected by extensive volcanism.

Volcanic dust and aerosols blocked some of the sunlight (i.e., days would have been somewhat darker immediately after the flood than today). Consider the eruption of Tambora (380 km east of Java), in 1815, thought to be the greatest volcano witnessed by man (at least in recent recorded in history). The dust from this volcano covered most of the world with a minor dust cloud and appears to have produced abnormally cold summers in the next few years. In the summer of 1816 snow fell in June and frost was seen in July and August. The frost caused crop failures in Eastern Canada and New England. 1816 in the history books is referred to as the year without a summer. That was the result of one volcano. Imagine the impact of thousands of volcanoes.

With extensive amounts of volcanic dust and aerosols in the atmosphere, blocking some of the sunlight, immediately following the flood, summers would have been cooler globally, than we experience today. Also, frost during the summer would have extended much farther into the lower latitudes in the continental interiors than it does today. Summer temperatures would have been warm only in the equatorial and sub-equatorial latitudes.

Immediately following the flood, the world was a barren muddy mess with no vegetation coverage. Bare ground cools faster than ground covered with vegetation (e.g., grasslands or forests). Snow would have fallen onto the bare land and would not have melted as quickly as it does today. In addition, the albedo (reflectivity) of the fresh snow would have projected much of the light that penetrated the volcanic dust cloud, back into space. Fresh snow on land with no surface irregularities has an albedo of about .8 (i.e., 80% of the light is reflected and is not absorbed), compared with: forests (no snow) ~.15; forests (snow covered) ~.25; bare soil ~.20; grass ~.20, water (high sun) ~.10. The snow on the bare ground would have produced more atmospheric cooling and slowed snow melting even more.

There is evidence that appears to support the view that the ice age occurred in the presence of bare land (i.e., without a vegetative cover). Invariably in the glacial till (scoured up by advancing ice sheets), which is attributed to recent ice age glacial activity, very little fossil vegetative material (e.g., petrified tree parts or plant fossils) is found. This seems to indicate that there was no (or very little) vegetation in front of most of the advancing ice sheets. Some scientists attempt to explain this absence by saying that the plants died of the cold before the ice arrived. But this would have required very cold winters, which would have been very dry, and thus there would have been very little snow. The rarity of organic remains in glacial debris fits the model of a rapidly advancing ice sheet over the postdiluvian barren land.

The first winter after the flood would have produced massive amounts of snow as the prevailing winds, saturated with moisture from the warm oceans, encountered the cool continental landmasses. This snow would have been dumped in quantities far in excess of what we see today. It is quite likely that during the first summer after the flood the snow did not completely melt in the higher latitudes of the continental interiors, and the ice age had begun. Each year more snow fell during the winter than could melt off during the summer. The snow compacted into ice and the ice sheets, under their own weight, began to migrate across the continents. Snow and ice continued to accumulate as long as the volcanic dust remained in the air, causing the summer temperatures to be cool, and the oceans continued to be relatively warm giving off extensive moisture.

Progression of the Ice Age – Cool Summers, Heavy Precipitation [October 17] (Gen 8.22)

After the flood, volcanoes on the edges of the continental land masses continued to spew dust into the atmosphere keeping summer temperatures in higher latitudes cooler than today. However, volcanic activity began to decline as the earth's new crustal form stabilized and thus there are far fewer active volcanoes today than 4,000 years ago. There is evidence that recent worldwide volcanic activity occurred at the same time as the extensive ice buildup was occurring. In a number of places (e.g., west of the Rockies and east of the Cascades in Washington and Oregon, in the Czech Republic, and in Iceland) there was volcanic activity that spewed lava and sandwiched ice layers. It appears that as the lava cooled some of the ice melted. But the cooled lava acted as an insulator and the remaining ice was preserved. In some locations the ice is slowly melting, in others the temperature remains constantly below

freezing in an insulated chamber. When the railroad was being built through Washington State, for example, workers would cut through the lava layers and discover layers of ice. They used the ice caves to store their food. Early settlers used some of the caves to mine ice.

The post-flood ocean water was highly mixed and uniformly warm. The large mass of the oceans and convection currents (cold water sinks to the bottom) would have kept the surface waters warmer than today, even when the air temperature and continental landmasses were cool. As the cool air of winter blew over the warm oceans, great quantities of warm water evaporated. Consider, as an example, the December 2001 snowfall which dumped over 2m on Buffalo over a few days. The moisture was picked up from the warm waters of Lake Erie. By comparison, imagine the impact of seven or eight months of continual snow coming off warm oceans and much larger interior continental lakes. The quantity of snow that fell each year for a few centuries after the flood would have been significantly higher than today.

There is considerable evidence that after the flood (into the recent past) worldwide precipitation rates were higher than they are today, for example:

- Lake Chad in North Africa was formerly nearly 1,000 km long. To maintain a lake of that size would have required 16 times greater rainfall than at present. This area is largely a desert today.
- The dry lakebeds in Nevada and Utah indicate a recent period of significant rainfall. Lake Bonneville was a lake that covered much of North America's Great Basin region. About a third of present day Utah was covered by it. Great Salt Lake and the Bonneville Salt Flats are the remnants of that lake. Today, you can see traces of previous shorelines, representing different levels of the receding lake, marking the mountains surrounding the salt flats.
- The Sahara Desert was once a well-watered area. Well-preserved (thus not very old) rock paintings and carvings in areas of the mid-Sahara show that extensive animal populations once existed. The images include animals that require much more rainfall than falls in these areas today (e.g., crocodiles and hippopotamuses). Satellite radio-wave observations show former drainage channels as large as the Nile River. In the story of Jason and the Argonauts the adventurers sailed from the Mediterranean, across the Sahara (including portages), to the west coast of Africa. To modern ears the tale makes no sense. The early-16th century *Piri Reis Map* includes a large portion of the Sahara that shows a network of lakes and rivers, which could well have been navigable in historic times. This area now gets rain only once in 30-50 years at any given locality.
- Roman records indicate that olive groves extended at least 100 miles into what is now eastern Libya. Today that region is desert.
- Australia used to have glaciers. Only glacial lakes, which occasionally freeze over, remain today.
- Seventy percent of all the fresh water in the world is locked in the ice of Antarctica. Yet, today Antarctica is a desert and one of the driest places on earth, with annual precipitation levels about the same as the Gobi Desert. Since there is so little precipitation, the amount of ice on the continent is decreasing each year.

Therefore, in the past these areas must have received considerably more precipitation than they do today.

Climate models based on an extrapolation of existing weather patterns cannot explain the high precipitation rates of the past. However, a model based on the post-flood conditions—cooler summers, particularly in higher latitudes, due to the presence of volcanic dust and aerosols; and warm ocean surface water—can explain the higher precipitation rates. These environmental conditions combined to produce heavy snowfalls in winter and incomplete snow melt-off in the cool summers. Prevailing winds dumped much more snow on the continents, than today. After a few winters, snow accumulated to such an extent that it formed into ice—once snow reaches about 100m of depth, the weight begins to form the lower layers into ice. As long as these conditions—cool summers, warm ocean surface water—remained, ice would have built up on the continents and near continental-wide glaciation would have occurred. A warm, ice-free Arctic Ocean and Antarctic Ocean easily explains glaciation in high latitude areas that are today polar deserts. In addition, as the ice sheets grew, they would have spread into areas that were too warm for perennial snow cover at the beginning of the ice age.

A Mammoth Die-off [October 18] (Gen 8.22)

The Siberian tundra is a stark landscape on which only shallow rooted plants (e.g., moss, lichen, sedges, grasses, and dwarf shrubs) can grow—trees cannot form roots because of subsurface permafrost. Yet, about 50,000 mammoth tusks were found in Siberia in the period 1660-1915. The average elephant eats ~250kgms of food daily. Therefore, a large population of mammoths would have required much more plant growth than the tundra can support. Even if the region were warmer, the dryness of the tundra today does not allow for plants to grow, of the type that elephants would eat—as shown by the advancing treeline which has been reclaiming tundra since the end of the ice age. This is evidence that there was in the recent past a lot more rain and succulent plant growth in Siberia than there is today.

After the flood, the surface water of the Arctic Ocean was warm (because of extensive mixing and volcanic heating during the flood) and there was no permanent sea ice. The warm water provided the coastal lands (and for some distance inland) with a moderate and wet maritime climate, much as the Gulf Stream moderates the climate in the UK (Inverness, for example, is at the same latitude as Churchill Manitoba and London is at the same latitude as Winnipeg). Thus, the coasts of lands adjacent to the Arctic Ocean (Canada and Russia, today) had mild, wet climates—likely warmer than the southern parts of the UK today because of the worldwide warmth of the oceans. Thus, mammoths and other animals lived comfortably at extreme northern latitudes.

However, the surfaces of the oceans were gradually cooling, particularly in the polar latitudes. As cold water sank to the bottom of the oceans, warmer water was forced to the top to be cooled (in a convection cycle). Eventually, the oceans cooled to near their current average of $\sim 4^{\circ}$ C. The cooler oceans gave off less evaporated moisture. In parallel, the massive tectonic changes which had triggered the flood began to stabilize, and there were fewer volcanoes and less dust spewed into the atmosphere. The combination of cooler oceans and more sunlight changed the global climate so that the winters became drier and cooler, producing less snow; and the summers became warmer, melting the snow that had accumulated during the winters. Then the continent-spanning glaciers began to melt off.

It is possible to calculate how long it would take for all the oceans to cool, starting with uniformly warm ocean water by considering such factors as surface radiation rates, evaporation rates, and conductive cooling. Starting with a temperate of 30° C (equatorial ocean surface temperatures are about 45° C), the oceans could have reached their current temperatures ~500 years after the flood. During that period, massive amounts of snow would have accumulated and formed into ice and glaciers on all continents. However, the bulk of the ice sheets would have melted quickly, in ~200 years. As the ice melted, cold, fresh water would have flowed into the oceans.

Fresh melt water from the continental glacial sheet would have floated on top of the saltwater since freshwater has a lower density than saltwater and would have lowered the Arctic Ocean's surface temperature close to 0°C. One winter the Arctic Ocean would have frozen permanently. Today if the Arctic Ocean were ice free it would likely not freeze permanently because it does not become cold long enough to create enough ice to last through the summer. Roughly 700 years after the flood (i.e., about 1650 BC), the Arctic Ocean froze over for the first time—the year of the big chill.

Prior to the big chill, mammoths and other animals foraging inland would have migrated to the coast as the winter approached, to be nearer to the warm ocean shore. As the winter of the big chill approached, the animals undertook their usual migration. However, this was the year that the Arctic Ocean froze over for the first time and remained frozen. The weather on the coast suddenly became colder that usual. At this point, the mammoths' food supply began to die out from the cold and the animals became disoriented—boxed in by the cold continental interior and the ice on the sea. Some died of starvation and their carcasses decayed to bones. A few became stuck in mud or large dust drifts and froze to death. About 50 frozen mammoth carcasses have been found with partial or whole flesh remains, indicating that the freezing was rapid enough to prevent total decay of their carcasses—some have

been found with food remains still in their stomachs and teeth. A carcass of a young mammoth, discovered in 2012 by a BBC Discovery Channel expedition, shows signs of having been cut open by men, who apparently reburied it in permafrost for future access. The mammoths died off in droves and almost all were probably extinct by the end of the year of the big chill. The rest were probably hunted to extinction.

The ecological stress caused by the big chill resulted in mass extinctions of other animals besides mammoths (e.g., mastodons, sabre-toothed tigers, horses, camels, giant peccaries, giant beavers, four-pronged antelopes, lions, giant short-faced bears, dire wolves, and ground sloths) that lived in northern latitudes after the flood. It appears that North America was hardest hit and that about 30 genera of large mammals became extinct. Current theories, which ignore the flood, are not able to provide an explanation for how this happened (after 200 years of trying!), because of their assumptions based on extrapolating current climate patterns. But a model based on an ice age following the flood can more than adequately explain the mammoth die-off.

A Single Ice Age [October 19] (Gen 8.22)

Most geologists *assume* that there have been many ice ages. Many claim that ice ages occur in 100,000-year cycles and that the most recent one ended about 10,000 years ago. They claim that complex glacial deposits, till layers separated by non-glacial deposits, and other post-glacial forms support their beliefs. However, the physical evidence is hard to interpret. For example, geologists in the 1950's concluded that the Scarborough Bluffs, in Toronto, were composed of glacial till (scourings left by glaciers) from several periods of glaciation. Investigations in the 1980's concluded that they were created during a single ice age, but under the ice. Studies of glacial geology is in trouble if the 'experts' cannot tell the difference between sediments laid down by a glacier and sediments dropped from floating ice. Geologists are not clear on what happened in the past and won't be able to explain the past until they accept a model based on the flood and a subsequent single ice age.

There are a number of reasons for supporting the claim that there has been only a single ice age, including:

- It is difficult, using a non-catastrophic paradigm, to show how any ice age could have started and ended. Therefore, it is difficult to believe that many ice ages could have occurred in succession over millions of years.
- Most glacial till is of local or nearby rock. If there had been multiple ice ages, we would expect to find till moved from other regions in front of subsequent advancing glaciers and common mixing of till types.
- Fossils are extremely rare in the till of glaciated regions. If fossils were laid down between ice ages, we should expect to find some.
- Large-mammal extinctions occurred during the last (only) ice age.
- The existence of frozen remains of mammoths in Siberia and Alaska implies that there has been only one ice age because no reasonable glacial or interglacial climate could provide the necessary conditions for the preservation of their frozen remains across ice ages.

The recession of Niagara Falls is one way to 'date' the end of the ice age. The falls started forming after Lake Iroquois drained below the level of the Niagara Escarpment. The Horseshoe Falls was estimated to be receding at about 1.5m/year. If the rate was constant in the past, then the current gorge took less than 7,000 years to form. However, the amount of water going over the falls was much greater as the ice age came to an end (the lakes were much larger and deeper). The recession of St. Anthony Falls in Minneapolis gives a similar time indicator that measures at only 1,667 years since the end of the ice age. Plum Creek in Oberlin, Ohio seems to have eroded its valley in about 2,500 years. Thus, placing the end of the ice age at 2,000 years to 6,000 years in the past corresponds with the Biblical chronologies which place the flood at about 2345 BC, with the ice age following.

We noted earlier that it required ~500 years for the oceans to cool sufficiently to reach current temperatures and to begin the worldwide decline in annual snow precipitation. If the average amount of net annual snow accumulation in the Northern Hemisphere (north of 40° latitude) was 1.4 meters/year—equivalent to what Mt. Fidelity in Glacier

National Park, BC gets today on average per year—the accumulation would result in about 700m of ice and snow. Once snow accumulation ended, the continent-wide glaciers would have melted at a rate of ~10m/year (based on heat absorption calculations and observations). The deepest part of the ice sheet would have melted in a surprisingly short period of time (less than 200 years). This places the end of the ice age at about 1700 BC.

Near the end of the melt-off, the Arctic Ocean froze over for the first time—the year of the big chill. Men were present during the ice age and the year of the big chill—shown by the existence of frozen mammoth carcasses with human intervention. Some carcasses have been found with knife cuts. Also, arrowheads from the Clovis people have repeatedly been found in sites containing mammoth remains. The people who were living in areas where the mammoths lived may also have died during the big chill; some may have survived the winter with difficulty and migrated to more temperate climates. But none of them left us a written record of how and when it happened. However, some North American aboriginal legends (such as those of the Tuscarora Iroquois and Lenni-Lenape Algonquians) mention a great migration across ice.

Job probably lived in the same era as Abraham, while the ice age was still in progress. Many scholars place him around 2000 BC. It is possible that Job is the same person as Jobab in Genesis 10.29; this would place him as the son of Joktan (brother of Peleg) and grandson of Eber. Regardless of who exactly he was, there are more references to cold weather (e.g., frost, snow, ice) in the book of Job than in any other book in the Bible. The book of Job was likely composed while the ice age was still in progress. The effects of the ice age may have had some impact even on the Middle East in the days of Job, a land now known for its heat and aridness. Notice in particular Job 38.29-30 which mentions the oceans (the face of the deep) being frozen. Also, Jacob and his family went down to Egypt around 1700 BC. It is possible that at the end of the ice age, the big chill changed the climate in the Middle East and was the instrument God used to produce the seven-year famine. The climate would have re-stabilized under new environmental conditions in a few years.

Global Warming [October 20] (Gen 8.22)

In previous meditations we have considered a model which can explain how the ice age developed as a by-product, and direct result, of the flood. Warm post-flood oceans and atmospheric dust caused by volcanoes provide a very plausible cause for the start of the ice age—the warm oceans produced lots of snow in the winter and the dust caused the summers in higher latitudes to be cool. The gradual cooling of the oceans and a reduction in volcanic dust can explain the recession of the ice age. Scientists, who use uniformitarian models and reject the Bible, have difficulty explaining how the ice age (or in their view, many ice ages) could have begun—cold, dry winters and warm summers are not the right conditions for producing an ice age, since not enough snow would fall in the winter to last through the summer heat. They also cannot provide a satisfactory explanation for the sudden extinction of the mammoths and other genera of large mammals during the ice age.

Vestiges of the ice age are still with us, including moraines, Arctic sea ice, continental ice in Antarctica and Greenland, and mountain glaciers. Glacier recession today is the remaining stage of a continental ice melt-off. Australia once had glaciers, but they melted before European settlers arrived. Glaciers in Africa will have completely disappeared within a few years. In the rest of the world, glaciers are receding at a rapid pace, with 90% of them losing thickness and volume each year. In addition, permanent sea ice in the Arctic is disappearing, and permafrost in North America and northern Europe is thawing, with tundra giving way to shrubs and trees. Most people today attribute these changes to global warming. In particular, they attribute the changes to an increased concentration of anthropogenic atmospheric 'pollutants' such as carbon dioxide and methane.

There may have been a long-term global warming trend that has continued since the end of the ice age (about 1650 BC). And there may also be cycles of warmer periods and cooler periods caused by other factors such as sunspot cycles. There seems to have been a relatively cooler period from about 1645 to 1715, based on historical records. Also, Greenland which had 300 hundred farms in 1300 could not support farming during that cold period, and until

recently. There are now about 50 sheep farms and dairy farms in Greenland. Also, potatoes are grown locally, and dormant pine forests are rejuvenating.

To attribute glacier and ice-sheet melt-off and the reduction in the extent of year-round sea ice in the Arctic primarily to anthropogenic global warming is suspect at best and at worst a lie. Ice recession was occurring in most parts of the world long before there was any significant industrial activity. Current human activities, which generate heat and 'greenhouse' gasses, may be contributing marginally to melt-off, but the extent is unmeasurable compared with the on-going melting which has continued since the end of the ice age. Likewise, annual total global precipitation rates, in most parts of the globe, began to decline centuries ago because of postdiluvian ocean cooling. The results are seen, for example, in the expansion of the Sahara and Gobi deserts. The growth of these deserts can be documented through comparison of ancient historical reports of farming in areas which are now desert. The reduction in global precipitation rates can be attributed only marginally, if at all, to human activities, such as clear-cutting forests.

The people most concerned about global warming are, in general, those who also believe that the earth is billions of years old, that there have been multiple ice ages, and that life developed through evolutionary processes. This is ironic, since their concern about environmental disasters which they claim are caused by human activities and their calls for global government action are inconsistent with their professed views. For example:

- If there have been a number of ice ages, and not just one, which have caused major environmental disasters such as the extinction of over two dozen genera of mammals, they have no valid reason for assuming that we are not seeing the upward swing of a perpetual temperature cycle.
- If humans are the product of mere mechanistic evolutionary processes, there cannot be any moral consequences of our heat and 'greenhouse' gas generating activities. Our industrial activities are merely the result of our species struggling for its own survival.
- If the world is actually billions of years old, using meteorological records collected over only a few decades makes little sense. A century's worth of data represents only 0.000002% of the time they claim that the world has existed. It is absurd to make any claims about long-term trends based on such a short period of time. We can see the silliness of the current claims by noting that in the 1970s many feared that we were entering a period of global freezing—the cover of the April 8, 1977 edition of *Time* had: "How to Survive the Coming Ice Age—51 Things You Can Do to Make a Difference."

Hyped concerns about anthropogenic global warming have driven ill-advised economic and environmental policies such as carbon emissions trading and requiring gasoline to include a percentage of ethanol derived from plants (e.g., corn). When we accept the Bible's account of the flood as history and understand the flood's massive impact on the earth—including being the cause of the ice age—we can approach management of God's world more sensibly.

A New World Constitution [October 21] (Gen 9.1-7)

The US *Constitution*, with its *Bill of Rights*, has often been hailed for its attempts to limit government powers, to lay out citizens' responsibilities, and to protect individual rights (e.g., of free speech, to bear arms, and to worship without interference). However, it has also been the subject of much debate—with respect to its philosophical roots, whether it successfully established a foundation for a just society, how broadly it can be interpreted, and whether it is inviolable or a 'living' set of concepts. Nevertheless, it is an example of what many people believe is required in a nation if its citizens are not to be subjected to a capricious tyranny.

God provides the foundation for the best form of constitutional law in the Bible. When civil magistrates seriously apply the moral law of God (given in summary form in the Ten Commandments) and follow the model for the application of that law given in the case-law examples, they can approach true justice and equity. To the extent that they deviate from God's law, to that extent society degenerates, and daily existence becomes drudgery.

Prior to the formal delivery of the Ten Commandments on Mount Sinai, the basic requirements of God's law were innately understood by men (see, <u>Universal, Innate Knowledge of God's Moral Law</u> [April 9]). However, initial elements of God's law for mankind were explicitly delivered to Adam as stated rights and responsibilities, e.g., dominion over the rest of creation, a prohibition against eating from a particular tree, the institution of marriage, Sabbath observance, and animal sacrifice for substitutionary atonement. Yet, many aspects of God's law were not explicitly stated. Initially, God let men apply their own reason, guided by conscience. We have seen where this led (Gen 6.5), and how God had to deal with the results by cleansing the earth of mankind's wickedness. So, God began progressively to reveal aspects of his moral requirements as standing law.

God indicates that the conscience of man cannot be trusted because the intentions of his heart are evil from his youth (Gen 8.21). Thus, God begins the process of formally establishing *constitutional* law for mankind immediately after the flood. The first focus of the formal statement of the law concerns rights and responsibilities related to the preservation of human life. This is given in the context of the flood which had destroyed all human life (except for eight persons), and the survivors' need of reassurance to overcome any fear they may have had about their future prospects on the barren earth. This does not mean that the creation ordinances—e.g., the Sabbath and marriage—were of less importance. It is to be assumed that the creation ordinances remain perpetual and universal, unless explicitly changed. The universally applicable antediluvian ordinances would be reiterated in later deliverances of the constitutional law for the governance of the nations of God's earth.

The reference to "Noah and his sons" (Gen 9.1) reinforces the universal nature of the rights and responsibilities provided in this section. What God states here cannot be dismissed as applying only to the Jewish nation—which would not come into existence for another 1,000 years. The rights and responsibilities stated here, are the conditions for the renewal of the covenant which would follow (Gen 9.8-17). This covenant applies to all of Noah's descendants (Gen 9.9).

The rights provided under the renewed covenant are:

- *Family*. At this new beginning for mankind, God restates the blessing of producing families (Gen 9.1). Although death would continue to reign, the earth will never again be de-populated.
- *Land*. Mankind was given the earth as his possession to fill (Gen 9.1; Ps 115.16). Although the earth is not as pleasant a place as it was before the flood (and before Adam's sin), it is still endowed with abundant resources and fruitfulness for the benefit of mankind.
- *Dominion*. The original grant of dominion over the rest of creation (Gen 1.28) stands (Gen 9.2-3). Originally Adam ruled by love, now men rule by fear.
- *Safety*. Assurance is given that animals will, generally, be afraid of men and avoid them (Gen 9.2), thus protecting men from danger.
- *Sustenance*. After Adam sinned, animals could be used for clothing (Gen 3.21). Now God grants their use for food (Gen 9.3-4).

The responsibilities explicitly associated with the renewed covenant are to:

- Abstain from blood. Men are not to eat or drink blood, or to eat meat with blood still in it (Gen 9.4).
- *Preserve Life*. A man must not kill himself (e.g., by suicide or through wanton living) or take the life of another person, through murder. The inverse is implied—we are to strive to preserve the life of others (Gen 9.5-6).
- *Protect humans from animals*. Animals must not be allowed to hurt men, and if they do, they are to be put to death (Gen 9.5; Ex 21.28).
- *Punish murderers*. Wilful murderers must be put to death (Gen 9.6).
- *Reproduce*. Mankind is to produce abundant life to fill the earth (Gen 9.7). This is the only condition, in this covenant renewal, which is a right and a responsibility—forming large families is a blessing and an obligation.

We will consider aspects of these rights and responsibilities in more detail, in the next few meditations.

Fruitful Multiplication – A Commanded Blessing [October 22] (Gen 9.1, 7)

An empty world lay before Noah, and despite human sin, God graciously gave mankind a second opportunity to exercise a proper dominion over his creation. As the progenitor of the new humanity, the second Adam, Noah was charged with the same mandate as was given to Adam at creation (Gen 1.28). Noah's descendants were to fill the earth with its new inhabitants. This is a standing command, given in the context of the covenant made with Noah, as the representative of all of mankind. No direction has been given by God to revoke this command.

God endowed mankind with a natural desire to engage in sexual intercourse as a means of ensuring that people would fulfill the mandate of this blessing and command. He expects people to get married and to produce children (1 Cor 7.9; 1 Tim 5.14). This is the norm he established for mankind. However, men have found ways to circumvent this command and to remove the sexual act from marriage and reproduction from the sexual act. The invention of some ways of preventing conception, and all means of disposing of conceived babies, has created a monstrous perversion of God's provision.

Christians who refuse to marry and to produce children are, in general, selfish and vain. They have succumbed to the world's existential pursuit of material comfort and entertainment. Of course, there are situations which mitigate the general requirement. Some Christians are unable to find Christian spouses, but would marry if they had the opportunity. And, many couples are unable to produce children despite their great desire to do so.

Societies and nations which refuse to follow God's command see the results of their disobedience within a generation. Japan and Russia are prime examples. Their populations are shrinking and the number of elderly, relative to the working-age cohort, is becoming imbalanced. China, which had strictly enforced its one-child policy, passed a key point a few years ago—each year the number of children being born is fewer than in the previous year. It will rapidly run out of labour force participants, begin to experience a rapid decline in total population and will grow old before it grows rich. Europe is in a similar state of decline. And, North America would be there as well if it were not for the arrival of immigrants who have compensated for the declining birth rates. The only places where significant population growth is still occurring are in India and Sub-Sahara Africa.

Radical environmentalists may be pleased that the world's overall population growth rate is turning negative. They claim that there will be benefits from a population decrease. However, they are mistaken. As population growth rates decline, we can expect to see a world that is thrown into chaos. There will not be enough productive workers to support the non-working elderly population, human capital and creative innovation will decline, and technical expertise to maintain the physical infrastructure will disappear. Without a taxable base of productive workers, government funded pension, welfare, education, and health programs will be unsustainable. The supposed 'fiscal cliff' of 2012 was nothing but a pothole compared with what is coming when budget cuts, debt defaults, and hyperinflation arrive. There will be riots and imposition of martial law. About the only good that will come out of man's disregard for God's command will be the exposure of the foolishness of welfare statism. Without doubt, from a temporal perspective, demographics is destiny.

God tells Noah, and all mankind, to "be fruitful and multiply". However, he does not specify the details of what this multiplication entails. The Hebrew word used here for 'multiply' means to be/become 'many' or 'numerous'. Clearly this means that married couples are to have more than one or two children, if God so allows, or there can be no population increase. However, this does not necessarily mean that they are to have twenty children. Some Christians believe that any form of conception control is disallowed by God, and that couples should have as many children as the wife can bear over her fertile years. However, this view cannot be supported from this command or the rest of Scripture. What has been called sanctified common sense must be applied when God does not give explicit directions.

Children are a blessing from the Lord (Ps 127.3-5) in a number of ways. Despite the many challenges of raising children—e.g., providing nurture, cleaning up after them, paying for their education, and exercising balanced discipline—they bring joy into a household. As evidence of this, look at the Facebook pages of parents and you will find numerous pictures and videos of their children doing silly things like eating corn-on-the-cob, playing in a water sprinkler, or learning to skate. As children grow older parents take pride in their accomplishments. In some societies, children are also considered a blessing because of the support they provide for their parents when they become older. Societies and nations experience the same blessings from children are also a blessing because their presence requires us to be less selfish and to focus on providing for the needs of others. God likely designed the human maturing process to take over a decade for this very reason—so that we can learn to love others besides ourselves. Societies and Churches also need to learn to love the presence of children and to see them as a true blessing!

The Mythical Population Bomb [October 23]

(Gen 9.1, 7)

God repeated the command that he had given to Adam (Gen 1.28) to be fruitful and multiply and fill the earth. Many people claim that human population growth is a tragedy, which causes environmental degradation and is rapidly depleting scarce resources. Without question, men cause problems that result in food scarcity, destroy natural environments, and cause species extinction. However, these problems are not because there are too many people but are the result of sin—sins that contribute to environmental issues include:

- *Superstitious beliefs*. Rhinoceros are near extinction because some men foolishly believe that ingesting powdered horn will increase their virility and sexual potency. A single horn can be sold for half a million dollars.
- *Greed*. Over half of the tropical timber from Indonesia is smuggled out illegally, because of profits that can be made in the \$5B industry.
- *Selfishness*. Pollution is often the result of companies and individuals dumping their wastes on other people's property. Widespread starvation is often caused by officials who horde goods and money for themselves

These problems cannot be directly attributed to population growth. There is no population bomb that is ready to explode since God would not give a command that would destroy mankind or the earth.

Many people believe that the earth is rapidly running out of resources and that if we don't stop population growth our civilization will collapse into barbaric anarchy. The eco-doomsayers have claimed, for over four decades (since the publication of the Club of Rome's *The Limits to Growth*), that we would reach peak production of resources within a few years. However, their projections have consistently proven to be wrong. Consider examples of the availability of some key resources:

- *Land.* We use land primarily for urban settlements (1% of habitable land) and agriculture (50% of habitable land). If, the entire population of the world were concentrated in one mega-city, at the density of NY City, the land-area required would be equivalent to the area of Texas. Using modern agricultural methods and technologies throughout the world, food production could be more than doubled without using any more land. It is clear that there is no shortage of land to support an increased world population.
- *Energy*. Each year 'proven' reserves of oil have increased, even though annual consumption rates have also increased—according the *Economist* (2016-11-26), reserves were at 120T m³ in 1995, but at 187T m³ in 2015. Oil can be extracted easily from crude oil reserves, and from shale deposits in Australia and the US mid-west. Also, extremely large quantities of oil are stored in oil sands in Canada, Kazakhstan and Russia. This does not include oil that could be made from coal, of which there are massive quantities. Natural gas is so abundant in North America today, due to advances in extraction techniques using fracking, that real prices are nearing an all-time low. In addition, while the world's total use of energy resources is increasing, the average energy requirement to produce a unit of GDP is declining due to greater efficiencies.
- *Food*. Even as the world's population grew from ~1.6B to over 6B during the 20th century, malnutrition and starvation rates declined. Overall, people are eating better today than at any other time. Worldwide, humans throw away about half (about 2B tons) of the food produced every year, and the rates of obesity have been

increasing everywhere.

- *Water*. The availability of fresh water has been an issue for millennia. In some areas (e.g., central and western US) freshwater aquifers are being drained faster than they are replenished. Nevertheless, new techniques for desalination and water purification using graphene are coming online.
- *Materials*. Construction and manufacturing materials have become less expensive (in real terms) per unit consumed because available sources and reserves have increased while the world's economy is becoming 'lighter'—consuming less material for each unit of GDP. According to US Geological Survey estimates, reserves of metals such as copper and chromium will last more than a thousand years, at current consumption rates. They also estimate the known reserves of phosphate rock to be over 300B tons, giving a supply that will last for more than 1,000 years.

Someone might respond, "But, the world's resources are finite!" That is true. But this should not concern us because we will never reach the point where we need to deal with earth's finiteness. We noted (see, <u>*The End is Near*</u> [October 14]) that it is likely, given such factors as the decay of earth's magnetic field and the human genome, that God plans to bring about the consummation of history before the earth reaches its 7,000th birthday. Until then, God has endowed the world with sufficient natural resources to accommodate a large population.

Paul Ehrlich, the biologist who coined the term, the 'population bomb' said in 2013, that no one "has the right to have 12 children or even three unless the second pregnancy is twins." He is flatly wrong. The current global fertility rate is approaching the global replacement rate. The world is not running out of natural resources, it is starting to run out of people and the potential of their creative abilities. Japan and Russia are experiencing the problem today. The US and Canada would also be experiencing it, if it were not for high immigration rates. China is going to be in serious trouble in a few decades. The world has ignored God's blessing and thus will suffer under his curse.

Diminished Dominion [October 24] (Gen 9.2)

Mankind's sovereignty over the animals, established at the time of creation (Gen 1.26, 28), was not abrogated after the flood. Instead, it was reiterated when God stated that the animals were delivered into the hands of mankind, as represented by Noah. However, the relationship between mankind and the animals after the flood is different from what it was before the flood. The change in this relationship did not occur because of natural environmental changes—for example, an evolutionary adaptation—but was the result of a deliberate and direct (i.e., not via secondary causes) action by God. God declares here that he changed the constitution of the animals so that they would now fear and dread man.

It appears that because of the overwhelming presence and consequences of sin, in particular excessive bloodshed, before the flood, God did not restate the command exactly as he had given it to Adam, to "subdue" the earth and to "have dominion" over the animals (Gen 1.28). There are probably two primary reasons for the change in the nature of man's dominion over the animals and the change in the constitution of the animals:

- 1. *To protect mankind* After Adam's sin in the garden and the curse on creation, the constitution of animals was changed. Originally, all animals were vegetarians (Gen 1.30). However, after Adam's sin some animals became carnivores. Evidence of carnivorous behaviour at the time of the flood is found in the fossil record (e.g., the fossilized stomach contents of some animals contain parts of other animals, and bones of some animal remains show teeth marks). It may be that carnivory was introduced by God as part of the curse upon creation, to make man's toil for subsistence more difficult. As part of the covenant re-enactment made with Noah, God graciously lightened the burden of a hostile environment by putting a restraint on animals—a fear of man. To protect people from the animals that would naturally have attacked them and shed their blood (Gen 9.5), God made the animals wary of man, so that wild animals will generally avoid people and attack them only if they feel threatened.
- 2. To protect the animals Before the flood, animals were used to further mankind's wicked schemes more than

they are today—for wicked 'sport', sexual 'entertainment', and pagan religious rituals. Therefore, God changed the constitution of the animals to protect them somewhat from human abuse. Before the flood, domestic animals would have been too trusting of men. Today, animals which we think of as domestic are often wary around strangers. And even domestic animals have to be tamed and trained (e.g., dogs to herd sheep, cows to stand in a milking station, and horses to carry a rider) before they can be of service to man.

The result of the change in the constitution of animals is that man's dominion over the animals has been greatly reduced, although not entirely abolished. Thus, God allows man to continue to utilize animals for his service and even explicitly extends the range of their service. Before the flood, animals could legitimately have been used for carrying loads and pulling plows and wagons, and for providing wool, fur, or skin for use in making clothes. After the flood, God adds the provision of eating the meat of animals (Gen 9.3). [We will consider the reason for this addition in two subsequent meditations.] God shows, by allowing man's dominion over the animals to continue and by extending it in a new area, that one of his reasons for creating the world was so that it could be a suitably equipped habitation for mankind, the pinnacle of his creation. He also shows that despite man's sin, he is gracious and considerate of mankind's welfare.

With this change in the constitution of the animals, God reinforces the value of life, in particular human life, which is created in his image, and establishes a standard for the reverence for all the life of men and animals. He then provides strictures on the use of animals for food by reserving a token of life for himself—blood (Gen 9.4)—and introduces human-administered punishment for the indiscriminate and unlawful taking of human life (Gen 9.5-6).

The old world, before the flood, was not a paradise or a Shangri-La. It was a considerably more dangerous place for man and beast than the world is today. Adam was driven from a paradise into a markedly contrasting environment—from plenty to paucity, from comforts to challenges, from security to stress. The antediluvians did not have to contend with a few wolves and bears that might occasionally come out of the dark forest. Rather, as we can imagine, they had to erect palisades to protect their families and domestic herds from roaming packs of ferocious dinosaurs which would attack any person they encountered. With the enactment of the New World Covenant, God began to lift the ferocity of the curse, as a foretaste of the renewed world he plans to provide for his redeemed people. The constraint on aggressive animal behaviour against men, is part of the blessing, as are other factors such as the reduction of man's lifespan (chapter 11) by which God limits the compounding of human evil and the introduction of capital punishment (Gen 9.5-6). At the end of time, God will provide a new paradise which will be more splendorous than the Garden of Eden was. We are provided with a hint of what the new heavens and earth will be like by Isaiah (Is 11.6-9; Is 65.25). He indicates that at that time, the fear and dread implanted in animals, and the animosity between men and animals, will be removed.

Providential Provisions [October 25]

(Gen 9.3)

God gave the animals as well as the plants to mankind for use as a source of food. This provision falls under the general dominion-mandate by which God delegated to mankind authority and responsibility over the rest of creation (Gen 1.26). But it broadens the mandate by permitting men to use animals for food—at creation, God gave mankind only vegetable materials as their food source (Gen 1.29-30). By designating both plants and animals as food, God implies that mankind's dominion over all of creation continued after the flood. For example, growing hay and grains for animal fodder is necessary for the production of beef. Also, growing sufficient crops to support an expanding population (Gen 9.1) requires the use of fertilizer, such as that produced from rock phosphate. Thus, grasslands and buried minerals (and by extension, all natural resources) were also given to man for his use.

There are a number of implications of God's restatement of the dominion-mandate, which we should consider. First, it indicates that God is gracious and good, and provides everything we need to live. But his goodness includes giving us much more than we need to live. The evidence of his goodness is seen the abundance of resources which are available to us. The fact that there are high poverty levels in a number of countries is not because of a lack of

resources supplied by God—for example, almost half of the food produced in the world is thrown away. Chronic poverty is the result of sin, caused by:

- Individuals who do stupid things such as destroying their own bodies with harmful drugs or refuse to take responsibility for their own welfare.
- Governments which treat people with disdain (e.g., by enacting policies which make it difficult for people to find work).
- False religions that engender hatred and strife.

Socialism and Islam provide evidence of how false systems institutionalize poverty. Endemic poverty exists in nations dominated by these systems, even where they have access to easily extracted oil and other natural resources.

God is the source of all that is good (James 1.17), including food and other resources. The provision of these resources, by God's general grace, extends to everyone, even if he is unrepentant (Mt 5.45). However, at times God uses a restriction of resources to bring people to repentance (2 Chron 7.13-14).

Paul says in Romans 1.19 that every person knows that there is a God and that we are subject to him. However, men suppress this truth and do not honour God or give him thanks. It is standard etiquette, in all societies, that if someone gives you a gift then you will thank him for his consideration, especially if it appears that the gift is given graciously with no expectation of anything in return. Thus, another implication of this verse is that we ought to thank God, if for no other reason than to be courteous to him. However, it is far better when our thanks is rendered to him because we love him and wish to praise him through thanksgiving (Ps 107.1).

God graciously provided food for mankind, as a blessing within the context of the New World Covenant, enacted with Noah (Gen 9.9-17). This means that God took upon himself an obligation to be faithful to what he had promised. Even when men rebel against the terms of the covenant, God will not be unfaithful. It is because of God's faithfulness as the provider of good things that Jesus teaches that we must not worry about our lives; what we will have to eat or how we will be clothed (Mt 6.25-34). It is especially disappointing when we see those who claim to believe in the goodness of God and his provision of spiritual food through Jesus Christ, unwilling to trust him to be their provider of physical food and other physical provisions.

Another implication of God's supplying us with animals for food, is that he explicitly differentiates plants and animals from mankind. Plants and animals are of entirely different orders of creation from mankind. No evolutionary continuum of life exists from one-celled amoebas and protozoa to mankind. Therefore:

- Animal parts and products may be used by men for food and for other purposes, such as making clothing and shoes.
- Animals can be used for medical research. For example, chimpanzees may have a similar outer appearance to humans, but this does not make them any more human than flies or mosquitoes are. Man is more than his anatomy.
- Animals do not have rights or standing before the law, of the same order as humans. However, men must not be cruel to animals or subject them to unnecessary pain. The fourth Commandment (Ex 20.10) provides rest for animals, and the Bible commends the humane treatment of animals (Dt 25.4; Prov 12.10; Lk 13.15).
- Laws that punish people more severely for abusing animals than for killing an unborn baby, are an abomination before God.
- Lawmakers do not have a God-given right to prohibit property owners from killing destructive pests, such as racoons, squirrels, or pigeons.

Religions (such as Hinduism) and organizations (such as PETA) and militant vegans which treat some classes of animals as 'scared' are teaching a pantheistic falsehood and are advocating for a treatment of animals that is contrary to God's intention. Also, an animal is certainly not a reincarnation of one of your ancestors.

Why God Allowed Man to Eat Meat (part 1 of 2) [October 26] (Gen 9.2-3)

At creation, God gave mankind (and animals) vegetable materials for their food (Gen 1.29-30). Before Adam sinned and, presumably, afterwards until the flood, men were required to be vegetarians—although some people argue that after Adam's sin, God permitted meat eating along with the use of animal hides and skins. It is, of course, likely that men ate meat before the flood, even if they were not permitted to do so, since their wickedness was great (Gen 6.5). They may have eaten the flesh of animals and of other men in their invented religious rituals. Also, since God introduced animal sacrifice (Gen 3.21; Gen 4.4) as a symbol of atonement for sin, it may be that men lusted after the 'food of God' and consumed animal flesh so that they could be 'like God'.

It has been suggested that God permitted men to eat meat after the flood because there was a shortage of plant food. However, Noah did not take extra animals into the ark to feed a family of eight adults for very long. Also, God had told Noah to take into the ark sufficient food for himself and the animals (Gen 6.21). He would have stored enough food to sustain them until the renewed earth began to produce plant food. Others suggest that the reason lies in the changed environment after the flood and declining strength of man's body. Plant food alone appears not be sufficient to provide the necessary nutrients for man easily to maintain his health. Therefore, God in mercy may have permitted man to eat meat. This reason has subtle leanings toward Deism—it seems to make God a victim of circumstances. God could have as easily ensured that man would be able to obtain all his required nutrients (e.g., the B vitamins) for good health through vegetable matter if that had been his plan.

Another suggested reason for the change is that God wanted to differentiate clearly between men and animals as evidence that there is no evolutionary continuity in the life of all flesh, and to ensure that men would not equate man and animals. However, some animals eat meat, so man is like them. Regardless, God differentiated animals from man through the creation of man as a separate kind of being. There is no room for evolutionary continuity between the created kinds, except in the imaginations of evolutionists.

It seems that commentators are grasping to develop reasons for why God permitted man to eat meat. Thus, there is not a consensus on the reason. This confusion exists because they appear to have missed the connection of this provision with the re-enactment of the covenant with Noah.

All of the covenant administrations between God and man appear to have included the consumption of food, usually in the form of a ratifying meal. For example, the covenant made with Adam included eating from the tree of life (Gen 2.9, 16; compare with Rev 22.2, 19), the Mosaic covenant included eating the Passover lamb, and the New Covenant includes drinking wine and eating bread. The provision of vegetables and fruits as food for mankind in the sinless state occurs in the context of the enactment of the Covenant of Creation. The provision of animal meat as food occurs in the context of a new covenantal administration—the New World Covenant mediated through Noah. The covenantal context of this dietary change indicates that there is something significant in the change of covenantal administration.

The new element that was introduced in the covenant made with Noah, not found in the Covenant of Creation, is the redemptive-substitutionary element. When the covenant was made with Adam, he had not sinned, so there was no need for the inclusion of the redemptive-substitutionary element. There are hints of redemptive-substitution associated with the sacrifice of animals to provide clothing for Adam and Eve (Gen 3.21) and with Abel's sacrifice of the firstborn of his flock (Gen 4.4). However, since there was no re-enactment of the covenant, there was no change in the elements or form of its administration.

It is not until Noah sacrificed clean animals that the covenant is reconfirmed (Gen 8.20-9.17). It is in the context of the covenant made with Noah that animal sacrifice is first associated directly with the covenant, and the redemptive-substitutionary element is introduced into the covenant. With the introduction of the redemptive-substitutionary element there was an associated change in the covenant fellowship meal. In the first covenant administration, the meal was based on life—fruit from the tree of life and did not involve sacrifice or blood since there was no sin and no need for substitution. However, the second covenant administration required both sacrifice and shedding of blood

(Heb 9.22). The covenant fellowship meal was changed from symbols of 'life' to symbols of 'death', in that it involved eating a portion of the dead redemptive-substitutionary offering made to God.

Participation in eating a portion of the redemptive-substitutionary sacrifice is a key component of subsequent OT covenant administrations. It is also found in the New Covenant as we partake of the blood and body of Jesus. However, in the New Covenant, there are two important changes: 1) the redemptive-substitutionary component is no longer bloody, because Christ's blood has been shed once for all time (Heb 7.27); and 2) The participation in eating is not physical but spiritual; the covenant fellowship meal has been changed from eating a portion of the sacrificed animals to symbolical elements (bread and wine) that allow us to participate spiritually in the sacrifice of Christ.

Why God Allowed Man to Eat Meat (part 2 of 2) [October 27] (Gen 9.2-3)

In the previous meditation, we considered why God allowed men to eat meat and concluded that the primary reason is that participation in eating a portion of the redemptive-substitutionary sacrifice was a key component of the New World Covenant administration made with Noah. If this analysis is correct, it explains why men were permitted to eat meat as part of the covenant ceremony. However, it does not explain why man:

- 1. Was allowed to eat meat at any time and of any kind, and not merely clean animals during the covenant fellowship meal;
- 2. Is allowed to eat meat since Christ has completed his sacrificial offering of himself and sacrificing of animals is no longer required; and
- 3. Is allowed to eat meat from animals that were once considered unclean.

It is necessary to provide reasonable answers to these questions to validate the association of the permission to eat meat with the enactment of the New World Covenant and to provide an explanation for why men can eat meat today.

The answer to these questions appears to lie in the *scope* of the New World Covenant. Subsequent covenant administrations were made with only portions of mankind. For example, the National Covenant, mediated through Abraham, was made with those who were called out of Ur, and their descendants, and who had the sign of circumcision placed upon them; the New Covenant, mediated through Christ, applies to all those who are Christians, and have the sign of baptism placed upon them. In contrast, the New World Covenant, mediated through Noah, applied to Noah and *all* of his descendants (Gen 8.21-9.11). The New World Covenant and the Covenant of Creation, mediated through Adam, are different from all other covenant administrations because they apply to all mankind.

The sign of the New World Covenant which God gave to mankind is the rainbow (Gen 9.12-13). All men, everywhere on earth, observe a sign of their participation in the covenant every time the rains end and the sun begins to shine again. In the same way, all men everywhere participate in the covenant fellowship meal when they eat the meat of an animal. Therefore:

- Every time a person eats meat, he participates in the covenant fellowship meal of the New World Covenant, which places him under the covenant obligations of the covenant between God and man. This should remind him that he is a creature dependent on the Creator for all good things and a vassal lord over creation, under the Great King.
- When a person eats meat, it reminds him that death is the result of sin, which requires punishment.
- Mankind, in general, can continue to eat any kind of animal meat, not just the meat of the clean animals, because the New World Covenant is a universal and perpetual form of the one covenant between God and man.
- God introduced the exclusivity of eating only clean animals—those that alone could be sacrificed to God—to point to the requirement for a redeemer who would be holy and a perfect substitute for man. People under the Sinaitic Covenant, mediated through Moses, were called to a holy separation to represent the coming Messiah.

The limitation on their meat diet continued the symbolism that sin resulted in death, but *added* the symbol that substitution required perfection.

• In the NT economy, the limitation of physical separation of Jews from Gentiles is removed (Acts 10.1-11.18) and the true implication of the separation—a spiritual separation in Christ—is emphasized. The removal of the one element of symbolism in meat eating—the requirement for a pure sacrificial substitute—does not, however, remove the other—the universal symbol associated with the New World Covenant. Therefore, all men everywhere continue to eat meat from all kinds of animals as a symbol of their universal obligation to God

Thus far we have considered the permissive aspect of the New World Covenant—i.e., God allowing man to eat meat. However, if we read the passage carefully, it appears that the provision of meat eating is not merely *permissive*, but *prescriptive*. There appears to be a command embedded in the words "everything that lives and moves *shall* be food for you". If the provision of meat eating is prescriptive and not merely permissive, there are implications which have a direct bearing on aspects of our culture, and the larger world in which we find ourselves living in the 21st century:

- Religions, such as some strains of Hinduism, that reject eating meat, are an abomination to God. Man-made regulations that require vegetarianism put them in direct rebellion against a universal requirement of God and place them under his curse.
- A person who refuses to eat meat refuses to participate in the covenant fellowship meal and denies his subordinate role to God the Creator. Vegetarianism, even if not practiced for 'religious' reasons, is rebellion against the covenant requirements. Personal-choice vegetarianism is a slap in the face of God and is following the way of the heathen.
- Organizations such as PETA pervert God's covenantal requirement to eat meat and attempt to position meat eating as a 'sin'. We should not flippantly dismiss them since they have support from influential people. We need to stand firmly against their rejection of meat eating, which is a direct challenge to God's perpetual covenant with all mankind.

Blood, the Life-Tribute Owed to God [October 28] (Gen 9.4-5)

In our previous two meditations, we considered why God permitted mankind to eat meat, and also *requires* it. The reason is that eating meat is a symbol of the universal and perpetual New World Covenant which God made with mankind through Noah (Gen 8.20-21). Even though God gives animal meat to men as food, he reserves the blood of animals and mankind for himself (Gen 9.4-6). The blood is a symbol of life (lifeblood), and life belongs to God. We have no innate right to take life. However, this is not an absolute prohibition against killing, for God has said just prior that men may eat the meat of animals (Gen 9.3). Rather, the killing of animals is to occur only with an understanding of the condition that God has established. This requirement, that the lifeblood portion be given to God, is stated in the context of the reestablishment of the covenant. Thus, he requires a tribute and token of the life that is forfeited, to reinforce the fact that all of life ultimately belongs to him.

The laws given to the Jews, in the Mosaic formulation of the covenant, continued to support this aspect of blood as a tribute. The Jews were not to eat the blood of any animal or bird (Lev 7.26; Dt 15.23) but were to drain off the blood (Lev 17.13; Lev 19.26) and to pour it out on the ground like water before the Lord (Dt 12.15-16, 23-24). Those who did eat blood were to be cut off from the people of Israel (Lev 7.26-27). They were considered covenant breakers and were to be excommunicated from the covenant community.

Two reasons were given to the Israelites for why they were not to consume animal blood. The first was the same as that which was given to Noah; the blood was the symbol of life (Lev 17.11, 14) and was the portion of the creature that was reserved for God (Dt 12.22-24). The second reason is an extension of the first. Because blood is a symbol of life, it could be considered to be a substitute for the whole life. The blood would be taken by God as a symbol of substitutionary atonement for life (Lev 17.11).

The importance of blood as a tribute that belongs to God is universal. At the time of Noah all plants and animals were given as food (Gen 9.3). There were no restrictions placed, at this time, as to the particular animals that men were permitted to eat, as there would later be under the Mosaic formulation of the Jewish ceremonial laws. Yet, even in this unrestricted context, the blood of animals was not to be eaten. It should be remembered that Noah was not a Jew. All men, Jew and Gentile, are descended from Noah, and all men, were placed under the universal obligation to abstain from the blood of animals.

This universal obligation was continued under the Mosaic formulation of the covenant. We find the prohibition against eating blood was to apply to both Jews and Gentile aliens (Lev 17.10, 13; Zech 9.7). If a Gentile wanted to become a Jew, he had to abide by all the Jewish ceremonial laws. Otherwise, as a Gentile, he was not bound by the Jewish ceremonial laws. For example, a Gentile was not prohibited from eating pork, whereas a Jew was. However, the prohibition against eating blood was not part of the Mosaic ceremonial law since it applied to Gentiles even if they were not interested in becoming Jews. The prohibition against eating blood is based on a universal principle that a tribute of life must be paid to God under the covenant.

James' statement delivered at the council at Jerusalem, shows that the prohibition against eating blood that was given first to Noah, still applies to all men, Jew and Gentile. His judgement was that the Gentiles should abstain from blood and from the meat of strangled animals (Acts 15.20), since the blood was not properly drained out of the carcases. The reference James makes to Moses is not to the Mosaic formulation of the covenant, but to the Pentateuch. The writings of Moses are often referred to in this way as in the expression "Moses and the Prophets." Although the writings of Moses were the primary source for the laws governing the behaviour of the Jews, they are also to be a source, along with the rest of Scripture, for laws governing all human behaviour. It is only Moses who provides us with the account of the creation and Noahic ordinances; and it is Moses who provides us with the codification of the moral law in the Ten Commandments.

James and Paul, and others who attended the council in Jerusalem, were concerned that no obligation should be placed on the Gentiles that was not universally binding. What they decided to focus on was the particular, but common behaviours among the Gentiles that went against the fundamental moral principles of God. In their letter (Acts 15.23-29; Acts 21.25) to the churches, eating blood is identified as being in the same class as sexual immorality and eating food that has been sacrificed to idols.

Peter's vision in Acts (Acts 10.9-16) does not contradict this conclusion. It does not refer to blood. It does not give man the right to consume animal blood. It only removes the stricter prohibition that was placed on the Jews under the ceremonial system. It returns us to the order established with Noah and permits a Christian to eat any plant or animal that God has given for food. But, as with Noah, we are to abstain from eating animal blood because it is the portion that belongs to God. As the symbol of life, it is the portion that he has reserved to himself to show his absolute ownership over life. Drinking animal blood or eating products that are made with animal blood, which should have been drained from a carcass, is a sin.

Capital Punishment – Required for Murder [October 29] (Gen 9.5-6)

About the only places where executions for premeditated murder still occur, in any significant number today, are in the US, China, and Muslim countries in the Middle East and North Africa. In a few of the countries in the Middle East executions are still public events. In the US, polls show a consistent level of support for the death penalty at around 60% of the population. About two-thirds of the states still have the death penalty on their statute books. Some states, such as Texas, continue to perform executions on a regular basis. However, in much of the world, capital punishment is dead or dying out, and a majority of countries have done away with executions in law or in practice. For example, the abolition of the death penalty is a condition for entrance into the European Union. Even a recent Pope (Benedict XVI) supported the elimination of the death penalty.

Opponents of capital punishment give a number of reasons for repealing the death penalty, or for preventing its reintroduction:

- *It is barbaric and inhumane.* The governor of Oregon called the death penalty "morally wrong" when his state banned it. Many of those who make this claim have no moral qualms about an abortionist ripping a baby from his mother's womb—that is real barbarism! God's law is the ultimate standard for morality, not the opinions of modern legislators.
- *We make mistakes.* It is said that since our judicial system is imperfect, it is worth repealing the death penalty if one innocent life can be saved. Mistakes are made in judicial proceedings because of ignorance, wilful neglect, or malice. However, the argument is not applied consistently. Doctors make mistakes prescribing drugs or performing surgery and kill people. Should we ban drugs and surgery? Automobile drivers make mistakes and kill pedestrians. Should we ban cars and drivers?
- *The fear of execution does not prevent murders*. Deterrence is not the primary reason for executing a murderer. However, God declares capital punishment to be a deterrent for, what we would view to be, lesser crimes than murder (Dt 13.11; Dt 17.13; Dt 19.20; Dt 21.21). By logical extension capital punishment is a deterrent for murder, at least for some people.
- *It is antilife*. The foes of capital punishment have it backwards. It is out of a respect for human life—life created in the image of God—that God requires capital punishment. Human life is a valuable gift from God. To deface God's image in man, and steal the gift he has given to men, by murder, dishonours God and is a crime against him. Thus, he requires the protection of life and a proper reckoning, and the ultimate penalty, when it is taken unjustly. Assigning a murderer to live out the remainder of his days in the relative comfort of a prison is to declare human life cheap and not worthy of just recompense. God's standard for justice is the principle known as *lex talionis* (law of retribution), that is, "an eye for an eye" (Ex 21.23–25). This requires that the punishment be commensurate with the weight of the crime.
- *It is not worth the cost.* The cost to appeal a murder conviction can be higher, in some cases, than the cost to incarcerate a murderer for the rest of his life. This argument is pragmatic. Rather than suspending what God requires (the death penalty), our governments should reform the justice system so that it is efficient, swift, just, and effective.

The real reason that people are opposed to capital punishment is that they view human life as of little value and God's law as of even less value. Men don't want to accept the validity of capital punishment, and apply it, because they are in rebellion against God. The acceptance of capital punishment is not a matter of a person's view of political theory but of theology. If God is God, then sin demands punishment, and on his terms. If God is not God, then no argument for capital punishment can prevail, other than a desire for revenge.

It is therefore ironic to see how people reacted to news on May 1st and 2nd, 2011. On May 1st, Osama Bin Laden was killed by a US Navy SEALs team. President Obama, in a speech announcing the killing, said "Justice has been done." Students on campuses were shown cheering spontaneously (Prov 11.10). The next day, newspapers carried headlines such as "Rot in Hell!" These responses to Bin Laden's execution show that men know that capital punishment is required and just in their inner consciences.

All men know that monstrous murderers deserve to die. However, as they suppress that truth about God's demand for retributive justice, they turn over Divine authority to the State. They reject executing a murderer under Divine authority but make killing in the name of the State through waging war—in battles against insurgents, covert SEAL operations, or 'sanitary' drone strikes—or police action in taking down a domestic terrorist into an event to be celebrated. They cannot foresee the unintended consequences which will be the result of their beliefs. Killing (i.e., executing a murderer or waging a just war) under God's authority are replaced with killing in the name of the State. God and his law are rejected and a false god—the State—is idolized. God will hand them over to the service of their god. When the justification for lethal force and its use rests with the State alone, and not ultimately on God's law, life in the secular State will become increasingly more arbitrary, violent, and dangerous. Capital punishment

is not optional. It is a requirement from God-every murderer must be executed.

Capital Punishment – A Standing Requirement [October 30] (Gen 9.5-6)

God told Noah that a murderer is to be executed. However, the instruction did not apply specifically to Noah and his immediate family, since none of them was guilty of first-degree murder. So, we can assume that this instruction is a standing requirement which applied to Noah's grandchildren and his great-grandchildren, and on to the n^{th} generation—i.e., it applies to everyone who is descended from Noah. Later, under the Mosaic law, God would expand the scope of capital punishment to include other crimes beside murder (such as adultery, rape, sodomy, incest, Sabbath breaking, idolatry and blasphemy), would reinforce the requirement to put a wilful murderer to death with examples (Ex 21.12-14; Num 35.16-33), and would extend the application of capital punishment to second-degree murder in the case of an unborn child (Ex 21.22-25) or by a person's animal (Ex 21.29). However, the expansion of the application of capital punishment is not the focus of our consideration today. It is important that we understand that the introduction of capital punishment applied initially to first-degree murder and goes back to the beginning of the post-flood era. Therefore, no one can legitimately claim that it is a 'Jewish' command which is abolished under the NT age of grace.

Some Christians believe that in the NT Jesus abolished the death penalty. They refer to John 7.53-8.11 and say that since the woman was undeniably guilty under the law, she should have been put to death by stoning. But they also say that since Jesus dismissed her case, he abolished the death penalty for capital crimes. However, this passage teaches nothing of the sort. The Pharisees had apparently permitted a married man, who had arranged a liaison with a prostitute, to get away—since she was caught in adultery, the man had to have been there also. Thus, Jesus challenges them to cast the first stone. He says, in effect, "If you are concerned that the law be properly administered, where are the *two* guilty parties—the man and the woman (Lev 20.10)? Why are you acting as accessories to the man's crime? Where are the required two or three witnesses (Dt 17.6)? Are you willing to perjure yourselves by raising a stone only against her (Dt 17.7)?" In this, Jesus is not abrogating capital punishment for adultery, nor dismissing the proper use of witnesses of a crime. He is condemning their sins of duplicity, hypocrisy, and evil intent, and upholding the law's requirements for proper due process.

Capital punishment for murder continues to be a requirement endorsed by Jesus and the writers of the NT. For example,

- Jesus suffered a gruesome form of capital punishment to bear our sins. If capital punishment is morally wrong, God would not have allowed his Son to die on the cross. The fact that Jesus had to be executed for our sins indicates that ultimately all sins are capital offenses (Gen 2.17).
- Jesus declared that he did not come to abolish the law, but to fulfill it (Mt 5.17-19). By being subjected to capital punishment he demonstrated that the law and its associated punishments were just.
- Jesus says that those who live by the sword will die by it, implying that murderers will be justly executed (Mt 26.52).
- Luke records the words of one of the criminals who died beside Jesus. He indicates that their capital punishment was justly received; however, Jesus did not deserve to die that way (Lk 23.41).
- The writer of Hebrews informs us that all punishment under the pre-Messianic economy was justly delivered (Heb 2.2).
- Paul teaches that the civil magistrate bears the sword (e.g., to use if for executions) for the purposes of punishing wrong doers (Rom 13.4).
- Paul declared that if he had done anything deserving death, then he would not seek to avoid the death penalty (Acts 25.11).

Since the OT and the NT broadly and clearly reinforce the requirement for executing murders, and since no valid arguments can be presented for abolishing it (see the previous meditation) there should be no debate among

Christians today about the application of capital punishment for murder.

The fact that many Christians are squeamish about the execution of murders is indicative of a problem in the Church which is the result of a number of coalescing factors:

- *Ignorance of the Bible's teachings*. Many professing Christians have not read the entire Bible and are not aware of much of what it teaches. They also have not been taught how to interpret God's word in a systematic manner and to apply it consistently across a spectrum of situations.
- *A weak view of sin*. They do not understand how seriously God hates sin. They don't understand God's law and why he requires that sin be punished, and how it is to be punished.
- *Duped by popular opinion*. They have been influenced by the mainstream media and popular opinion, which hate God's laws and requirements. Thus, they follow the prevailing view that capital punishment is immoral.

Since capital punishment has been outlawed in many jurisdictions, Christian teaching on the subject has been marginalized and there seems to be little likelihood that capital punishment will be reintroduced. Unless God reforms his Church and dramatically changes our culture through revival, we can expect to see the consequences of an increasing lawlessness which rejects obedience to, and the application of, God's law.

Capital Punishment – Its Agents of Application [October 31] (Gen 9.5-6)

Before the flood, God permitted men to exercise their depravity with few constraints, to demonstrate where they would end up without his redeeming Spirit being broadly active (Gen 6.5). After the flood, God began to introduce constraints to contain the evil so that mankind could survive (Gen 8.21). One way he constrained evil was by limiting the length of man's lifespan (Gen 11.11-26). Another way he constrained evil was by documenting laws and punishments, which would be administered by men with delegated authority.

Before the flood, God punished Cain for the murder he had committed (Gen 4.11-16). However, since God reserved the right to administer punishment, it may have appeared to the antediluvians as if there were no consequences for murder (and other overt sins). So, men, such as Lamech, took vengeance into their own hands, and carried it to an extreme (Gen 4.23-24). Thus, under the covenant administered with Noah, God provided a means of limiting personal vendettas to avenge murder, so that violence would not escalate to such an extent that it would become necessary for him to purge the world again, as he had done with the flood (Gen 6.7).

Someone might think that the statement, "by man shall his blood be shed", is not introducing anything different. An act of blood vengeance would appear to accomplish the same thing. However, God is setting up a contrast with the past order. Things would be different after the flood: 1) He assigned the responsibility for carrying out punishment for murder into the hands of men. 2) He authorized human administered civil government to control violence to keep it from escalating. Although, it is not stated in this brief passage, the immediate context, of the covenant with Noah as the human agent representing mankind (Gen 9.11-17), indicates that God's intent was to appoint representatives for the administration of capital punishment. Later Biblical passages (Dt 19.1-21; Num 35.9-34; Rom 13.1-5) support this.

It is often argued by opponents of capital punishment that executing a murderer is still killing a human being and is therefore as evil as murder. God's response to this accusation is clear. He is the one ultimately doing the punishing and killing—notice that he says "I will require" three times. Paul reinforces this when he indicates that personal vengeance is wrong and that God is the one who avenges (Rom 12.19), and then he follows with the explanation that it is the civil magistrate that has been appointed to carry out God's vengeance against wicked behaviour (Rom 13.1-7). Therefore, God authorizes his human agents to carry out the execution of a murderer on his behalf. Thus, Psalm 82.1-8 refers to judges (2) as 'gods' (6). Reflecting this delegation of authority, the North American modern criminal justice systems (based on the English Common Law system) represent the prosecution as the State *vs* the

accused, not as the harmed individual against the perpetrator—in Canada it is the Crown that presses charges and in the US it is the 'people'.

Execution of a murderer is not a breach of the sixth Commandment. It is not the outward action, *per se*, of taking a person's life that is wrong. The reason must be taken into account. By way of analogy, the driver of a fire truck racing to put out a fire does not break the law when he drives above the posted speed limit. Capital punishment does not show a disregard for human life, but a great regard. God values life so highly that the one who takes it away unjustly must pay back with a life—per the principle of *lex talionis*, "an eye for an eye" (Ex 21.23-25). However, since the murderer cannot create a new life by which to make the payment, he is required to give up his own.

The execution of a murderer is a serious and solemn matter and is not to be engaged in lightly. We can identify some principles which should guide every administration of the death penalty:

- 1. There must be multiple witnesses (Dt 19.15; Heb 10.28). Great care must be applied in the use of circumstantial evidence as a 'witness' to murder.
- 2. Guilt must be established beyond any reasonable doubt.
- 3. Due Process, with a fair and speedy trial, must be applied.
- 4. Accused murderers must be provided with adequate legal representation, even if they cannot afford to pay the costs.
- 5. There must not be any mitigation because of the person's low or high status (Lev 19.15).
- 6. There must be no exemptions once guilt is established (e.g., mitigation by measure of insanity, or pleabargaining).
- 7. The trial must be carried out by the accused person's peers. The Hebrew has "man, brother of him" (Gen 6.5), which is translated as 'fellow man'. We are our brothers' keepers, in life and in death. Also, if executions were carried out by immediate peers, not in a removed 'clinical' setting, we would likely see fewer abuses of justice.
- 8. There must be no vindictiveness in an execution. Rather, it should be carried out to achieve justice, with great regret and tears—over a precious human life that is being forfeited.
- 9. The execution should be sanctified with prayer—that the murderer would repent of his sin before his execution and that the proceedings would be done only in accord with God's dictates and order.
- 10. The proceedings should be carried out only under the jurisdiction of an authorized civil magistrate—no vigilante behaviour should be tolerated.

Abortion is Murder [November 1] (Gen 9.5-6)

The Kermit Gosnell trial, held in Philadelphia in 2013, illustrates the depth of human depravity on many levels. The most obvious example is evidenced by what was done during the abortion procedures to babies who were born alive. The description is sickening—things that most people would not do to a cat! Hearing about them should cause any sane person to weep. The fact that Gosnell and his staff could conduct these atrocities on babies should be unbelievable. But, in principle, what they did is no different from what the Jewish and Roman leaders did to Jesus during his trial and crucifixion, Muslim Ottoman Turks did to the Armenians in 1915, the Nazis did in the gas chambers at Auschwitz, the Khmer Rouge did to their fellow Cambodians, or the Rwandan Hutus did to the ethnic Tutsis. Men who refuse to live under God's law, and are unconstrained by his Spirit, display their wickedness against those who cannot defend themselves.

However, the depth of human depravity and the evil of abortion goes beyond the Gosnell butcheries in less obvious ways:

- While Gosnell's trial was in progress, President Obama spoke at Planned Parenthood event, where he said, "God bless Planned Parenthood." The blasphemy of his declaration, in favour of the largest purveyor of abortion in the US, is indicative of the great wickedness of our elected 'leaders' who not only refuse to speak out against abortion but endorse it.
- The prosecution struck a plea bargain with Gosnell, who was convicted, on clear evidence, of murder. They

agreed to Gosnell's serving two life sentences without parole, on the condition that he waived his rights to an appeal. The prosecution had sought the death penalty because Gosnell was convicted of multiple murders and because of the vulnerability of his victims. However, given that he was 72 years old at the time, the thinking was that he would die before the appeal process ran its course. This was a concession to convenience. Gosnell should have been sentenced to death, notwithstanding the abuse of justice which occurs because of the lengthy trial and appeal processes. Permitting him to live out his retired life in an institution, watching TV in comfort, is a gross abuse of justice.

- Women who advocate for the rights of women and yet support access to abortion are the worst of hypocrites. They will not speak out against sex-selective abortions—in China at least 50 million female babies have been aborted because of their chromosomes—because they are desperate to preserve access to wide-open abortion.
- There was a blatant inconsistency when Gosnell was charged with first-degree murder in the deaths of three babies. What made his gruesome actions in these cases different from the abortions he had performed was only the fact that the babies were outside of their mothers' wombs. The distance of a few centimetres changed the killing of a baby from a legal abortion into murder. Pro-abortion advocates claim that as long as the baby is fully or partially in his mother's womb, it is okay to murder him—because in their view he is merely a lump of cells with no more rights than a skin mole. However, once a baby fully exits the birth canal, then it is considered murder if someone takes the baby's life. As Andrée Seu Peterson said, "The difference between a respectable civil right and an atrocity should hinge on something greater than the geography of the killing." It is no wonder that the in the Gosnell trial the prosecutors were careful to avoid the topic of abortion and the jury required about two weeks to come to the conclusion to charge Gosnell with murder. The jury probably had to debate issues for which they were not equipped by the moral chaos of today's culture.
- The most pernicious evil is the silence and lack of engagement of most professed Christians on the subject of abortion. In the US, after *Roe vs Wade* (1973), over 50 million babies have been murdered. At least 330 million babies had been murdered by abortion in China after the introduction (1978) of their one-child policy. The equivalent of the entire population of Canada has been destroyed every decade in only the US and China. Canada's unwillingness even to hold debate on the topic of an abortion law lies at the feet of the Church. We are so consumed with being entertained and securing material comfort that we hardly raise a mouse-peep about the unprecedented cultural genocide around us, that makes the Nazi pogroms look like a carnival.

Life begins at conception (Ps 51.5; Jn 1.14 with Lk 1.35). Pre-born babies are distinct persons, with their own DNA, hearts, and minds. Even most strident supporters of abortion admit this, they merely claim that it is irrelevant and that the mother's 'rights' supersede the baby's. A baby in his mother's womb is an individual person created in the image of God (Gen 25.21-26; Luke 1.41-44). God declares that anyone who sheds the blood (i.e., murders) of a person (Gen 9.5-6), even in the womb (Ex 21.22-25), is subject to having his own blood shed. Abortion is murder and abortionists should be executed.

The wickedness of people before the flood was of such a kind and at such an intensity (Gen 6.5) that God deemed it necessary to wipe out all of them. We must be amazed at God's patience, since he has not struck down all the inhabitants of countries which are slaughtering their pre-born. This is what we deserve; and if we do not repent, God may yet send the consequences of our rebellion.

Justified War [November 2] (Gen 9.5-6)

Is it ever right to wage war? Within the Church today, there is a spectrum of views—from principled and pragmatic pacifism, to just-war theories, to a belief that nations, such as the US, should use aggressive military force in their role of global 'policing'. In the post-Apostolic era, some pastors taught that it was wrong for Christians to be involved in the military. For example, Tertullian (c. 170-230) said that, "It is not lawful to make a living by the sword, when the Lord says that those who live by the sword will perish by it." Hippolytus (c. 170-236) condemned voluntary military service and taught that no one was to be baptized who was in the army. Others condemned war.

Justin Martyr (c. 110-165) said, "We who formerly murdered one another now refrain from making war on our enemies." Origen (c. 185-255) opined that Jesus does not teach that it is right for his disciples to act in violence; killing of any individual is opposed to his laws. Cyprian (200-258) said that war is a "wicked crime". Lactantius (c. 250-325), the tutor of Constantine's son, taught that it was not lawful for a righteous man to engage in warfare (since his warfare is righteousness itself). He also condemned capital punishment.

Later pacifists included the Waldensians, who condemned all war and taking of human life, but eventually fought in their own defence. At the time of the Reformation, Anabaptists (e.g., Menno Simons, after whom Mennonites are named) developed their position on pacifism. There have been recent non-Christian pacifist movements, including The Hague Convention (1899, 1907) and the Kellog-Briand Pact (1928) which attempted to outlaw war.

The Christian pacifist position is usually based on NT passages, such as:

- Mt 5.38-48; "Do not resist evil ..." Pacifists say that this is not to be taken merely as counsel concerning our personal attitude, but as a proscription against waging war.
- Romans 12.17-21 and Hebrews 12.14; "Do not repay evil, seek peace". They generally ignore what follows in Romans 13.1-7, which deals with the role of the civil magistrate and his use of the sword, or they provide an explanation specific to the Roman situation in which Paul wrote.
- 2 Corinthians 10.4 and Ephesians 6.17; the Christian's warfare is not physical but spiritual. However, this applies to the role of the Church and Christians as individuals, not to the civil magistrate.

Pacifist writers also oppose war and personal self-defence based on Jesus' example of non-resistance during his trial and death. However, a problem with using Jesus' experience on the cross as an example of passive non-violence, is that the cross is a central demonstration of the righteousness and justice of God who must punish sin (Rom 3.25-26). Pacifist tradition focuses on the exemplary theory of the atonement, rather than the substitutionary and judicial aspects of the atonement. The general view held by pacifists is that if someone is put in a position of having to choose between preserving the values of justice or of non-violence, he is to choose non-violence, even at a price of great injustice to himself and others. In their view, a large number of lost lives and collateral damage resulting from non-resistance, and the imposition of totalitarianism and persecution of Christians, is always better than actively prosecuting a lethal self-defensive initiative with few casualties.

A challenge to the pacifist's position is God's command to Noah—if a man sheds the blood of another person, he is to forfeit his life. Thus, an aggressor-nation is to be challenged with a defensive war. In addition, war is proper, in principle, or God would not have commanded his people to wage war (Dt 20.1-20). Also, God grants victory in war (Ex 15.1-27; Judges 3.10; Judges 4.14; Judges 5.1-31; 2 Sam 22.35-51; Ps 3.1-8; Ps 24.8; Ps 27.1-3; Ps 68.1-3, 21-23). The arguments for pacifism, based primarily on NT passages, suggest that God's character changed from OT times and that his provisions for justice given to Israel were localized and are now unjustified. By their teaching, the pacifists pit the NT against the OT.

Augustine is credited with formulating a set of criteria which established a tradition for executing justified war that attempted to limit the destructiveness of armed combat. Thomas Aquinas enhanced this formulation. The *just war* criteria can be summarized as: 1) declared by a legitimate authority, not by private individuals; 2) for a just cause (defence against an aggressor); 3) with right intentions (to advance good or to prevent evil); 4) with a proportionality of means and costs to the probability of success (the cost of resolving the injustice has to be less than the cost); 5) exhaustion of peaceful means of resolution; 6) the use of force is limited to legitimate military combatants; and 7) it is discriminatory, with no direct, intentional attacks on civilians.

The Bible indicates that use of the sword and war are legitimate. Warriors are set forth as examples of faith (Heb 11.32-34). John the Baptist did not tell the soldiers to leave the army when they asked what they should do (Lk 3.14). Jesus commends a man for his faith and does not tell him to leave the army (Lk 7.9). Jesus forbid the use of the sword in his defence (Mt 26.52) but insisted that he came to bring a sword (Mt 10.34-35), and then told his disciples to take up a sword (Lk 22.36, 38). And, the civil magistrate is not to bear the sword in vain (Rom 13.4).

Using the sword is a proper expression of the authority delegated by God through Noah. Pacifists would take away use of the sword either for capital punishment or for war. What then would be the use of the sword? Use of weapons in war is justified, if the war is a just one.

New World Covenant – A Covenant of Life [November 3] (Gen 9.7)

God opens and closes his delivery of the obligations associated with the enactment of the New World Covenant, with the command that mankind is to be fruitful and multiply. This repetition may seem to be redundant. However, God wants to ensure that we don't miss something that is very important. His purpose, in all covenant administrations, is to offer life to mankind, with the condition of obedience to the covenant obligations. At this point in the renewal of the covenant, he has just completed giving instructions that deal with death—the execution of men or animals who shed human blood without a just cause. He now turns the focus from death to life, giving mankind not only a command but offering them a blessing. Despite the destructive tendencies of mankind, God will overrule and sustain life.

God is life, and the source of all life. He created mankind to live, not to die. When man was created, and placed in the Garden of Eden, he was designed to be immortal. However, man chose death over life (Gen 2.17). Since then, God's stated objective in redemptive history has been to give mankind eternal life (Jn 3.16/), not merely temporal immortality. But men, without the converting power of the Holy Spirit, refuse to have the life that God offers (Jn 5.40). To demonstrate his commitment to the life of mankind, and to give them a token of his good intentions, God put in place a provision for showing the value of life (capital punishment) and changed the constitution of the animals so that they would be less of a threat to human life than they were before the flood. God wants mankind to flourish; not to perish by bloodshed or to be destroyed by another cataclysm.

The provision by God, and the administration by men, of capital punishment is neither barbaric nor inhumane, as many people (including many professing Christians) claim today; it is a key component of the operation of a just and well-ordered society. A society which refuses to execute murderers will soon find that it is overwhelmed with violence and injustice. A society which takes God's commands seriously and executes convicted murderers efficiently and effectively, demonstrates that it chooses to live by the rule of God's law, administer true justice, deter men from committing murder, contain violence, and show a reverence for human life. It is only under these conditions that human life can be protected from the terrors of tyrants (like the Nephilim; Gen 6.4) and flourish.

In this instance, the command to be fruitful and multiple is slightly different from the previous instances (Gen 1.28; Gen 9.1). There is the addition of a 'you', which is in the plural form. God is not speaking only to the patriarchs, as he did with Adam and Noah as the meditators of their respective convent administrations. His command is more general and includes Noah's sons and, by extension, all of mankind descended from them—their offspring (Gen 9.9). We begin to see the outworking of the fulfillment of this command in the catalogue of the nations, given in chapter 10. In effect, God says, "Produce many children so that the world will be repopulated and filled."

God is life. God celebrates life. Life is an incredible thing. No matter how hard our scientists try, they will *never* be able to create life. Men will never be able to take a carefully arranged amalgam of water and organic molecules and make it alive. Nor will they be able to turn circuit boards into rational, volitional entities. God's glory and majesty is displayed through the creation of the universe (Rev 4.11), but it is displayed most amazingly in the creation of the spiritual animating principle, which we call 'life'.

God wants us also to celebrate life. He wants us to rejoice at being alive and he wants us to produce more life. All angels were created at once; they do not reproduce. In contrast, God's chosen means of producing human life is through the loving marital union of a man and a woman. But the number of humans is indeterminate (from our perspective). The more children we produce the more people there will be to explore God's creation, invent new things, fellowship together, and worship their Creator. Men can actually participate in filling Heaven through reproduction—the more children we produce the more people there are for God to save. He wants to fill Heaven with a great multitude that no man can number (Rev 7.9).

Since 1970 about 1.5 billion (!!) abortions have been performed worldwide. That is 1.5 billion unique living persons who were not given the opportunity to celebrate life in this world—to love and be loved, to learn and teach, to grow and produce. God wants us to live peaceful and quiet lives (1 Tim 2.2) in security and produce large families. Thus, he established his covenant with Noah, a covenant of renewed life, a covenant to protect life, and a covenant to encourage mankind to live with hope even in the face of death.

While death must be faced by all men (Heb 9.27), because of original and personal sin, death does not have the victory over life (1 Cor 15.54-55). Death has been conquered by the Last Adam, the New Covenant mediator, the resurrected and living Lord, Jesus. In a culture held in thrall by death—from the slaughter of the unborn, to the violence in movies, and to the titillation of media stories about terrorism—we need to rejoice that we are alive and that we have the hope of life offered by God's covenant with man.

New World Covenant – Universal Applicability [November 4] (Gen 9.8-17)

In the account dealing with the flood, we encounter seven instances where God speaks directly with Noah (Gen 6.13; Gen 7.1; Gen 8.15; Gen 9.1, 8, 12, 17). In each case, God's message to Noah is that, despite the sin of mankind, which must be judged, he will be gracious toward Noah and his family. God's final words to Noah (Gen 9.17) seal the covenant with the sign of the rainbow—a sign that he will never again send universal temporal judgement on mankind—to assure mankind of his good intentions toward them. However, God's good intentions toward mankind are conditional on man's faithful compliance with the covenant obligations—as implied by the earlier observation about Noah's righteous conduct (Gen 7.1). God indicates, elsewhere in Scripture, that when men refuse to abide by the covenant obligations, they must expect judgement. For example, in Psalm 29.1-11, which mentions a flood, God's voice is heard seven times in the thunder of judgement (see also, Rev 10.3-4).

Over a year passed between the announcement of the covenant with Noah (Gen 6.18) and its enactment. During this time, God punished mankind's sin, to demonstrate what a serious matter it is to rebel against God's commands and to indicate how dreadful the everlasting punishment will be for those who do not repent of their sin. Thus, the flood establishes the context for this instance of God's covenant making with mankind. Obligations for both parties in the covenant are defined—for man it is obedience to God's commands (Gen 9.1-7), for God it is fulfillment of the promise he made to sustain mankind and the world through all time (Gen 9.11, 15). And, rewards are identified for mankind as the beneficiary of the covenant—the temporal reward is a continuity of life on earth, but this is a pointer to eternal life in the renewed paradise.

God again (see, Gen 6.18) indicates that he is the one who establishes the covenant with Noah (Gen 9.9, 11), and with all mankind. Covenants, when made as human agreements, may be between two equal parties who mutually agree to cooperate. However, when God makes a covenant, it is unilateral. He defines the obligations, rewards for obedience, and consequences for disobedience, without consulting mankind. However, the divine initiative for making the covenant does not mean that its administration is tyrannical or its obligations draconian. To the contrary, the covenant obligations are gracious and not burdensome (Mic 6.8; Mt 11.30; 1 Jn 5.3); the rewards are abundantly more than we deserve (1 Cor 2.9; Eph 3.20); and God himself provides the means of fulfillment of the covenant obligations through the God-man, Jesus. When God makes a covenant, he ensures that its duties will be fulfilled, and its rewards faithfully distributed.

There is only one primary covenant between God and man—the Covenant of Grace. However, it was enacted in various forms during a 4,000-year period, each with different signs and specific obligations—some of which are universal and permanent and some local and temporary. The first administration of the covenant, the Covenant of Creation, was made with Adam (see the earlier meditations on Gen 2.9, 16-17) who represented all of creation. The

second administration, the New World Covenant, was made with Noah, a second Adam, who also represented all of creation. This is indicated by the consistent use of the plural 'you', the explicit inclusion of his sons (Gen 9.8), and the inclusion of the animals (mentioned three times).

Later covenant administrations were limited and exclusive. The Abrahamic covenant administration related to those who were called out of the pagan world before the Messiah came, and applied only to Abraham's physical offspring—although it has a typical application to his spiritual offspring by faith (Rom 4.13-17). The Mosaic administration related to those who were ethnically Jews, and who observed the sacrificial ceremonies pointing to the Messiah. The New Covenant administration relates to those who have been called out of the world to be the spiritual Israel, who are baptized into the household of faith in Jesus, and who worship God in Spirit and truth. In contrast, the New World Covenant applies to all mankind—in all times and in all nations. Thus, the obligations of this covenant (Gen 9.1-7) are perpetual, the blessing of the preservation of mankind are continual (Gen 9.11, 14-15), and the sign is made clearly visible to all creation (Gen 9.12-17). Thus, the New World Covenant is an everlasting covenant (Gen 9.16), for all future generations (Gen 9.12), which cannot be annulled and will stand until the end of time (Gen 8.22).

The covenant administration enacted with Noah is the first one which is formally referred to in Scripture as a covenant. The previous covenant administration, made with Adam, was not referred to as a covenant, although it had all the key components of later covenants—the naming of the two parties, an announcement of the duties, blessings and curses, a sign or seal, and a ratification ceremony with a meal. Therefore, the concept of covenant making, and the term 'covenant' come from God, not from man. Although there are significant similarities between Biblical covenant administrations and human covenants such as a royal grant covenant or a Hittite treaty, God did not adapt those models for his covenant administration—this covenant administration predates the Hittite treaties by over 1,000 years. Therefore, human treaties and covenants made after the flood are based on concepts handed down by tradition from the days of Noah. Covenant making is not a human invention, but rather it is a divine institution.

New World Covenant – Promised Continuity [November 5] (Gen 9.11 14-15)

Every time we see a rainbow after a violent thunderstorm, we should reflect on the promise which it directly symbolizes—that God will never again destroy the earth by a worldwide flood. However, it has broader application than mere preservation from a worldwide flood. The sign of the rainbow in the sky is a symbol of the promise which God made (Gen 8.21-22), and repeats here, that, until the end of time, there will never again be *any* global calamity (including a virus!) which will wipe out all of mankind or all the animals.

God says that upon his seeing the rainbow he will remember his promise and fulfill the covenant obligations he has imposed on himself to preserve mankind. When God says that he will remember, this does not mean that he could ever forget anything—an omniscient God cannot not know everything. Rather, using an expression from human language, God informs us that he will perpetually remind himself of the promise he has made.

God permitted men to go their own way in the antediluvian world and then dealt with their rebellion through the flood. He thereby demonstrated his just dealings with mankind's sin. However, he also demonstrated that the outward cleansing with water could not change the heart of man, which quickly returned to evil, and continues to be desperately wicked (Gen 6.5; Jer 17.9). By this twofold demonstration, God shows that there can be no solution to the problem of sin from within natural man, and that God himself must provide the solution.

Thus, the promise to preserve mankind was not given because mankind had been reformed by the flood. The reason God withholds global calamities is that his mercy and love transcend our wickedness. Man's failure opened the way for God's solution to sin—the provision of a perfect God-man who could act on mankind's behalf. God's goal is to offer life, abundant life and eternal life, to mankind. The rainbow is God's firm assurance of his general goodwill

toward mankind and that his primary desire is that many will turn to him in repentance and live forever as part of his renewed humanity. By withholding global calamities, God shows what he can do, but also what he will do, in the renovated world.

The promise to preserve mankind from global calamities does not hinder God from using local disasters to warn and punish mankind temporally. Although we must be careful not to attribute calamity to a specific sin (Jn 9.2-3), yet we may conclude that when God sends calamities on nations or cities (Amos 3.6), he is reminding mankind that his hand has not been shortened and that ultimately sin must be dealt with justly—as it will be at the end of time.

The end of time is coming. When we considered Genesis 8.22 (see, <u>*The End is Near*</u> [October 14]) we noted that there are multiple lines of evidence which support the view that mankind's tenure on this earth will end relatively soon. However, we should not engage in the fancies of many, who make end-time predictions—even to the hour. History shows the foolishness of such endeavours, for example,

- Although some scholars claim it to be a recent reading into the past, there is evidence that many in the 10th century believed, based on a faulty reading of Revelation 20.3, that the end of time would come sometime during the 11th century—e.g., around Eastertime in 1033, 1,000 years after the crucifixion, resurrection, and ascension of Jesus.
- Pierre d'Ailly (c. 1400), the French theologian, calculated that there had been 6,845 years of human history and that the world would end in 1555, when the world would be 7,000 years old.
- In 1523 London astrologers caused many to be concerned over the alignment of the planets in the constellation Pisces (the fish) on February 1st, 1524. Their claim was that God would again wipe the world clean with a cataclysmic flood. Some people built arks and thousands of people living in London fled to higher ground. Others viewed that date as the beginning of the millennium—predicting that the world will end in 2523.

There have been so many such predictions that a descriptive catalogue of the calculations for the predictions and their consequences would fill pages. The list of men making predictions includes prominent names such as Christopher Columbus (1658), Nostradamus (1999), John Napier (1688, 1700), James Ussher (1977), Cotton Mather (1697, 1716, 1736), Isaac Newton (2000), John Wesley (1836), Jonathan Edwards (2000), Charles Russell and the Jehovah's Witnesses (1874, 1914, 1941, 1975, 1984), Herbert W. Armstrong (1936, 1943, 1972, 1975), Pat Robertson (1982, 2007), Harold Camping (1994, 1995, 2011), Jerry Falwell (2000), Tim LaHaye (2000), Ed Dobson (2000). Even the Connecticut General Assembly made a prediction (1780).

The return of Jesus, the day of judgement, the consumption of this physical universe by fire (2 Pt 3.7, 10-12), and re-creation of heavens and earth (2 Pt 3.13) will not happen on a date that men have worked out by their spurious calculations. Jesus is clear, no man knows the hour or the day when these events will occur (Mt 24.36). Rather, Jesus will return when mankind least expects it (Lk 12.40); for example, on a Sunday when the 'entire' world is watching a world cup championship soccer game. Then, our time will end, and the promise of continuity will be fulfilled in God's everlasting paradise.

New World Covenant – Rainbow Sign [November 6] (Gen 9.12-17)

God's appointment of the rainbow as the sign and seal of the universal New World Covenant was appropriate because of its:

- *Beauty*. A rainbow is a spectacular sight when it is embossed on receding dark clouds, after a violent thunderstorm. God uses the imagery of a rainbow as a symbol of heavenly glory (Ezk 1.28; Rev 4.3; Rev 10.1).
- *Global visibility.* The rainbow is not limited to any particular culture, so is known to every people-group. In contrast, sheep and goats used in the Mosaic covenant administration were not known in some parts of the world (e.g., in South America) until the Europeans arrived. And grape wine, used for the observance of New Covenant sacrament, was not available in every society.

- *Extent*. A rainbow arch is large, symbolizing the all-encompassing nature of the covenant. Everyone who dwells under its arch is included under the covenant.
- *Significance*. In the immediate post-flood context, when the skies grew dark and heavy storms arrived, Noah and his family would have been reminded of the rain that had fallen for weeks and flooded the entire earth. Then, after the storm passed and the sky cleared, the setting sun, at the right angle (within 42° of the horizon), would have created a 'beacon' of light to bring to their memory the promise that no storm would ever again flood the entire earth.

The commentators disagree over whether the rainbow had been visible before the flood. Calvin, for instance, writing on the sacraments (in the *Institutes*), states that God took an ordinary tree in the Garden of Eden and designated it as the tree of life, as a sign of the Covenant of Creation. Likewise, God designated the rainbow as the sign of the New World Covenant. He may have done the same thing with circumcision—there is evidence that it was applied in the Egypt and the Middle East before the time of Abraham. Also, Jesus used commonly available elements (bread and wine) for the sacramental signs of the New Covenant. Others, such as Leupold, believe that the rainbow appeared for the first time after the flood, reinforcing the solemnity of the occasion, and ratifying the covenant, with an awe-inspiring sign. Some believe that there was no rain during the 1,656 years leading to the flood and this is the reason why the rainbow had not been seen.²¹ Rainbows are not only visible after a storm, but in waterfalls and fountains. So, if a rainbow had never been seen by anyone prior to the flood, then the nature of physics and the workings of the hydrological cycle must have been radically different than they are today. However, it is unnecessary to postulate such a radical change in the operations of the natural realm and, consistent with Scripture, to accept the appointment of the previously existing rainbow as the sign of the New World Covenant.

The rainbow sign serves a number of purposes, including:

- *Reminder for God.* God explicitly states that when he sees the bow in the clouds, he will perpetually remember his promise to withhold universal temporal judgement on mankind.
- *Pledge of peace*. God is at war with mankind over their sin. In the flood, he defeated the rebels and won a great battle. Yet, in making the covenant with Noah he offers peace to the remnants of the defeated forces.
- *Reminder for mankind.* When we see the rainbow, we should recall the promise that God is withholding judgement until the end of time and utter a prayer of thanks for his goodness and preserving mercy.
- *Encouragement*. We can be encouraged when we see a rainbow because it speaks of the hope of victory over sin, in a world consumed by it.
- *Assurance*. Rainstorms have occurred for 4,400 years since the flood. But each time, the rains stop, the clouds blow away, and a rainbow appears. This consistency assures us of the reliability of God's word.
- *Seal.* In the Lord's Supper, we consume a piece of bread and drink a sip of wine. There is nothing magical about the elements, they retain their physical nature. Nevertheless, they are means of grace to strengthen our faith in what Jesus did on the cross. Likewise, God seals his promise of ongoing temporal grace with the physical sign in the clouds, to confirm and strengthen our faith.
- *Pointer to Christ.* The atmospheric rainbow is caused by a scattering of light from the sun. The behaviour of the physical light points to the spiritual light of the Son, who is the true light of the world (Jn 8.12), and to the light which he shines into our hearts (2 Cor 4.6).
- *Symbol of judgement*. The rainbow is a Christian covenantal element, having been designated as a sign of mercy by the living God. Therefore, the usurpation of the rainbow symbol by organizations associated with the homosexual community is a blasphemous perversion of the sign of the universal Covenant of Grace. God will not hold guiltless those who abuse his appointed sign. Thus, the rainbow becomes, for them, a symbol of pending judgement. However, the rainbow is not merely a symbol of judgement for them, it is a symbol of the general judgement which is yet to come. God promises to withhold judgement only as long as the earth remains (Gen 8.22). When God's patient forbearance in general grace ends, the rainbow sign will be removed, and the day of judgement will arrive.

 $^{^{21}}$ We addressed the question of whether there was rain before the flood, when we looked at 2.5.

Covenant Signs and Seals [November 7] (Gen 9.12-17)

In the previous meditation, we considered reasons why the rainbow is a fitting sign of the New World Covenant. However, in these verses we find the first formal reference to a covenantal sign. This raises a question which we will now address, why does God associate signs (and seals) with his covenant administrations?

First, we should note that there may not be a significant distinction between a covenant sign and seal—a sign can also be a seal; for example, by using the rainbow as a sign, God was also sealing his commitment to the covenant (Gen 9.14-15). However, there may be a subtle distinction between the two—a sign is generally a visible indicator, dictated by God, that a person is a member of the covenant community; whereas a seal is a participatory activity for persons in the covenant community, who make an active profession of faith, which reinforces their faith. For example, baptism in the case of infants is a sign that they are members of the New Covenant community. In the case of adults, baptism can be both a sign and seal—indicating their entrance into the covenant community and reinforcing their profession of faith. The Lord's Supper is a seal of the covenant for the professing community.

Redemptive history is structured around covenantal administrations. Each covenant administration between God and man has different emphases and may introduce different signs or seals to reinforce a particular emphasis. We noted that the signs and seals of the covenant made with Adam were the tree of life and the Sabbath (see, <u>*The Covenant of Creation*</u> [March 30]). Each subsequent administration of the covenant between God and mankind has included signs and seals. The New World Covenant included the rainbow as its sign—all mankind is part of that covenant community, whether they acknowledge it, or not—and sacrifices of ceremonially clean animals was a participatory seal for those who made a profession of faith.

The National Covenant (with Abraham) included circumcision as a sign, but did not change anything with respect to the sacrifices—although there is a hint of changes which would be introduced at the time of the Messiah, in the fellowship meal of bread and wine which Abraham and Melchizedek shared. The Sinaitic Covenant (with Moses) did not change the sign of circumcision, but it did formalize the ceremonial sacrificial system and reinforced the Sabbath seal introduced in the Covenant of Creation (Ex 31.16). However, it did add a feature to the sealing elements with the Passover. The Royal (with David) and Priestly (with Phinehas) covenant administrations continued the signs and seals from previous covenants. Although, the introduction of the Davidic scepter may be a sign which pointed to the Kingdom of the Messiah. Also, the temple, built by David's son Solomon, with its new forms of worship rituals may have been a seal of these covenants. The New Covenant (with Christ) introduced radical changes with the institution of Baptism and the Lord's Supper. These removed the bloody elements of the covenant administration which had ruled from the days of Abel and Noah, and replaced them with bloodless observations, which emphasized their spiritual nature.

Reasons why God introduced covenantal signs and seals may be to:

- *Ratify.* When humans make a covenant (e.g., a contract or a treaty) they often ratify the covenant documents with a signing ceremony, which makes for a great photo opportunity. God doesn't sign 'on the dotted line', but nevertheless he does sign his covenants; for example, the smoking pot and flaming torch that passed between the pieces of meat (Gen 15.17), the Ten Commandments written on stone by the finger of God (Ex 31.18), and the blood of Jesus shed on the cross at Golgotha.
- *Reinforce*. When humans commit to a marriage covenant, they usually exchange rings. These are a symbol of their vows and reinforce the solemnity of their commitment to the covenant which they have just entered into. Likewise, God reinforced the solemnity of the covenant with signs such as circumcision and through drinking the wine and eating the bread in the Lord's Supper.
- *Remind*. When a male Israelite looked at his pubic area, he was reminded that he was covenanted to God and that he should be faithful to that covenant—particularly in keeping the marriage bed pure. Likewise, today when

married individuals see the rings on their fingers they are reminded of their covenantal relationship with their spouses. God also is reminded of the covenant he has made when he sees the rainbow (Gen 9.16).

- *Reassure*. The signs and seals of the covenant reassure participants in the covenant that the promises associated with the covenant are certain. God promised, through the sign of the rainbow, that as long as time remained, he would never again destroy all mankind on the earth with a cataclysmic event (Gen 9.15). In the Lord's Supper, we are reassured that Jesus will return and take us to be with him (Jn 14.18) to partake of the everlasting feast in Heaven. And, the Sabbath (now observed as the Lord's Day), a perpetual sign associated with all covenant administrations, is a promise of the restoration of all things.
- *Represent*. The signs and seals have a representative element. For example, a wedding ring is not the covenant vows nor the marriage itself. The signs point to something greater. In God's covenant administrations, the signs and seals point to the ultimate reality fulfilled in Jesus Christ.

Noah's Descendants [November 8] (Gen 9.18-19)

These verses serve as a bridging *janus*, looking back to the old world, with a reference to the ark, and forward to the new world, with a reference to the repopulation of the whole earth. They conclude the account of the flood and anticipate the:

- Worldwide dispersion of mankind, as recorded in chapter 10 and 11.8.
- Reintroduction of sin into the world, particularly sexual perversion, as implied by the naming of Ham's son, Canaan.
- Fulfillment of the covenant promise given to Eve (Gen 3.15), as implied by the order in which the sons are named.

Even though Noah lived for 350 years after the flood began, it appears that no other sons (or daughters) were born to him. This does not mean that Noah had had no other children before the flood, who perished in the flood—the English translations supply a verb ('were', in the ESV) in verse 19. We could translate verse 19 as, "From these three sons of Noah were dispersed all (the inhabitants of) the earth." God arranged matters so that all of the new world's population would be descended from one of the three named sons of Noah who had lived through the flood and were eyewitness to the cataclysm.

Paul, speaking to the Athenian council, emphasizes the unity of mankind, when he proclaims that all people are descended from one man—either Adam or Noah (Acts 17.26). At the time of Noah and his sons there was no national or ethnic differentiation in the human population—this differentiation arose when God forced men to disperse through the confusion of languages at the time of the Tower of Babel (Gen 11.1-9), and individuals in small breeding populations, based around a common language, began to show distinctive phenotypic variation. Differentiation around phenotypic characteristics is the result of the punishment of man's hubris, not what God originally intended for mankind. This means that any form of phenotypic prejudice or ethnic snobbery are violations of God's good order. As the Church evangelizes the world, it must strive to break down artificial barriers, such as those based on skin colour, and unite mankind from every nation into the one worshiping Church (Rev 7.9).

This account states that all inhabitants of the world are descended from one of the three sons of Noah. This must influence what we believe, for example:

- All of mankind has the same genotype. This has been demonstrated by recent DNA research. All human diversity arose from the three couples who accompanied Noah in the ark.
- The flood was universal, not local. All antediluvians were destroyed by the flood. No person can consistently claim to be a Christian and that some human or humanoid population groups escaped the flood.
- Reported dates for post-flood population groups, such as Neanderthals inhabiting Northern Spain (~25,000 years ago), are wrong. Regardless of what the academic community claims, no human settlements survived the flood (about 2345 BC); all human settlement remains are post-flood.

- The Neanderthals lived after the flood and were descended from one of the three sons of Noah. Studies showing that Neanderthals used tools, ate cooked meats and plant foods, and understood the medicinal properties of plants, reinforce the fact that the Neanderthals were entirely human, and not, as claimed, a branch of hominoids separate from modern humans.
- Post-flood aboriginal populations are not the precursors of modern man, in an evolutionary process. Their subsistence lifestyle is indicative of what men deteriorate into when they migrate away from locations where the true God is known and revered.
- Studies of mitochondrial DNA demonstrate that all human populations dispersed from a single point. Objective assessment of the data will show that the origin point is in the Middle East, near the landing site of the ark. Africa is not the cradle of life, as claimed by evolutionists.

Canaan is mentioned here because of what follows—Noah's and Ham's sins, and the curse on Ham's son, Canaan. It is probable that when this account was written down (by Shem, representing the three sons of Noah; Gen 10:1) the outcome of Noah's prophecy (Gen 9.25) was already being realized among the Canaanites—Shem lived for 500 years after the flood (Gen 11.11), until the time of Jacob. Canaan's name is included here as a symbol for the sexually perverse behaviour that was displayed by his father and by his descendants. The iniquity of the Canaanites would not reach its full measure for about 1,000 years; the expression of it began to be manifest within a generation. This served as a warning to the called-out ones (Abram the Hebrew, and his progeny) that the nations which surrounded them were morally destitute.

Shem was not Noah's firstborn son by birth order (see, *Noah and His Sons* [July 24]), but the one through whom the birthright passed. Thus, he is named first. Adam fathered a righteous son—Seth—who was not his oldest yet was the one through whom the promised offspring of the woman would be realized (Gen 3.15). Likewise, Noah propagated the privileged line of blessing, leading to the Messiah, through a son other than his eldest. This indicates that God's salvific plans will be fulfilled in his way. However, the naming of Shem first also indicates that God had not forgotten his covenant promises. As mankind began to re-fill the earth, God demonstrated that he was going to maintain a righteous line which would produce the saviour of the world.

Neanderthals – Noah's Descendants [November 9] (Gen 9.18-19)

We made mention of the Neanderthals in the previous meditation but did not addressed them specifically. A search on *Google Trends* indicates that the average interest in this topic remained relatively constant for over a decade. People seem to have a continuing fascination in knowing more about these 'archaic humans'. Therefore, today, we will consider these descendants of Noah and determine what the varying opinions about them can teach us.

Fossilized skulls, of what are called Neanderthal, were first discovered in Belgium in 1829 and again in Gibraltar in 1848. The name 'Neanderthal' was given to a class of skulls, after an 1856 discovery in the Neander valley in Germany. Since then, many similar skulls (and additional skeletal remains) have been found in a number of limestone caves—thus giving Neanderthals the popular name 'cavemen'. The distinctive characteristic of Neanderthal fossils is an enhanced bony ridge above the eyes. However, the average cranial volume of fossils classified as Neanderthal is about 1600cc, much larger than the 1400cc average for humans today. The remainder of their skeletal anatomy does not differ markedly from that of modern humans—except that the fossils indicate that the body structures were generally shorter and stockier than today's average human form.

Since the classification of these skulls as Neanderthal, there has been debate about how closely related the Neanderthals are to today's human genotype. The *Encyclopedia Britannica* (11th edition, 1911) stated that "The cranium [of the 1856 discovery], pronounced by Huxley to be the most ape-like yet discovered, was remarkable for its enormous superciliary ridges." The article refers to Thomas Huxley (1825-1895), known as 'Darwin's Bulldog', and gives his assessment as 'ape-like' with 'enormous' bone ridge above the eyes. Yet, the same article refers to

the bones as "human remains". Subsequent discoveries of similar skulls throughout Europe (and Asia and parts of Africa) have indicated that the Neanderthal type does not have as pronounced ('enormous') a bone ridge as was suggested in the late 19th century.

An article in *Collier's Encyclopedia* (1981) is considerably more tentative about the differences between the Neanderthal type and modern humans. The article states, "Neanderthal Man seems to be the subject of more misinformation among laymen than is the case with any other fossil. Neanderthals have been pictured as squat, hairy, brutish creatures with bent legs and heads thrust forward on short necks to give an impression that they had not quite attained erect posture. ... The evidence is quite impressive that this image is grossly distorted. ... [G]iven a shave and a haircut, and suitable clothing any of the Neanderthals might move among us without attracting special attention, although they would be noticeably square, squat, and stocky. ... The variation that is evident among the Neanderthal seems in many respects to be analogous to racial difference in historic populations."

Recent articles, published in the popular media, indicate that there is essentially no difference between Neanderthals and modern humans. For example: "Signs of Neanderthals Mating with Humans" (*NY Times*, 2010-05-06), "Are Neanderthals Human?" (*NOVA*, 2012-09-20), "Neanderthal mothers breastfed their babies for over a year—just like humans" (*MailOnline*, 2013-05-23) "Humans and Neanderthals interbred" (*Science Daily*, 2014-04-08), "Neanderthals were not inferior to modern humans" (*Science Daily*, 2014-04-30). *National Geographic*, a bastion of evolutionary theory, cannot quite come to the conclusion that the Neanderthals were like modern humans, "Gap Between Neanderthals and Us Narrows, But Does Not Close" (2014-05-02). Yet the physical evidence supports the conclusion that the Neanderthals were not a separate species from *Homo sapiens*, but fully human. Detritus found in Neanderthal caves shows evidence of cooking meat, tool use, language, artistic skills, using plants with medicinal properties, and religious rituals. Also, there are a number of people groups living today which have the same pronounced brow ridge as the Neanderthal type.

The ongoing assessment of Neanderthal fossils provide a number of lessons:

- Early claims that the skulls were the 'most ape-like' and that Neanderthal were a primitive type have been replaced by more recent suggestions that they fall within the range of modern humans. What may have, at one time, been considered a 'missing link' between 'apes' and man, is now classed with man. This is how it will be with all claimed pre-hominoid fossils. They are either ape or man, and not something in between.
- Many things which, at one time, were declared to be absolute certainties about the Neanderthal have since been overthrown. In a similar way, the 'facts' about evolution are being overthrown by many findings of modern research into the structure of cells and animal forms.
- Proponents of evolution claim that the Neanderthal went extinct ~25,000 years ago. But they didn't go *extinct*, since they were fully human, and humans have not gone extinct! Evolutionists teach this because they can't accept the alternative—that the skeletal remains of humans, *classed* as Neanderthal, are from descendants of Noah who were early migrants out of the Middle East, after 2345 BC. Evolutionists reject the Biblical account, not because of empirical evidence but because the alternative is repugnant; thus, demonstrating the bankruptcy of evolutionary thinking.

Human Population Dispersion [November 10] (Gen 9.19; Gen 10.32; Gen 11.8-9)

In these verses, we find a reference to the repopulation of the earth, as Noah's descendants were dispersed from Babel in Shinar. When we study chapter 11, we will consider the primary cause of this dispersion—the language division, after a united mankind attempted to build a tower to challenge God's authority. Today we will consider only that Shem, the principal author of these sections of Genesis, tells us that mankind was dispersed throughout the whole earth.

This dispersal has been a major obstacle to belief for many people-causing them to question the authenticity of

the Genesis account. They question, for example, how the aboriginal peoples of Australia reached that land after the flood. They generally argue that the aboriginal peoples (and native animals of Australia) were present before the flood and that the flood, if it occurred at all, was a local phenomenon. However, since all mankind and all landbased animals were destroyed in the flood (Gen 6.17; Gen 7.18-21), the repopulation of the earth must have occurred in less than 4,400 years.

In a later passage, the ESV refers to the 'coastland peoples' (Gen 10.5). The KJV uses the word 'isles' instead of 'coastland', and the NIV translates the Hebrew word as 'maritime'. The Greek translation of the OT (Septuagint) uses the Greek word for 'island'. So, it appears that shortly after the flood, and certainly within the lifetime of Shem, and therefore before 1840 BC (the approximate date of his death), mankind was able to travel by piloted ships beyond the immediate shores of the mainland and to reach islands. Thus, one of the means whereby men were able to reach distant lands was by ship.

There has been considerable debate about whether ancient sailors would continuously hug the shoreline as they sailed or if they would sail out of sight of land. However, even historians who do not accept the Bible as an accurate account of history, contend that some distant islands (reachable only by sea) were settled before 2000 BC. For example, it is claimed that the Shetland Islands were settled before 4000 BC, during the putative Mesolithic period. We would contest that suggested date, since the flood occurred about 2345 BC. Regardless of the exact date when these islands were settled, the fact is that migration by ship was certainly occurring throughout the Mediterranean, along the coasts of Africa and Northern Europe, and in the Persian Gulf and Bay of Bengal well before 1000 BC.

Other migrants would have travelled by foot in areas which were not densely forested. For example, migration into China probably occurred before 1600 BC as there are written historical records (oracle bones) from the Shang Dynasty. These migrants would likely have been able to use camels, donkeys, and horses to carry human passengers and transport loads. These animals were domesticated by 2000 BC (Gen 12.16; Job 1.3; Job 42.12).

It is believed that some aboriginal settlers in North America arrived on foot via the Bering Strait. As the ice age progressed (from about 2345 BC to 1700 BC) significant quantities of water were frozen in the glaciers of continental North America, Europe, Asia's mountains, and Antarctica. At maximum glaciation, sea levels were considerably lower than they are today. Thus, the idea that travellers were able to cross to new continents or islands on land (or ice) 'bridges'—for example, across the Bering Strait—appears to have merit. A land bridge that is now submerged, but may have been exposed during the ice age, is Sundaland, a portion of the Asian continental shelf connecting the Malay Peninsula, and the islands of Borneo, Java, and Sumatra to the Asian mainland. Also, an area which may have been exposed during the ice age is the Sahul Shelf, connecting Australia with Papua New Guinea. This would have permitted relatively short voyages between the exposed continental shelves of Sundaland and Sahul, via the intervening islands. If this was the case, contrary to the commonly levelled canard, aboriginal migrants would have been able to reach Australia with relative ease as early as 1700 BC. In addition, it is possible that the continents were closer together 4,000 years ago, than they are today. During the flood, the original continent was broken up and the new continents began to separate. They are still drifting apart today, but the rate is considerably slower than it was in the past.

The world is 40,000 km in circumference. A person could walk (at 10 km per day) halfway around the world in 2,000 days. Thus, if a clan of migrants had walked only 10km every other day, with a day between each day of travel for rest, grazing, and foraging, they could have reached nearly any point on earth, accessible by foot, in about fifteen years. Of course, the clans leaving Mesopotamia would likely not have travelled at this rapid pace. They would have migrated over generations. In some locales, they would have been hindered by forests and in others they would have had to ford rivers and build boats to traverse large bodies of water. Regardless, in the 4,200 years since the confusion of language at Babel, even the most distant points from Shinar could have been reached by deliberate migrants or by travellers blown off course. For example, the Seychelles islands, Iceland, Greenland, Hawaiian Islands, Easter Island, and New Zealand were finally reached during the European Middle Ages. Clearly, Shem's statement that mankind was dispersed throughout the *whole* earth is realistic.

Noah's Sin [November 11] (Gen 9.20-21)

Being drunk is a sin (Rom 13.13; 1 Pt 4.3). Noah is charged here with this sin with poignant abruptness, "he became drunk". His lack of discipline and self-control led to his exposing himself, which led to the sin of Ham.

We must not suppose that Noah had no idea about the intoxicating effects of wine when he planted his vineyard and produced wine from the grapes. Noah knew how to make wine, since grape juice has to be deliberately fermented in a controlled environment to make it into an alcoholic beverage. He likely had brought seeds and cuttings of various kinds with him in the ark. Immediately after the flood, he resumed his vocation as a farmer and gardener, from which he had been diverted somewhat while building the ark. The ESV's (and other's) translation, "began to be" implies that this was an entirely new activity for Noah. The Hebrew word used here is difficult to translate (in some instances it means 'defile' or 'profane'). A possible way to translate is as "proceeded" (NIV). Also, there is no evidence that the biochemical effects of fermentation were any different after the flood than before the flood. And it is likely that Noah took wine and beer with him in ark as part of his food supply—water stored in wooden casks goes bad quickly. Sometime after the food supplies they had carried in the ark had been consumed, Noah missed the soothing effect of a cup of wine (Ps 104.15) and set out to re-supply his wine cellar. However, once he tasted the new wine, he lost control and consumed to excess, never intending to become drunk.

Drinking to excess had undoubtedly been one of the many grievous sins of the antediluvians, which Noah had been able to avoid for over 600 years. The problem, in Noah's case, was that after the flood he let down his guard. Living a long life of control and circumspection is hard work. It was some time after the flood when Noah made his wine, since his vineyard had produced grapes (it can take three to five years for newly planted vines to begin producing grapes) and Ham already had at least one son (Canaan) and possibly four (Gen 10.6). The barren earth was again covered in vegetation and erosion was under control, the earth was giving its fruit again, their flocks and herds were increasing, and their families had started to grow. The situation in the new world was looking positive and hopeful. So, as the events of the flood had begun to fade from foremost in Noah's mind, he forgot how bad things had been before the flood and he relaxed and fell into sin.

This short account provides a number of important lessons:

- Farming was not a late invention which took centuries for men to master. Men did not pass through a huntergatherer phase and eventually settle into farming. Adam was a gardener, Cain a farmer, and Abel a shepherd. Noah resumed farming immediately after they had exited the ark. Tribes that subsist primarily on hunting and gathering are not the primitive root of modern man but what men deteriorate into when they depart from civilization. Contrary to modern anthropological thinking, the early missionaries had it right—the lifestyle of the aboriginal peoples had to be abandoned as pagan superstition, not protected as primitive simplicity.
- Self-control is required throughout our entire lives. Paul and Peter, for example, emphasize that all people, of every age, must apply self-control (1 Thess 5.6-8; Titus 2.2-12; 1 Pt 1.13; 1 Pt 4.7; 1 Pt 5.8). Even those who have been explicitly declared to be righteous (Gen 6.9; Gen 7.1; Ezk 14.14, 20) must maintain self-control.
- Satan is wily and uses an opportunity to tempt us when we least expect it. He had been unable to corrupt Noah during the years leading to the flood, when Noah faced serious challenges of this faith. Yet, when a test of faith didn't seem to be required, Satan found a crack and pried open a chasm. This carelessness is often the result of pride. Thus, Paul warns us not to think that we can't fall into temptation (1 Cor 10.12).
- This is the solitary stain in the life of Noah. While there can be no excuse for his getting drunk, it can encourage us. David and Solomon are other examples of men who, despite great knowledge about the truth and a love for God, let down their guards later in life and fell into shameful sin. The sins of these righteous men remind us that while no mere man is perfect, and that all men have sinned and have fallen short of God's standards, there is still forgiveness available. Noah, after all, was saved and is in Heaven (Heb 11.7).
- There is no such thing as a small sin. James tells us that to commit any sin is to break the whole law (James

2.10). Some writers state that Noah's drunkenness and exposing his nakedness were mere lapses and relatively minor matters to be excused in an old man. They say that Ham's sin was much graver. In contrast, Calvin calls Noah's drunkenness a "filthy and detestable crime". We like to categorize sin (a 'white lie', an 'indiscretion', minor *vs* major, etc.) so that we can rationalize it away. Jesus puts a lie to our thinking in the *Sermon on the Mount*—sin is sin, whether only conceived in the heart or carried out in despicable actions.

- The harmful consequences of the misuse of alcohol to an individual and his family are something we are warned of by the example of Noah
- Sin compounds, one sin leads to others; for example, the adulterer lies to cover his sin and may resort (as David did) to murder to keep his adultery a secret. In Noah's case his drunkenness led to his shamefully exposing his nakedness and was followed by the sin of his youngest son, Ham.

Adam, the Second Adam, and the Last Adam [November 12] (Gen 9.20-21)

Noah is presented in the Biblical account as a second Adam. There are a number of significant parallels between the two:

- Each is a father from whom all mankind is descended (Acts 17.26).
- Both have a relationship with the ground. Adam was created of the ground, and his name is derived from the Hebrew word 'ground'. In Noah's case, the word 'soil' (Gen 9.20) is the same word translated elsewhere as 'ground' or 'land' (Gen 6.7, 20; Gen 7.4, 8, 23; Gen 8.8, 13, 21; Gen 9.2).
- Both had duties related to tending plants from which they could consume the fruit (Gen 2.15; Gen 9.20). Adam tended the garden that God had planted (Gen 2.8) and Noah planted a vineyard (Gen 9.20).
- Both had to toil to maintain their livelihoods from the cursed ground.
- God made a covenant with each of them—the Covenant of Creation with Adam, the New World Covenant with Noah—and each acted as a human mediator who represented all of mankind.
- Each had delegated sovereignty over the animals which God brought to them (Gen 2.19-20; Gen 6.19-20).
- Each was given an earth, devoid of humans, and a command and a blessing to multiply and fill it with inhabitants (Gen 1.28; Gen 9.1).
- Both committed sins related to consuming fruit—Adam ate the forbidden fruit from the tree of the knowledge of good and evil; Noah became drunk consuming a by-product of the fruit of the vine.
- The shame of nakedness was associated with their sins (Gen 3.7, 10-11; Gen 9.21).
- Their nakedness had to be covered by others (Gen 3.21; Gen 9.23).
- Both had sons (Cain and Ham) who committed sins which became the defining sins for their age.
- Both of their personal sins introduced conflict into their families—Cain murdered Abel (Gen 4.8) and was banished from his brothers (Gen 4.12), and Canaan became a slave to his brothers (Gen 9.25-26).
- Both had immediate descendants who were cursed (Gen 4.11; Gen 9.25).
- Both lived for almost a millennium—Adam, 930 years; Noah, 950 years.
- The involuntary death of each is reported (Gen 5.5; Gen 9.28).
- Despite their sin, both walked with God (implied, Gen 3.8; Gen 6.9) and both believed God and took him at his word (implied, Gen 3.20; Gen 4.1; Gen 6.22).
- Both knew that God required shed blood and animal sacrifices as a type for the ultimate atonement which man needs to cover sin (Gen 4.4; Gen 8.20).
- Both were blessed by God (Gen 5.2; Gen 9.1).

The second Adam failed, as the first one had, to leave behind offspring who were obedient to God. The fresh start after the flood was not the answer to sin and the curse on creation. God had guaranteed seasonal continuity and fruition (Gen 8.22; Gen 9.11). Yet, this did not change the heart of man. In less than a generation, and within a few years, sin came roaring back into the world. No outward, or human-initiated, cleansing can get rid of the sin that is in man's heart. Consider, as an example, programs to rid the world, a country, or a city of poverty. The authors of

these programs often claim that if we do something specific (usually make larger donations or spend more tax dollars) we can eradicate poverty within an established number of years. They may have good intentions, but they ignore the reality, proven by events after the flood, that changing the outer circumstances of man will not change his heart.

Just as a change of an individual's character and attitudes is required if he is to overcome poverty, so must a change be wrought in his heart if sin is to be eradicated. What was needed for mankind was not a *second* Adam but the *Last* Adam, who is Jesus Christ (1 Cor 15.45), who:

- Is the spiritual father of all who believe (1 Jn 3.1-2).
- Unlike Adam, is not of the ground but from Heaven (1 Cor 15.47).
- Tends his garden to produce righteous fruit (Is 5.1-7; Gal 5.22-24).
- Had to toil under the consequences of the curse by humbling himself (Is 53.3; Phil 2.7-8; Heb 12.2) so that he could abolish the curse of toil for us (Rom 8.22-23; Rev 22.3).
- Is the mediator of the better New Covenant in his blood (Lk 22.19-20).
- Has been given ultimate authority over all creation (Mt 28.18; Jn 17.2).
- Will fill an empty paradise with his people—the ones whom he came to the earth to die for and to save (Lk 23.43; Rev 2.7; Rev 7.9).
- Unlike Noah, resisted the temptation of wine, when it was offered to dull his pain (Mk 15.23), and to taste forbidden 'fruit' (Mt 4.1-11).
- Became associated with the shame of sinful human nakedness, when his tormentors stripped him and cast lots for his clothing (Mk 15.24).
- Had his nakedness covered by others, before being laid in a tomb (Mt 27.59).
- As God, has 'sons' who are also his holy brothers and sisters (Heb 2.10).
- Brings about family reconciliation among the saved, rather than discord (Col 1.20).
- Gives his sons blessings, not curses (Ps 2.12; Mt 5.3-12; Lk 24.50).
- Does not live for a little short of a millennium, but forever (Rev 1.8), and gives to his people eternal life (Jn 3.15-16).
- Died voluntarily (Jn 15.13; Heb 2.9), so that he could conquer death through his resurrection (Ps 110.1; 1 Cor 15.26; Rom 1.4; Rev 1.18).
- Walked with God in full obedience (Ps 40.8) and fellowship (Jn 17.21).
- Gave his own blood as the perfect sacrificial lamb (Jn 1.29).
- Is blessed by God (Mt 3.17; Lk 1.42).

Ham's Sin [November 13] (Gen 9.22-24)

Noah's sinful drunken binge led to Ham's sin. There is considerable debate about the nature of Ham's sin, and two primary explanations of what he did. Some believe that the extent of his sin was to show disrespect for his father by observing his naked body while he was lying drunk and then ridiculing his father before his brothers. Others believe that Ham's sin was more egregious and that he sodomized his father while Noah was not in full control of his faculties. We will not consider other suggested explanations such as that he castrated his father, or he had sexual relations with his mother.

At face value, it is clear that Ham found his father lying drunk in his tent, observed that he was naked, and then went out and told his brothers about what he had seen. Many commentators suggest that this was the full extent of his sin. They argue that in ancient times for someone to see the patriarch of the family naked was to show disrespect for him. However, it is difficult to see how what is described in the passage could be a sin worthy of a cross-generational curse. If Ham inadvertently entered the tent of his father and saw him lying naked on his bed asleep, and then went and told his brothers about it, there could be no reproach. In fact, his behaviour should be commended, except we might ask why he didn't merely cover his father with a blanket. So, interpreters add that Ham delighted

in the inebriated state of his father and made fun of it to his brothers. They imply that Ham found his father's state comical, as if he said, "Mr. holier-than-thou isn't so good after all!" Chuckle. Chuckle. Those who hold this view say that modern readers don't understand the importance of filial duties in ancient cultures and the gravity of showing disrespect for a parent's failure. They say that Ham's sin was that he failed to honour his father and broke the fifth Commandment (Ex 20.12). A problem with this interpretation is that, despite their claim to be taking Scripture at face value, it is necessary for them to add a gloss to turn Ham's accidental observation into a sin. There is nothing in the words themselves which suggest that Ham ridiculed his father or showed disrespect for him.

Some interpreters focus on the word 'saw' and suggest that it could be translated as 'gazed' with passion (Hab 2.15), and that this means that Ham had impure sexual thoughts about his father (Gen 34.2). This is certainly a possible interpretation. However, again, this interpretation requires that a gloss be added to what the text says. So, regardless of how this passage is interpreted, it is necessary to find an implied or hidden motive beneath the stated Scriptural account in order to turn the simple statements about Ham's observation of his father into a sin.

The larger context of these verses appears to provide some assistance in how to understand the nature of Ham's sin. After Noah awoke from sleeping off the wine, he knew that something had been done to him and that Ham had done it. It would seem that this had to be more than Noah's realizing that someone had observed him in a drunken state. He had been asleep and would not have been aware that anyone had seen him, and thus would not have sought information about who it had been. There is no indication that Shem or Japheth were tattletales. If Noah had been sodomized, he would have been sore, and possibly in pain, and would have called together the only possible culprits and grilled them to determine who was guilty.

Leviticus 18.6-7 uses a euphemism—uncover nakedness—for illicit sexual intercourse. It is true that in Leviticus, homosexual acts are later described in a different manner (Lev 18.22), and to 'see' (Lev 20.17) or 'uncover the nakedness' of a person refers to improper heterosexual acts. However, the account of Ham's sin may be using Ham's seeing the nakedness of his father as a euphemism for the sexual sin of sodomy.

Another factor which suggests that Ham's sin was sodomy was the curse on Canaan (we will consider the curse in more detail in our next meditation) in response to Ham's action (Gen 9.25) and earlier references to Canaan (Gen 9.18, 22). Noah spoke prophetically in the curse on Canaan and his descendants. Sexual perversion was to become *the* defining characteristic of the Canaanites (Gen 18.16-19.29), and the Jews were to avoid their abominable religious practices (Ex 34.12-16; Dt 7.1-5; Dt 20.17-18), which included performing rituals with female and male prostitutes (Dt 23.17-18; 1 Ki 14.24).

Shem and Japheth showed proper respect for their father by walking in backwards and covering his naked body. However, their action is also a symbol of their abhorrence of what Ham had done in sodomizing his father.

It is invalid to claim that Ham, a member of the covenant community and one who had seen God work salvation through the flood, could not have committed a homosexual act. David, a true believer, committed adultery and murder. Many in the nation of Israel committed sexual sins at Peor (Num 31.16), even after seeing God's miracles in the desert. And, the Benjaminites wished to rape a man travelling home (Judges 19.22-23). There is no indication that Ham repented of his action. Thus, his action shows that sin came roaring back into the world after the flood and that even in the family of a righteous man there can be a traitor. The downward pull of sin cannot be stopped by providing mankind with a pristine environment. He needs to be born again!

Canaan is Cursed [November 14] (Gen 9.24-27)

In the account dealing with the flood, we encounter seven instances where God speaks directly with Noah. However, the only recorded words of Noah are found in 9.24-27. The first word from his mouth is 'cursed' indicating that the antediluvian curses (Gen 3.14-19) have not been removed by the flood. His pronouncement is significant because

it is more than an immediate reaction to Ham's sin. It is the first recorded imprecation from a man's mouth and a prophetic statement about the history of the tribes that would be descended from Canaan. The prophetic aspect of the pronouncement is reinforced by Ham's having named his son 'Canaan'. The name probably comes from a root which means 'submissive one'. Ham may have wished to indicate the obedience he expected from his son, but under God's providential guidance it had a prophetic meaning—they would be slaves.

Most commentators assume that Canaan was Ham's fourth son since he is listed last among the sons of Ham (Gen 10.6). However, there is nothing in the Bible indicating the birth order of Ham's sons. It is possible that Canaan was Ham's firstborn, since he is mentioned before any of the other sons, shortly after the flood (Gen 9.22). It is possible that he is listed last among the sons of Ham because he lost his right of firstborn as a result of the curse being placed upon him. If this is the case, then it may have been only a few years after the flood when Noah planted the vineyard, produced wine, and got drunk. Noah lived almost 350 years (Gen 9.28) after these events, yet his pronouncements (Gen 9.24-27) serve as a statement of his last will and testament. His words are immediately followed, in the account, by the announcement of his death.

If Canaan was in fact Ham's firstborn, then we can better understand why Noah cursed Canaan, rather than Ham directly, and why the other sons, born after these events, are neither cursed nor blessed. Noah (prophetically) had insight into what would become of Canaan and his descendants. Ham had committed an abominable sexual act against his father and Noah understood that sexual perversions (such as homosexual practices) are often associated with bad parental influence (e.g., a bad example or abuse by an over-bearing parent). Noah knew that Ham's sexual sin would result in an entire 'civilization' being formed around intensified sexual perversion. As we noted previously, sexual perversion became *the* defining characteristic of the Canaanites, and the Jews were to avoid their abominable religious practices, which included performing rituals with female and male prostitutes.

Some interpreters attempt to make an issue out of Canaan's curse. They claim that Canaan was punished for the sin of his father, contrary to the Mosaic law (Dt 24.16; Ezk 18.1-32). Rather, different Biblical principles are manifested in the imprecation against the Canaanites. The curse on the Canaanites shows that, without the intervening grace of God, a corporate personality prevails—as 'like gives birth to like', and children often inherit the wicked dispositions of their parents. Also, God visits consequences on the children for the sins of their parents (Ex 34.7). However, God didn't punish Canaan and his descendants for Ham's sin. The Canaanites were punished for their own sins. The imprecation was spoken against distant future generations, not because of Ham's sin but because they would act like their ancestor Ham.

The specific curse upon Canaan was that he would be a "servant of servants" to the rest of mankind—specifically to the descendants of Shem and Japheth. The Hebrew repetition is to be understood as a superlative. It does not mean that the descendants of Canaan would be slaves to slaves, but rather that the Canaanites would certainly be slaves (a similar construct is found in Genesis 2.17, where "dying you shall die" is translated as "shall surely die"). The intent of the emphasis is to demonstrate that the consequences of the curse would come about without fail.

Initially, the Canaanites were not slaves to any other nation. After the episode of the Tower of Babel, the Canaanites expanded their territory (Gen 10.15-19). Canaan's descendants included Phoenicians and Carthaginians, who settled in various locations in North Africa and around the Mediterranean shore, as well as the Canaanite tribes which settled in Palestine.

The curse on Canaan did not reach its full measure for many centuries. God indicated to Abram that the sins of the Amorites (a Canaanite tribe) would be recompensed after many generations (Gen 15.16). Eventually, Noah's prophecy was fulfilled completely. Most of the Canaanites living in Palestine were destroyed during the conquest under Joshua. Solomon drafted some of the remnants of the Canaanites as slaves (1 Ki 9.20-21)—thus fulfilling verse 26. The Phoenicians, on the eastern shore of the Mediterranean, were subdued by Alexander the Great, in 332 BC, after the siege and destruction of Tyre. From that point, until the arrival of the Roman Empire, their territory was controlled by a succession of Hellenistic rulers. The remainder of the Canaanites were finally subdued by Rome

in the Punic Wars. Thus, outside of Palestine, the Canaanites became slaves to the descendants of Japheth as they obtained their territorial enlargement (Gen 9.27). The delayed fulfillment of the curse on the Canaanites demonstrates that God will always punish the sins which he denounces. His threats against sin are never ineffectual but are always brought to their conclusion when the time of grace comes to an end.

Noah Blessed God [November 15] (Gen 9.26)

Earlier in the historical record we read that God blessed man by giving them the command and opportunity to be fruitful and multiply, by providing the earth for them to subdue, and by appointing them to have dominion over the animals (Gen 1.22, 28; Gen 5.2). This blessing is repeated to Noah after the flood as part of the covenant renewal (Gen 9.1). We also read that God blessed the seventh day (Gen 2.3) as he set it apart as a holy day of rest (a sabbath) and worship.

When we review the use of the verb 'bless' in the OT we find that most often it is used in the sense of a greater blessing a lesser entity (Heb 7.7). For example, God blessing a person (Gen 48.3), one of the patriarchs blessing his children (Gen 49.28), or a king blessing his subjects (2 Sam 6.18). However, in this verse we find Noah blessing God—the first instance of a lesser blessing his greater.

We have a sense of what it means for a greater to bless a lesser. For example, a king might give someone a gift of land, a title, or an annuity. We would say that the person receiving the benefit from the king was blessed by the king. We also see examples in the OT where blessings were given by men which were in the form of prophecies, which both giver and receiver expected to be fulfilled. For example, when Isaac blessed Jacob, and Esau asked also to receive a blessing Isaac told him that the blessing given to Jacob was already as good as complete (Gen 27.37). Similarly, when Jacob blessed his sons the prophecy given about Judah (Gen 49.10) was to be understood as applying to the Davidic monarchy and ultimately to the promised Messiah (Heb 7.14; Rev 5.5).

How then are we to understand this instance of Noah blessing God? In this case, we find a lesser—Noah, a man blessing a greater—God. Noah had nothing with which he could reward God. God was the life-giving creator; Noah was the recipient creature. God had given Noah a new world full of opportunity and had just awoken from a drunken and sinful stupor and, ironically, we find him blessing the holy God. It seems that we are to understand the usage of 'blessed' in this instance, as a:

- *Synonym*: Noah uses the word 'bless' as an equivalent for 'praise'. David appears to use it in the same way (1 Sam 25.32, 39; Ps 103.1-2).
- *Subjunctive*: Noah expresses a wish or desire that God and his name would be revered. We find a similar idea in the prayer which Jesus gave to his disciples as a model, where we are to ask that God's name would be hallowed (Mt 6.9).

There are early instances of acts of worship mentioned before and after the flood (Gen 4.3-5, 26; Gen 8.20). But we are not told what the worshipers did, other than the offering of sacrifices and calling on the name of God. We inferred that calling on the name of God could be a reference to prayer and praise (see, *The Public Worship of God* [July 7]) and that Noah likely offered praises of thanksgiving with his sacrifice (see, *The First Thanksgiving* [October 9]). However, it is surprising that there is no instance in Genesis 1-11 where it is explicitly stated that men praised God. This lack of a reference to praise may be deliberate; to reinforce the message that mankind had become so wicked that they universally had no intention of considering their creator (Gen 6.5).

In contrast to the overwhelming majority of mankind to this point, we finally encounter someone praising God— Noah the only antediluvian declared to be a righteous man (Gen 6.9). To praise God includes a number of things which we can infer from Noah's prophecy (Gen 9.26-27). It includes declaring God to be God. In it, Noah refers to the LORD as God. This means that he understood and confessed that *Yahweh* is the true and only God. It also

includes acknowledging that God is the source of all blessings and curses—as Noah asked for a reward upon Shem and Japheth and punishment on Canaan and his descendants. Finally, praise includes thanksgiving. This is implied in Noah's words in two ways: 1) as he came out of his drunken state he knew that he could still appeal to God, and 2) he understood that his request on behalf of his sons would be answered by God. Noah's example of praising God gives us a model for how we can prise him—in prayer and praise. We have so many reasons for offering praise to God—he has given us material blessings such as food and clothing and a mission in life to serve him, and has saved us from everlasting damnation and given us the promise of the heavenly kingdom. We can use adoration, acknowledgment, asking, and appreciation, from Noah's example, to guide us in the praise of our creator.

Another aspect of Noah's blessing God can be observed in his prophetic statement. Noah declared that through Shem the world would be blessed—the descendants of Japheth would join with the descendants of Shem to receive the coming Messiah. Noah's desire was that the whole world would come to bless (praise) the God of gods by revering his name and person as holy and by worshiping him. As the OT unfolds, we find this message being enlarged. For example, Isaiah speaks of the nations streaming into the kingdom of the Messiah (Is 11.16; Is 19.23). It begins to be fully realized with the entry of the Gentiles into the Church (Acts 15.14-17). Jesus declares his sovereign authority as he tells the disciples to go and make disciples of all nations (Mt 28.19-20). So, we bless God when we pray to him, "hallowed be your name. Your kingdom come, your will be done, on earth as it is in heaven."

Shem and Japheth are Blessed [November 16] (Gen 9.26-27)

Noah invoked a patriarchal blessing on two of his sons and a curse on his grandson, Canaan (Gen 9.25-27). However, he neither cursed nor blessed his third son, Ham, or Canaan's brothers. We misunderstand Noah's intent, and action, if we conclude that the curse on Canaan applied to the other sons of Ham. Noah's action was probably following antediluvian practice (Gen 5.29), and, if this was similar to the later patriarchal practice, then, in general, a firstborn son would have received the principal blessing (Gen 27.27-40). Noah does something which may not have been common practice: blessing *two* of his sons—although in later times other sons than the firstborn were blessed (Gen 49.1-27). One reason why Noah blessed both Shem and Japheth was because they had displayed godly character by covering his nakedness (Gen 9.23). Another reason was that Japheth, as the eldest son of Noah (see, *Noah and His Sons* [July 24]), would normally have received the blessing. However, God providentially overruled this practice and Shem, from whom the Messiah would be descended, was designated as the formal firstborn; similar to how Jacob later changed the positions of Ephraim and Manasseh (Gen 48.13-14).

Noah's invocation does not appear to use the word 'bless' with respect to his sons. Rather, the wording in the English translations has him blessing *God*. A possible way to translate this could be 'Praised be the LORD, the God of Shem'. Thus, he praised God as he indirectly invoked the blessing of God on his sons. However, it has been suggested that an alternate translation could be, "Blessed of *Yahweh*, my God, be Shem." Regardless of the translation nuances, the use of the verbal mood expressing a wish makes it clear that Noah recognized that there is no magic in invoking a blessing and that blessings flow ultimately from God, the creator and sustainer of the universe.

Following the common English translations, God is referred to as Shem's God. This does not mean that Shem had *Yahweh* as his own personal god, as an idol. Rather it means that Shem was a believer in the true God and that he was committed to serving God. This places the blessing of Shem primarily in a spiritual, rather than temporal, context. The explicit element of the blessing which Noah mentions is that Canaan would be his servant. However, the designation of Shem as the official firstborn son of Noah, even though he was the second of Noah's sons by birth order, indicates that there is an implied component to the blessing. The patriarchs knew that God had promised that the Messiah would be born to one of their descendants (Gen 3.15) and they traced the genealogical line from Adam, onwards (e.g., chapter 5). Noah prophesied, by blessing Shem, as if the firstborn son, that he would be the ancestor of the promised seed. This bestowed a great honour on Shem and elevated his position among his brothers and across all of mankind. Bestowing a blessing on Shem as the progenitor of the Messiah was similar to how Mary

is called 'blessed' because she was chosen to be the mother of Jesus in his human nature (Lk 1.28, 42, 45, 48). Shem's prophetically assigned name—it means 'name' or 'renown'—is realized in the prospects of this blessing

Another aspect of the blessing given to Shem is implied in Noah's declaration that Japheth would dwell in the tents of Shem. This indicates that Japheth would be blessed by his descendants entering the Church of which Shem's family was to be the custodian. The post-flood Church of God was first formally established in the covenant made with Abraham, the Hebrew (i.e., a descendant of Shem through Eber), who was an ancestor of the Messiah. All nations on the earth would be blessed by his faith and obedience (Gen 18.18; Gen 22.18). As Paul tells us, the Jews, the descendants of Abraham, through his grandson Jacob, where blessed by being entrusted with the oracles of God (Rom 3.2).

Japheth, as Noah's natural firstborn son, was blessed with a double portion. The first aspect of his blessing is his enlargement—a wordplay on his name which sounds similar to the Hebrew word for 'enlarge'. Some commentators object to considering this as having a temporal-spatial dimension. However, it seems clear that the worldwide spread of Japheth's descendants is a fulfillment of this blessing. Japheth's descendants are the dominant inhabitants of Europe, the Americas, and Australia and New Zealand. The descendants of Japheth may also have populated parts of the Indian sub-continent. [We will consider the origin of the large people-groups living in Asia and Africa in future meditations].

Japheth's other blessing was that he would dwell in the tents of Shem. If this is taken in a purely temporal sense, the only possible fulfillment could be the Roman occupation of Judea. However, the expression 'dwell in the tents' needs to be understood to have the sense of hospitality and friendship (Ex 25.8-9) not conquest—that is the descendants of Japheth were invited to dwell with the Shemites. The majority of commentators interpret this as the entry of the Gentiles into the Church (Acts 15.14-17), and Shem's God becoming the God of Japheth. A few descendants of Japheth came into Shem's tent prior to the arrival of Christ. However, the explosive fulfillment of it occurred after Pentecost, when the Gospel began to spread to the ends of the earth (Acts 1.8). The NT was written in the language of Javan (Greek) a direct descendant of Japheth. Today, Japheth's descendants are found everywhere as members of Christ's worldwide Church.

Celebrating God's Retributive Justice [November 17] (Gen 9.24-27)

These are the only words in the Bible attributed to Noah. They are a prophecy which was fulfilled over a number of millennia following the pronouncement. Most of the Canaanites living in Palestine were eventually destroyed during the conquest, under Joshua. The remainder were drafted into slavery in the time of Solomon. Outside of Palestine, the Canaanites living on the shores of the Mediterranean were conquered by the Greeks and then by the Romans.

Many people raise objections to the Jew's conquest of the Canaanites. They claim that a good God would not have decreed (as here) and then commanded the destruction of the Canaanites. For example, Richard Dawkins, in his book *The God Delusion*, claims that the destruction of Jericho, and the invasion of Canaanite territory, is morally indistinguishable from Hitler's invasion of Poland, or Saddam Hussein's massacres of the Kurds. Elsewhere in his book, Dawkins calls the God he doesn't believe in a "pernicious delusion" and says he is "a misogynistic, homophobic, racist, infanticidal, genocidal, filicidal, pestilential, megalomaniacal, sadomasochistic, capriciously malevolent bully." We won't address today the philosophical inconsistency of those who claim that there is a problem with the good God decreeing evil, other than to note that they have no reason to speak of 'evil' if there are no God-defined standards. [We considered one aspect of what is called 'the problem of evil' previously (*Why Did God Permit Man to Sin?* [May 9]).] It is also ironic that those who raise objections about God's punishing the Canaanites by the Jewish conquest, do not raise similar objections to God's using the Babylonians to punish the disobedient Jews by taking them into captivity.

God is truly and only good. The final proof that he is good lies in two truths:

- God, the self-attesting God, declares that he is good (Ps 25.8; Ps 73.1; Ps 100.5; Ps 106.1).
- God shows that he is good by saving sinners who deserve nothing but everlasting damnation (Jn 3.16/; Rom 5.8).

God's retributive justice must therefore also be good. There is nothing logically inconsistent between God's goodness and kindness and his punishing sin. In fact, to the contrary, if God did not punish sin, he would not be good, but wicked and capricious. If he did not punish sinners, we could not consider him good, because he would be allowing them to get away with their evil and would be an accessory to their evil.

God's essential nature requires that he judge the wicked (Dt 32.35). Men know innately that this is true (Rom 1.32). They just do not like the idea of God's punishing sinners—especially when it means their own punishment. But justice can only be realized if God is just and punishes sinners. Therefore, we must not look with disgust on the doctrine of God's retributive justice. Rather we must embrace it as a glorious truth (Ps 94.1). God will not permit a single sin committed against his law or against Christ and his people to go unpunished. He will not allow those who have despised him to go merrily into the next life. In justice, God receives the full honour of his majesty. We must rejoice in God's justice as much as in his love.

The Canaanites deserved the punishment which Noah prophesied would come about, and which was later carried out against them, for they were:

- *Excessively depraved* Their depraved religious fertility cult included group sexual orgies with male and female prostitutes and the sacrificing of live babies in fire to one of their gods, Molech.
- *Genocidal aggressors* They were intent on destroying the Jews (Ex 17.8-13; Dt 25.17-19; Num 14.45), as the later Nazis would also be. As we are thankful that God used the Allies to stop the Nazis, so we should thank him for using Joshua and his armies to destroy the Canaanites.
- *Rejecters of God's grace* God gave the Canaanites centuries to change their ways—from the time of Abram (Gen 15.13, 16) to the Exodus, but the wickedness of their hard hearts only increased, even though they knew that God was going to punish them (Josh 2.10; Josh 9.9). Some, such as Rahab and Araunah, believed in the true God and became part of Israel. God would have received others who repented (Ezk 33.11; Jer 18.7-8).

God is the author and sustainer of life and has the right to remove every person's life when and how he wishes to do so (Job 1.21). Every person must die (Ezk 18.20; Heb 9.27). From an ultimate perspective, God may choose to use any secondary means he wishes, to remove sinners from this world—a wasting disease such as AIDS, a famine or earthquake, or the sword of a Jewish soldier. We must not question God's liberty to execute his vengeance as he sees fit (Heb 10.30). Instead of questioning his methods we should be thankful that he punishes sinners and saves those who have repented.

The prophecy of the demise of the Canaanites and its later fulfilment, is a clear reminder that all mankind is under the same threat, which will be carried out by the judge of all the earth. Modern North America is following in the ways of the Canaanites with its displays of 'pride' parades, open endorsement of sexual depravity, and public support for sacrificing babies in the womb to materialistic gods. We should pray with the Psalmist that God would rise up, judge the earth, and repay to the proud what they deserve! (Ps 94.2). Thank God that he will not let sin go unavenged. But thank him even more that he is still inclined to show mercy to sinners like us.

All the Days of Noah [November 18] (Gen 9.28-29)

The *Economist* (2013-06-15) made a brief observation "A Japanese man died at the age of 116. Jiroemon Kimura is on record as being the oldest-ever man." Because of their philosophical and religious presuppositions, which are anti-Christian, the editors of the magazine are blind to two significant errors in their account. They state that Kimura was the oldest-ever man. Despite the attempts of those who wish to dismiss or recalibrate (e.g., by dividing by 10) the patriarchal ages reported in Genesis chapters 5 and 11, God states that Noah lived to the age of 950. The editors

also accept the record-of-birth of the Japanese man, as evidence of his age, but they reject the record of the birth of Noah. The acceptance of one and the rejection of the other, shows a bias which cannot be supported by the application of logic or historical method. Anyone who denies that Noah lived to be 950 years old, calls God the Holy Spirit (the ultimate author of this text) a liar—a very dangerous blasphemy (Mk 3.29).

Noah, the second 'Adam', lived 20 years longer than the first Adam did. The only persons, on record, who lived longer than Noah were Jared and Methuselah. From one perspective, long life is understood to be a blessing from the Lord (Gen 15.15; 1 Ki 3.14) and, in general, a sign that a person so endowed lived a righteous life. Noah had 16 grandsons and possibly a similar number of granddaughters. If we assume that during the three and a half centuries immediately after the flood, the average woman had four or five children, then Noah's descendants at the time of his death could have numbered over fifty million people. Since Noah lived through the events of the Tower of Babel, he would have seen the rise of the first Babylonian empire, the formation of new nations, the construction of many cities, and the development of international trade. The reintroduction of communal life into the world would have been a cause for rejoicing for Noah.

However, from a different perspective, a long life can also be fraught with hardship. Noah had to witness the reentry of sin into the cleansed world. In particular, he would have been distressed to see men reject the true worship of God and introduce new idols for veneration. He would have also heard of the wicked practices of the Canaanites as they compounded the evil of their idolatry with abominable sexual practices. The last years of Noah offer a sad commentary on mankind's inclination to sin—the intentions of the thoughts of his heart continued to be evil (Gen 6.5), even after the lesson of the flood. During his remaining years, Noah probably continued to serve God as a preacher of righteousness (2 Pt 2.5). But as he grew older, he undoubtedly became weary of the abounding sin around him and looked eagerly for the day when he would join his forefathers in heaven.

In the vicinity of the location where Noah settled after he exited the ark, people could have consulted with him about the events of the flood. Also, any sage, wise man, or prophet in the first Babylonian empire could have sought him out for instruction about earth's antediluvian history and of God's requirements for the practice of true worship. Yet, instead, they invented their own cosmogenic myths and false religions. Their behaviour is no different from men today who wilfully walk past churches which proclaim God's law and salvation in Christ, and then go into their academies to warp young minds with fairy tales about the universe's and man's origins and to spew the pollution of moral relativism. Paul tells us that mankind's problem is that he does not *want* to hear the truth and suppresses it (Rom 1.18). Man's heart has not changed since the day that Adam sinned.

Noah's history began with the announcement of his birth (Gen 5.29). It ends here, with the announcement of his death, 950 years later. At his birth, his father, Lamech, prophesied that Noah would bring rest and relief from painful toil. However, the relief that Lamech speaks of did not arrive as he probably thought it would. After the flood, mankind did not return to the Garden of Eden, but founded rebellious cities like: Babel, Nineveh, Sodom, and Gomorrah. Environmental conditions for man, since the flood, seem to be as (or more) challenging as they were before the flood. So, there does not appear to be any relief from the curse on the natural realm. Also, as we reach the conclusion of Noah's history, we hear again the refrain, "and he died" (see, Genesis chapter 5). The thunder of death still sounds. So, at the end of the history of Noah, it is unclear how he or the flood brought relief to mankind.

The answer to this perplexing question can only be found in Noah serving as a type for someone else. Noah was the second Adam. But a second Adam in a pristine natural environment cannot change mankind when the heart of man remains desperately perverted (Jer 17.9). What was needed for mankind was not a *second* Adam but the *Last* Adam, who is Jesus Christ (1 Cor 15.45) who would change the hearts of his people (Jn 3.7-8). Therefore, the true nature of the hope for relief and rest would be provided by Christ, of whom Noah is a type. Noah saved lives by bringing them through the flood, but baptism into Jesus saves from everlasting fire (1 Pt 3.20-22). At the death of Noah, Lamech's prophecy was still to be fulfilled. But Noah's death is not the end of the story. The account recorded by Shem on behalf of the three brothers (Gen 6.9b-10.1a) is followed by the next chapter in the history of redemption— "Sons were born to them after the flood" (Gen 10.1b). There is hope! A son will be born, the seed of the woman

(Gen 3.15) is coming!

Table of the Nations – An Historical Record [November 19](Gen 10.1-32)

This account of the origin of the first nations after the flood is unique among all ancient writings. Significant differences from other accounts of the origins of people groups include the following:

- It presents history in a straightforward and sober manner. There is no embellishment with mythical accounts such as in the Greek tales of the age of the gods followed by the age of the heroes.
- While the account includes a "mighty man" (Nimrod), who builds cities, he is presented in an historical context and not as a demigod who fights with the gods or with mythical monsters to gain renown, is conceived by a god (e.g., Hercules) or raised by an animal (e.g., Romulus and Remus).
- The mighty man is presented as an antihero who has no traditional heroic qualities such as nobility of character or moral goodness.
- It presents the origin of numerous nations. In contrast, other origin accounts generally focus on a single ethnic group, often viewed as the only true people—with other people groups being considered inferior.
- The majority of the nations identified in the account, sometimes with the locale of their early settlement, can be associated with nations from extra-Biblical history. In contrast, origin myths usually include details which are difficult to connect with historical records.

This chapter, other than verses 8-12 and 25, may appear to be little more than a dry list of names, with no relevance for us in the 21st century. However, its unparalleled uniqueness should cause us to consider the Holy Spirit's purpose for including it in Scripture. The account has significance because it:

- Maintains the genealogical record of the Messianic line from Adam and Seth, through Noah and Shem, to Eber and Peleg. Although, at the time of its composition, the author appears not to have known whether Peleg or Joktan was to be the key individual through whom the promised line would lead to the Messiah.
- Provides an approximation for the date of construction of the Tower of Babel, which is described in the next chapter. The separation of mankind into language groups occurred around the time Peleg was born (Gen 10.25; Gen 11.16), in about 2245 BC. This means that the events at Babel occurred during the fifth generation after the flood (Shem, Arpachshad, Shelah, Eber, Peleg) when the population had grown. It also indicates that the dispersion of the nations around the world occurred after 2245 BC, providing an upper limit for the arrival of most migrants into Europe, Africa, the Americas, China and the south Pacific. Thus, the original settlers of North America, for example, did not arrive 15,000 years before the present, as is claimed by many archaeologists.
- Answers a question that mankind has always asked, "Where did I come from?" Every modern people group identifiable today is not documented in the account. However, at least 70 nations are identified, many of which are recognizable from other historical records.
- Provides a general overview of the major early people groups, with an indication of the direction of their migration from the Middle East:
 - Descendants of Japheth (Gen 10.2-5) occupied the Mediterranean's northeast coast and the region around the Black and Caspian Seas. A branch also extended through Iran, and later toward India.
 - Descendants of Ham (Gen 10.6-20) occupied the southern portions of Mesopotamia, Palestine, and Arabia. Branches extended to northeast Africa—e.g. today's Egypt, Sudan, and Ethiopia.
 - \circ Descendants of Shem (Gen 10.21-31) clustered in the Middle East.
- Substantiates the belief that the 'cradle of civilization' is in the Middle East (not Africa), out of which the ancestors of all living men migrated. The general vicinity of Mount Ararat (where the ark landed) is at the centre of the world—with major connections from Gibraltar to the Bering Strait and from there into the Americas, through India to South East Asia, and through Egypt to the tip of Africa.
- Reports that all the postdiluvian inhabitants of the earth are descended form one of the three sons of Noah. Thus, all of mankind, of every shade of skin, eye colour, and hair colour are brothers.

- Demonstrates that the Neanderthals were likely the first of Japheth's descendants to settle Europe, and not an early branch of a supposed tree of evolution which led to modern man. A map of the discovered remains of Neanderthal populations in Europe corresponds almost exactly to the distribution of Japheth's immediate descendants described in this chapter.
- Supports the view that travel and communication in the ancient world (e.g., from Tarshish [Spain] to the Iranian plateau) was extensive. The seafaring people (e.g., the Phoenicians) travelled throughout the Mediterranean, and probably beyond.
- Demonstrates that God had his eye on all nations before he called out Abram. God's ultimate goal is that all nations will be blessed through the posterity of Shem, Abram, and the Messiah (Gen 18.18)
- Focuses attention, with more detail, on the nations who lived in closest geographic proximity to the families descended from Eber. For example, the author of this account understood the significance of the prophecy that Shem's descendants would interact with the Canaanites (Gen 9.26).

This account provides a rich treasure trove of information about mankind's early expansion after the flood.

Table of the Nations – An Ancient Record [November 20](Gen 10.1-32)

There are various opinions about when this account was composed. Many have suggested that Moses was the author, rather than a redactor of older material, since much of the Pentateuch was written by him. It is possible that since he had been a prince in Egypt for a number of decades, he had had access to ship logs, trade accounts, travellers' stories, and chronicles of military conquests. From this extensive knowledge of the ancient world he may have been able to prepare a summary account of where the nations had settled by about 1500 BC. Others suggest a later date—placing its composition sometime during the monarchy (i.e., 1000-600 BC).

However, internal evidence seems to point to a date for its composition that is considerably earlier than the time of Moses. For example,

- The cities of Babylonia were founded by Nimrod, the son of Cush (Gen 10.8). Later references to Cush relate to a different territory (e.g., near the source of the Nile, or in what we call Sudan). A later writer would likely have provided a clarification (e.g., Gen 14.2-3, 7-8).
- Casluhim (Gen 10.14) rather than the Caphtorim (Jer 47.4; Amos 9.7) is given as the ancestor of the Philistines, reflecting an earlier association.
- The Jebusites are mentioned without any reference to Jerusalem. Leaving out a reference to Jerusalem would be unthinkable to a late Jewish writer.
- Sidon is mentioned (Gen 10.19) but not Tyre. Tyre later became the more prominent of the two cities. This seems to indicate that this account was written before Tyre was founded—certainly before 1300 BC.
- Sodom and Gomorrah are mentioned as existing cities (Gen 10.19). Therefore, the account had to have been written before they were destroyed, which occurred after Abram had left Mesopotamia.
- Abram is not mentioned in the account, indicating that it was written before his birth (around 1990²² BC), and certainly before he had been called by God to leave Ur.
- There is no mention of Israel's troublesome neighbours—the Moabites or Ammonites. This indicates that the account was written before the days of Lot, Abram's nephew.
- The account of the Hebrew (Eber's) line is discontinued with Peleg who was born about 2245 BC, about 100 years after the flood, even though his brother's sons are mentioned (Gen 10.26). At the time this account was written, Peleg may have been unmarried or childless, and Eber may have believed that the line leading to the Messiah would go through his oldest son, Joktan. However, the history of the Joktanites becomes obscure after their mention in this account.

 $^{^{22}}$ The flood occurred around 2345 BC (see, <u>The Year of the Flood</u> [August 30], and applying the ages given in the chronology in Genesis chapter 11 we can determine approximately when Abraham was born.

- Since Reu (Gen 11.18) was born to Peleg around 2215 BC, it appears that the account was written sometime between 2245 and 2215 BC.
- The placement of this account in the Genesis record, before the account of Abram, also provides evidence of an early date.
- There is nothing in the account that suggests it was written to promote the interests of a particular people group—such as the Jews using it to support a divine calling—ruling out a late date for its composition.

Thus, the account is ancient and the information it contains was assembled directly from sources who were able to provide firsthand knowledge of where the family groups lived. It was not transmitted orally for generations but was written down within the lifetime of the person who gathered the information. A popular myth is that written language was invented independently by the Egyptians, Sumerians, Chinese, and Mayans. However, written records were probably brought through the flood by Noah, and this account was written down shortly after the events at Babel, before nations were founded. It is better to conclude that independent systems of recording speech, but not the concept of writing, were developed by men who had an awareness of, and possibly an experience with, writing before the events at Babel.

The author of this account was likely Shem—the section of Genesis with his colophon runs from Gen 10.1b to Gen 11.10a. If so, he was diligent in keeping up with news about the families descended from Noah. Noah died about 1995 BC. Shem lived until about 1840 BC—he lived through much of Abram's life. So, both Noah and Shem lived well beyond the date when this account was likely composed. Therefore, it is possible that Shem gathered information from his brothers and their descendants as they travelled through the Middle East and stopped by to pay homage to their legendary ancestor and patriarch, Noah. Shem first listed the descendants of the oldest son of Noah, Japheth (see, *Noah and His Sons* [July 24]), followed by Ham's descendants. He listed his own descendants last because it would be through them that the blessing of the Messiah was prophesied to come (Gen 9.26-27). This structure follows an example from before the flood, where the descendants of Cain, including an account of a tyrant (Lamech), were reported (Gen 4.16-23) before those of Seth (Gen 5.3-32), through whom the Messiah was to come.

Since this account gives evidence of being ancient, and derived directly from sources with firsthand knowledge, it should be accepted as a literal record of how the nations spread abroad on the earth after the flood (Gen 10.32).

Table of the Nations – The Babel Effect [November 21](Gen 10.1-32)

The Babel Effect has cursed mankind for over 4,250 years-not the violence-virus of Daniel Hecht's novel, but the spirit of confusion that God sent among men so that they would disperse (Gen 11.7-9), and not be able ever again to unite as one people in their attempt to unseat God from his sovereign throne. This spirit of confusion manifests itself in many ways: ethnocentrism, tribal wars, nationalism, cultural vanity, phenotypic prejudices, and linguistic elitism. Many Christians who analyze this chapter, with references to the curse placed upon Canaan and the blessing given to Shem and Japheth (Gen 9.25-27), show that they have been infected by the *Babel Effect*. For example, they defend a belief that, in general, the descendants of Japheth produced philosophers, those of Ham engineers or craftsmen, and those of Shem religious seers. This is a conclusion that stems from cultural imperialism, perpetrated largely by writers of Japhetic descent. Similarly, there are some who attempt to use the *Table of the Nations* to give credence to a disproportionate attention to phenotypic differences—including the unsupportable view that all of the descendants of Ham (as distinct from the Canaanites, who no longer exist!) were intended by God for slavery. It is sad when Christians fall for the world's stereotypes, and dangerous when they espouse beliefs similar to those which fueled Nazism's policy of Aryan purity, the eugenics movement of the early 20th century, Margaret Sanger's 'Negro Project', and Planned Parenthood's pathological course of race-based genocide through abortion. This account unequivocally dismisses any form of bigotry based on skin, hair, or eye colour, since all the nations are descended from Noah.

Scientists who reject the authority of Scripture claim that aboriginal peoples have lived in Australia for more than 30,000 years, and in North America for more than 15,000 years. Some Christians claim that the flood was confined to the Eastern Mediterranean or the Middle East and that the account in this chapter does not include the distant aboriginal peoples. However, we reject these claims on the authority of God's word. Every inhabitant on the entire earth was destroyed by the flood (Gen 6.7, 17; Gen 7.4). Only Noah's family survived. This means that every person on the earth today is descended from one of Noah's three sons. It also means that the aboriginal peoples arrived in distant lands sometime after 2245 to 2215 BC, the range for the date for the division of mankind into language groups after they built a tower at Babel.

All the genetic diversity among humans, which we see around us, originated with Noah's three sons and their wives. During the first 130 years after the flood, mankind would have displayed the results of continual genetic mixing. Any typical couple could have produced children with a spectrum of skin, eye, and hair colour. It was not until after the post-Babel dispersion (Gen 10.5, 18, 32) that small people groups became genetically isolated and produced children with more uniform external characteristics. However, this table presents a key point: humankind is a unity. There has never been multiple *Homo* species (e.g., *floresiensis, erectus, habilis, neanderthalensis, sapiens*, etc.). Also, there is only one human race and no sub-races. The idea that there are different races within mankind is merely an invention, with no genetic support, of people who have been infected by the *Babel Effect*. Despite a diversity of languages, phenotypic variation, geographies, and national alignments, all people have a single source of origin, and therefore are unified as far as their inherent nature that bears the image of God.

This table supports a universal view through the word that is used to describe the dispersing populations. It uses the general term 'nations' (Gen 10.5, 20, 31, 32) rather than the more exclusive covenant term 'people' (often applied to Israel; e.g., Ex 3.7). Later, the Apostles made a similar distinction (Acts 15.14). This indicates that God is working out his purposes not merely for a single people, but for all nations—Jew, and Gentile. This universal view is reinforced by the earlier covenant made with Noah (Gen 9.8-17), which has universal applicability, and by the account which follows (Gen 11.1-9), where all people align in an attempt to unseat God. Also, the inclusion of a brief overview of Nimrod's actions (Gen 10.8-12) "before the LORD" (Gen 10.9), indicates that God's eyes are on all nations. Paul, a Shemitic Jew speaking to Japhetic Greeks in Athens, alludes to this chapter and makes the point that all mankind is one (Acts 17.26). He refers to 'nations' and to the fact that God determined the boundaries of their dwelling places.

The forced dispersion of the nations around the world was a punishment for man's hubris at Babel. And, the *Babel Effect* is a curse resulting from that act of punishment. It is not what God desires for mankind and it is certainly not what he intended for his Church. God created and loves the diversity of the nations. He desires to see Heaven filled with a beautiful mosaic of mankind (Rev 7.9). During the immediate postdiluvian era, God's salvific dealings with mankind narrowed. Any Gentile who came under conviction of sin and sought the true God had to become a Jew— circumcision became an obstacle (Acts 16.3; Gal 2.3). However, since the Messiah's arrival, the Church has been opened inclusively to all nations (Mt 28.19; Lk 24.47; Acts 2.5; Col 3.11). A congregation of the Church of Jesus Christ must counter the *Babel Effect*. It must not be made up of one ethnic or cultural group, but rather it must reflect the *Table of the Nations*. The Father, Jesus, and the Holy Spirit take delight when a diverse congregation assembles in praise (Ps 67.4-5).

Table of the Nations – A Theological Treatise (part 1 of 2) [November 22](Gen 10.1-32)

All Scripture is breathed out by God and profitable for teaching and for equipping us to live righteous lives (2 Tim 3.16-17). Therefore, the Holy Spirit had a didactic purpose for including this account in the Bible and we should endeavour to understand what that purpose is. There are number of lessons about God and his dealings with mankind which we can derive from the *Table of the Nations*.

A first-order truth that this account teaches is that the disposition of all the nations is of concern to God. He

consistently portrays himself in Scripture as not just the God of believers—he is their God in a special way—but the God over all nations. For example, the covenant made with Abraham indicated that through his seed all nations would be blessed (Gen 22.18), Moses alludes to this chapter to show God's sovereign outworking in the distribution of the nations (Dt 32.8), the prophets emphasize God's sovereignty over the affairs of all nations (Is 13-24), the Psalms rejoice in the day when all nations will praise God (Ps 45.17), and Paul refers to God as the "God of the Gentiles" (Rom 3.29) and applies the message of this account in his apologetic argument when speaking with Gentiles in Athens (Acts 17.26).

As the creator and providential sustainer of all mankind, God cares for the people who make up the nations. The fact that individuals are named in the various lines of descent from Noah indicates that God extends his general grace to all men, not merely to those who are immediate beneficiaries of the salvific Covenant of Grace. We can infer that even though this genealogical list continues (from chapters 4 and 5) the process of narrowing the line of descent toward the Messiah, God's intent is to assemble people from every nation into the restored paradise (Mt 28.19; Rev 7.9). The narrowing is given in the context of a broad perspective on mankind—a world of nations before Abraham's descendants became a nation—thus suggesting that the purpose of the narrowing is to provide a means of salvation for peoples from all the nations of the world (Jn 3.16/) through the work of the promised Messiah.

Some writers have concluded that there are exactly seventy descendants of Noah named in the table—a multiplier of two numbers symbolizing completeness, seven and ten, representing the entirety of mankind. They suggest that the seventy members of Jacob's family that went into Egypt (Gen 46.27) and the gathering of seventy elders in the wilderness (Ex 24.9) are related, and that when Jesus sent out seventy disciples (Lk 10.1; NKJV) he was associating this missionary activity with the world's early nations. However, others count a different number of descendants. Also, nations are not associated with each named descendant (for example, Arpachshad, Shelah, Eber, and Peleg represent *one* nation). Also, the number of disciples Jesus sent out was more likely seventy-two. We must be careful not to assume that similar counts in Scripture are connected with a single meaning.

A second aspect of the *Table of the Nations* is the early realization of the blessings and curses theme of the covenant administration between God and Noah. The blessing of expanded population growth (Gen 9.1) is observed in the large extended family descended from Noah. The blessing motif is also found in the allocation of named territories to Japheth's sons (Gen 10.5), Nimrod (Gen 10.10-12), Canaan (Gen 10.19) and Joktan (Gen 10.30). The fact that there is no mention of a territory assigned to Peleg (the ancestor of Israel) indicates that the allocation of territory to the nations is a general blessing of the Noahic Covenant and not specific to the Jews. That Abraham and Israel would, centuries later, possess the land of the Canaanites cannot be inferred from this account.

The curse motif can be identified in this account. However, not with Canaan, as we might expect based on the curse (Gen 9.25) Noah placed on him and his descendants. Rather the curse is identified in the rebellion at Babel which resulted in disunity (Gen 10.25) among Noah's offspring and a forced dispersion of the various people groups (Gen 10.32; Gen 11.9), and in the re-emergence of tyrannical overlords, as exemplified by Nimrod (Gen 10.8-12).

We must not read into this account information which becomes evident only later. It was not written for Jews in Palestine. For example, the identification of Babel (Gen 10.10) is not because it would later take the Jews into captivity but because of the importance of the episode of the tower's construction related in the next chapter. Similarly, no reader of this account, when it was delivered by Shem, could have known that Peleg would become the ancestor of the Messianic line. In fact, at the time this account was written, Peleg had no sons and it appeared that Eber's line would be carried through the sons of his brother Joktan. Also, just from reading this account, no one could have known that the descendants of Cush or Egypt would send armies against the descendants of Peleg. Of course, God knew the importance of each territorial assignment as he was executing his plans. The placement of the Canaanites in the territory he assigned to Abraham is an obvious example. However, God placed the descendants of Javan in Greece so that they would later have a confrontation with the Persians and, under Alexander, possess the territory of the Persians and establish the Hellenization of the Middle East, which would lead to the use of Greek for writing the NT.

Table of the Nations – A Theological Treatise (part 2 of 2) [November 23] (Gen 10.1-32)

In the previous meditation, we began to consider some of the lessons about God and his dealings with mankind, which we can derive from the *Table of the Nations*. We noted that this account teaches that the disposition of all the nations is under God's providential direction and that he shows concern for individuals who make up the nations, as is evidenced by the recording of the names of sons in the non-Messianic line. We also noted that the table demonstrates an early realization of the blessings and curses motif for covenant obedience and disobedience, associated with the covenant established between God and Noah. The blessings were realized primarily by population expansion. The curses were manifested by the rebellion at Babel and the subsequent disunity among Noah's offspring, and by the re-emergence of tyrannical overlords, as exemplified by Nimrod.

Two events associated with the curse are mentioned in this table:

- *The rejection of God as sovereign.* The collected post-flood population soon forgot the lesson of the flood—rebellion against God and his laws must be punished—and established a false religion with its own gods, myths, and forms of worship, centred on a tower that was intended to reach into Heaven and dethrone God. The rebellious action of building the tower at Babel is alluded to in the table (Gen 10.25).
- *The reintroduction of human tyrants*. The antediluvian tyrants were called Nephilim. They became renowned as violent warriors as they fell upon other people to subdue them. Nimrod (Gen 10.8-12) was the first of the new Nephilim to arise after the flood. He founded imperial centres in Babylon and Assyria. He was followed by tyrants in surrounding nations.

The full account of the tower is sandwiched between the genealogy of Shem's line, begun in this table (Gen 10.21-31), and continued after the account of the incident of the tower (Gen 11.10-26). And, the account of Nimrod is included in the table itself. This indicates that these two events are of relevance to the Shemitic line leading to the Messiah. They reinforce the need for the Messiah to deal with sin, since the flood was unable to provide a solution. Wiping sinners off the face of the earth, with a worldwide flood, did not deal with man's heart problem.

Thus, a key consideration presented in the table is the continuation of the line of descent, which was leading to the Messiah. God had promised Eve that one of her offspring would strike Satan's head (Gen 3.15). She understood that the promise would be fulfilled through Seth (Gen 4.25). Seth's line was carried systematically to Noah (chapter 5), and Noah prophetically positioned Shem as the continuation of the Messianic line (Gen 9.26-27) by declaring him to be the official firstborn (Gen 5.32)—although he was actually the second-born of the named sons of Noah. This table continues Shem's line through four more generations to Joktan and Peleg, and to a fifth with Joktan's sons. At the time this table was prepared by Shem he did not know that the line would extend through Peleg, since Peleg had not yet had any children. However, Terah continued the genealogy and extended it to include his three sons, with Abram occupying the firstborn position (Gen 11.27).

Thus, these two chapters (10 and 11) lay the foundation for the call of Abram, whose seed—the Messiah—would bring salvation to the world. We can form an image of what God is doing if we think of two funnels placed tip to tip. At the wide end of one funnel is the *Table of the Nations*. At the narrowest point of the first funnel, at the start of the stem, we find Abraham. The table's use of 'clans'/'families', and 'nations' (Gen 10.5, 20, 31–32) is reprised in the call of Abram (Gen 12.1-3). He represents the channel through whom God's blessings will flow to the nations (Gen 22.18). The chain of his offspring continues as a thin thread for many generations until it reaches the end of the stem of the second funnel, at Jesus. From there the second funnel opens up with salvation for peoples from all nations of the world (Jn 3.16/) and the explosive growth of the NT Church. We again hear of clans/families and nations (Mt 28.19; Acts 2.9-11; Rev 7.9), but they have been transformed from pagan peoples into saved saints through the funnel of Jesus.

The structure of the table also reinforces the importance of the Messianic line. Prior to the flood, the descendants of Cain were reported (Gen 4.16-23) before those of Seth (Gen 5.2-32). In this table, the descendants of Japheth

and Ham are reported before Shem's. This pattern, of reporting the non-Messianic line first, is followed later in Genesis with Ishmael's descendants being listed before Isaac's (Gen 25.12-18), and Esau's before Jacob's (Gen 36-37).

The continued maintenance of the genealogical record of the Messianic line for 2,000 years, from Adam's recording Seth's birth to Terah's recording Abram's birth, is a remarkable achievement—and the Jews continued the practice for another 2,000 years (Lk 3.23-38)! Our 21st century mindset, influenced by near real-time news and short Twitter messages, has difficulty finding relevance in information that is more than a few hours old, let alone centuries old. The long-term retention of family genealogies as displayed in this table, and in chapters 5 and 11, indicates that the pre-flood and post-flood patriarchs had a strong faith and incredible patience (Heb 11.8-10). They believed that God would send the Messiah someday to reverse the curse placed on mankind in the Garden of Eden.

Sons of Japheth [November 24] (Gen 10.2-5)

In his commentary on Genesis, John Calvin says, "I leave to others the scrupulous investigation of the names here mentioned. ... the obscurity is too great to allow of any certain conclusion; and those figments which interpreters adduce are, in part, very much distorted and forced; in part, vapid, and without any fair pretext. Undoubtedly it seems to be the part of a frivolous curiosity to seek for certain and distinct nations in each of these names." As important and astute as Calvin's theological writings usually are, in this case he appears to have missed the mark. There is considerable ancient extra-Biblical historical evidence that corroborates the distribution of many of the nations recorded in this table. Also, people are interested in where they came from. Consider the prevalence, throughout all cultures, of myths which deal with origins—even our 'modern' civilization has invented the myth of the evolutionary ascent of man to address the question of where we came from. In addition, the extensive interest in genealogical research shows that people have more than a 'frivolous curiosity' about their ancestors.

In broad terms, the immediate descendants of Japheth occupied the northeast coast of the Mediterranean Sea and the region around the Black and Caspian Seas. A branch also extended through Iran, and later toward India. The name Japheth is found in Greek legends as Iapetus and in India as Iyapeti, the reputed ancestor of the Aryans. Most Europeans— who lived in Europe prior to the post-WWII immigration—were descendants of Japheth. The record given here lists Noah's grandsons through Japheth, but the great-grandsons of only two of the grandsons (Gomer and Javan). About 2215 BC, before when this account was likely written, maintaining communication with tribes that moved north-west and north-east of Turkey or to the east of Iran, was probably more difficult than with tribes which initially settled on the Mediterranean and the Black Sea and travelled by ship. We cannot look at the history of every nation mentioned in this table, but we will consider the distribution of a few of the nations mentioned (often named after their forefathers), and how they are likely connected with modern nations.

The descendants of Gomer are generally believed to include the Cimmerians (i.e., Gomerians; the G-M-R and C-M-R consonants are related linguistically) which are mentioned in Homer's *Odyssey* (chapter 11: *The Visit to the Dead*). They initially lived around the Black Sea (in Crimea). Some of their descendants appear to have migrated west across Europe, possibly as they were driven out by Scythians arriving in the 8th century BC. Some view the Scythians as coming from the territories of Madai (northern Iran) or Magog (north of Turkey), and to have been other descendants of Japheth. It is also possible that the Scythians were nomadic Cimmerians. Some historians associate the Cimmerians with early settlements in Germany, Gaul, Britain and the Nordic areas. Also, Celtic linguists, generally, accept the etymology of *Cymro* "Welshman" (plural, *Cymry*) as a reference to the Welsh being Cimmerians. Similarly, it has been suggested that the district in England called Cumberland is Gomer-land (the introduction of the B is seen in other cases, such as in 'numerous' and 'number'). It is interesting that descendants of Ashkenaz settled in the region from southern Russia to eastern Germany. Ironically, Ashkenazi Jews are primarily descendants of Japheth, not Shem.

The descendants of Magog and Meshech migrated north through Turkey. The settlers of the Ukraine and Russia

appear to have been descended for one of these sons of Japheth. There may be a connection between the names Mechech and Muskovi (Russia) and Moscow; Meshech is identified with the Muski or Musku in Assyrian texts.

The descendants of Madai are generally thought to include the Medes (called Mada in some cuneiform inscriptions), who lived south and southwest of the Caspian Sea, in northern Iran. Apparently, some of their tribes migrated through Pakistan toward India. The Medes would later become connected with Jewish history. Cyrus, who was a Mede, overthrew the Neo-Babylonian Empire and issued the decree permitting the Jews to return to Judea.

Little is known about the descendants of Tubal and Tiras. Some assert that the tribes from Tubal settled in central Asia Minor, based on its association with Magog and Meshech (Ezk 38.2-3). Josephus places the descendants of Tiras in Thrace (Bulgaria and Romania).

The descendants of Javan were some of the early settlers of southern Europe. The Greeks are referred to as Ionian in Daniel (Hebrew: Dan 8.21; Dan 10.20; Dan 11.2) and on the Rosetta Stone (Iounan). However, Javan's son Elishah appears to be directly associated with southern Greece. The Greek name for Greece is Hellas, and terms such as Hellespont and Hellenists appear to be connected with the name Elishah. Tarshish is identified as the most distant western part of the Mediterranean (i.e., southern Spain; Jonah 1.3) in other parts of the Bible and in extra-Biblical writings. The Kittim appear to have been the settlers of the Aegean islands and Cyprus (the ESV, NIV, NASB translate *kittim* as Cyprus in Ezk 27.6). The Dodanim are also called the Rodanim in the parallel account in 1 Chronicles (1 Chron 1.7). The difference in spelling may be due the similarity between the Hebrew letters D (τ) and R (τ). The Rodanim may have been the inhabitants of Rhodes, a Greek island.

Coastland Peoples [November 25] (Gen 10.5, 19)

This account was probably written sometime between 2245 and 2215 BC— after Peleg was born at the time of the construction of the tower at Babel, and before the birth of Reu, since no sons of Peleg are mentioned in the account. If this is correct, then the reference to the coastland peoples (Gen 10.5) and to Sidon on the coast (Gen 10.19) is significant. Within a generation, the Japhetic peoples had begun to spread along the north Mediterranean coast and Hamites had founded Sidon on the coast of Palestine. This does not mean that they had reached the Aegean islands or the far end of the Mediterranean by 2215 BC. But it does mean that men, who had formerly lived in the inland region of Mesopotamia, had already migrated to the Mediterranean coast and begun to construct boats and organize settlements along the coast.

Over the following 1,000 years, Japhetic settlers migrated along the north shore of the Mediterranean and settled in Cyprus, Crete, Greece, Italy, Gaul and Spain (Tarshish). Descendants of Sidon (the Phoenicians), from Canaan, migrated along the south shore of the Mediterranean and eventually reached Gibraltar and Spain. They also established colonies in Sicily, Sardinia, Corsica, and Mallorca, where they undoubtedly engaged descendants of Japheth in battle. The Phoenicians eventually evacuated Sidon, during the Persian period, and lost Tyre to Alexander. Later, their Carthaginian colonies were involved in numerous conflicts with the Greeks and Romans.

At the time of Solomon (1000 BC) and Jonah (about 775 BC), ships were regularly travelling the length of the Mediterranean (1 Ki 10.22; Jonah 1.3). Around that time, the Phoenicians had exited the Mediterranean through the Pillars of Hercules and colonized the north Atlantic coast of Africa and had discovered the Canary Islands. Herodotus (*The Histories* 4.42) reports that a Phoenician expedition (around 600 BC), sent out by pharaoh Necho II of Egypt, left the Red Sea and circumnavigated Africa, returning through the Mediterranean about three years later. Part of the account gives credence to the report. Herodotus stated with disbelief that the Phoenicians, as they sailed on a westerly course around the southern end of Africa, had the sun on their right—to the north. People who had not crossed the equator could not have imagined such a phenomenon.

About 150 years later Hanno II of the Phoenician outpost of Carthage, on the Libyan coast near the site of Tripoli,

undertook an expedition with 60 ships and around 30,000 settlers. They sailed south along the African coast, establishing colonies or trading posts with the locals. They travelled along the north shore of the Gulf of Guinea until they reached a towering volcano in full eruption, which they called "The Chariot of the Gods"—believed to be either Mount Cameroon or Mount Kakulima. The account of the expedition was recorded on a tablet that Hanno had made on his return and placed in the temple of Ba'al Hammon (Kronos, in the Greek translation).

It is evident from the OT record, and the extra-Biblical accounts from the same era, that travel throughout the Mediterranean world had become quite advanced by the time the Greeks and Romans became dominant. It has been suggested that the Phoenicians, as particularly experienced sailors, and others from their times also travelled to the Americas. For example, it is claimed that inscriptions on rocks have been found, in Georgia and in at least two places in Brazil, which appear to have been written in ancient Mediterranean scripts. These are generally dismissed by mainstream archaeologists and historians as clever forgeries. The idea of Phoenician contact with the Americas is viewed as a fringe theory. However, it is quite possible that Phoenicians travelling along the west coast of Africa were blown off course by storms and ended up in the Americas. Whether they were able to return successfully to their native lands remains a debatable question.

The descendants of Japheth—the coastland peoples—produced a wave of world explorers. For example, Brendan an Irish monk and a Welsh prince, Madoc Morfran, probably reached North America during the Middle Ages, and returned to report it. Madoc is said to have brought a 'brown-skinned' man with him. His expedition was followed by a fleet of 700 ships. It appears that they settled in the central Atlantic region and assimilated with the natives. They were followed by the Norse adventurers who established settlements in Greenland and North America. Other explorers included the Portuguese (Henry, the Navigator; Bartolomeu Dias), Italians (Cristoforo Colombo, Amerigo Vespucci, Giovanni Caboto), Spanish (Juan Ponce de León, Francisco Pizarro, Vasco Nunez de Balboa), French (Jacques Cartier, Samuel de Champlain), and English (Sir Francis Drake, Sir Walter Raleigh). As Genesis chapter 10 suggests, the descendants of Japheth became seafaring nations.

Mainstream historians dismiss the likelihood of ancient Mediterranean, or British medieval, contact with the 'new world'. Yet, they accept claims which are far less supportable. For example, based on flimsy evidence (e.g., flints found in Suffolk or a shinbone found at Boxgrove Quarry), they claim that Britain was settled hundreds of thousands of years ago, and that Neanderthals were in Britain 100,000 years ago. When men reject the Bible and the genealogical records in Genesis, they will believe a lie—as the proverb says, they choke on a gnat, but swallow a camel (Mt 23.24).

Sons of Ham [November 26] (Gen 10.6-20)

When this list was complied, the descendants of Ham occupied the southern portions of Mesopotamia, Palestine, and Arabia. Branches extended to north Africa—e.g., Egypt, Sudan, and Ethiopia. Many of the names and locations, named after a son mentioned in this account, are familiar to anyone who has read other portions of the OT—particularly Genesis, Numbers and Joshua.

Shortly after the tower episode at Babel, the descendants of Cush, were the primary settlers in south Mesopotamia and Arabia. Some of his descendants appear to have migrated into east Africa. Cush's own name is later associated with the upper regions of the Nile. The names of some of his sons appear to be associated with locations in this area, for example, Seba, Sabtah, and Sheba. However, some commentators believe that these names should be associated with locations in Arabia. It is possible that their migration route was south through the Arabian Peninsula, eventually, across the Red Sea, and into northeast Africa. Thus, their names may have become associated with both regions. The people groups of the African continent *must* be descended from at least one of the sons of Noah. So it is likely that at least some of them are descended from Cush. Some others may be descended from Mizraim or Put (no information is given about the sons of Put, assuming that he had any).

Similarly, the origins of people groups in Asia, South East Asia, and the Pacific islands, including Australia and New Zealand, and the Americas must be considered. They all *must* be descended from one (or more) of Noah's sons. Some people suggest that the Han Chinese are descended from the Hittites who fled east after their empire crumbled around 1200 BC. They suggest that 'Khittae' could be 'Cathay', and that there are similarities between the two peoples in casting iron and breeding horses. However, 1200 BC appears to be too late to account for the significant presence of people in China before the Shang Dynasty. Others suggest that the name 'Japheth' is found in India as 'Iyapeti', the reputed ancestor of the Aryans, and may also be found among Australian aborigines.

More information about a sixth son (some claim he was a 'descendent' rather than a son) of Cush, Nimrod, is given in the account (Gen 10.8-12). He founded the first Babylonian empire, which was located between the Euphrates and the Tigris in the mid-Mesopotamian region. Later, probably after the tower episode and the confusion of languages, he moved northwest and founded a second empire in Assyria (northern Iraq).

The destination of Ham's son Mizraim, after the dispersion from Babel, has better documentation. His family initially occupied the area around the lower Nile and the delta (Egypt). There is a possibility that Ham travelled with his son when he left Mesopotamia (Ps 105.23, 27; Ps 106.22) and may have been instrumental in establishing the first settlement. It has been suggested that the legendary founder of Egypt's first dynasty, Memes, is a vestigial memory of Mizraim. In this account, there is a parenthetical comment about Casluhim being the source of the Philistines (Gen 10.14). Possibly, this comment was added by Moses when he included the *Table of the Nations* in Genesis, unless the Philistines had already settled in Palestine at the time this account was written. This comment raises an issue for some, since Amos (Amos 9.7) and Jeremiah (Jer 47.4) refer to the Philistines as being from Caphtor (apparently named after another son of Mizraim, and understood to be Crete). However, there are numerous reasonable explanations—for example, some of the Philistines may have migrated back to the Middle East (Palestine) from Crete. Moses may speak about this migration from Caphtor (Dt 2.23).

Beyond this, there is little information in the ancient historical records which indicates where the descendants of Mizraim settled. Some may have extended their reach along the southern shore of the Mediterranean—competing with the descendants of Sidon (the Phoenicians), and some may have migrated south and were the ancestors of some of the African tribes.

The sons of Canaan initially settled in a relatively small region, in Palestine, (Gen 10.19). Afterwards some of his descendants dispersed (Gen 10.18). For example, the sons of Sidon settled at first on the eastern shore of the Mediterranean and then, later, their Carthaginian descendants settled along the south shore of the Mediterranean and reached Gibraltar and Spain. They also established colonies in Sicily, Sardinia, Corsica, and Mallorca, and along the west side of Africa from Morocco to the Gulf of Guinea.

The boundaries of the territory of the Canaanite settlements are mentioned in this account. The reason is not because the account was written by Moses from the perspective of Israel. It was written before the time of Abraham, since Sodom and Gomorrah are used to define part of the boundary. It is true, that their territory would later become significant to the descendants of Abraham, however the author would not have known that it would become the land of promise. God, of course, knew the future relevance of the land and ensured that it was included. The immediate reason that this information is included is probably because of the curse that was placed on Canaan and the promise to Shem (Gen 9.25-26). The author has Canaan in view because the Canaanites were to become servants of Shem's descendants.

Nimrod (part 1 of 2) [November 27] (Gen 10.8-12)

Tyranny has returned to the earth! Before the flood, tyrants, called Nephilim (Gen 6.4), arose from the line of Cain, who acted in ways similar to the marauding Vikings who earned their reputation as fierce and fearless combatants by burning crops and villages and taking hostages as slaves. However, the Nephilim went far beyond the Vikings

in their evil ways, because they used their domination to extend direct control over mankind as the first empire builders in history. They were the antediluvian equivalent of Attila the Hun, Genghis Khan, Hitler, and Mao Zedong.

Within two generations after the flood, the equivalent of the Nephilim had begun to reappear on earth—first in the person of Nimrod, the grandson of Ham. Many commentators suggest that the name 'Nimrod' comes from the Hebrew root for the word 'revolt' or 'rebellion'. However, there is some doubt about whether the name is of Hebrew origin and if its meaning can be determined. Regardless, his name *signifies* rebellion in many ways:

- As the founder of the first post-flood imperial kingdom, he established himself as an autocratic ruler over other men.
- As a supporter of a polytheistic mystery religion—implied by the tower which was intended to reach the heavens and challenge God's throne, and by Babylon being considered the mother of false religion (Rev 17.5).
- As the leader overseeing the tower's construction. It is not stated in chapter 11 that he was responsible for the tower, however, as the founder of Babel, it can legitimately be assumed that he oversaw its construction. Josephus, the Talmud, and the later midrash on the OT support this view.
- As a tyrant who oppressed his neighbours before the LORD.

This account tells us that Nimrod was the first person to be a 'mighty man' (the adjective 'mighty' is used three times; see also 1 Chron 1.10). The Hebrew word translated as 'mighty', can also be translated as 'hero' or 'tyrant'. His distinction was that he was the first man, after the flood, to use aggressive force to control other people. The implication is that he attempted to put himself above truly honourable men like Noah and Shem, and in the place of almighty God. Even while Noah and Shem were still alive, and able to bear witness to the judgement that came upon the antediluvian tyrants, Nimrod pursued his ambitious course of consolidating power, exercising authority over his neighbours, and challenging God. What Nimrod began, would soon be emulated by other men. Throughout antiquity, and until the present, men have aspired to lord it over others and have desired to consolidate their power so that their scepter extends over all off mankind. People of Nimrod's generation likely lived around 400 years. During his long life, he would have continued to extend his power and increase the degree of evil which he practiced. Thus, his ruthlessness became legendary.

The Scriptures refer to him as a mighty *hunter* before the Lord. The choice of word is interesting. Every other occurrence of this word in the OT refers to hunting animals. So, many commentators conclude that Nimrod became famous for his ability to track and bring down big game. It is possible that this is a reference to his being the first dragon-slayer. At that time, the offspring of dinosaurs which had been taken in the ark would have been reproducing rapidly throughout the lightly inhabited world. Nimrod may have brought down these 'dragons' and become renowned for protecting human settlements from vicious marauding animals. If this were the case, then even God would have been pleased with his benevolence.

However, the context suggests that we are to understand this differently. Nimrod was a mighty hunter; but he did not limit his hunting to animal game. Nimrod treated his neighbours as if they were nothing more than deer or gazelle. He stalked, trapped, and slaughtered his human prey without any compunction. He didn't play an assassin in a virtual-reality game—he was the ultimate Ezio (from *Assassin's Creed*), carrying out his death lust with real subjects. Thus, the expression 'before the LORD' should be taken in the negative sense, 'against the LORD'. Nimrod was an affront to God and man because he sought to rule over people tyrannically and because he treated them as objects that could be disposed of at whim, for his own gratification.

Nimrod raised himself above all other men with a ruthless psychopathy and attempted to raise himself above God with a self-confident defiance. He took to himself the prerogative of determining who should or should not live— with no consideration of God's rights as the life-giver. His actions demonstrate that he did not work according to any rule of law, but arbitrarily. In particular, he did not consider himself to be subject to God's law—as delivered through Noah, that stipulated that anyone who shed the lifeblood of another was to have his own blood shed (Gen 9.5-6). Also, his aggression was contrary to God's intentions for mankind—created as an image-bearer of God. God

intended mankind, as his sub-sovereigns, to be multipliers, nurturers, and sustainers of life (Gen 1.22; Gen 2.15), not destroyers.

Micah (Mic 5.5-6) speaks of the later Assyrians coming into the land of Judah but being pushed back by shepherds and princes from Judah. They would shepherd the land of Assyria (referred to as the land of Nimrod) with a sword. This shows that God plans to overthrow all of the wicked Nimrods of history.

Nimrod (part 2 of 2) [November 28] (Gen 10.8-12)

Like Cain (Gen 4.17), one of the evil antediluvian tyrants, Nimrod founded a city—Babel. Babel was situated in Shinar (the early Biblical name for the southern portion of the area later called Babylonia), in the flat valley between the Tigris and the Euphrates rivers (in what is Iraq today), near where the two rivers come close together. Today this area is dry and desolate, as Isaiah prophesied it would become (Is 13.19-22). However, in the centuries immediately following the flood, this area would have been well watered and highly productive (see, *Progression of the Ice Age – Cool Summers, Heavy Precipitation* [October 17]). For the Babylonians, the name *Babel* meant 'gate of god'. It is generally believed that it was given this name since it was the seat of the pagan cult of Baal worship. However, it has been suggested that it received its name as the gate through which God punished mankind. It was there that the tower was built to honour the pagan pantheon and to challenge the authority of the living God. The covenant people reinterpreted the meaning of the city's name, using related sounds (*balal*), to mean 'he confused' (Gen 11.9).

Nimrod's peer generation (Gen 11.13, 15) lived for about 400 years. So, he also probably lived as long, and increased his control over his subjects. As the Mesopotamian population grew, Babel would have become too large for its hinterlands to support, so Nimrod established other cities, in Sumer:

- *Erech* (Uruk, in Akkadian) was located about 250 km south of Babylon on the Euphrates River. It became famous as the city of the mythical Gilgamesh. Uruk grew into a complex city with its own government, religious, military, and craft-guild establishments. During the Sumerian period, it became larger (in population and area) than Babylon.
- The location of *Accad* (Akkad, in Akkadian) is not known, despite extensive searches by archaeologists. One theory places it at the site of modern Baghdad. Nevertheless, it appears to have been an important ancient city since the Akkadian empire and language are named after it.
- The location of *Calneh* is also not known definitively. It has been associated with different ruins in Iraq by various historians and explorers. Sir Henry Rawlinson identified it with modern Nippur (a name probably derived from Nimrod), a high tell situated in the marshes on the east bank of the Euphrates, about 100 km southeast of Babylon. Based on Amos 6.2 and Isaiah 10.9, others have placed in near Carchemish. And, others have placed it on the Tigris, based on a comment by Xenophon.

Nimrod maintained control over these cities and formed them into the first postdiluvian kingdom (this is the first reference to a kingdom in the Bible).

The account mentions that Nimrod then went into Assyria and also built cities there. This area had initially been settled by the descendants of Shem. So, Nimrod not only formed the first kingdom, but he also extended his kingdom by conquering and subjugating the people of other lands. The initial settlers in Assyria may have been nomadic or rural, but Nimrod established permanent settlements, which were likely walled (based on the findings from archaeological digs in city ruins) from which the territories within his empire could be controlled. He first founded Nineveh on the Tigris River (in northern Iraq), which became the capital of Assyria. We know of Nineveh from later history (e.g., Jonah's visit), as a city which covered a large area (Jonah 3.4). Thus, Rehoboth-Ir (its location is unknown) may not have been a separate city, but rather may be a reference to the open plazas, wide streets, or districts of Nineveh. Two nearby satellite cities were added, Calah and Resen (between Nineveh and Calah). Calah

is believed to be the city ruins called Nimrud (named after Nimrod) which was excavated in the mid-19th century. Two large, winged lion statues from the ruins were delivered by Henry Layard to the British Museum, after many transportation challenges. The *Treasure of Nimrud* (gold jewellery and precious stones) found in the ruins, survived the looting in Iraq in 2003 and were preserved in Baghdad.

Nimrod was an historical person, not legendary. The name 'Nimrod' may be a dysphemism. So, we can ask who he was, as he is referenced in extra-Biblical history. The most likely candidate is Sargon I, the Great, the founder of the dynasty of Akkad. Historians dated his reign from 2270 to 2215 BC. We cannot accept secular historians' dates, in most cases, because they date many events prior to the flood. Nevertheless, the dates we have calculated for the flood (about 2345 BC) and the construction of the tower at Babel (between 2245 and 2215 BC), place Sargon in the right era. The extent of Sargon's empire was essentially the same as that referred to here (Shinar and Akkad)— although it extended into Asia Minor (which may have occurred after this account was written). Historians regard Sargon as the first person to have created an empire. His empire is believed to have controlled Mesopotamia for a century and a half. It is likely that the demise of his empire was caused by the disruption which God sent after men built the tower at Babel.

God used the disruption at Babel to end Nimrod's ambitions and the first postdiluvian world empire. Nimrod was an affront to God because he invented a false religion, attempted to dethrone God by building a tower raised against Heaven, ruled over people tyrannically, and treated people as objects which could be hunted and disposed of at whim, for his gratification. He built cities, like wicked Cain, as memorials to man, rather than altars to the living God as Noah and Abraham did (Gen 8.20; Gen 12.7-8). He continued to build the *City of Man*—the anti-God, temporal, hedonistic city—rather than seeking the establishment of the *City of God* (Heb 11.10).

Sons of Shem [November 29] (Gen 10.21-30)

Although the *Table of the Nations* records the first few generations of the three sons of Noah after the flood, it focuses more on listing the descendants of Shem. One reason is that Shem was likely the author, as suggested by the colophon at the end of the section (Gen 10.1b-11.10a). Thus, he included more generations of his own children (at least in Arpachshad's line), than for either of his brothers. Another reason is that he likely had more information about his own descendants. Also, he focused on his descendants because they were part of the covenant family from which the Messiah would spring. He listed the descendants of his brothers first, then the descendants in the line of the covenant fulfilment (Gen 9.26). This follows, what appears to have been a practice of the patriarchs (Gen 4.16-23; Gen 5.2-32; Gen 25.1-18; Gen 36-37).

Shem compiled this account sometime after the birth of Peleg (about 2245 BC), but before the birth of Reu (about 2215 BC), since no children are mentioned as having yet been born to Peleg. He concluded his account with the incident of mankind building the tower at Babel, and the confusion of languages, which he also mentions in this genealogical section (Gen 10.25). Even though he lived at least 130 years after composing this account, he did not amend it after children were born to Peleg. The recording of the descendants of Peleg was left to the next chronicler, Terah (Gen 11.10b-27a).

After the tower episode, Shem's sons did not disperse as far as the sons of Japheth and Ham. Shem's son clustered in the Middle East, in the territories we now call southern Turkey, the Arabian Peninsula, and Iraq and Iran. The distribution of the initial settlement of many of the Shemite tribes was likely similar to the later pattern of where they dwelt, when they interacted with the Israelites until the Persian period. So, in early post-flood history, while Shem was still alive, his sons were already occupying their permanent territories:

• *Elam* – His descendants settled in the highland region east of the Tigris (in eastern Iraq) and south along the Persian Gulf (in Iran). Their capital was Susa. They existed as a largely independent nation for about 1,300 years and were eventually subsumed into the Persian Empire by the Medes, who made Susa their capital. Elamites were still recognizable as a people group at the time of Christ (Acts 2.9).

- *Asshur* His descendants settled in northern Iraq, in the same general region where Nimrod, a Hamite, had founded several cities (Gen 10.11). Their descendants eventually formed the Assyrian Empire. Asshur was one of the earliest men to be deified and worshipped by his descendants as a god. The Assyrians became a major enemy of Israel in later times. Their use of the Aramaic language (see below) influenced its spread.
- *Lud* It seems that his descendants settled in Lydia in western Turkey. They were famous as archers in the ancient world. They spoke an Indo-European language, usually associated with descendants of Japheth. Their territory was conquered by Cyrus in 546 BC.
- *Aram* His descendants settled primarily in parts of Mesopotamia, Armenia in Turkey, and in Syria. Their identity became fluid as they integrated with other tribes. At times, the term Aramean referred to anyone from that region, e.g., in the case of Jacob (Dt 26.5). Their language, Aramaic, became the 'world language' used throughout the Middle East until Greek took over, after 325 BC. Parts of the OT are written in Aramaic. The Aramaic alphabetic script was adapted by the Jews; we refer to it today as the Hebrew alphabet. Jesus probably spoke Aramaic. The language is still spoken by a few small groups today.
- *Arpachshad* His descendants settled primarily in the south, in the low valley between the Tigris and Euphrates rivers. Only Shem's grandsons, through Aram and Arpachshad, are mentioned in the account. And, only additional generations are included for Arpachshad.

Eber, one of Arpachshad's descendants is given special attention in this account. Shem is referred to as the father of Eber's sons (Gen 10.21), even though they would have been Shem's great-great-grandsons. It is possible that Shem (who was alive through much of Abram's life and died about 30 years before Eber died) declared Eber's sons (Joktan and Peleg) to be his sons figuratively, or even literally through adoption. In either case, it seems that Shem understood that the line of the covenant was to extend through Eber and not through any of the descendants of his other sons. We will consider Eber's place in redemptive history when we address chapter 11.

We should note another name in this account—Jobab (Gen 10.29). He was one of the thirteen sons of Joktan, and a peer of Reu (his cousin), the son of Peleg. Some commentators have suggested that Jobab is the same person as the subject of the book of Job—an addition in the Septuagint says that he was formerly called Jobab. However, others equate him with a son of Issachar (Gen 46.13) or with an Edomite king (Gen 36.33-34). Jobab was a grandson of Eber and in the Covenant family. Job lived 140 years after his trials (Job 42.16). Since he had had ten children (with one wife) before his trials, he was likely at least 30 before his trials began, and probably older. So, he was over 170 and possibly over 200 years old when he died—the Septuagint adds, in verse 16, that he was 248 years old at his death. His age at death places him in the generation of the patriarchs before Abraham, and roughly the age of Reu (239), the grandson of Eber, at his death.

The True Shemites [November 30] (Gen 10.21-30)

If you think that this ancient account has little relevance for today's geo-political situation—particularly in the Middle East—you are mistaken.

Shortly after the flood, mankind began again to establish empires and institute false religion. This bi-focal human effort to overthrow God's sovereign rights began in what is called the 'Middle East', from a Eurocentric perspective. From a Biblical perspective we should call the Middle East—the region that is bounded by, and includes, Egypt, Turkey, Iran and the Arabian Peninsula—'Middle Earth'. For over four thousand years, since the tower episode at Babel, Middle Earth has been a place of constant conflict and turmoil. Mankind was dispersed from this region by the division of language and by the on-going wars that have been engendered by the formation of nations (nationalism) around different languages.

Mankind was flung outward from Middle Earth to the edges of the earth by a powerful centrifugal force. In every land, people have fled to avoid tyrants and persecution, and to seek places of refuge and safety. Much of this

migration occurred over the three thousand years following the Tower of Babel. However, the migrations of Europeans to the New World, beginning in the 17th century, continued this trend, as witnessed by the names of some of their settlements—e.g., Independence, Liberty, New Haven, Providence, Salem, Zion. Today, Middle Earth continues to fling out refugees fleeing sectarian conflict. The land identified as Canaanite territory in this account (Gen 10.19), has been at the heart of much of this conflict. It was designated as the land of the cursed (Gen 9.25) and, later, it became the land of promise for the covenant people—as a sign that the meek will inherit the earth (Mt 5.5). This land continues to influence geo-politics, since there is a prevalent attitude among many in the West that today's Jews have a divine right to possess the land between the Gaza strip and the Jordan.

For forty centuries, the patriarchs and then the Jews maintained genealogical records. They had a sense from the beginning that this was important because it would demonstrate that the promised Messiah was a descendant of Seth, and then of Abraham, Jacob, and David. Proof of lineage from Jacob (Israel) was taken seriously by the Jews. For example, at the time of the return from the captivity some could not find their family records (Ezra 2.61-63) and were excluded from practicing as priests. In a similar way, Matthew and Luke demonstrate that Jesus was a legitimate Jew and descendant of David—both as a physical descendant and as a legal heir to the throne (Lk 3.23-38; Mt 1.1-17).

It is often claimed in the popular media that Arabs and Jews are descended from Abraham—through Ishmael and Isaac. However, modern Arabs are probably descended from Elam or Aram rather than Arpachshad (or Joktan rather than Peleg). Ironically, if Arab Muslims are descendants of any of Shem's sons, then Islamic anti-Semitism is an oxymoron. Muslims (even in the Middle East) represent a spectrum of ethnic and phenotypic subtypes. Jews represent even a broader spectrum of phenotypic subtypes, that includes descendants of Japheth (Ashkenazi [Gen 10.3] Jews, from southern Russia or eastern Germany, are descendants of Japheth), and may have blond hair and blue eyes, dark skin and black curly hair, or olive skin and dark brown hair. There is not a single Jew (or Muslim) who could definitively demonstrate that he is descended from Abraham. Jewishness is no longer a physical factor but is cultural or religious. The people Paul was concerned about (Rom 10.1-3)—Israel in the flesh—no longer exist as an identifiable people or nation.

No one, who calls himself a Jew today, can demonstrate that he is descended from Abraham, Jacob, or David. Therefore, it would be impossible for anyone to provide genealogical proof that he is the Messiah. Jesus uniquely qualifies as the Messiah, according to the preserved genealogical records. Thus, Jews who reject Jesus and look for a future Messiah are sadly deluded.

Jesus dismisses any claim that ethnic ancestry has merit before God (Jn 8.31-41) and introduces the revolutionary concept that the true descendants of Abraham are not his physical seed, but those who believe in Christ and are obedient to God's commands (Lk 19.9; Rom 4.11-12; Gal 3.7, 29). It is this distinction that Paul refers to when he says: "A man is not a Jew if he is only one outwardly ... No, a man is a Jew if he is one inwardly; and circumcision is circumcision of the heart, by the Spirit ..." (Rom 2.28-29). Christians are the true Jews (Israel) of God (Gal 6.16). Jesus and Paul teach that the Jews (as a nation) had their chance to receive Jesus as the Messiah while he was on earth. If they rejected him, they would no longer be considered the people of God, would be cut off, and would be treated as pagans (Mt 8.11-12; Mt 21.43; Mt 23.38; Lk 13.6-9; Acts 18.6; 1 Thess 2.14-16).

Jesus is the fulfillment and completion of everything that was true Israel. The promises of God announced in the OT have reached their universal fulfillment in Christ and now encompass believers in all nations. The land of Palestine and the Shemites have no special place in the remainder of God's redemptive history, contrary to the false eschatological views purveyed by many in the Church today. Palestine and Shemites have been replaced by the world and anyone who believes is Jesus out of all the nations (Mt 28.19).

Lands, Languages, Clans, and Nations [December 1]

(Gen 10.5, 20, 31-32)

The theory of the recent out of African (ROoA) origin of modern humans, *Homo sapiens*, is the most widely accepted model for the geographic origin and early migration of humans. This theory was considered speculative until the 1980s, when a study of mitochondrial DNA in modern humans and archaeological artifacts supposedly demonstrated that our ancestors began their journey from the Serengeti to the ends of the earth, about 50,000 years ago, and replaced early populations of Neanderthals and *Homo erectus*. We have already addressed the belief that the Neanderthals were not of the same kind as modern humans and showed that it is questioned now, even among proponents of the evolutionary paradigm. Based on the teachings of Scripture we can state emphatically that any remains of post-flood humans must have been descendants of Noah—and therefore had no differences anatomically or intellectually from us. In addition, Genesis chapter 10 informs us that the ROoA theory is false—despite the protestations of modern sceptics who wish to dismiss this chapter as a fabrication. All the inhabitants of the earth today are descended from families who migrated out of the Middle East, beginning sometime between 2245 and 2215 BC.

These verses indicate that people spread out over the earth, into their 'lands', by their 'languages', 'clans', and 'nations'. The dispersal of mankind by these three factors (languages, clans, and nations) is repeated three times once for each son of Noah. Elsewhere, we are told that the Lord dispersed them (Gen 11.8). The migrations of mankind were not haphazard. They were directed by God. God sent each group of people to *their* lands. The threefold repetition in this chapter indicates that God sovereignly controlled the migrations of all peoples (clans and nations). Paul reinforces this truth when speaking with the Athenian council, "[God] made from one man every nation of mankind to live on all the face of the earth, having determined allotted periods and the boundaries of their dwelling place." (Acts 17.26) Paul uses this allocation as an argument for why the Athenians should turn to the living God.

The first division of mankind, from a single homogenous group (Gen 11.6), was based on a confusion of language (Gen 11.7). Whereas mankind had previously had a single language (Gen 11.1), after God disrupted their work of constructing the tower at Babel, he divided mankind by languages. Today language differences continue to be a significant divider of mankind. Not only from the perspective that people who do not share a language cannot communicate, but also from the way in which language is used for political control. For example, when the European Union was formed, languages to be used in its administration became a major concern. Similarly, language considerations continue to be divisive in Canada and the in US. Language differences can be as, or more, divisive than religious differences.

After the division at Babel, families formed around a single new language—e.g., spouses and near relatives learned another language in order to maintain a degree of cohesion—and these developed into a clan system based around languages. Over time, larger clans formed into nations. Empire building after Babel attempted to include peoples of many language groups (e.g., in the Persian Empire), but in practice a single language became necessary for the functioning of an empire (e.g., Aramaic, Greek, Latin, English, or Mandarin).

Clans based around a language, dispersed from the Middle East. They would have been relatively small subpopulations which, according to standard genetic models, would have had a narrower genotype than is representative of the wider human population. The language differences would have reinforced genetic segregation—except where slaves were captured and interbred with their captors. Thus, genetic differences would have arisen quickly, and clans would have looked significantly different from each other. This explains how differences such as skin colour and hair colour became concentrated into people groups. However, it does not answer an interesting question raised by the ROoA theory, "Why did the original inhabitants of the continents found nearer the equator or in hot climates tend to have darker skin and hair colour, whereas those found in higher latitudes tend to have lighter skin and hair colours?" This is a general observation since the Inuit have darker skin pigmentation and hair colour than the inhabitants of the Shetland Islands.

The traditional explanation for regional distributions of genotypic variants is that humans adapted to their environments through evolution. However, there is no evidence that skin colour would have provided enough of a

reproductive advantage in one geographic area over another—even over 50,000 years. A person with dark skin is probably more susceptible to vitamin D deficiency and rickets in higher latitudes, and a person with light skin is likely more susceptible to skin cancer because he has fewer melanosomes. However, childhood rickets is caused by a dietary deficiency and skin cancers develop over decades of exposure to sunlight. Skin colour may be correlated with geographic distribution (i.e., in higher or lower latitudes), but as a causal factor for reproductive strength by geography it is unproven. Rather than agreeing with evolutionary models, we need to take God at his word. He providentially directed clans to the lands he had allocated to them. For example, knowing what was best for them, he directed darker skinned individuals to areas where they could more easily tolerate tropical sunlight.

Earth's Division in the Days of Peleg [December 2]

(Gen 10.25; Gen 11.9)

In Peleg's days, the earth was divided. This brief parenthetical comment (in Gen 10.25), in the midst of a genealogical record, has resulted in considerable discussion. For the original readers of the account the genealogical record was associated with a known specific event which was memorialized in the name Eber gave to his son Peleg. In our day, the meaning is not obvious. Traditionally, this statement has been understood to be a reference to the scattering of mankind because of the construction of the tower at Babel and the subsequent confusion of human language by God (Gen 11.7). However, alternate interpretations have been proposed.

The meaning of the words used in this statement need to be considered first:

- *Divided* The Hebrew verb *niplega* can be translated as 'split' or 'divide'. Other than in the parallel passage (1 Chron 1.19), the verbal form is used only two other times in the OT. In Job 38.25 it is used to refer to the creation of channels for water. In Psalm 55.9 the verb is used metaphorically to refer to the confounding of language.
- *Peleg* The word *peleg*, the noun form of *niplega*, is used about ten times in the OT to refer to streams (Is 30.25; Ps 1.3). As a noun, it does not appear to be used to refer to a division. However, this may be implied by the fact that streams (or canals) divide land. There are similarities between the Hebrew *peleg* and the Assyrian *palgu* ('canal' or 'irrigation ditch') and the Akkadian *pulukku* ('boundary').
- *Earth* The Hebrew word *erez* can be translated as 'earth' (meaning the whole globe or all of mankind) or as 'land' (meaning a territory).

Based on these etymological considerations, a number of interpretations of this parenthetical comment have been proposed. The interpretations generally assume that the event occurred prior to Peleg's birth, or during his lifetime, depending on whether Peleg was named prophetically or retrospectively. Proposed interpretations include the following:

- The land (Mesopotamia) was physically divided by an earthquake.
- There was a single continent *after* the flood. This continent was broken into separate continental masses, which then began to drift apart. A suggested trigger for the breakup of the continent was a slight change in the earth's axis tilt. A consideration of Genesis 10.25 led Antonio Snider to propose the idea of continental drift in 1858 in his book *Creation and its Mysteries Unveiled*, before Alfred Wegener proposed the idea in 1912, and long before it became more widely accepted after evidence showed that the seafloor was spreading.
- The land (Mesopotamia) was divided into territories and assigned to the nations of men by Noah or Eber under the direction of God (Dt 32.8). This would be similar to the manner in which Joshua divided the land Israel inherited from the Canaanites into their tribal allocations, or the way the 1494 *Treaty of Tordesillas* divided the lands beyond Europe between Portugal and Spain.
- Peleg invented the concept of marking property boundaries with hedges and ditches or canals.
- A split between the two families of Eber, the Pelegites and the Joktanites.
- 'Land' ('earth') is a metonymy for 'people' and the division refers to a political schism and mankind's separation into factions—possibly precipitated by Nimrod as he pursued his empire-building in Shinar and Assyria.

• The general scattering of people across the globe as they divided into their respective nations (Gen 10.5, 20, 31-32), after the confusion of language as a consequence of building of the Tower of Babel (Gen 11.8).

Since Genesis 10.1b-11.10a forms a single unit (Shem's account), we need to understand the reference to the division within its context, the events at Babel. This probably rules out interpretations based on physical phenomena (an earthquake, continental drift). Also, the confusion of human language made it difficult for people to work together and resulted in political chaos. Thus, suggestions which include people working together, such as setting up property boundaries or digging canals, are probably ruled out.

The event was the division of human language and subsequent scattering of mankind across the earth in nationallinguistic groups by God (Dt 32.8; Acts 17.24-26). Both the genealogy and the account of the tower use 'earth' or 'land' (Gen 10.5, 20, 31-32; Gen 11.1, 8-9); refer to 'language' (Gen 10.5, 20; Gen 11.1, 6-9); mention 'Shinar' and 'Babel' (Gen 10.10; Gen 11.1, 9) and building of cities (Gen 10.11-12; Gen 11.4-5, 8); and refer to population dispersion (Gen 10.5, 18, 32; Gen 11.4, 8-9). Also, both include a wordplay: 'Peleg' with 'divided' (Gen 10.25) and 'Babel' with 'confused' (Gen 11.9). This provides evidence supporting the traditional interpretation—the division of the earth in the days of Peleg is the same as the confusion of human language which was the result of the construction of the Tower of Babel.

Thus, it is possible to provide approximate dates for the construction of the Tower of Babel and the beginning of significant waves of migration from Mesopotamia. Peleg was born about 2245 BC, and this account was likely written before 2215 BC. Thus, the tower's construction and division of languages likely occurred within that period.

Ice Age Civilizations [December 3] (Gen 10.32)

Conventional opinion among geologists and archaeologists, states that there has been a cycle of ice ages and interglacial periods. It is claimed that we are currently in the Holocence interglacial period, which began around 10,000 years ago. Actually, there has been only *one* ice age (see, <u>A Single Ice Age</u> [October 19]), which followed the worldwide flood, and ended around 1700 BC.

Prior to the dispersion of mankind, through the confusion of languages, it is possible that a few migrants left the Middle East and travelled into Asia Minor and northeast Africa, along the Mediterranean coast, and toward India. They may have fled from the oppressive empire-building activities of Nimrod. However, these migrant groups would have been small—since it took some time for the world's population to grow to sufficient levels to support mass migration, and the majority of mankind was disobeying God's command to go out and fill the earth (Gen 9.1). It is probable that they would have been nomadic and itinerant and left little evidence of their residence—such as cities or stone monuments (e.g., the pyramids, Stonehenge, or other megaliths).

After the events at Babel, between 2245 and 2215 BC, larger groups began to migrate from the Middle East and to establish permanent settlements. Their initial settlements would have been along the seacoasts and the banks of rivers (see, <u>Coastland Peoples</u> [November 25]). From there, they began to move further inland (e.g., into the grasslands of north Africa and forests of Europe). Some of these migrants would have also begun the trek to distant lands (e.g., to Asia and North America, and then to South America and the South Pacific).

The Neanderthals, who *must* have lived post-flood, since all evidence of human settlements was destroyed by the flood, were probably among the original descendants of Japheth who settled Europe and Asia. They may have been pushed inland as the Phoenicians (a Hamite people) and other seafaring peoples began to form colonies on the coasts or may have chosen to move inland to be independent and to form separate settlements. Thus, 'cavemen' or 'stone age' peoples of the ice age are not the precursors of modern *Homo sapiens* or of civilization, but what people became as they moved away from the hubs of civilization and technology (e.g., smelting and working with metals).

Likewise, all aboriginal peoples in the Americas and in the South Pacific had to arrive in their current lands after 2215 BC; not 15,000 or more years ago, as most historians claim. Some legends of indigenous Americans trace their histories to a worldwide flood. For instance, a Toltec legend speaks of a great flood, the construction of a great tower, and the confusion of languages. The Choctaw have a legend which recounts the building of a large monument and the confusion of tongues. The Inca also trace their history to the flood.

As the ice age progressed (from about 2345 BC to 1700 BC) significant quantities of water were frozen in the glaciers of continental North America, Greenland, Europe, Asia's mountains, and Antarctica. During the ice age, particularly at maximum glaciation, sea levels were considerably lower than they are today. Thus, the popular idea that migrants were able to make crossings to the new continents or to islands on land (or ice) 'bridges' (that are now submerged)—for example, across the Bering Strait—appears to have merit. However, Amerindian legends from Central America (e.g., the *Popol Vuh*, "Council Book", of the Quiche Mayans of Guatemala) speak of their ancestors crossing a great body of water and arriving from the east. It is possible that Phoenician sailors were blown off course and ended up in the Caribbean—whether they were able to return to the Mediterranean and report their discovery is a matter of debate; although Diodorus Siculus, writing in the first century BC, seems to support this contention with his account of the Phoenician's discovery of a lush land with rivers, to the west of Africa. So, the earliest settlers in parts Central and South America may be descended from migrants who came both from the north-west and from the east.

As the postdiluvian sea level dropped during the ice age, settlers constructed dwellings and harbours on the coasts. Then, in the centuries following the end of the ice age (around 1700 BC), many of these settlements would have been flooded and abandoned, as the low-altitude glaciers melted and the sea level rose by as much as 50 meters. The rise in sea level during the Greek and Roman period provides evidence that the ice age ended in historic times, and accounts for the existence of many submerged ruins such as these:

- Herakleion and Canopus, the twin cities guarding the gateway to Egypt.
- Pavlopetri, off the coast of Greece, which covered more than 30,000 square meters and was submerged around 1000 BC.
- A megalithic temple on the seabed in Maltese waters.
- Apparent dwellings, and monuments off the Japanese island of Yonaguni.
- Atlit-Yam in the Bay of Atlit near Haifa, Israel.
- The Shore Temple of Mahabalipuram, and the remains of a vast city in the Bay of Cambay almost 80 km offshore; both off the coast of India
- Ruins of a city stretching for kilometers along the Yucatan Channel that runs between Cuba and Yucatan, Mexico.

These undersea ruins have perplexed mainstream archaeologists who claim that classical civilizations formed thousands of years *after* the ice age ended. However, if we accept Biblical chronologies, the worldwide flood and the subsequent ice age, their existence is easy to explain.

One Language [December 4] (Gen 11.1)

Noah and his family spoke only one language when they exited the ark. This language would have been spoken by Noah's descendants, for all generations to the present, if it had not been for the events that are recorded in Genesis 11.1-9. Thus, when Shem wrote this account, after the confusion of language, he determined that it was necessary to establish the context for the Tower of Babel incident by reminding his future readers of the fact that after the flood the world's inhabitants spoke a single language. He uses parallel expressions 'one language' and 'same words' to reinforce his point.

The reference to the one language, at this point in Shem's account, indicates that he is providing details to explain why people began to migrate from the Middle East in groups which had their own languages (Gen 10.5), after the

linguistic division of the earth (Gen 10.25). It also explains why people were inclined to unite in Nimrod's rebellion. Before the confusion of language, the entire human population would have been represented by a spectrum of skin, eye, and hair colours and a variety of different physiological characteristics. But the concept of *race* did not exist. Thus, the expression 'one language' serves as a proxy to indicate that mankind, other than a few in the covenant line, were united in their commitment to Nimrod's naturalistic religion, and his project to build a temple-tower for his anti-God pantheon. In addition, the expression 'one language' reminds us about how God had created mankind with a linguistic unity to worship with one voice and anticipates the call of Abram who would unite people from all nations in one true faith and the Pentecostal removal of the language barrier which divides people (Acts 2.8).

Many commentators have noted that the 'one language' is literally 'one lip' in the Hebrew. Previously Shem had used the word 'tongue' (Gen 10.5) to give expression to the idea of different patterns of speech. In this chapter (Gen 11.1, 6, 7, 9) he uses 'lip' as another metonymy for 'language'. It is possible that the reference to the lips is used because they are a principal part of the body used to shape the different linguistic vocal sounds which emanate from a person's mouth. The expression 'same words' can be understood as 'having the same vocabulary'—i.e., each sound formed by the lips had the same meaning for every person.

We do not need extra-Biblical evidence to support what God, through Shem, has recorded. However, it is interesting that the fact that at one time all people spoke a single language and then there was a confusion of language, is supported by legends from different parts of the world. For example, an account preserved among the Miautso, a minority group who live in south-central China, says that after the flood, "Their speaking was all with the same words and language." The Sumerian myth *Enmerkar and the Lord of Aratta*, speaks of Enmerkar of Uruk building a ziggurat in Eridu and then speaks of "the whole universe" addressing "Enlil [the storm God] together in a single language." Another account, from the island of Hao in Polynesia, tells the story of the tower and then of God, who, "in anger chased the builders away, broke down the building, and changed their language, so that they spoke diverse tongues."

There is debate about what was the original language. Many ancient cultural groups from China to the Americas claim that their language is the original. Historians contend that Sumerian is among the oldest languages since its cuneiform script was apparently used before the invention of written alphabetic scripts. However, spoken languages can be written with different scripts (e.g., a number of languages use the Latin alphabet and Hebrew uses the Aramaic alphabet). In earlier meditations we noted a number of wordplays (some have complex double meanings) which appear to indicate that the antediluvian language was Hebrew (or a proto-Semitic cognate). However, it is also possible that Sumerian was the original language. There is some evidence that there was a period of at least 100 years of upheaval (which we attribute to the confusion of languages), after which the Sumerian culture and language disappeared. If the original language was Sumerian, it is possible that Eber translated the documents containing the pre-flood history into Hebrew after the confusion of languages or that Moses was able to read and understand the Sumerian in the text he had when he wrote Genesis.

For centuries, linguists have postulated a single proto-language underlying all languages. For example, they identify 'ultra-conserved' words (such as *hand*, *give*, *bark* and *ash*), which they claim to be at the root of the Indo-European languages. Finding a single proto-language is important to linguists because otherwise, they would have to presuppose polygenesis or an unthinkable alternative—Genesis chapter 11 is factual! Linguistic polygenesis introduces a serious challenge for the evolutionary paradigm; similar to the challenge presented by the claim that there has been biological convergent evolution—i.e., eyes, wings, hemoglobin, etc., evolved multiple times in unrelated species. Men will be unsuccessful in their attempt to prove linguistic monogenesis because language did not arise through evolution once, let alone multiple times. Human language kinds (families) are as different from one another as are animal kinds. Language is a gift from God endowed only on humans, within the physical creation. Fully mature and unique languages were created by God between 2245 and 2215 BC, as a result of man's rebellion against God.

Settling on the Plain of Shinar [December 5]

(Gen 11.2)

The ark landed on the mountains of Ararat (Gen 8.4). After the ground had dried out completely, Noah and his family exited the ark. We are not told where Noah settled initially. However, it is probable that he continued to live near the ark for some time—he may have used food stored in the ark until his first crops could produce a yield and he may have used wood from the ark to construct dwellings and barns. If he had settled in a mountain valley, it would have quickly proven to be unsuitable for sustaining his rapidly growing family. It is probable that the family sent out scouts to search for a suitable new place to live, or a hunting party discovered a more commodious location. However it happened, a major portion of Noah's descendants decided to move away from the mountains of Ararat, even if Noah remained living there.

Since the ark landed in the Ararat mountains, the logical direction for their migration was toward the south—i.e., away from the mountains via the valleys, and toward a warmer climate. However, the mountain valleys with their fast-flowing rivers—there was much more precipitation after the flood that there is today, because the oceans were considerably warmer then and gave off more moisture—would have provided natural barriers which guided their migration. They likely ended up funnelling down between two major rivers (the Euphrates and the Tigris). As they reached lower elevations, they found a large fertile plain between these two rivers (in upper Mesopotamia). Thus, their direction of migration was southeast, or from their perspective, down and then toward the sunrise (east).

A comparison of translations indicates a difference. The ESV and NKJV have 'from the east', but the NASB and NIV have 'journeyed east' and 'moved eastward', respectively. The same word is translated elsewhere in the ESV and NKJV in the early portions of Genesis as 'in the east', 'eastward', 'at the east', 'on the east' or 'journeyed east' (Gen 2.8; Gen 3.24; Gen 12.8; Gen 13.11). This supports the translation 'eastward' in this verse (Gen 11.2)—rather than the ESV's translation—and is consistent with the location of upper Mesopotamia relative to the vicinity of Mt. Ararat. Thus, it is not necessary to suppose that the ark landed in the Zargos Mountains (in western Iran) and that people migrated west into Mesopotamia.

The idea of going eastward may allude to earlier events—the expulsion of Adam and Eve from the Garden through the eastern gate (Gen 3.24) and the expulsion of Cain eastward to the land of Nod (Gen 4.16). Later, lot would depart from Abraham in an eastward direction (Gen 13.11) and became entangled with Sodom and Gomorrah, and deceitful Jacob went to the people of the east (Gen 29.1). This may indicate that the residents of Shinar were deliberately going outside of God's blessing. Today people pursue *eastern* mysticism as if true enlightenment comes from going east, rather than dwelling among the covenant people—Christians.

At that time, Shinar was a well-watered region, ideal for planting orchards, the production of grain and legumes and garden vegetables, and raising cattle. This is one reasons why James Breasted, an archaeologist from the University of Chicago, referred to the larger region, which included Shinar, as the 'Fertile Crescent' in a book published in 1906. The fertility of the land permitted the population to grow rapidly and ensured that they did not have to devote all their time to the production of food. Thus, they were not inclined to move on and to explore other regions of the world—contravening God's direct order to fill the earth (Gen 9.1). Instead, they "settled there". The mention of their 'settling' in the opening of the Babel section of the Genesis record stands in opposition to their being forced to disperse at the end of the section (Gen 11.9). It is also a contrast to the later obedient "going forth" of Abram and his family from Ur, in lower Babylon (Gen 11.31; Gen 12.1-4).

The people called the area in which they settled, Shinar. It later became known as Babylonia, after the main city (Babel/Babylon) which they built. Various etymologies have been proposed for the term *shinar*, including: 'land of the two rivers'. If this is the meaning, it makes sense because of the importance of the two main rivers which flowed through Mesopotamia. At some point, they gave names to the two rivers surrounding Shinar, and named them after rivers that had been known before the flood. One they named *hiddeqel* (translated as 'Tigris'), which means "arrow" and signifies a "dart", or "swiftness". The other they named *perat* (translated as 'Euphrates'), which comes from a word that means "good and fertile stream". They chose these names as generic but meaningful

terms for the two rivers, but also with an allusion to the pre-flood world. By so doing, they were declaring their independence from God—with Shinar being a second Eden, they did not need God's paradise, they would establish their own.

After Cain was expelled eastward, he built a city to overcome a restless wandering. Likewise, the postdiluvian population went east and established cities which they believed would keep them from being dispersed (Gen 11.4). The first city, built under the direction of Nimrod (Gen 10.10), was Babel—which means 'gate of god'. This also indicates that their intention in settling in Shinar was to establish a society on a foundation other than the living God. Their next act, building a temple-tower for their anti-God pantheon, which stood above the plain of Shinar, would solidify their rejection of God.

Brick Making Techniques [December 6] (Gen 11.3)

We might wonder why the Holy Spirit determined that it was necessary to include in his permanent communication to mankind a record of the early postdiluvian people, living on the plain on Shinar, making fired bricks and using bitumen (tar or pitch) as mortar.

One reason this information is included is probably to inform us that the manufacturing abilities of the early postflood dwellers were technologically advanced and not primitive. Contrary to popular opinion, human civilization did not develop through a series of long ages—Stone Age, Bronze Age, and Iron Age. Rather, within 130 years of exiting the ark, mankind displayed the ability to create ceramic bricks—a technique which requires precise and sophisticated manufacturing techniques, using complex formulations and steps to prepare the clay and glaze the ceramic. The bricks were made of white clay mixed with organic material (straw or reeds) which served as a binding and reinforcing agent (like fiberglass filaments in an epoxy resin do today). The kilns for firing the bricks had to be constructed so that the unfired bricks could be stacked in batches. The kilns had to be large enough to allow heated air to reach a constant temperature and circulate around the bricks. The remnants of brick kilns found in the area indicate that they were large structures (100 square meters and 10m high, including the chimney). Fuel was placed in openings along the walls, called fire-mouths, which would have had individual air draws for controlling the temperature. Openings in the sides also permitted observers to look into the kiln to watch the brick firing process (the colour of the bricks and ceramic surfaces would be used as a temperature guide). Also, to provide sufficient continuous heat for the firing process, the residents of Shinar would likely have had to import wood or charcoal from the mountains.

Historians inform us that Mesopotamia is the 'cradle of civilization' and that the residents of this area introduced technological innovations such as writing, the wheel, irrigation, and glass. However, it is more correct to say that they *reintroduced* them. We noted previously that writing was invented before the flood—documents containing the pre-flood accounts (including Adam's) were carried on the ark. Also, we noted that antediluvian technology was likely as developed as the technology of the Greeks and Romans which produced the Parthenon and aqueducts. It may even have been comparable to that of the late Middle Ages, which was able to construct cathedrals such as Notre-Dame de Paris. Shem, Ham and Japheth would have all been skilled craftsmen, having participated in the construction of the ark. They undoubtedly taught their descendants pre-flood construction, metallurgy (Gen 4.22), and agricultural techniques (Gen 9.20). The postdiluvian inhabitants of Shinar quickly advanced these techniques. Within 130 years, many would have been skilled masters in their trades. A rapid advance of technology innovation is demonstrated by the ability of societies to move massive stones and build megalithic edifices such as ziggurats and temples, the pyramids and Stonehenge, within less than 300 years after the flood.

Another reason this information is included is that it provides evidence of the historical validity of the Genesis account. The production of fired bricks and the use of bitumen for mortar is well attested from extra-Biblical sources (written and archaeological) in Mesopotamia. The lack of large trees and unavailability of nearby quarries in the area, made brick making (sun-dried bricks or kiln-fired) an essential technique for construction. The remnants of

large edifices in the area, including buildings and city walls, made of bricks, attests to the use of this construction technique. Bitumen pits are found in Hit, Iraq today. This is not surprising, given the prevalence of easily accessible oil in the region. Tar from the bitumen pits is used today for coating roofs and wooden boats. Tar has also been found, used as the binding agent for the bricks, in the ruins of Nineveh, Babylon, and Birs Nimrud (Borsippa).

Many professing Christians reject the accuracy of the Genesis genealogies and end up with major inconsistencies in their approach to dealing with the Bible and historical data. They often don't accept the genealogies as complete and as providing accurate chronologies and dates. Instead, they accept long ages and dates (e.g., based on the presence of C¹⁴ isotopes in organic material). As a result, they make statements such as that made by Paul Seely: "When we employ these facts [a tower in Shinar made of fired bricks with bitumen mortar] to date the building of the Tower of Babel, we discover from archaeological data that the event occurs too late in history to be the origin of all languages on earth."²³ Because he doesn't accept absolute dates which can be derived from the Genesis genealogies, and gives precedence to the purported dates obtained from C¹⁴ measurements, he has difficulty with God's explicit declaration that all languages originated after the Tower of Babel incident. We must reject the use of C¹⁴ isotopes as a means of determining absolute dates and rather accept the Bible's generational 'clock' (in chapters 5 and 11). The Tower of Babel was likely constructed about 100 to 130 years (2245 to 2215 BC) after the flood. By 2215 BC, the population in Shinar could have been as large as 50,000, with most of the residents living in the neighbourhood of Babel.

Towering Aspirations – False Religion [December 7] (Gen 11.4)

The account of the Tower of Babel does not describe a competition among rival nations to gain recognition in the *Guinness World Records* for building the tallest tower. It describes a united mankind, executing a direct challenge against the creator and sovereign ruler of the universe. In this account, we encounter the first instance of explicit religious rebellion after the flood—of the same order as Cain presenting unacceptable offerings as worship (Gen 4.3-7). A quick reading of the account does not show that the actions of the Babelites were particularly evil. However, the severity of the resulting punishment—the confusion of languages and forced dispersal of mankind—shows the enormity of mankind's sin and God's displeasure with their action.

Their attempt to build a tower that would reach to heaven was not so that they could have a stairway to heaven which they could use to ascend and draw closer to God in true worship, but so that they could depose God from his throne, which he had established in Heaven (Ps 103.19; Ps 123.1), and practice false worship. They were like kings of a later Babylonian empire who wished to set up their thrones above the stars to be like the Most High (Is 14.13-14). They built their tower so that they could establish their own name, not to glorify the name of God. Their rebellion began with a plot against God's existing reign—"they said, come let *us*"—followed by a plan to make their regime permanent—"let us *build* ourselves a city and a tower"—by using 'indestructible' bricks, which would endure throughout the ages.

The tower was to be built as a temple citadel for their pantheon of gods. Some believe it was to be a large, raised platform with a small temple in the centre to honour their celestial deities. On the platform, astrologers would have observed the night sky and performed their cultic ceremonies. Others believe that the tower's consisted of a series of stepped levels—possibly twelve—associated with celestial objects or astrological signs (the zodiac).

Based on our current understanding of ancient Middle Eastern cultic religions and the nature of ziggurats (which the tower likely was), it is probable that the Babelites, under Nimrod, instituted a religion with gods associated with celestial objects (sun, moon, planets, stars) and earth-based entities (sea, rivers, and storms). Whether or not the practices were original to the Babelites (Ham may have guided this religious rebellion and reintroduced ceremonies

²³ Paul H. Seely, "The Date of the Tower of Babel and Some theological Implications." *Westminster Theological Journal*, 63: Spring, 2001, pp. 15-38.

practiced before the flood), they instituted a religion founded on materialistic naturalism and laid a foundation (not the Sumerians, who followed them) for the use of astrological signs and omens. They may have also introduced human sacrifices to appease angry gods, and cultic prostitution to elicit favour from fertility gods—practices prevalent in ancient Middle Eastern religions. Whatever they created was absorbed by the later inhabitants of Akkad and Sumer and transmitted around the world with the dispersing people groups, after the confusion of languages (Gen 11.7-9). Their pantheon was incorporated, though usually adapted, into the religions of many other nations, including Egypt, Canaan, Neo-Babylon, Persia, Greece, Rome, India, Mesoamerica, and northern Europe.

We may think that our society is scientific and rational, and has moved beyond these ancient superstitions, but that would be a mistake. Over 4,200 years have passed since the Babelites created their anti-God religion, but aspects of it are still visible today—people ask one another for their astrological signs, seek guidance from horoscopes, and undertake actions based on the supposed propitious alignment of celestial objects. Evidence of the continued popular belief in astrology was demonstrated when Canada Post issued twelve stamps with the signs of the zodiac, which have their origin to ancient Mesopotamia. Similarly, many countries have issued stamps to commemorate the Chinese lunar calendar. Religions such as Hinduism continue to perpetuate the pantheism of Babel.

God condemns astrology (Dt 18.9-14) because of its false assumption that celestial objects can influence our destinies, its attribution of deity to created entities (Ex 20.3), and its association with the demonic (Dt 32.17). Likewise, God condemns Darwinism, a religion based on materialistic naturalism and a recent morph of Nimrod's pagan religion. Darwinism preaches that matter (e.g., our genes) determines our destinies and chance (essentially the same as Fortuna, the goddess of fortune) is a god creating out of nothing. It has high priests (e.g., Huxley, Freud, Hawking, Sagan, Dawkins) who lead the gullible in their incantation—"There is nothing for a God to do". Darwinism is also demonic because it denies the existence of absolute truth and morality. Babylon has become a symbol for man's false religions—first exemplified by Nimrod, then by Nebuchadnezzar, and finally by Rome, in Revelation.

Although Nimrod was the instigator; all mankind went along with his initiative to create a false religion. The only exceptions would have been Noah, Shem, and some of Shem's descendants, through Eber. The unified rebellion at Babel may have occurred as soon as 130 years after the Flood, and possibly as late as 340 years after the flood. Even with the later date, Noah (Gen 9.28) and at least Shem (Gen 11.11) of Noah's sons were still alive as eyewitnesses to the antediluvian rebellion against God (Gen 6.5) and of its consequences. So, men could not have used an excuse of ignorance. Rather, the Babelites' rebellion was clearly a blatant act of defiance against God's law and authority. It is disconcerting to see how mankind united in this way against God, so soon after the flood. However, it should not surprise us because it is another example of what Adam and Eve did when they questioned God's authority to establish laws and boundaries for mankind.

Towering Aspirations – Faithless Rebellion [December 8] (Gen 11.4)

The construction of the Tower of Babel epitomizes mankind's sin because it included both the establishment of a false religion and a faithless rebellion against God's sovereign authority. The severity of the resulting punishment— the confusion of languages and forced dispersal of mankind—shows the enormity of mankind's sin and of God's displeasure with their actions. In the previous meditation, we considered the false religion which Nimrod introduced. Today, we will address other aspects of the Babelites' rebellion against God. Their actions shows that the result of abandoning the correct worship of God always leads to other sins of rebellion.

God had instructed mankind to go out and fill the uninhabited earth (Gen 9.1)—to explore and subdue his splendid creation. However, instead of migrating in different directions, most of them determined that they would stick together and organize themselves around a single central city (Gen 11.4)—this does not mean that every inhabitant of the earth at the time lived in the one city, Babel (Gen 11.1; Gen 10.10). Like their father, Adam, their pride led them to defy a direct command from God. We see the same kind of disrespectful behaviour toward God every day,

as everyone flagrantly disobeys the Ten Commandments. People think they know better than God what is best for them and for society. They invariably say, "Surely God didn't mean what he said!" (Gen 3.1) The tower is a symbol of all declared human autonomy from God and disregard for his commands.

They set out to create a name for themselves. Their construction project was intended to raise a lasting monument to their own abilities, which would make them renowned. Instead of praising God, the Creator, and encouraging others to praise God, they wanted men to praise them. Making a name—being famous while alive and remembered beyond death—is an operating paradigm for many of our age. Everyone would like to have more than the 15 minutes of fame, of which Andy Warhol spoke. That is why people dress to impress and wish to be envied when driving expensive cars. Even many preachers want to be recognized for having large congregations or for being popular on the speaking circuit. Mankind is infatuated with making a name in the temporal realm, at the expense of being recognized in Heaven (Lk 10.20; Rev 2.17). More than half of the bricks found amid the ruins of Babylon are stamped with the name of Nebuchadnezzar. It is possible that this practice began under Nimrod and that the people who built the first Babylon inscribed their names on each brick before it was fired. Ironically, their goal was indirectly achieved. Their name is forever remembered, but as the fools who thought they could build a tower to Heaven and dethrone God.

We noted previously that Cain built the first city (Gen 4.17) as a challenge against God, as an attempt at permanency and to inhibit wandering, as a monument to man, to declare his independence from God, and as a rallying point for apostasy. The builders of Babel had the same goals. They were determined to establish their own destiny and to declare God redundant. Cities founded by men are the focal point for all human evil. They engender a collectivist and centrist spirit and concentrate corruption. Thus, we find in Scripture a tension between the *City of Man* and the *City of God*. While human cities embody evil, God plans to redeem the institution of the city by replacing it with a city which he will build (Heb 11.10)—the New Jerusalem (Rev 21.2, 10-27)—in which his law will reign supreme and the citizens will have perpetual holiness and health (Rev 21.4; Rev 22.2).

Babel was not merely any city. It was *the* city of man. It was the centre of Nimrod's empire and would later become the capital of Nebuchadnezzar's Babylonian empire—the head of gold (Dan 2.32). Babylon was declared by God to be the greatest human empire—all that man would want in a world-controlling empire. It had a complete religious system that replaced Biblical truth, an absolute monarch who placed himself above all creation and sought to be worshiped as a god, a humanistic system that viewed man's technology as preeminent, a comprehensiveness that brought together all people groups descended from the three sons of Noah, and a total domination of society through the concentration of statist power. Babylon's authority and control over men was unequalled and unrivaled in history. Babylon has forever become a symbol for man's total religious and political rebellion against God.

Since Nimrod and Nebuchadnezzar, men have aspired to recreate Babylon with world-strangling empires—Cyrus the Persian; Alexander the Great; Ashoka, in India; Rome, under Julius Caesar; Attila the Hun; Genghis Khan; Tamerlane; Hitler's Nazis; and Stalin's USSR and the export of communism. An *orbis unum* (one world) government founded on humanistic, statist, and socialistic principles continues to be a goal of many. Thankfully, God has shown through the judgement of Nimrod and Babel, and Nebuchadnezzar (Dan 4.28-33) and Babylon (Is 21.1-17; Rev 18.1-24) that he will never permit a worldwide human government to exist. He will not tolerate any challenge against the kingdom of his Son. He will not permit a unified kingdom to arise ever again, like the first Babylonian empire that challenged him and was destroyed. And no single earthly kingdom will ever reach the heights of rebellion against him that the Neo-Babylonian empire did. Only the Kingdom of Jesus Christ will be world encompassing (Dan 2.44; Mt 28.19). Thus, this account is significantly more important than the simple, short narrative might suggest. It exposes the futility of an imperialism that attempts to compete with God.

God's Observation [December 9] (Gen 11.5-6)

Modern man, with all his pseudo wisdom, rejects the Tower of Babel account as historical, because he knows that

if he accepts it as historical, he will have to face the reality of a God who deals with rebellion. However, this account speaks of an event which occurred in history. It speaks of God coming down to inspect the construction project of the Babelites. This does not mean that God didn't know what was going on. He does not just watch the universe unfold. He actively governs and preserves his creation (Acts 17.28). Nor does it mean that he had to commute to the construction site to conduct an inspection. God didn't come down to Babel because he couldn't quite see what they were doing from far away in Heaven. Rather, it means that he took official notice of their project to demonstrate his personal involvement in history. He acted like a building inspector who, on conducting a post-construction visit, declares a building unacceptable since it contravenes the zoning bylaw and building code. As a human inspector would require a building to be razed under these circumstances, so God inflicted punishment on those who undertook the project against his revealed will.

This account (Gen 11.3-9) includes a number of ironies:

- The LORD came down. Thus, the "tower with its top in the heavens" (Gen 11.4) didn't reach very far, and certainly not to God's throne.
- God's council (Gen 11.7) counters man's council (Gen 11.3-4).
- The beginning of what they did became the end of what they would do.
- The builders are called 'children of man'. Their tower, built of fired bricks, was intended to be indestructible. But it was no more durable than a child's Lego house in the eyes of the designer and builder (Heb 11.10) who created the universe (Col 1.16).
- The sad message is reported with an element of humour. The Lord laughs at men who rebel against him (Ps 2.4).

God gives the reason why he had to put an end to their united efforts, as one people with one language, which they had displayed in the construction of the tower—it was only the beginning of what they would do. In a similar way, he gave the reason why he had to expel Adam and Eve from the Garden of Eden—lest they eat from the tree of life and live forever (Gen 3.22). In both cases, God limited mankind's abilities to perpetrate evil, first by mortality and then by division.

Many conclude that there is, in God's reflection on what mankind could achieve, an acknowledgement that man, as the image-bearer of God, has been endowed with great gifts and a potential to create. God's observation might sound confusing, since it appears as if he is saying that if he left man to himself, he would actually be able to build a tower all the way to Heaven. But that is not what is meant here. The focus of God's reflection is not on the height of what man could achieve but on the depraved depths to which he is disposed to fall, if he is not restrained. In effect, God says, "If I let their sin go unchecked, there is no telling how much worse it will get. No rebellion will be too great for them. Nothing will be sacred in their crooked hearts." In this regard, Christopher Wright has said, "It is the horrendous and limitless potential for evil of a *unified* and fallen human race that stirs God to 'divisive' action. ... The same proud sin that prevents the whole human race from living in unity for good, also prevents the whole human race for so and grace of God, which uses that very effect of sin as a dyke to save the human race from being engulfed in the self-destruction of unified evil."²⁴

Verse 6 contains the first occurrence of the word 'people' (Heb: *am*) in Genesis, rather than the word 'nation', which is used consistently in the *Table of the Nations*. The word 'people' implies kinship and family, whereas 'nation' tends to refer to linguistic, geographic or political associations. The sinful potential of the 'one people' is what concerns God. Their ungodly unity would lead to fearful consequences if they were left unchecked. We can barely understand the potential for 'family' evil because our history has been written in the context of the national-linguistic division after Babel. However, we know how strongly family ties can influence a proclivity to evil, from the proverb "blood is thicker than water", from stories about dynastic mafia family feuds or of accounts of imaginary or real infamous family feuds (e.g., Capulets *vs* Montagues, Hatfields *vs* McCoys, or Campbells *vs* MacDonalds).

²⁴ Christopher J. H. Wright, Old Testament Ethics for the People of God (Downers Grove, IL: InterVarsity Press, 2004), pp. 216-217.

When we hear of overt examples of extreme evil, we are appalled at the depth to which human depravity can go e.g., the Auca Indians of Ecuador who slaughtered peaceful outsiders who entered their territory; Ahuizotl, the Aztec emperor who sacrificed over 84,000 prisoners from surrounding tribes over a four-day period, to the gods, especially Tezcatlipoca, the god of war; the holocaust perpetrated in the furnaces of the Nazi concentration camps; and Islamic terrorists who crash planes full of passengers into buildings. So, it is hard for us to imagine how things would have been *worse* if God had not intervened at Babel with the linguistic division. But, the Lord, who sees all, knows what the real extent of man's evil intentions is, and he frustrates the counsel of peoples (Ps 33.10, 14) to preserve a people for himself.

Language Confusion [December 10] (Gen 11.1, 7-9)

God conducted a council among the members of the Trinity. They were of one mind in their decision to act against a united mankind, which had sinned grievously by establishing a false religion—building a tower for the pantheon of their gods—and by faithless rebellion—defying God's command by building and concentrating in a city rather than migrating outward to fill the earth. The men said, "Let us make bricks and build a city and a tower that will reach to heaven." God countered by saying, "Let us go down and confuse their language." The repetition of the 'let us' reinforces the cause-and-effect relationship. Newton's law of force says that for every action, there is an equal and opposite reaction. God's law of obedience says that for every evil action, there is an equal and opposite punishment.

God has a vast array of forms of punishment in his arsenal. He banished Adam and Eve from paradise and turned immortality into mortality. He consigned Cain to a life of wandering. He used a worldwide flood to cleanse the earth of deep depravity. He cursed the descendants of Canaan with servitude. Now, he introduces another form punishment, which affects all mankind as long as we remain on the earth—he "confused there, the lip of all the earth" (Gen 11.9). The direct purpose of this punishment was to make it impossible for the men who had worked together on the tower project to understand one another. The immediate, indirect, consequence was to make them unable to continue to work together on illegal projects. The indirect, intermediate-term, consequence was to cause groups of men, who could no longer understand each another, to migrate from Babel to distant parts of the earth. The indirect, long-term, consequence was to bring about a division of language that has made mankind disunited until the end of time.

God could have toppled their conceit with a hurricane-force wind and left their tower as a pile of sand. Instead, he left it standing as a mute witness as it crumbled over the centuries. Although he could have marshalled legions of angels to fight against the rebels, he demonstrated the true greatness of his power by defeating them with a mere whisper in their minds. With the flip of a mental switch, each man became unintelligible to his neighbours. The irony is sweet: they had wanted to make a name for themselves (Gen 11.4), instead they could no longer pronounce one another's names. This should encourage us. God can confound and defeat his enemies as easily today—regardless of the nature of their sin. He does it by having them work against one another (Judges 9.23) and by confounding their ability to communicate (Ps 55.9).

Mankind is divided by many things—phenotypic and cultural differences, religious affiliations, nationalism, and native languages. All of these divisive factors are the result of the language schism God introduced at Babel. In Canada, we understand the nature of this division with the 'two solitudes' around the perceived lack of a will for communication between Anglophone and Francophone peoples in Canada. Contrary to what the Governor-General, Michaelle Jean, said, the time of the 'two solitudes' has not finished. In the US, skin colour (black *vs* white) is more divisive than language (Spanish *vs* English). Contrary to what Barak Obama hoped, when he spoke at the 2008 Democratic convention, 'a more perfect union' was not achieved by his election. The invalid concept of *race* is more divisive now than it was before his election. God's purpose in introducing the language division was, first, to ensure that men can never again develop a level of cooperation which will allow them to attempt another Babel-

project. Since God has fragmented false religion and rebellion, we can be assured that he will never allow all the evil forces of Satan and mankind to unite in one wave to sweep away truth. The language fragmentation of mankind at Babel is a promise that there will never again be a worldwide concentration of evil which will destroy the Church of Christ. It was both a curse and punishment and a blessing because it forever limits the extent of wickedness which man can coordinate and carry out.

After the immediate chaos caused by the inability of people to communicate with others, family units began to form around new languages. These families could not work or trade efficiently with others and became suspicious of outsiders. So, they began to move away and seek their own territories. Thus, they dispersed across the earth. God made men obey his command to fill the earth, despite their desire to cluster together in the vicinity of Babel. Ironically, they had wanted to prevent being dispersed over the face of the whole earth (Gen 11.4), but that is exactly what ended up happening to them.

The saddest consequence of the language division and dispersion of mankind was that men quickly forgot the written record of God delivered by Adam, Noah, and Shem. Many cultures have legends at first handed down orally about creation, the introduction of sin, the flood, and the construction of the tower and confusion of languages. But these are generally garbled babbling. It would have been necessary to translate the written record immediately after the events at Babel to preserve the truth. However, since this could not have happened because of the confusion of language, the families which migrated away from Shinar left with the Babylonian pantheon and little knowledge of true religion. The result was that soon after, many false religions sprang up around the world. Thus, when the covenant people reinterpreted the meaning of the city's name, using related sounds (*balil*), to mean 'he confused', they could have included man's confusion of religion as well as language.

The Origin of Languages [December 11] (Gen 11.1, 7-9)

Because evolutionists reject the Biblical account of creation and of the flood, they have had to postulate the 'Cambrian Explosion' to explain the relatively rapid appearance (from the perspective of an earth that is supposed to be 4.5B years old) of most major animal phyla in the fossil record. Linguists have a similar challenge—explaining the sudden appearance of numerous languages within historic time (i.e., beginning around 2215 BC).

There are two basic views about how language arose. The first, based on the belief that language is too complex to have appeared suddenly fully formed, posits that language must have evolved from pre-linguistic systems of communication (e.g., proto-human grunts). The second claims that language appeared suddenly, fully formed, during human evolution. However, actual language complexity and diversity presents an impossible challenge for either of these views to adequately address. There is no 'deep grammar' underlying all languages and no evidence of a common source or historical connection between language families, so they cannot have evolved from a common proto-language. But, the odds of evolutionary processes producing multiple complex and markedly different fully formed languages, within a few hundred or thousand years (linguistic polygenesis), is too absurd to believe.

There is no direct empirical evidence that shows how human languages arose. Indirect evidence—e.g., archaeological and studies of language acquisition—does not help address the challenge. The shortage of evidence has led many linguists to dismiss the subject of language origin as unsuitable for serious study, and as one of the hardest problems in science. Tom Wolfe has written about the challenge (*The Kingdom of Speech*; 2016). Linguists cannot explain the origin of languages because they will not accept the Bible's teaching that God introduced numerous languages and different kinds of languages, at the time he punished mankind for building the city and tower at Babel. Only from the Bible can we learn how the world's languages originated.

Language did not develop by chance through an evolutionary process. It is impossible that an evolutionary process could have produced language, because: 1) language grammars are far too complex to arise through chance

processes, 2) men could not process any language if they didn't already know (innately) how to process one, 3) the supposed pre-hominoids would have had no means of agreeing on what particular sounds meant without a pre-existing language system.

All languages have vocabularies of tens of thousands of words, and complex syntactic and grammatical structures. For example, some Bantu languages have grammars more rigid and precise than Greek; the Wintu Indians of California use special forms in indirect speech to indicate when a statement is hearsay, the result of direct observation, or inferred with degrees of plausibility. It is beyond credulity to believe that these complex systems of communication developed by chance from grunts and squeals. Language has every attribute of a complex, specified information system, designed by an intelligent agent.

Older languages are more complex than languages which have developed more recently from the older languages. For example, Sanskrit, ancient Greek, and Latin had many different noun inflections (case, gender, number), and verbs were inflected for tense, voice, number, and person. Modern Indo-European languages have a greatly reduced number of inflections and verbal forms. Latin is more complex than English (cases, genders, moods, voices, personal terminations, and precise syntax). Greek (considered to be older than Latin) is even more complex. In Vedic Sanskrit (believed to be older still) the complexity is even higher, with more than one present tense; three aorist tenses; a perfect tense using reduplication in terminators showing intensive, repetitive, inchoative, causative, and desiderative formations; each of three verb stems have five moods (e.g., injunctive, subjunctive, etc.); twelve ways of forming infinitives; and each tense can be conjugated in two voices (active and middle). Similarly, Hindi (an ancient language) is much more complex. There is a loss of information through time, indicating devolution, not evolution; decay not improvement. This is consistent with what we have noted previously in these meditations— the created order is decaying because of sin (Rom 8.21-22).

Most commentators suggest that when God confused man's single language at Babel, he introduced a few dozen languages associated with the families identified in the *Table of the Nations* (chapter 10). However, today there are at least 6,000 languages in about 100 language families. In addition, there are around 50 language isolates that appear to fit into no family (e.g., Basque). We also know that many languages have died out (e.g., North American Indian, Asian, and Pacific languages). We noted previously that by 2215 BC, the population in Shinar could have been over 50,000. It is possible that when God confused the single language of mankind, he flipped a mental switch in each person, who was then endowed instantaneously with his own unique language. Families would have been in total chaos as children and wives were required to learn the language of the husband. Within a few years of the Babel event, nine tenths of the languages may have died out.

Extra-Biblical Evidence of Language Disruption [December 12] (Gen 11.1, 7-9)

Linguists have no accepted model for how language could have developed under the evolutionary paradigm. They propose a number of hypotheses with names such as: *obligatory reciprocal altruism*, *gossip and grooming*, *self-domesticated ape*, and *gestural*. Nor can they explain how distinctly different languages could have developed. They dismiss the idea that Adam was created with an innate ability to communicate with language. And they reject the idea that the languages spoken today are descendants of languages created instantly at Babel. For example, "This [Genesis 11.1] is not very plausible. Nothing we know or can observe about human linguistic behavior makes it likely that there ever was a single form of speech. ... The voluminous tradition of Babel commentary weaves religious, philosophical, historical, cultural, archaeological, and philological speculations around the story told in Genesis. What matters is whether we allow Genesis 11:1 to close our minds to other ways of imagining the origin of human speech."²⁵

²⁵ David Bellos, *Is That a Fish in Your Ear? Translation and the Meaning of Everything* (NY, Faber & Faber, 2011), pp. 325-326.

However, the Bible is not the only account which supports the existence of a single language, which was disrupted and replaced with multiple languages. The Sumerian epic *Enmerkar and the Lord of Aratta*, says that,

In those days, the lands of Subur (and) Hamazi, Harmony-tongued Sumer, the great land of the decrees of princeship, Uri, the land having all that is appropriate, The land Martu, resting in security, The whole universe, the people in unison To Enlil in one tongue [spoke]. (Then) Enki, the lord of abundance (whose) commands are trustworthy, The lord of wisdom, who understands the land, The leader of the gods, Endowed with wisdom, the lord of Eridu Changed the speech in their mouths, [brought] contention into it, Into the speech of man that (until then) had been one.

The Miautso people, a minority group who live in south-central China, have a poetic account which has been handed down for centuries, which states,

Lo-han then begat Cusah and Mesay. Lo-shan begat Elan and Nga-shur. Their offspring begotten became tribes and peoples; Their descendants established encampments and cities. Their singing was all with the same tunes and music; Their speaking was all with the same words and language. Then they said let us build us a very big city; Let us raise unto heaven a very high tower. This was wrong, but they reached this decision; Not right, but they rashly persisted. God struck at them then, changed their language and accent. Descending in wrath, He confused tones and voices. One's speech to the others who hear him has no meaning; He's speaking in words, but they can't understand him. So the city they builded was never completed; The tower they wrought has to stand thus unfinished. In despair then they separate under all heaven, They part from each other the globe to encircle. They arrive at six corners and speak the six languages.²⁶

Abydenus, a Greek historian, wrote the *History of the Chaldeans and Assyrians*. His work has been lost, but portions were quoted by others such as Eusebius (*Praeparatio Evangelica*; 9.14). Abydenus said that "But there are some who say that the men who first arose out of the earth, being puffed up by their strength and great stature, and proudly thinking that they were better than the gods, raised a huge tower, ... and when they were already nearer to heaven, the winds came to the help of the gods, and overthrew their structure upon them, the ruins of which were called Babylon. And being up to that time of one tongue, they received from the gods a confused language..."

Legends from people groups on every continent provide support for the Bible's record of the language division at Babel. For example, Don Fernando de Alvara Ixtlilxochitl, a 16th century historian, refers to a Mexican aboriginal account, 'And as men were thereafter multiplying they constructed a very high and strong *Zacualli*, which means "a very high tower" in order to protect themselves when again the second world should be destroyed. At the crucial moment their languages were changed, and as they did not understand one another, they went into different parts

²⁶ Edgar Truax, *Genesis According to the Miao People*.

of the world.' Other indigenous people have similar legends, as do the ancient inhabitants of other parts of the world (e.g., India, Southeast Asia, Africa, and Polynesia). This spectrum of ancient witnesses to a language division points to an historical event which the scattered peoples carried with them when they migrated from Babel.

The Origin of Prejudices [December 13] (Gen 11.4-9)

God responded to mankind's invention of a false religion and their rebellion against his command to fill the earth, by putting them into a permanent state of schism. The instantaneous creation of many different languages became the first obvious form of division within mankind. However, the language division led to discord over phenotypic variations and the eventual rise of xenophobic nationalism.

Some Christians have sought for an explanation of phenotypic differences in the curse placed upon Canaan. However, there is no evidence that the Canaanites had a significantly different physical appearance from their neighbours in Mesopotamia. In the first 130 years after the flood, mankind would have displayed the results of continual genetic mixing. Any typical couple could have produced children with a spectrum of skin, eye, and hair colour. It was only after the division of mankind into different languages that particular genotypic characteristics began to be recognizable.

When a couple speaking a particular language moved from Shinar, there would have been limited intermarriage across the language barrier. There may also have been incestuous marriages among siblings because of the lack of an ability to communicate with others. Of course, some genetic mixing would have occurred with children captured from other family units during raids or through slave kidnappings. Recessive genes in these small population groups would have become prominent. Within a few generations, visible differences would have become obvious, which strengthened the tendency for people to marry within a linguistic group—increasing even more their differences.

In addition, cultural differences would have arisen from the linguistic division. Language families appear to be more different from each other than has generally been thought. Some languages are not structured the way we think they *should* be—with verbs interspersed among nouns. For example, in the Riau Indonesian language there are no modifiers to distinguish verb tenses or ways to determine definite ('the') or indefinite ('a') nouns. In fact, at times, there are no linguistic features to distinguish verbs from nouns. Rather, tones are used to change the meaning of words. A simple example, in English, would be to ask a chemist or a plumber to pronounce 'unionized'. The meaning of the word is entirely different depending on the syllabic emphasis. Another example can be seen in the words 'cleave' or 'bill' which can have opposite meanings depending on the context.

Noam Chomsky's theory of a common 'deep grammar' underlying all human languages is likely incorrect—even though it is the ruling paradigm among linguists. Benjamin Whorf, an early 20th-century American linguist claimed that the basic structure of language affects the way people think. Evidence is accumulating which supports the view that how we think is influenced by the language we first learned to speak. Also, the form of the language we use and its vocabulary influence how we learn, what we are able to learn (e.g., in different domains of knowledge), and how we express emotions and concepts. For example, our notions of gender and time, and other abstract concepts, appear to be influenced by the presence or absence of an assigned noun gender (as in French) and the presence or absence of verbal tenses.

After the division of language at Babel, each family group based around a language, began to appear physically different from other groups and learned and conceptualized somewhat differently. This would have caused them to consider their neighbours not only as different but also as stupid because they didn't share the same mental space with them. Thus, the language differences led to a breakdown in the original unity of man's thinking and emotional expression, giving rise to phenotypic and cultural prejudices based on the outward markers of inner conceptual differences. Language groups reinforced their prejudices by moving away from others or by attempting to subdue them to capture their territory. The outward migration was directed by God ("the Lord dispersed them") so that the

language-based families migrated to regions suited to their representative genotypes—for example, God providentially directed darker skinned individuals to move to areas where they could more easily tolerate tropical sunlight.

An exhibit at the Ontario Science Centre read the following, "Dogs are dogs. They're bred to look very different from each other. But they all belong to the same species, *Canis familirais*. The genes dogs have in common allow for a lot of individual variation. People are people. We all belong to one species: *Homo sapiens*. But like dogs, our genes allow for individual variation." Their objective was to counter phenotypic prejudices. A laudable objective, but one doomed to failure in the sin-filled post-Babel world. The schism of language and resulting forms of prejudice continue to engender chaos among men. Issues today around language and phenotypic differences are a reminder of the human presumption and disobedience at Babel. Everything man touches is steeped in discord, everything is alien. The punishment for rebellion is the presence of divisive tensions—God gave men over to schism. Christians are called to break down the barriers (Acts 2.5-11; Col 3.11). One way we can do this is by supporting Bible translation into the world's languages. Another is to ask God to give us the grace to resist phenotypic and cultural prejudices.

Towers of Babel [December 14] (Gen 11.1-9)

Prior to the flood, mankind's wickedness was so great that God determined that it was necessary to wipe out all but eight inhabitants of the earth and start afresh. However, as we learn from this account, it did not take mankind long before he was again practicing his evil ways. This time, God intervened by confusing language to make it more difficult for people to work together in their schemes of rebellion. However, the confusion of language did not solve the problem of man's sin; this could only be solved by the two appearances of the promised redeemer—the first to purchase redemption and the, pending, second to renovate the universe. In the meantime, the problem of man's wickedness persists. As long as the earth remains, with seedtime and harvest, men will continue to plot against God and construct their 'Towers of Babel'.

Today we see many instances of men building their own 'Towers of Babel'. They do not take the explicit form of a high temple constructed out of fired bricks and bitumen, but they are nevertheless 'towers' by which men claim to be the measure of all things, attempt to make a name for themselves, place their invented schemes at the center of meaning and purpose, and live without reference to God's righteous law. Consider a few examples:

- *Cosmology* The goal of most astronomers and astrophysicists is to create a model for the origin of the universe in which there is no room for God. They fabricate myths about eternal or self-creating matter and hypothesize a big bang and a multiverse in an attempt to rule out the need for the Creator.
- *Biology* Most biologists hold to the view that life is the inevitable product of matter and energy interacting through aeons. They claim that complex, specified information (e.g., in DNA) is the result of self-organizing molecules reorganizing under selective pressures. Also, they believe that mind, memory, and volition are the result of biochemical reactions alone and that there is no spirit dimension to life.
- *Morality* Good is declared to be evil and evil is declared to be good (Is 5.20). They call murder of a child in the womb a 'blessing' and refer to those who stand up for life 'uncaring'. They play God by taking the life of the unborn but refuse to punish by death a psychopathic serial killer. They demand the right to display their perversity in 'Pride' parades but declare that anyone who believes that marriage is a relationship between one man and one woman is an intolerant 'homophobe'.

The Tower of Babel is a symbol of every wicked scheme of men who raise their fists at God and refuse to accept his reign over them. The immediate post-flood generations built the Tower of Babel (in the first Babylon). The Bible ends by speaking of Babylon as the "mother of prostitutes and of earth's abominations" (Rev 17.5) and refers to its final demise (Rev 18.1-24). These two accounts of Babylon, in Genesis and Revelation, serve as bookends for mankind's rebellion. To reinforce the reality that man's aspirations are always to build 'Towers of Babel', Babylon

appears again as a significant player in the midst of Biblical history. Nebuchadnezzar boasts of his great city of Babylon (Dan 4.30). His kingdom of Babylon was the head of gold (Dan 2.37-38). It was the greatest kingdom in history—not in geographic extent or in duration, but because of its:

- *Originality* It was the first to create a single culture of dominance, with a concentration of statist power and a complete religious system that included sacred myths, priests, and rituals set up to replace Biblical truth.
- *Tenacity* It was governed by an absolute monarch who placed himself over all of creation. He claimed to own every aspect of existence, from land to crops, and from beast to men. He claimed to be subject to no one, including God, and expected to be worshiped as a god.
- *Comprehensiveness* It was the first kingdom, since Babel, to draw all people groups, descended from the sons of Noah, into a single empire—Shemites in the Middle East, Hamites in north Africa and to the east, and descendants of Japheth in the north west (Turkey, today). Earlier kingdoms appear to have been more of a confederacy under a single head—e.g., Sargon I.

The kingdom of Babylon under Nebuchadnezzar was the archetypal 'world' empire that stood in total opposition to God. It is the ultimate example of all attempts to exalt human beings above the true and only God. All other kingdoms or nations striving for world domination are merely graspers or imitators. Its roots were in Babel and in the tower builders' aspirations, and it continues to exist to this day. Thus, the Tower of Babel stands as the representative symbol of all pagan anti-God systems (religious, philosophical, economic, and scientific), governments, cultures, and civilizations.

"The LORD came down to see the city and the tower, which the children of man had built." He then judged the first Babylon. In a similar manner, an angel of the Lord, having great authority from God, came down (Rev 18.1) to pronounce judgement on the final Babylon. Likewise, God comes down now to confuse rebellious mankind; not by creating new languages but by sending a spirit of confusion (Is 19.14). God's word, from Genesis to Revelation, declares that he is sovereign over all nations and that he will bring to nothing all the false beasts (secular governments) and false prophets (false religions) of mankind's 'Towers of Babel' and cast them into the everlasting lake of fire (Rev 20.10). There their creators will be forever confused.

What Happened to Nimrod's Empire? [December 15] (Gen 11.8-9)

In a previous meditation (see, *Nimrod* (part 1 of 2) [November 27]), we identified Nimrod as an historical person, not legendary as many historians claim, whom we concluded was Sargon I, the founder of the dynasty of Akkad. Historians date Sargon's reign from 2270 to 2215 BC. The dates of the flood (about 2345 BC) and the construction of the tower at Babel (sometime between 2245 and 2215 BC), place Sargon in the right era. The extent of Sargon's empire was essentially the same as that which is attributed to Nimrod, in Shinar and Akkad (Gen 10.10-12)—although it extended farther into Asia Minor, which may have happened after the *Table of the Nations* (Gen 10.1-32) was written. Historians regard Sargon as the first to have created an empire. The Bible identifies Nimrod as the first empire builder. Thus, they are likely the same person.

Historians believe that Sargon's dynasty controlled Mesopotamia for a century and a half, that he died in 2215 BC, and that the subjects in his empire revolted upon hearing of his death. Nimrod was the grandson of Ham. If Nimrod's generation lived as long as the grandson of Shem, Shelah, then he could have been expected to have lived to be around 400 years old. Therefore, it is possible that Nimrod (Sargon) was deposed and assassinated after the events at Babel and the confusion of language. Two of Sargon's sons succeeded him with short reigns. After which, his empire decayed, and the Elamites destroyed the remnants of his empire.

Historians have identified a period of chaos after the death of Sargon and the demise of his dynasty, in which Mesopotamia had no central authority for over a century. It is believed that, following the Akkadian period (under Sargon), there was an attempt by a Sumerian dynasty (south Mesopotamia) to consolidate power in Mesopotamia.

It is called the Third Ur Dynasty period. It is reported to have lasted until around 2000 BC. Abraham was born during this period, and, as we are informed, lived in Ur of the Chaldeans (Gen 11.28, 31). Out of this turmoil in Mesopotamia, an Amorite king, Hammurabi (reported to have reigned c 1792-1750 BC) established a new empire, based in Babylon. He was successful in consolidating power in Mesopotamia and restored a measure of centralized order. He is known for his law code, of which parts have been preserved on a number of stele and clay tablets.

During the period of chaos in Mesopotamia, migrating peoples began to establish dynastic kingdoms in other parts of the world. Among the earliest was the kingdom established in Egypt by Ham's son, Mizraim. His family initially occupied the area around the lower Nile and the delta. It has been suggested that the legendary founder of Egypt's first dynasty, Memes, is a vestigial memory of Mizraim. There is a possibility that Ham travelled with his son when he left Mesopotamia (Ps 105.23, 27; Ps 106.22). Elsewhere, a dynastic kingdom arose in China (Xia dynasty). And, significant kingdoms appear to have developed on Crete, in the Indus River valley, and in Anatolia.

Dynasties controlling Mesopotamia were important throughout the period of the Israelite occupation of Palestine, because they had significant interactions with God's covenant people. After Hammurabi, these empires were the Neo-Assyrian (e.g., Tiglath-Pileser and Sargon II), Neo-Babylon (reaching its height under Nebuchadnezzar), Persian (e.g., Cyrus the Great), Greek (e.g., Alexander and Antiochus Epiphanes) and Roman. Sargon I (Nimrod) was regarded by later Mesopotamian empire builders as the model for despotic rule. For example, Nabonidus (r 555-539 BC) king of Babylon, showed great interest in the history of Sargon's dynasty. He had excavations undertaken at Sargon's palaces. Nabonidus' relationship to the Chaldean kings of Babylon is uncertain. He may have been at the head of the conspiracy to overthrow the young grandson of Nebuchadnezzar, Nitocris. In 549 BC, he left Babylon to live at Tayma, a rich oasis city in Arabia, leaving his son Belshazzar to rule the empire in his place. His interest in Sargon I was likely due to his insecurity and desire to substantiate his rule—much like Hitler admired the Frankish emperor Charlemagne.

God used the division of language at Babel to bring to an end Nimrod's ambitions and the first Babylonian empire. Similarly, he used miracles—causing Nebuchadnezzar to go insane for seven years (Dan 4.28-33) and writing on the wall (Dan 5.5-31)—to teach the Neo-Babylonian dynasty that they also were subject to the living God. He also condemned Rome's imperialistic aspirations by equating Rome with Babylon (1 Pt 5.13; Rev 14.8; Rev 16.19; Rev 17.5; Rev 18.1-24). Babylon is the archetype for man's imperialistic efforts to dethrone God. Under Nebuchadnezzar, Babylon was declared to be the head of gold (Dan 2.32)—the greatest human empire—all that man would want in a world-controlling empire with a complete anti-God religious system, an absolute monarch who sought to be worshiped as a god, a humanistic system that viewed man's technology as preeminent, a comprehensiveness that brought together many groups, and a total concentration of statist power.

The annihilation of Nimrod's empire, and the later Babylon, is what will happen to all nations and despots who attempt to again establish Babylons. The right to rule the earth is reserved for Jesus Christ. He is King of kings and Lord of lords, with world-encompassing authority (Dan 2.44; Mt 28.19).

Dispersion Over the Face of the Earth [December 16] (Gen 10.5, 20, 31-32; Gen 11.8-9)

The most widely accepted model of the origin and migration of mankind states that anatomically modern humans, *Homo sapiens*, originated in Africa over 50,000 years ago, and reached South America about 7,000 years ago. It is claimed that this model is based on studies of mitochondrial DNA (it is believed that mDNA diversity is highest in African populations) and physical anthropology (comparing the DNA of archaic specimens with that of modern humans). The model also proposes that *Homo sapiens* replaced earlier human populations (Neanderthal and *Homo erectus*). However, constructing an mDNA tree of connections is difficult, and may only 'prove' the assumptions the researcher had before commencing his analysis. Also, recent studies of the Neanderthal genome indicate that the Neanderthal samples fall within the genetic diversity of modern humans, and that the Neanderthal genome is so

similar to the genome of a modern human that if one had not presupposed them to be different species of humans he would conclude that there is no substantive difference between them. Neanderthals were human and they were descended from Noah, likely through Japheth.

Shem, in this account (Gen 10.1b-11.10a), provides a different model. He tells us that after the flood (about 2345 BC) the majority of mankind lived on the plain of Shinar and participated in the construction of the city and tower at Babel. He tells us that mankind was then dispersed by the LORD (Gen 11.9) into their designated lands by language, family group, and nation. This dispersion occurred *after* God had disrupted mankind's language (sometime between 2245 and 2215 BC). Thus, according to Shem, the origin of mankind is out of Mesopotamia, not out of Africa. And, the earliest that any men could have reached Australia or South America would have been sometime after 2000 BC (as a reference point, Abraham was born about that time)—allowing for about 200 years for families to migrate from Mesopotamia.

These two models are so different from one another that it is impossible to reconcile them. In theory, both could be wrong. However, if one is correct, then the other *must* be wrong. There are no truly objective natural means of providing dates for ancient human remains and artifacts. Every dating method (e.g., calculating the ratio of C^{12}/C^{14} isotopes in organic material) is based on assumptions and full or exceptions. Also, the oldest non-Biblical calendars or chronologies are the Chinese and the Mayan. Any *accurately datable* events associated with the Chinese and Mayan calendars are later than the Biblical date for the flood. Similarly, the oldest record of a solar eclipse is from October 2134 BC. Thus, any dates assigned to human remains or settlements prior to 2000 BC, outside of Mesopotamia, are nothing but guesses based on the faulty belief that the Bible's genealogical and chronological record (in Genesis chapters 5 and 11) cannot be correct. Therefore, the debate about which model (out of Africa 50,000 years ago, or out of Mesopotamia 4,230 years ago) is correct, must be based solely on one's presuppositions and belief paradigms, not on empirical data. Since we must accept the word of God as truthful and historically accurate, we must conclude that Shem's account informs us that mankind began to populate the face of the earth sometime after 2215 BC, after they had left Mesopotamia.

The worldwide distribution of apparently ancient human remains (e.g., in burial sites) and artifacts (e.g., megalithic structures used for religious purposes, irrigation canals, dwelling units, barns, market sites, trash dumps, jewellery, carvings, and paintings), indicates that most of the world was inhabited very quickly—within a few generations after Babel. Mankind did not pass through long developmental stages—Stone Age, Bronze Age, to Iron Age; or hunting-gathering to sedentary agriculture—as most historians claim. Rather, as men left Mesopotamia, they carried with them significant technological knowledge and skills. When they arrived in a new location, they briefly used whatever natural resources were available. Some of them would have temporarily lived in caves, others in tents, and they would have used stone implements until they could clear land, build settlements, and find sources of metal ores and re-establish smelting and other industrial processes.

However, many of the migrating families or tribes would have consisted of a small number of people. Stronger tribes would have driven them away from their territories and they would have had to keep moving. In these small tribes, the breadth and depth of technical and agricultural knowledge would have been limited. So, by the time some of them reached the 'ends of the earth' (e.g., in the Australian outback, Amazon basin, or jungles of New Guinea), they would have forgotten much of what was known in Mesopotamia. Thus, the uncivilized, isolated tribes found during the age of discovery, are not the precursors of modern man, but what man can become when he is driven away from the presence of God.

Shem's final words, "from there the LORD dispersed them over the face of all the earth" offer a sad conclusion to the post-flood era. Men are scattered, divided from their neighbours in hostility, separated from God, and have no access to God's written revelation. From this perspective matters appear to be hopeless for the majority of mankind. But God has great plans. After a quick connecting genealogy (Gen 11.10-26), God is going to introduce the solution—a new nation forged in the fires of Abraham's true faith.

God's General Grace [December 17] (Gen 11.9)

About 430 years passed in the era of the post-flood patriarchs—from Noah's exiting the ark to the death of Terah (Gen 11.32). In the midst of that era, mankind introduced a polytheistic religion, organized an oppressive empire, and rebelled against God's command to fill the earth. In response, God confused their language and dispersed them over the face of the earth. After a period of chaos, empire building resumed and the world's population grew to an estimated 50,000,000, at the time Abram entered Canaan. Among that population there were only a few who retained the knowledge of the true God, and even they had been infected by idolatry and worshiped the LORD, as one among many gods. The spiritual condition of the world around 1920 BC was as dark as it has ever been. Yet, God did not wipe out humanity again with a worldwide disaster. Instead, he struck a match with the call of Abram (Gen 12.1-3), which was soon to fill the world with blazing light (Jn 8.12).

We might ask, why God tolerated all the evil and why he continued to provide material blessings for mankind despite their disregard for him and hatred of his law? The answer is multifold and delves into his eternal purposes for why he created, permitted sin to enter the universe, and planned the salvation of men through the death of his Son. However, one component of the answer lies in what theologians generally refer to as 'common grace'. I prefer to use the term 'general grace' because there is nothing *common* (a subtly different meaning of 'common') about God's grace!

Whatever we call it, general grace is different from God's special grace. God's special grace is the grace which he shows to undeserving sinners by giving them the Spirit of conversion, declaring their sins covered by the blood of Christ, and setting them apart as holy. Special grace does not apply to all mankind, but only to those whom God elected unto salvation. The call of Abram is an example of God's special grace. God's general grace is that which does not result, directly, in salvation but is applied to all kinds of people without distinction. God's general grace is the favour he shows toward undeserving sinners, by which he allows them to experience a taste of his blessings and by which he maintains a measure of moral order among them.

In the Genesis record, which covers the immediate post-flood period (i.e., Gen 8.20-11.32) we find numerous examples of God's general grace, for example:

- Animal populations swarmed over the earth (Gen 8.17). These animals directly provide us with food (Gen 9.3) and clothing but are also part of the ecosystem which sustains us (e.g., bees pollenating fruit trees).
- A promise that while the earth endures there will not be a worldwide weather (or any) disaster (Gen 8.21-22; Gen 9.11) which will annihilate mankind. And a related promise that the earth will always produce food.
- A promise that the world can sustain a large population (Gen 9.1).
- A restriction on dangerous animals from harming mankind (Gen 9.2).
- The restraint on man's evil through the provision of laws (Gen 9.5-6).
- The ability of men to invent creatively and to build (Gen 11.3).

Another way that God's general grace is displayed is by his granting men the ability to maintain, and regain, a measure of natural hope and optimism—even when they are without real hope (Eph 2.12)—despite experiencing war, economic collapse, or other disasters. Even though the people building the city of Babel and its tower had been scattered, within 150 years large cities and ziggurats were being built again throughout Mesopotamia—with Ur (Gen 11.28) being the largest city in the world at the time of Abram.

There are numerous obvious examples of God's general grace. However, there are also ways in which God dispenses his general grace which are less obvious and often involve his judgement. For example, the confusion of human language is both a curse and a blessing. The element of blessing is that it now limits the extent to which men can cooperate to perpetuate their wicked schemes. Similarly, the gradual reduction in the age to which men can live, from nearly a millennium to less than a century, also limits the extent of the evil that wicked masterminds are able

to concoct and carry out.

Since the majority of men in our generation appear to be destined for Hell, we need to ask why God bothers to sustain wicked men with his general grace? At least the following reasons can be given:

- God does not desire the destruction of any man. His general grace is a witness to his goodness. At times, God uses natural revelation and his general benevolence as a means to bring people to repentance.
- God sustains civility so that believers may live peaceful lives. Jeremiah counselled the people in Babylon to pray for peace in that land so that they could prosper (Jer 29.7). Paul counsels Christians to do the same (1 Tim 2.2). Jesus says that for the sake of the elect civil disruption (war) would be cut short (Mt 24.22).
- God has his elect in every generation and is filling Heaven with a great multitude (Rev 7.9). Until the last elect person has been saved, God will continue to dispense general grace on all mankind.
- God is heaping coals of fire on the heads of those who are his enemies and have rejected the evidence of his goodness toward them (Rom 12.20).

Countering the Babel Effect [December 18]

(Gen 11.8-9)

At the beginning, all mankind communicated with a single language (Gen 11.1). Today all of us would speak that same language if it had not been for the events that occurred at Babel. The single language made it easier for men to cooperate in their rebellion against God—creating a false religion, building a temple-tower for their pantheon of demon gods, and resisting the command of God to disperse throughout the earth. Thus, God caused a division of language among them so that they would no longer be able to coordinate their wicked ways. As we have seen, the division manifests itself in more than just language confusion—the results include linguistic elitism, ethnocentrism, tribal wars, nationalism, cultural vanity, and phenotypic prejudices.

As a result of the curse at Babel, social confusion and fragmentation reign. There are over 6,000 languages; over 200 nation states; and about 20 major religions with over a million adherents each, divided into feuding sects. In addition, tensions over cultural and phenotypic variations are as bad as they have ever been, despite attempts by peace brokers to make reparations and facilitate reconciliation. People everywhere are unable to sustain cooperation. We are reminded constantly of the *Babel Effect* by reports in the daily news, when we are required to take cultural sensitivity training to conduct business in pretentiously woke corporations, or when we are inconvenienced by challenges communicating when travelling in foreign countries. The Church reflects the same spirit of confusion when it organizes denominations or congregations based on phenotypic, cultural, or linguistic factors. This should not be the case as it reinforces the curse of Babel rather than countering it.

The fragmentation of mankind is not what God intended at the time of creation. Thus, he has established the Church—also called the Kingdom of Christ (Mt 16.18-19) and the *City of God* (Heb 12.22-23)—as the only antidote to the *Babel Effect*:

- God made a covenant with Abraham, with a promise that he would unite people of all nations in one faith (Gen 18.18; Gal 3.7, 29).
- Zephaniah (Zep 3.9) foresaw a day when the division of language would be undone, and all the people of God would worship with one language.
- Jesus prayed that his Church would be united in one spirit (Jn 17.11).
- Jesus declared that his authority extended to all nations, which were to be baptized, inducted into the one Church, and taught to obey his commands (Mt 28.18-20).
- The Day of Pentecost displayed the first fruits of what the NT Church should look like (Acts 2.5, 11).
- Paul declares that national and cultural backgrounds and barriers are rendered irrelevant in the Church (Gal 3.28; Col 3.11).
- Heaven is filled with a great multitude from every nation, tribe, people, and language worshiping God with a united voice (Rev 7.9).

Ultimately, the reversal of the *Babel Effect* will require an eschatological fulfillment. However, this does not mean that Christians should not strive for a temporal (if incomplete) realization. The tendency to sin and the effects of sin will only be overcome once we reach glory—yet this does mean that we are to give up the quest for holiness in this life. Therefore, we should be striving to see all mankind brought into communion in the one, holy, apostolic, and catholic Church of Jesus Christ. The Church is to be a model, type, and foretaste of what God intends to establish in a restored paradise.

Since mankind's rebellion at Babel, people have been desperate to restore a sense of corporate belonging and unity—they have a hollowness which they unsuccessfully attempt to fill through nationalism and empire building; organizations such as the United Nations; vain religious rituals of induction and consecration; or professional guilds, unions, and associations. Every attempt to bring people together to counter the *Babel Effect*, on a foundation other than Christ, is doomed because it is built out of man-made fired clay bricks held together with bitumen (Gen 11.3), for the purpose of glorifying men (Gen 11.4). The Church is unique because it is built out of living stones, held together with the mortar of love, and laid on a permanent foundation of truth, with Jesus as the cornerstone (Eph 2.20), for the purpose of glorifying the only true God. The Church, alone, can address the peoples' deep needs as they are brought into friendship, family, and fellowship.

A searching question we need to ask is, "Are we doing what can, and should, do to counter the *Babel Effect*?" We need to do at least the following:

- Be Spirit-filled and Spirit-led (Rom 8.14; Gal 5.18; Eph 5.18).
- Ensure that our worship practices are God-authorized. To the extent they are not, to that extent we participate in Babel's idolatry (Jn 4.23-24).
- Support Bible translation into the world's languages (Mt 28.19-20).
- Make building the *City of God*, rather that the *City of Man*, our highest priority (Mt 6.33; Heb 11.10).
- Communicate the Gospel in the common, simple, language of the people; avoiding technical jargon and 'holyese' (1 Cor 9.20-22; 1 Cor 14.9, 11).
- Be a warm, welcoming congregation (Rom 12.13; Heb 13.2).

It is not clear that the Church today has the desire or will to counter the *Babel Effect*. But, through the grace of God the Father, the uniting love of Jesus, and the power of the Holy Spirit we can.

Genealogy of the Covenant Line (part 1 of 2) [December 19] (Gen 11.10b-27a)

It is rare that we read an account in the Bible that speaks of a punishment from God that has an impact on members of the Covenant community, in which we cannot discern a measure of God's mercy and grace. Even in the midst of the curse on Adam and Eve, God gave the promise of the Messiah (Gen 3.15). Thus, we find that, in the context of the punishment of mankind by the division of language, God provided a sign of his blessing. Shem's account ends with the division and dispersion of mankind. But that is not the end of God's dealings with mankind. A next chapter in the genealogy of the Covenant line had been introduced at the end of the *Table of the Nations* (Gen 10.21-31). Then, after the account of the events at Babel, the genealogy is picked up again and extended from Peleg to Terah and his sons, including Abram. God's message is clear, the Messianic line was not annihilated by the worldwide flood, nor could it be destroyed by the sins and retribution at Babel. God has set apart a people whom he is watching over, despite their sins of idolatry (Josh 24.2, 14-15), to give them an undeserved salvation.

The genealogy in chapter 10 recounts the early history of the postdiluvian world and the rapid expansion of mankind from the few (eight) survivors of the flood. The genealogy in chapter 11 reverses the direction and narrows the progression of mankind to a single family. God was continuing the line from Seth and Shem, which would culminate in the arrival of the Messiah. He was keeping alive his promise to the woman that her seed—a particular man—would conquer sin and Satan. We should marvel at the amazing providence of God, who preserved an accurate

record of the thread of descent from Adam to Christ (Lk 3.23-38) for over 4,000 years! This was done to prove the reliability of his promises and to validate the Son of God as the God-man, a descendant of Adam, who could pay the debt of sin and stand in the place of sinful men before the holy God.

This genealogy was likely recorded by Terah (Gen 11.27a). It is not the last of the identified sections in Genesis marked by the Hebrew word *toledoth* as a colophon (which is variously translated as 'generations', 'account', or 'history'). Ishmael, Isaac, Esau and Jacob will all be credited (Gen 25.12, 19; Gen 36.1, 9; Gen 37.2) with contributing a portion of the account, which Moses would later assemble into the book of Genesis. However, its attribution to Terah does present interesting considerations. Even though Terah was an idolater, God used him to maintain the genealogical record, leading to Abram. This indicates God's overruling providence and that men, despite their idolatry, are constrained to do what God wills for them.

Also, four of the forefathers of Terah (Shem, Arpachshad, Shelah, and Eber) outlived Terah. So, even though he had maintained the genealogical account, he could not have recorded the age at death of these four patriarchs. Their ages must have been added later by some other contributor. Abraham could not have added all the ages of death either, since Eber outlived him by four years. This indicates that there may have been regular communication between Palestine and Mesopotamia around 1815 BC, when Eber died. However, it is possible that Jacob obtained the genealogy, or at least the information about the ages at death of these patriarchs, when he fled to Haran, after stealing the birthright from Esau (Gen 27.43), around 1760 BC.

The two genealogies, in chapter 5 and 11, show that very few transmission links were required between Adam and Abraham. This is important for the transmission of the pre-flood account—whether it was handed down orally, as many claim, or was delivered in the form of a written record. The lives of Adam and Methuselah overlapped by 243 years and Methuselah and Shem overlapped by 98 years. Shem lived through much of Abram's life. It is likely that Abram knew Shem when he lived in Ur (ancient Jewish scribes believed that Melchizedek was Shem), and that he received from him the antediluvian records or oral account, with the record of creation and of the entry of sin into the world. Abram would have also received from Shem the account of the flood (Gen 6.9b-10.1a) and the *Table of the Nations* (Gen 10.1b-11.10a). He undoubtedly heard from Shem additional accounts (not recorded for us) about the flood and the rebellion at Babel which strengthened his resolve to trust God. Thus, these four godly men, spanning a period of 2,000 years, took care to preserve God's truth for all subsequent generations of mankind.

This genealogy also speaks to the presence of an additional witness to truth. Noah lived for 350 years after the flood, and Shem for 500 years. Noah may have continued to live near Ararat and may not have migrated with his sons to Shinar, in northern Mesopotamia. Shem likely settled in the south after the division of language at Babel. He may have gone with his son Arpachshad, who settled southern Mesopotamia. Later his descendant, Abram (with his father and brothers), left Ur and migrated northwest toward Haran, and then to Canaan. This means that for at least two centuries, Noah and Shem were at the edges of human population concentrations, and they continued to provide a witness to God's displeasure with false worship and the events of the flood and Babel. It is ironic that myths, such as the *Gilgamesh Epic*, arose from the very area where Shem lived. The rejection of the true account of the flood must have disappointed him, in the same way that Christians are distressed by how men reject the true creation account and accept the myth of evolution.

Genealogy of the Covenant Line (part 2 of 2) [December 20] (Gen 11.10b-27a)

Ten generations, from Shem to Abram, and twelve names, are mentioned in this genealogy. Five of the named individuals (Arpachshad, Shelah, Reu, Serug, and Nahor I) do not appear elsewhere in the Bible except in the genealogies. No additional information is given about them, other than that they had other sons and daughters besides the named heir. However, they are important because of their covenantal and progenitor connections to Jesus, as Luke shows (Lk 3.34-36), through whom all mankind would be blessed.

Additional information, at varying levels of detail, is presented in Scripture about a few of the individuals in this genealogy:

- *Shem* We considered him in the antediluvian context; his postdiluvian blessing by his father (Gen 9.26-27); his role as the father of the Shemites in the *Table of the Nations* (Gen 10.21-31); and his being an author of portions of Genesis (Gen 10.1a; Gen 11.10a). He is not mentioned again in Scripture after notice is given of the number of years he lived after fathering Arpachshad (Gen 11.11), other than in the genealogies in 1 Chronicles and Luke 3.36-38. However, the mention of his name immediately following the Babel incident (Gen 11.10), is ironic. His name means 'name' or 'renown'. The people of Babel wanted to make a name for themselves (Gen 11.4). Instead, they became forever known as babblers. In contrast, the godly Shem understood that the name men should want to have is the name given to them by God (Rev 2.17).
- *Eber* The presence of his sons (Joktan and Peleg) is recognized by Shem (Gen 10.21) before Shem's own sons are named (Gen 10.22), even though they were Shem's great-great-grandsons. It is possible that Shem declared Eber's sons to be his, figuratively or literally through adoption. In either case, it seems that Shem understood that the line of the covenant was to extend through Eber and not through any of the descendants of his other sons. It may be that his son, Arpachshad, and grandson, Shelah, had fallen into pagan superstition, but Eber walked in the way of the Lord. The Hebrew word *eber* appears to come from the same root as the verb 'to cross over' or 'to pass through', which may mean that the descendants of Eber were nomadic peoples or that they had crossed over the Euphrates to enter Palestine. The first mention of the 'Hebrews' (from *eber*) is in a reference to Abraham (Gen 14.13). When the sons of Jacob were in Egypt they were referred to as 'Hebrews' (Gen 43.32; Ex 2.6). God identified himself to Moses as the "God of the Hebrews" (Ex 3.18), which seems to indicate that God considered Eber to be a man of true faith. Eber was also the longest-lived of any of the patriarchs, born after the flood, and even outlived Abram by four years. This may indicate that he received a special blessing from God for his faith (Prov 16.31).
- *Peleg* He is recognized because it was in his days that God divided the earth linguistically (Gen 10.25), in response to the rebellion at Babel. He was given his name by Eber, either prophetically or retrospectively, as a memorial to how God dealt with man's sin.
- *Terah and his three sons* We will consider him and his sons (Nahor II, Haran, and Abram) in subsequent meditations.

There are parallels and differences between the genealogies in chapter 5 and 11. The primary parallel is the sequence of the key sons in the covenantal line, with only a recognition that each patriarch had "other sons and daughters". Each genealogy also serves as a chronology, giving the age of the father when the covenantal son was born, and the number of years that the father lived after the birth of that key son. The regular pattern of the genealogy in each account then ends with the identification of a patriarch's three sons—Noah's (Gen 5.32) and Terah's (Gen 11.26). In each case, it is not the oldest son who is mentioned first—for example, Japheth was the oldest of Noah's sons—but rather the son designated as the Covenant heir.

One difference between the two genealogies is that the one in Genesis chapter 11 does not provide the total number of years that each patriarch lived. It has been suggested that the reason is that the account is intended to move quickly over the generations to arrive at Abram. However, there may be another reason for the difference. God may have anticipated the modern, post-19th century, scepticism which would arise about the long ages of the antediluvian patriarchs. By providing the total number of years for each patriarch's life, he reinforces the accuracy of the Genesis chapter 5 account. Having done that with the first genealogy, it was not necessary to do it with the second one.

Another difference is the omission of the phrase, "and he died" from Genesis chapter 11. Before the flood, the appearance of death was a significant intrusion into generations which could live for nearly a thousand years. After the death of millions in the flood, and as the age of each generation began to decline, death became an ever-present reality for everyone. Thus, chapter 11 ignores the obvious—all men must die (Heb 9.27). However, it may have a more optimistic outlook than chapter 5. Before the flood, the intentions of man's heart was only evil continually (Gen 6.5), and there appeared to be only a handful of righteous men among the millions. However, in the

postdiluvian world, despite the ongoing presence of wickedness, God had plans to begin to build a new nation founded on Abraham's faith. Thus, Genesis chapter 11 has a more hopeful tone with the missing deaths pointing to God's patience toward men.

Historical Chronology [December 21] (Gen 11.10b-26)

The majority of scholars who write today about the genealogy in Genesis chapter 11, whether they are non-Christians or claim to be Christians, are unwilling to accept this list of names as representing an historical account, which reflects accurately the complete sequence of generations from Shem to Abram. Instead, they make claims such as the following:

- The names do not refer to real people, since there is no extra-Biblical mention of most of them, including Abram.
- The reported ages of the patriarchs are fabrications. No one could have lived for 500 or 403 years.
- The list was prepared by Jewish scribes, in one of the monarchial, Persian, or Hellenistic periods, to provide an origin myth for the Jews.
- The list is contrived to show symmetry—for example, the lists in Genesis chapters 5 and 11 end with three sons; Abram was the tenth member of Shem's line, Peleg was the fifth (at a midpoint, to mark the language division).
- The account was developed to be similar to the mythical king-lists of surrounding Mesopotamian and Levant cultures.
- The list must contain gaps since the timeframe from the flood to Abram is not consistent with Stone Age and Bronze Age dates from archaeology.

All Jewish and Christian scholars, before the time of Darwin, held the view that Genesis chapters 5 and 11 provide strict chronologies and that they can be used to date creation and the flood. They believed that the chronologies in Genesis are so complete that, from beginning to end, they trace every significant birth and death from Adam to Joseph. There are a few fundamental reasons why these genealogies are no longer accepted as providing an historical account:

- It is unpopular to accept the Bible as presenting an historical account.
- The genealogies don't confirm the long-age view held by most scientists.
- The earth could not be old enough to allow for evolution if the genealogies are accepted as chronologies.

It was only after the theory of evolution gained acceptance among scientists that Christians began to question the genealogies as chronologies. Although scholars who profess to be Christians claim that they are merely following the 'evidence', they are in fact letting the world set the agenda for determining the truthfulness and accuracy of the Bible and presuppose it to be wrong.

There are a number of reasons why we must accept the Genesis genealogies as providing accurate and complete chronologies, including:

- Few scholars would question the statement that Noah was the father of Shem and that Terah was the father of Abram. So, it is inconsistent to accept the bookends for the genealogy, and then to argue that there are gaps between the other names.
- To demonstrate that there are gaps in the chronology one would have to show that there are numerous missing words in a tight account with a repeating pattern. The claim that 'fathered' means 'became the ancestor of' is an attempt to avoid the explicit statements which identify the age of the father when the key son was born and the age of the father at death.
- A statistical analysis of the age at death of the 14 patriarchs mentioned in Genesis—Noah to Judah or Joseph who died after the flood, shows that these data fit standard decay curves. We are not told the age of Judah at his death, although the Midrashic Book of Jasher gives it as 129 years. So, instead we can use Joseph's age at death, 110 years, as a substitute. When the data are fit to a logarithmic decay curve (with generations plotted on the

X-axis and the age at death plotted on the Y-axis) they produce a correlation (r^2) of .931. When the data are fit to an exponential decay curve, a correlation of .885 is produced. The statistical odds of this degree of correlation occurring by chance are highly unlikely, at less than one chance in 1,000. As capable as many ancients were in mathematics, it is extremely unlikely that they could have manufactured data (by chance or deliberately) which would have fit standard logarithmic or half-life decay curves so precisely. It also indicates that there are no missing data points. The ordered decay of the age at death of the patriarchs points to God's involvement in limiting lifespans.

• The repetition of the genealogy in 1 Chronicles (1 Chron 1.24-27) demonstrates that the Jews during the Persian period accepted it as a reliable statement of the ancestors of David, and subsequent kings; as did Luke (Lk 3.34-36). [We will deal with the addition of Cainan in 1 Chronicles in the Septuagint and in Luke 3.36, in a future meditation.]

The ages of the birth of the firstborn (whether natural firstborn or designated firstborn) in Genesis chapters 5 and 11 provide an unbroken genealogical and chronological chain from Adam to Moses (when we include Exodus 6.14-20). God provided this information, along with other key dated sign-posts (see, *When Was the World Created?* [February 9]) which can be associated with events referenced in extra-Biblical history (e.g., solar eclipses and the destruction of Jerusalem by Nebuchadnezzar), so that men would not be ignorant about when he created the world (about 4000 BC), when the flood occurred (about 2345 BC), and when he divided human language (sometime before 2215 BC). He gave this chronological information to provide an independent and objective standard for judging the claims of men as to the history and age of the earth, and to confound the foolishness of the worldly wise (1 Cor 1.19, 27).

The Age of the Demigods [December 22]

(Gen 10.1-32; Gen 11.10b-26)

Ancient myths are filled with demigods. For example, the Greeks and Romans had a pantheon with twelve Olympians, including, Zeus/Jupiter, Hera/Juno, and Poseidon/Neptune. Similarly, the Norse gods have a family tree which traces back to Ymir and includes Odin and Thor. In many legends and myths there is often an historical person or event (e.g., the battle at Troy) which is the source. So, it is possible that the historical source for a number of the mythical genealogies in the ancient world is found in the descendants of Noah. This does not mean that the account in this chapter is the source. However, people migrating from the Middle East, after the events at Babel, carried with them a memory of Noah and his sons, and their descendants, which was similar to the account recorded in this chapter.

Suggested connections between Genesis chapter 10 and ancient myths, include:

- Noah has been associated with the god Uranus (sky) and his wife (not named in the Bible) with Gaia, Tytea, or Terra (earth).
- Japheth has been associated with Iapetus (Jupiter) based on the similarity of their names and a Jewish tradition (as reported by Josephus), that positioned him as the ancestor of the Greeks, Slavs, Italics, and Teutons.
- Jehoshaphat Aspin, an early 19th century historian, associated Ashkenaz the grandson of Japheth, with a region in Germany and with Tuisto the 'divine' ancestor of the Germanic peoples (i.e., the Teutonic people), and with Hermes (Greek), Mercury (Roman), and Tvastar (Vedic).
- Ham has been associated with Cronos or Pan. Legend states that he castrated his father or used magic to keep him from having other children. This legend could have been derived from the events recorded in Genesis 9.20-27.
- Some of the descendants of Ham have been associated with gods. For example, Mizraim (Egypt) may have become Osiris or Zeus. And his son, Naphtuhim has been associated with Neptune or Poseidon. Another son of Mizraim, Lehabim, has been associated with Hercules. However, others have suggested that the Hercules myth is based on the account of Samson which the Greeks learned about during the time of Solomon.
- The apex stone from a 12th Dynasty pyramid in Egypt refers to eight gods, four males and their wives, with one,

Nu (Noah), a chief god.

Similar associations can be made with patriarchs in Chinese and other cultures. By presenting these possible associations, it is not suggested that they should be taken as proven or as absolute. A lot of embellishment occurred as historical accounts became myths.

A consideration which supports the belief that many of the demigods of the ancient myths are based on historical persons is the fact that the first few generations after the flood lived 500-200 years. In Greek mythology, the Titans were the first race of beings to live on the earth and were descended from Uranus and Gaia (Noah and his wife). The Titans were immortal and had extraordinary strength. The first two or three generations of descendants after Noah would have appeared to be immortal to men of later generations.

Even if the specific associations are speculative, the long, and probably healthy, lives of the earliest generations after the flood could have resulted in later generations viewing them as demigods. For example, Shem was 600 years old when he died and he outlived all of his descendants (except Eber) until Abraham, and Eber was 464 years old when he died and outlived Abraham by 4 years. It is a valid assumption that peers in each generation lived roughly the same number of years as recorded in this chapter. And, each of the early post-flood generations were likely considerably healthier at advanced years than later generations were in mid-years. For example, Abraham took a new wife, after the death of Sarah, when he was 137 years old, and through Keturah he fathered six children.

Moses indicates that 70-80 years is a normal life span (Ps 90.10), even though he lived to be 120 years old and Joshua lived to be 110 years old. So, sometime after 1400 BC (Moses died about 1450 BC, and Joshua about 1425 BC) normal life spans had reached the new plateau. In Greek history (or mythology), by the time of the Trojan War, dated around 1200 BC the age of the demigods had already passed. This coincides with the declining ages recorded in the Bible. Thus, legends developed around the ancestors of an earlier age who lived considerably longer and healthier lives and undertook great exploits as they migrated out of the Middle East. Over time, these legends were transformed into myths and their ancestors became demigods.

As their ancestors were elevated to demigod, and even to god-like status, the ancestors became increasingly revered, and the practice of ancestor worship developed. At one time ancestor worship was pervasive throughout Europe, Asia, African and the Americas. It is difficult to explain how this practice developed if a generation's ancestors were viewed as merely decrepit and demented precursors to the current generation. However, when the legends and myths about long gone generations spoke of their lengthy lives, then it is easier to understand how the practice of revering long dead ancestors could have developed. Thus, the elevation of ancestors to the status of demigods provides extra-Biblical support for the account of the post-flood decline in ages, as recorded in Genesis chapter 11.

Cainan, the Son of Arphaxad [December 23] (Gen 10.24; Gen 11.12-13)

There is one variation between the chronological genealogies provided in Genesis chapters 5 and 11 and the genealogy found in Luke. In Luke 3.36, the name Cainan is included between Shelah and Arphaxad. This difference must be addressed, even though devoting a meditation to a single name which does not even appear in Genesis might seem to be rather pedantic. The primary reason we need to consider this difference is that the presence of this additional name in Luke is used as the basis for attacks against the accuracy of the Genesis genealogies and the reliability of the text of the Bible. If it is assumed that Luke's list is accurate and that a name was deliberately or mistakenly excluded from the Genesis chapter 11 genealogy, this could indicate that other names are also missing from both the Genesis chapters 5 and 11, this would present a serious problem for anyone who believes that the Genesis genealogies are the only legitimate chronometer of the early history of mankind. We could therefore not conclude that the Genesis account can be used as an indicator of the amount of the time that passed from creation to the flood and from the flood to Abraham. This would open the door to the long-ages view that claims that the world and human history are much older than the approximately 6,000 years calculated from the genealogies and

other dated events in Scripture.

The usual approach, among Bible-believing scholars, for addressing this difference is to suggest that Luke, being a Gentile and writing for a Gentile audience, used the Greek OT translation rather than the Hebrew OT text when writing his Gospel. In some manuscripts of the Greek OT translation the name Cainan appears with information about the age of his father (Arphaxad) at the time of his birth. Some argue that the name Cainan was added by mistake to the Greek OT and that Luke mistakenly copied it. Others argue that the Greek version of the OT is accurate and that a Jewish scribe mistakenly dropped a name and the associated ages from the Hebrew text of Genesis chapter 11 during the copying process. A key difficulty with either of these interpretations is that they posit a serious error in the text of the Bible. In the first case, if Luke copied an erroneous Greek text this would mean that the original of the Gospel of Luke contained an error when it came from his hand. This implicates the Holy Spirit who was superintending the production of the NT. In the second case, there is an error in the OT text, based on a faulty Hebrew manuscript tradition and we must rely on less reliable manuscripts of the Greek translation to fix the problem with the Hebrew. However, there are significant variations in the ages assigned to the patriarchs in different versions of the OT Greek translation, but no variations among Hebrew manuscripts. This suggests that the manuscripts of the Greek OT translation are not as reliable as the Hebrew manuscripts. In this case, we could not be sure that we have an accurate OT. Others suggest that an early Christian copyist's eyes shifted to a preceding line, and he mistakenly added the name Cainan to a NT manuscript he was copying. However, there is no indication that this name was added during the copying process—there are no documented variations among early Greek NT manuscripts at this point. Rather the name Cainan appears to have been what Luke included in his original account, under the guidance of the Holy Spirit.

A possible way to solve this apparent contradiction is to accept that all the genealogies (Genesis chapters 10, and 11, and Luke 3.36-38) are correct, and we must understand them to serve different purposes. That genealogies may serve different purposes can be seen from the difference between Matthew's and Luke's genealogies. Matthew indicates that Jesus had the right to the throne of David through Solomon and his descendants to Joseph, by adoption. Luke, however, traces Jesus's ancestral line through his mother Mary, through Nathan, another son of David. In a similar way, there may be differences between the accounts in Genesis and Luke. The Genesis chapters 10 and 11 accounts trace the direct assignment of the blessing of the inheritance rights from one son to the next—not necessarily of the firstborn sons. We have already noted that Shem was not Noah's firstborn son, Japheth was. Shem, however, was the son chosen to inherit the promised blessings leading to the Messiah. A number of possible scenarios could explain the difference between the genealogies. However, we will mention only a few possibilities:

- Cainan could have been Arphaxad's firstborn but did not receive the blessing; rather it passed to Arphaxad's grandson, Shelah—Biblical examples of blessings skipping a firstborn son include Shem replacing Japheth, Jacob replacing Esau, and Ephraim replacing Manasseh.
- Cainan may have been Arphaxad's firstborn, who married at a young age and died shortly after his son Shelah was born. Arphaxad may have then adopted Shelah and declared him to be his heir—for example, Naomi declares Ruth's son Obed to be her own son (Ruth 4.17).
- Cainan may have been a son-in-law of Arphaxad, and the blessing skipped him and was passed to the male heir, Shelah.

We should note that the Hebrew term 'begot', translated here as 'fathered' (ESV), can also be translated as 'became the father of' (NIV), which can be through adoption or declaration (Ps 2.7) and not necessarily through direct conception. Genesis chapter 11 could be focusing on the inheritance rights of the declared firstborn, whereas Luke could be focusing on the direct genealogical descent of Jesus from Adam to his adoptive father, Joseph (Lk 3.23).

A Limit Placed on Man's Life Expectancy [December 24] (Gen 11.11-24, 32)

How do you feel when you read a prophetic blog-posting like this?

"We aren't going to stay helpless against aging tissues. ... At some point in the 21st century we will reach actuarial escape velocity where the rate at which we can repair the body exceeds the rate at which pieces of the body wear out and fail. Our rejuvenated bodies will then go on for many more decades and eventually centuries. In a nutshell: If you are in your 30s or below I think your odds of dying of old age are remote."²⁷

If you are over the age of 30, do you wish that you were younger and that you would be able to take advantage of the biomedical engineering innovations which are supposedly coming?

Most people in our society are happy when their medical insurance covers life-extending surgeries and would even be willing to expend a considerable amount of their available financial resources if they could extend their lives for a few years—consider, for example, how much money is spent on cancer treatments and organ transplants. It was reported in USA Today that the sale of anti-aging products such as vitamins, nutritional supplements, and hormone replacements could generate global revenues of over \$80B annually, as baby-boomers pursue the quest to stay forever young.

Many scientists believe that the aging process in humans can be slowed, and that life expectancy can be extended by at least twenty or thirty years. Some claim that animals that age slowly, such as species of lobsters, tortoises, and jellyfish, show that the aging process can also be slowed down in humans. However, despite the research and money invested in slowing or reversing aging there has been little change in mankind's overall life expectancy after infancy. Life expectancy at birth has changed, worldwide, over the past few hundred years, but this has been largely due to significant reductions in infant mortality rates, not because the end of life has been extended. Someone might think that we are living longer, because they hear in the news about people who live to be 115 or even 120. There are undoubtedly more people living to 100+, than in the recent past, but that is largely due to improved nutrition, medical intervention, and the world's larger total population. However, the worldwide *average* life expectancy is limited to 70 years, and for the particularly strong, 80 years (Ps 90.10).

Man was given a body that could have been immortal. The ages of the antediluvian patriarchs (Gen 5.4-32) indicates that the self-repair mechanisms in the body, even after sin had entered, were able to slow aging for almost a millennium. Then, the ages of the post-flood patriarchs, declined on a logarithmic decay curve from Shem, who died at the age of 600, to Terah, who died at the age of 205. The reduction continued through Judah and Joseph and Moses and Joshua, until it reached an asymptote of 70-80 years by the time of Saul and David—where it has remained ever since.

The reason we age, and die is unexplainable from a purely materialistic perspective. Why human life is limited to \sim 80 years is beyond the realm of an empirical explanation. Some scientists claim that aging and dying is how evolution has worked out a means for dispensing with the unproductive who cannot contribute to the preservation of the gene pool. This sort of reason is pure invention. It attributes foresight and causation to evolutionary processes and uses evolution as the default cause for every biological phenomenon.

Scientists who accept the Genesis account as factual, suggest various causal factors for the reduction in ages such as, deterioration in Noah's sperm by the time his sons were born (Gen 5.32); an increase in genetic mutations caused by cosmic radiation (they claim that prior to the flood it was filtered by a vapour canopy), increased radiation from rocks and soil, less nutritious food, a more rugged environment, a less salubrious climate, increased disease, or increased levels of chemical carcinogens. There is a fundamental problem with all these proposed causes—they can't provide a reasonable explanation for why life expectancy plateaued at an average of 70-80 years. For example, genetic mutation is continuing to increase with every generation. If God did not have plans to intervene with the renovation of the physical realm, the genome will become so defective that all humans will die before they could

²⁷ Randall Parker, 2012-08-02, <u>http://www.futurepundit.com/archives/008687.html</u>

reproduce (see, <u>Genomic Decay</u> [May 29]). We cannot explain the limit on human ages by appealing to decay in the natural order. It can only be explained by God's explicitly introducing a change (for example, flipping a 'switch' in the genome) which set a limit on the natural repair processes.

One reason why God providentially placed a limit on man's age was to limit the extent of evil men could perpetrate. Prior to the flood, God permitted men to exercise their depravity with few restraints, to demonstrate the results without his redeeming Spirit. There was essentially no end to the evil they invented (Gen 6.5). The limit on life expectancy is a blessing to control evil, so that mankind can survive (Gen 8.21). With today's technology, life would be unimaginably dystopian if men like Hitler, Noriega, Kim Jong-un or Morgentaler lived, not 70 or 80 years but 700 or 800 years!

Terah and His Family [December 25] (Gen 11.27b-32)

When you attend a play, you are handed a playbill which lists the principal performers, with a little information about their experience. This section of Genesis is similar. It is provided as opening credits to the next major episode in the history of redemption—the calling of Abram out of the paganism of Ur and God's making a covenant with him, which would be a blessing to all nations. Although most Bible translations include the first part of verse 27 in this section, and position it is a heading for the section, it is more likely that it is a colophon for the previous section (Gen 11.10b-27a), written by Terah. We have now begun a new section of Genesis which focuses on the life of Abraham. This section was probably composed by either Isaac or Ishmael.

The opening scene of the new episode in the history of redemption introduces Terah, three named sons (who are listed in order of importance, not in birth order), and a few other players. Terah may have had other sons, just as one of his daughters (Sarai) is not mentioned as being his daughter but as the wife of one of his sons. All of the named individuals, except for Iscah (as far as we know), have roles in the drama which is to unfold. The author of this section realizes that he is writing a compelling human drama and does not reveal important details (such as Sarai being Abram's half-sister or that Terah had more than one wife) which he will later reveal as a surprise. At the same time, he sets the stage for future episodes (e.g., between Lot and Abram, and between Sarai and Hagar), by a brief mention of Lot and Sarai's barrenness.

This scene opens with Terah, the patriarch of the Abrahamic clan, on the stage. He provides the critical link from the genealogy of descent from Adam, through Shem, to Abram, and is the bridge between the postdiluvian world of nations which did not honour God, to the founding of a new nation based on the faith of Abraham. Terah was a syncretistic polytheist. He likely had knowledge of the true God—handed down from Shem, which he transmitted to his sons (Gen 31.53)—but he also worshiped idols (Josh 24.2, 14-15), in particular the moon god, Sin, who was popular in Ur (in Sumer) and Haran.

Terah's oldest son was Nahor, named after his grandfather. His importance becomes evident in a subsequent narrative, when he is mentioned as having twelve sons (Gen 22.20-24), eight through his wife, Milcah. Milcah was Nahor's niece, the daughter of Haran. Rebekah, one of the granddaughters of Nahor and Milcah, would become Isaac's wife, reuniting the families of two of Terah's sons. Also, Jacob would draw two of his wives, Leah and Rachel, from the descendants of Nahor and Milcah. Through their female descendants they play a key role in the unfolding dynastic line leading to the Messiah.

Haran, another son of Terah died at an early age, while Terah was still alive and before the family had left Ur. This is the first reference in the Bible to an early 'natural' death and is a sign that a curtain is being drawn on the long lives that the patriarchs had experienced—the expected length of life is tapering toward 70 or 80 years. Haran had had children before he died. Three of them are mentioned in this account, Milcah, Iscah, and Lot. As we noted, Milcah became the wife of Nahor, her uncle. Nothing is known about Iscah, although an ancient Jewish legend

claimed that she was the same person as Sarai. However, Sarai would then have been Abram's niece, not his sister as he emphatically declares (Gen 20.12).

Lot migrated with Terah, and later accompanied Abraham as they migrated to Canaan (Gen 12.4; Gen 13.5). We learn more about Lot in the account of the destruction of Sodom and Gomorrah. Also, the nations descended from Lot's two daughters (Moabites and Ammonites) would interact with the Israelites. Of particular concern was an interaction during the Exodus from Egypt, when they joined together to hire Balaam. As a result of the sexual deviance and idolatry which they introduced to Israel at Peor, the Israelites were prohibited from allowing anyone from either nation to join the congregation (Dt 23.3-6). Solomon had Moabite and Ammonite women in his harem and allowed them to lead him into idolatry through the worship of Chemosh and Molech (1 Ki 11.5, 7). However, Israel's interaction with these nations would not be all bad. Ruth was a Moabitess who became a worshiper of the true God, the great grandmother of David and an ancestor of Jesus (Mt 1.5).

At this point, Sarai, is not identified as a daughter of Terah, but only as the wife of Abram. She may have been the daughter of a concubine of Terah and not considered a fully legitimate descendant. However, her name means 'my princess', so she could have been a daughter through a second, unidentified, full wife of Terah.

At the time the family migrated from Ur to Haran, the prospects of the Covenant line did not look promising. Lot was the only male descendant in the family of Terah, and Abram's wife, Sarai, is declared to be barren (Gen 11.30). Thus, it is possible that Abram took Lot with him when he left Haran for Canaan because he considered Lot to be a candidate to appoint as his heir. So, Abram wished to remain on good terms with Lot (Gen 13.8), in the event that Lot was the only available male descendant. Later, Abram had to consider even a servant, Eliezer, to be his heir (Gen 15.2). However, God had great plans for Abram that would go beyond anything he could have imagined.

Abram [December 26] (Gen 11.26-31)

Abraham is probably the most important figure in the Bible, between Adam and Jesus. Some people might suggest that Moses is more important than Abraham is. However, selected evidence shows the importance of Abraham, compared with Moses:

- Abraham is the man through whom God's purposes of calling out an obedient people for himself, realize their beginning.
- Abraham was the ancestor of the Jews, not Moses.
- Abram means 'exalted father'. His name was changed to Abraham, which means 'father of many nations' (Gen 17.5).
- Abraham fills the offices of prophet, priest, and 'king', as a type for Christ. Moses fills only two of these offices (prophet and 'king') and is a type for Christ only as a prophet (Dt 18.15, 18-19).
- Abraham possessed the Promised Land (for a time)—Moses was not permitted to even enter it (Dt 32.52)—as a foreshadowing of Christ who would inherit the earth.
- The Jews at the time of Jesus did not claim to have Moses as their father as they did of Abraham (Jn 8.39).
- Moses does not leave a dynastic line that culminates in the Messiah. Abraham was the forefather of Jesus.
- The covenant enacted by God, with Abraham, is the first covenant which does not apply to all mankind, but to a select group of people—who are included fully only when they have the same faith as Abraham.
- The writer of Hebrews dedicates about twice as much space to Abraham's faith as to Moses' (Heb 11.8-12, 17-19, 23-28).
- In Romans, Paul mentions Abraham twice as often as Moses. He makes the argument that the believers in Jesus are heirs to the faith of Abraham. [The number of references to Abraham in the NT are about 10% less than the number of references to Moses. However, many of the NT references use 'Moses' as a synecdoche for the Pentateuch.]

Many historians and Bible scholars reject the historicity of Abraham. Some claim that Abraham is a composite image of a patriarch from the second millennium BC, even though they acknowledge that the word *abarama* (or similar) appears as a personal name in the cuneiform texts from that time. But many scholars, since the mid-1970s, have claimed that there is no compelling evidence that supports the existence of Abraham at the time he lived according to Biblical chronology. They claim that Abraham is merely a late Jewish invention with attributes of someone who might have lived 700 to 1,000 years later than the Bible's chronology places him—i.e., during the supposed Iron Age. They argue that early cultural values were handed down through oral transmission, but that historical facts were garbled, and events and characters invented to serve national interests. By the late 20th century, archaeologists had given up any hope of recovering archaeological data which could have made it possible to accept Abraham as a credible historical figure. We cannot review here the various arguments we have made, in previous meditations, about the accuracy of the history contained within Genesis 1-11. Rather, we simply note that God's word states the truth. Abraham was born about 1990 BC and died about 1815 BC (Gen 25.7).

When Abram is first mentioned, he is introduced as the firstborn son of Terah. However, since he was in fact the youngest of the three named sons—having been born when Terah was 130 years old (see, *Abram's Age at the Death of Terah* [December 29]), this is the only indication in the account, thus far, which hints at there being something special in Abram's situation. In fact, the context of his introduction would appear to indicate otherwise:

- The nations had been scattered from Babel as punishment. There is no hint in this account that men repented of their actions. In fact, the return, a few hundred years after Babel, of nation-states with kings declared to be 'divine', indicates that men gave no thought to changing their ways.
- The migration of Terah's family, from Ur to Haran, with the intention to continue to Canaan, is not attributed to a call from God or in response to a promise of blessing from God. It could be inferred that they were merely economic migrants, rather than religious refugees. The land of Canaan was infected with greater superstitions than either Sumer or Assyria were. In addition, their long stay in Haran would appear to indicate that their migration to Canaan was a whim, not taken seriously.
- Abram's barren and aging wife (Gen 11.30), along with only one grandson of Terah (Lot) did not show promise for the next generation.

By any standard of assessment, anyone watching the opening scene in this new drama—the introduction of the immediate descendants of Terah—would have concluded that the unfolding chain of descent form Seth, which was to produce the future Messiah, looked pretty fragile. But, unknown to Abram, who was already 75 years old at the end of chapter 11, and to the readers of this account, God had not abandoned his promise to the woman (Gen 3.15). Rather, God was setting up the circumstances so that he could perform marvelous works in the economy of redemption which would dazzle Satan, declare the pagan gods to be nothing, and rebuke men for their lack of belief. God was planning, through Abram, to change hearts, change history, and change the hopes of mankind.

Sarai's Barrenness [December 27] (Gen 11.30)

The statement about Sarai's barrenness is delivered in the midst of the brief record about Terah and his family. It is presented as the reason why Abram had no children, when both of his brothers did. Haran had fathered Lot and two daughters, Milcah and Iscah, and then he had died at a comparatively young age (Gen 11.28). Nahor took Milcah, his niece, as his wife. Later, in Genesis, we learn that Milcah had borne him eight sons (Gen 22.21-22). In addition, Reumah, Nahor's concubine had borne him four sons (Gen 22.24). Although Abram was Terah's youngest son, born when Terah was 130 years old, he had been appointed as the heir in the Covenant line, leading to the Messiah. Yet, there was a dilemma, Abram had no children.

This is the first reference to a woman being barren. It comes as a surprise in the context of the command to be fruitful and to multiply (Gen 9.1, 7), and the context of the statement, in the genealogical account, that each patriarch had "other sons and daughters" (Gen 11.11-24). Barrenness was rare at that time and had never before been experienced in the Covenant family line.

Sarai's barrenness is presented here as a statement of fact. However, God intended this statement to be understood as more than a passing reference. He presented it to create a point of tension in the narrative and for the fulfilment of the Covenant promise. The text reinforces this by stating that not only was she barren, but she had no children. In the later cases of Rebekah (Gen 25.21) and Rachel (Gen 29.31), we are only told that they were barren.

There can be little doubt that Sarai had to endure her barrenness with shame. She undoubtedly heard whispers that she had been cursed. All the women she knew, including those in her family, had probably produced children—in some cases many. She alone was without children. Later, she would discover that the problem was not with Abram. He was able to produce a child through Hagar. So, the barrenness was her problem. If she didn't produce a son, there could be no continuation of the Covenant line. She was the weak link in the chain of blessing which had begun with Seth and was to lead to the Messiah. We can be sure that, like Hannah, she prayed earnestly that God would give her a son. She even tried to solve the problem of not being able to give birth her own way—using her servant Hagar as a surrogate. Giving her servant to Abram as a concubine must have caused her considerable grief, but she felt it was the lesser of two evils—being barren was far worse in her opinion. It not only brought shame on her, but also on her husband who would have been unable to sit in the city gate with authority (Ps 127.5).

Sarai's barrenness dominates the later account of Abraham and will introduce challenges for his faith and Sarai's faith. Abraham was promised that he would produce a large progeny (Gen 12.2; Gen 15.4-5; Gen 17.2). But this promise seemed to be already proving impossible to fulfill. Sarai was already 65 years old when the promise was first delivered and may have already reached the point where she could not have borne any children, even with the advanced ages the patriarchs could live. She certainly had reached that point, 25 years later, before she conceived Isaac (Gen 17.17; Gen 18.11).

We can imagine Satan giving an evil cackle when he saw Sarai's barrenness. In his unoriginal mind, he undoubtedly thought that God's promise was going to be broken. The Covenant line was going to end. The Messiah who was to crush Satan's head was not going to be born. But God had a greater plan in mind than Satan, Abraham, or Sarai could imagine. God was going to reverse the aging process in Sarai and rejuvenate her body so that she could produce and carry a child in her womb. Evidence that the effects of aging were reversed can be seen in the fact that Abimelech, king of Gerar, found Sarah attractive and wanted to take her as a wife, even though she was 90 years old (Gen 20.2). It must have been a marvelous thing in Abraham's eyes as he saw his beloved wife growing younger and move beautiful as each day passed. No wonder Elizabeth, who also had been barren, could later declare to Mary that "nothing is impossible with God" (Lk 1.37). God got the last laugh over Satan, particularly when Sarai named her son Isaac (which means 'laughter') and when she was renamed Sarah—*sarai* means 'my princess' implying an exclusiveness to her role; *sarah*, means '*a/the* princess', implying that she was to be the mother of kings and nations.

God planned Sarai's barrenness so that he could emphasize the necessity of his work in fulfilling the promise to send the Messiah, and to display the wonder of his power and his absolute control over procreation and history. The conception of a child may appear to be natural to us. However, conception belongs to God (see, <u>Conception is from</u> <u>the LORD</u> [June 13]). The conception of every child depends on a direct creative act on God's part. A new human life is not merely the result of the merging of two cells. It is a miracle directly from the hand of God, who acts to create the spirit of each person. So, the fulfillment of the promise of the Messiah did not depend merely on human sexual activity, but on God who gives the increase.

God also planned Sarai's barrenness so that he could test and display the faith of Abram (Rom 4.19) and Sarah (Heb 11.11). God graciously intervened at the right time, when it seemed impossible from a human perspective, and Sarah conceived as God had promised and planned (Gen 21.1-2).

The Call of Abram [December 28] (Gen 11.31)

No reason is given in this verse for why Terah left Ur of the Chaldeans, in southern Mesopotamia, and began to travel to Canaan. We could suppose that the departure was precipitated by changes in the Mesopotamian socio-political or economic climate. For example, Terah may have been migrating north-west to avoid excessive taxation or a change of dynasties worried him. There is nothing in the verse (or context) that would indicate that there was a religious reason for the departure from Ur—for example, to avoid seeing the idolatrous rituals being performed in market squares, or to escape overt oppression of true worship or a requirement to participate in pagan worship (such as in Daniel 3.1-30). That they were heading to Canaan would seem to suggest that the objective was not to separate from false worship. Canaan was where the cursed descendants of Canaan, the son of Ham, lived (Gen 9.25; Gen 10.19). It was the centre of a demonic polytheism that used cultic rituals with male and female prostitutes, and where Sodom and Gomorrah were located. Also, their settling in Haran would appear to contradict any suggestion that they were seeking a place where they could have practiced true worship. Haran was the centre of the moon-god cult, which may have been Terah's particular attachment among the idols (Josh 24.2, 14-15).

However, we need to know the rest of the story to understand what is going on. Stephen tells us that, "[t]he God of glory appeared to Abraham in Mesopotamia, before he lived in Haran, and said to him, 'Go out from your land and from your kindred and go into the land that I will show you.'" (Acts 7.2-3) It was not Terah who initiated the migration from Ur, but Abram, under God's direction. Terah went along, as an aged companion, with Abram and Sarai; as did Lot. Nahor and Milcah were probably part of the migrating party, since they are mentioned as living in Haran (Gen 24.10; Gen 27.43).

Terah is credited with leading the migration because he was the patriarch. We do not know how old he was when the journey began. However, the fact that Sarai had been declared barren (Gen 11.30) seems to indicate that she was advanced in years. So, it is probable that Terah was old, unwell, and expecting to die soon—particularly since his son, Haran, had died before him in Ur (Gen 11.28). Abraham was subject to his father and, out of deference, did not press him to continue the journey when he wanted to settle for his remaining days in Haran—about a two-day journey from the ford on the Euphrates where one could enter Canaan. Abram planned to wait until his father died, and then he would continue to Canaan, which he did (Acts 7.4). Other than the death of Haran before his father (Gen 11.28), Terah's death (Gen 11.32) is the first death reported in Genesis since the death of Noah (Gen 9.29). Thus, the notice of Terah's death is a marker for the end of the postdiluvian era. It serves to designate Abram's independence form his father's house (Gen 12.1) and identifies the beginning of a new era—what would become Abram's descendants' (the Israelites) possession of Canaan.

God's command to Abram to leave Ur indicates that he wanted Abram out of that city and region. At that time, Ur was the largest city in Mesopotamia. With an estimated population of 65,000, it was also likely the largest city in the world at the time Abram left it. Archaeological excavations in the early 20th century discovered that it had a highly developed urban culture with supporting agricultural hinterlands, based on the Sumerian culture that had preceded it. The ziggurat in the ruins is massive. It has been cleared of debris by the Iraqi government and, since 2009, developed as a tourist destination.

The command God gave to Abram to leave Ur is not to be understood as a general principle—e.g., that Christians are to abandon pagan cities. God has not abandoned cities, in general—although he might abandon specific cities because of their wickedness. The call to Abram to leave Ur does not mean that God does not want the Gospel proclaimed in the capitals of modern 'empires'. God called Abram to make an explicit break with his extended family and the national deities that saturated his experience. His departure from the urban setting to a rural setting in Canaan was a way to provide him with a training ground in which his faith could be developed. His separation was similar to the separation Paul experienced in Arabia and Damascus after his conversion (Gal 1.16-18). God was challenging Abram to live out the principle of separation which Jesus would later enunciate when he taught his disciples that they were to love him more than their own family members (Mt 10.37-38).

God's plan was for Abram to cut his ties with his former nation in order to establish a new anti-Babel spiritual kingdom, the Church, founded on faith, to which all true believers in the Messiah belong. It would:

- Replace polytheistic idolatry with worship of the one true God.
- Be a worldwide kingdom of nations (Gen 17.4-6, 16), rather than a city-state (Gen 11.4).
- Not be ruled by a divinized man, but by God incarnate as the God-man, the King of kings (Rev 19.16).
- Include a city built by God (Heb 11.10), not by man (Gen 11.4).
- Not have a tower-temple (Rev 21.22) for its temple is Jesus (Jn 2.19, 21).
- Be accessed by the 'gate of God' (Ps 24.9), not the 'gate of god' (Baal).

The Church is not opposed to empire per se-it is the anti-Babel 'empire'.

Abram's Age at the Death of Terah [December 29]

(Gen 11.26, 32)

The chronicler (possibly Isaac) informs us that Terah lived to the age of 205. That in itself is not a problem, once we have accepted the fact that the early postdiluvian patriarchs lived considerably longer than people do today, and that their ages declined across the generations from Shem to Abram.

In Genesis 12.4 we are told that Abram was 75 years old when he departed from Haran. If Abram was born when Terah was 70 years old (Gen 11.26), then this means that Abram left Haran when Terah was 145 years old, and that Terah lived for an additional 60 years in Haran after Abram had left. However, Stephen in his sermon (Acts 7.4) says that Abram left Haran *after* his father died and then God brought him into the land in which the Jews were then living (Palestine). This apparent contradiction is often raised as a challenge to the historical accuracy and truthfulness of the Bible.

A number of explanations have been provided for how we might resolve this apparent contradiction, including:

- Stephen reported a widely accepted, incorrect, rabbinical tradition. In this case, Luke just reported what Stephen said. So, there is no inaccuracy in Scripture—it reported factually. However, since Stephen delivered his sermon in the power of the Spirit (Acts 6.15; Acts 7.55) he seems to have been diligent in his study of the OT Scriptures, and the Spirit recorded his words in the NT, it seems unlikely that he would have made a mistake reporting such an important piece of information about Abraham.
- Stephen *inferred* that Terah had died before Abram had left Haran, because the order in the account reports the death of Terah after the departure of Abram. Whereas, Abram left 60 years before his father's death but never saw him again. This suggested explanation is similar to the previous one and implies that Stephen made a mistake.
- Stephen was following an alternate version of the text. For example, the Samaritan Pentateuch says that Terah died at the age of 145. However, it is unlikely that Stephen would have used the Samaritan version of Genesis when he had the Hebrew and Greek translation (Septuagint) available to him. The Septuagint supports the reading in the Hebrew text.
- Stephen referred to the death of Terah in a figurative sense. Terah may have become enamored with the prosperity and lifestyle of Haran and given up on continuing the journey to Canaan. It seems that he became beguiled by the idolatry of the northern Chaldeans (Josh 24.2, 14-15). So, Abram considered his father to be spiritually dead. Those who suggest this 'solution' often point to Matthew 8.21-22 for support. However, there is no contextual evidence to support the view that Stephen uses the term 'died' in his sermon in a spiritual sense.

An alternate explanation is possible, which John Calvin defends in his commentary on Genesis. The solution is quite simple—Abram was not the natural firstborn son of Terah, although he later became the appointed firstborn, who was to inherit the covenant blessing. Terah could not have had three sons (by one wife) at the age of 70— unless they were triplets. Rather, after he had turned 70 the first of his three sons was born.

The question that needs to be addressed is whether we *must* understand the listing of the three sons as giving their actual birth order. We noted that Shem was not the firstborn of Noah's three sons (see, *Noah and His Sons* [July 24]). Japheth was the firstborn and Ham the youngest son. Yet, Shem is always listed first when the three sons are

listed together (Gen 5.32; Gen 6.10; Gen 7.13; Gen 9.18; Gen 10:1), because he was designated as the formal firstborn; similar to how Jacob is placed before Esau (Josh 24.4; Heb 11.20), and Jacob later changed the positions of Ephraim and Manasseh (Gen 48.13-14). The account does not state what the birth order of the three sons was. It only states that they were born after Terah had turned 70. So, Abram was most likely Terah's youngest son, born 60 years after Haran, the natural firstborn.

Some object to this solution, that Terah became the father of Abram when he was 130, 60 years after the birth of his firstborn, Haran. They say that Terah would have been too old to have produced a son at the age of 130. Yet, he was of the generations of the postdiluvian patriarchs who were living longer than men do today. Those who object, also refer to Abraham's questioning God (Gen 17.17) about the possibility of a man who is a hundred years old producing a child. However, they seem to miss the fact that Abraham produced a number of other children by Keturah (Gen 25.1-2), after the death of Sarah, when he himself was about 130 years old.

There is in fact no contradiction in the Bible, we do not have to appeal to textual variants of the OT, and Stephen did not make a mistake when he reported the departure of Abram from Haran. God's word is vindicated. Just as it is reliable here and in Acts, it is reliable in every statement it makes. We can trust it absolutely when it declares how and when God created the world, sent the flood, and divided mankind's language. It is important that we have an accurate understanding of when Abram left Haran because this information is a key for calculating that creation occurred about 4000 BC (see, *When Was the World Created?* [February 9]), the flood occurred about 2345 BC, and the division of language occurred sometime before 2215 BC.

A Proper Understanding of Genesis 1-11 is Important [December 30] (Gen 1-11)

In June 2014, Chuck Queen, the pastor of Immanuel Baptist Church in Frankfort, Ky. published an article entitled, *It's time for evangelicals to come out for evolution*. In the article, he lampooned Christians who hold to a youngearth, six-day creation view. He said, "I am not a science-denying Baptist minister who thinks that dinosaurs lived alongside humans a few thousand years ago." He also said, "[T]he creation stories are parabolic in nature and are not chronicles of history or reports conveying scientific data... [T]hese stories are spiritual, metaphorical and theological stories and, while not factual, they certainly teach truth about God and God's relationship to the world... Educated evangelicals know that the creation stories were never intended to be history lessons or science reports, because the Bible is not a history or science book."

Queen uses the faulty *ad hominem* argument, to attack, and dismiss, those who accept the Bible's account at face value—by calling them 'uneducated' and 'science-denying'. It is always easier to name-call than to deal with facts. In contrast, Queen demonstrates that he is really the uneducated and science-denying one. He clearly does not know that science is "knowledge about or study of the natural world based on facts learned through experiments and observation". There is no experiment or observation which can show how the universe began—we have to accept God's account or cling to the latest myth of the evolutionary cosmologists. Nor has biological evolution (defined as an undirected and chance-based increase of genomic information complexity) ever been demonstrated by experiment or observation.

Genesis 1-11 is not a collection of cleverly devised theological stories. It is a true account of how the world began and how it came to be as we now know it. If we do not believe that it presents an explicit historical record, then:

- Man is the result of an unguided evolutionary process, and is part of continuum of living creatures, not a different kind of creature, separate from the animals. Therefore, vegans are right; we should not eat meat.
- Man is only a naked ape who lives by instinct and cannot be held morally accountable for his actions.
- Marriage between one man and one woman is merely a traditional contrivance, not a creation ordinance established by God. Therefore, we cannot object to polygamy or the union of two people of the same sex.
- There was no actual Adam who acted as the covenant head of the human race. Therefore, we should not be

charged as guilty of original sin. And we cannot explain why everyone is born with a sinful nature and the consequences of curse on sin have permeated the natural realm.

- Death is not the result of Adam's sin, but a 'natural' process.
- We should be listening with trepidation to the 'chicken littles' who claim that human activities are responsible for the melting glaciers and rising sea levels, rather than understanding that they are legacy remnants of the post-flood ice age, which was a single non-repeatable event.
- God's word cannot be taken at face value. If we question the authority of it in one area—e.g., claiming that Genesis chapter 1 is a topically arranged story rather than accepting it as history; or claiming that the flood was local instead of global, as his word declares—we open the door to rejecting the authority of God's word in every area—e.g., what it says about the virgin conception of Jesus and his resurrection.

It is sad to see people who profess to be evangelical Christians attempting to drink from the well of worldly 'isms' while ignoring the reality that they are drowning in a deep sea of rapidly changing currents. We can use one example to show how quickly declared 'truths' of scientism can be reversed. In March 2014, the media claimed that scientists had found the first direct evidence that the universe expanded quickly in the microseconds after the 'big bang'. This 'evidence' was supposedly gravity waves generated by the 'big bang'. But, by June of the same year, after reanalysis, the claims had to be dismissed as there is no means of distinguishing supposed primordial gravity wave signals from foreground wave signals from galactic dust. There will be no Nobel Prize issued for the scientists who called the March press conference.

A 2011 Barna poll about why young people leave churches when they reach their 20s, indicated that 29% of the survey respondents believed that "churches are out of step with the scientific world we live in". However, the real problem is not, as many claim, that the Church is antagonistic to science, but rather that the Church has capitulated with materialistic naturalism and has questioned the authority of the Bible, wishing to appear supportive of the foolish God-despising claims of the world.

Instead of it being time for evangelicals to come out for evolution, it is time for them to take an unequivocal position and declare that God created the universe over a six-day period, by the power of his word, out of nothing preexisting, about 6,000 years ago; and that he judged sinful men with a worldwide flood about 2345 BC. The thin edge of the wedge of disbelief in the word of God, is a rejection of Genesis 1-11 as an historical account. We must declare to our congregations, our youth, and to the world at large, that God's word is the final authority in every area of life, and that Genesis 1-11 is a literal, historical record of the first 2,000 years of world history.

The First Bible [December 31] (Gen 1-11)

Since the beginning of creation God has revealed himself and his will to mankind. In the Garden of Eden, God gave Adam and Eve duties to perform and a command to obey. If they had done what God asked of them, they would have dwelt with him forever in the paradise he had created, experiencing only bliss. In other words, they knew what their primary purpose was: "to glorify God and to enjoy him forever." However, their desire to be like God, to usurp his authority, and to act autonomously resulted in the spiritual, psychological, moral, and environmental mess that we see around us today. Now, men suppress the knowledge of why they are here and where they are going, and try, through various means (power, property, pleasure, etc.), to fill the God-shaped void in their souls. Genesis 1-11 is God's first Bible, directed to all of mankind, which explains how we can fill the void caused by sin. It answers the fundamental questions that we all ask, such as: Where did we come from? When did it all begin? Who are we? Why are we here? How are we to live? What are we to do now?

Genesis 1-11 is not a myth, fairy tale, or legend. Nor is it an attempt, by a wandering tribe of tent-dwellers, to provide a foundation for nationhood. It is the word of the living God, who cannot lie. It presents historical and scientific facts in a sober and solemn, and yet majestic, way. It speaks with absolute authority as it reports unique,

HISTORY'S OPENING ACT - Meditations on Genesis 1-11

non-repeatable, events which cannot be examined with empirical methods. The record of the events is based on the word of two or three witnesses. The Trinity speaks of what was accomplished during creation week. Adam and Eve tell us what transpired in the garden rebellion and God's promise to provide a means of recompense. Shem, with his two brothers, provides the account of the flood and the events at Babel.

Today, most historians and scientists have dismissed this section of the OT as a reputable voice of history or of science. They claim that archaeological investigations and laboratory results do not support the statements in this section of the Bible. Their radical skepticism is based on *a priori* materialistic presuppositions—that God, if he exists, is silent and that sensory perceptions are the final authority for truth. In contrast, God expects and demands that we listen to what he says in these chapters, and that we accept what is written here at face-value, as statements of what actually happened. We are to believe what is recorded here, simply because it is part of God's word. As God's word, it has self-authenticating, final authority. We cannot place it under scrutiny and subject it to tests to authenticate it. The standards which we would use to authenticate God's word would then be above his word, and would, in turn, have to be subjected to the same tests of authentication. However, we cannot have an infinite progression of authenticating. Thus, we accept what God says as true, because it is God's word, which is true.

Genesis 1-11 provides sufficient information about "what man is to believe concerning God, and what duty God requires of man." It gives explicit details about creation, God's sovereign rights over man, the entrance of sin into the world, God's hatred of man's sin and his requirement that rebellion be dealt with through punishment, and the need for a saviour who would stand in the place of mankind. It also teaches that one day in seven is to be set aside as holy in which no regular work is to be performed and provides information about how God was to be worshiped through anticipatory animal sacrifices and communication (i.e., prayer). The principles of the Ten Commandments are also revealed in these chapters, long before they were formally encoded on tablets of stone at Sinai. These chapters also provide, in seed form, information about the nature of God, including his non-physical nature and the plurality of his persons. Prior to the incarnation of Jesus, if a person had had only Genesis 1-11, believed what is written, and truly sought God, this would have been sufficient for him to be saved from sin, forever. Genesis 1-11 offers the Gospel message: man was created by God, is expected to live in obedience to God, has broken God's law, must repent of his sins, and must believe in the seed of the woman who would conquer sin and Satan.

Genesis 1-11 opens on the heights of hope and glory. It takes us through a number of deep valleys of despair (Cain, Lamech, the flood, Nimrod, and Babel). And it ends on a clear, level, highway leading to the horizon—the line of Shem is being extended toward the future Messiah. The chapter divisions in our Bibles were not in Moses' original. The account that begins in Genesis 11.27b continues into chapter 12 without interruption. Abram has arrived. He will be called out of pagan Ur to establish a new nation, based on faith, and to live in a new city built by God. Genesis 12.1-3 offers the hope that there is a solution to the mess of sin and death that Adam brought upon us.

When we read these chapters, our response should be that of the Psalmists, who in multiple places praise God for what he has done in creation, "O Lord, how manifold are your works! In wisdom have you made them all." (Ps 104.24) Genesis 1-11 is God's message to the wise, scholar, and debater of this world. By it, God has made foolish the wisdom of the world. "For the foolishness of God is wiser than men, and the weakness of God is stronger than men." (1 Cor 1.25) Amen.

Bible References

01 Genesis

ch. 1, v. 1, 14-19, pg., 53 ch. 1, v. 1, pg., 5, 6, 7, 8, 9, 10, 12, 15, 16, 17, 18, 23, 49, 100, 114, 133, 148, 247 ch. 1, v. 1-2.14, pg., 114 ch. 1, v. 1-2.25, pg., 101, 148 ch. 1, v. 1-2.3, pg., 100, 102 ch. 1, v. 1-2.4, pg., 26, 100, 241 ch. 1, v. 1-3, pg., 101 ch. 1, v. 1-31, pg., 11, 13, 18, 36, 91, 93 ch. 1, v. 1-5.1a, pg., 258, 272 ch. 1, v. 1a, pg., 114 ch. 1, v. 2, 26, 27, pg., 22, 199 ch. 1, v. 2, pg., 18, 19, 21, 23, 48, 106, 333, 355 ch. 1, v. 2-2.4, pg., 101 ch. 1, v. 2-31, pg., 100 ch. 1, v. 3, 14, pg., 100 ch. 1, v. 3, 26, 28, pg., 24 ch. 1, v. 3, pg., 25, 27, 28, 114, 149, 156 ch. 1, v. 4, 10, 12, 18, 21, 25, 31, pg., 29 ch. 1, v. 4, 10, pg., 29, 135 ch. 1, v. 4, pg., 14, 29, 30, 101, 135 ch. 1, v. 4-5, pg., 30, 101 ch. 1, v. 5, 8, 13, 19, 23, 31, pg., 33, 34, 35 ch. 1, v. 5, pg., 32, 33, 34, 35, 36 ch. 1, v. 6, 20, pg., 100 ch. 1, v. 6, 9, pg., 31 ch. 1, v. 6, pg., 19, 31, 38, 100, 101, 311 ch. 1, v. 6-8, pg., 38, 101 ch. 1, v. 6-9, pg., 311 ch. 1, v. 8, pg., 40 ch. 1, v. 9, 24, 26, pg., 100 ch. 1, v. 9, pg., 39, 100, 101, 119, 156, 333, 340 ch. 1, v. 9-10, pg., 39, 101, 119, 340 ch. 1, v. 10, pg., 40 ch. 1, v. 11, 29, pg., 100 ch. 1, v. 11, pg., 40, 41, 43, 44, 62, 88, 100, 101, 104, 149.156 ch. 1, v. 11-12, pg., 41, 43, 104 ch. 1, v. 11-13, pg., 40, 44, 88, 101 ch. 1, v. 12, pg., 41, 70, 346 ch. 1, v. 14, pg., 38, 44, 45, 46, 47, 49, 50, 51, 54, 55, 56, 57, 58, 101, 105, 153, 188, 276, 311, 358 ch. 1, v. 14-15, pg., 153, 311 ch. 1, v. 14-18, pg., 58, 101 ch. 1, v. 14-19, pg., 45, 47, 49, 50, 51, 54, 55, 56, 101, 188 ch. 1, v. 14a, 18b, pg., 101 ch. 1, v. 14b, 18a, pg., 101 ch. 1, v. 15, 17, pg., 48, 101 ch. 1, v. 15, pg., 27, 48, 101, 218 ch. 1, v. 15-16, pg., 27 ch. 1, v. 16, pg., 35, 46, 59 ch. 1, v. 18, pg., 46, 60

ch. 1, v. 20, 21, pg., 62 ch. 1, v. 20, pg., 22, 40, 54, 62, 63, 64, 66, 68, 69, 70, 71, 73, 88, 101, 109 ch. 1, v. 20-21, 24, pg., 22, 40, 54, 66, 68, 70, 71, 73, 88, 109 ch. 1, v. 20-21, 24-25, 26, pg., 66, 68, 70, 71, 73 ch. 1, v. 20-23, pg., 62, 101 ch. 1, v. 20-25, pg., 69 ch. 1, v. 21, 24-25, pg., 288 ch. 1, v. 21, 25, pg., 136 ch. 1, v. 21, pg., 62, 136, 288 ch. 1, v. 22, 28, pg., 398 ch. 1, v. 22, pg., 62, 130, 162, 193, 287, 398, 414 ch. 1, v. 24-25, pg., 65, 101, 346 ch. 1, v. 26, 28, pg., 85, 136, 149, 370 ch. 1, v. 26, pg., 14, 24, 36, 37, 74, 75, 76, 78, 79, 80, 81, 82, 83, 84, 85, 101, 108, 114, 116, 121, 136, 139, 140, 149, 152, 156, 180, 192, 271, 276, 287, 289, 346, 370, 372 ch. 1, v. 26-27, 31, pg., 136 ch. 1, v. 26-27, pg., 36, 62, 74, 75, 76, 78, 79, 80, 81, 82, 83, 84, 85, 105, 108, 114, 136, 140, 346 ch. 1, v. 26-30, pg., 114 ch. 1, v. 27, pg., 77, 82, 85, 101, 135, 149, 260 ch. 1, v. 28, pg., 24, 62, 77, 82, 86, 101, 113, 114, 115, 118, 120, 123, 166, 177, 193, 207, 244, 261, 274, 367, 368, 369, 371, 383, 394 ch. 1, v. 28-29, pg., 114, 115 ch. 1, v. 28-30, pg., 118 ch. 1, v. 29, pg., 41, 44, 86, 88, 101, 187, 210, 214, 372, 373 ch. 1, v. 29-30, pg., 41, 44, 88, 101, 187, 214, 372, 373 ch. 1, v. 30, pg., 54, 88, 109, 188, 268, 321, 371 ch. 1, v. 31, pg., 79, 82, 86, 88, 89, 90, 94, 97, 101, 135, 142, 149, 152, 159, 288, 334 ch. 1-11, pg., 1, 2, 3, 4, 6, 9, 21, 34, 100, 101, 183, 191, 262, 299, 352, 354, 399, 450, 454, 455, 456 ch. 1-11?, pg., 191 ch. 2, v. 1, pg., 100, 101 ch. 2, v. 1-2, pg., 95 ch. 2, v. 1-3, pg., 94 ch. 2, v. 2, pg., 35, 207 ch. 2, v. 2-3, pg., 96, 100, 114, 276, 344, 351 ch. 2, v. 2a, pg., 101 ch. 2, v. 2b, pg., 101 ch. 2, v. 3, pg., 95, 96, 98, 101, 127, 193, 398 ch. 2, v. 3a, pg., 101 ch. 2, v. 3b, pg., 101 ch. 2, v. 4, pg., 5, 99, 101, 102, 103, 104, 114, 132 ch. 2, v. 4?, pg., 99 ch. 2, v. 4-6, pg., 101 ch. 2, v. 4a, pg., 101 ch. 2, v. 4b, pg., 101

HISTORY'S OPENING ACT - Meditations on Genesis 1-11

ch. 2, v. 5, pg., 26, 100, 101, 104, 105, 240, 284 ch. 2, v. 5-5.1a, pg., 26, 100, 101, 240 ch. 2, v. 5-6, pg., 101, 104 ch. 2, v. 6, pg., 105 ch. 2, v. 7, 21-22, pg., 75 ch. 2, v. 7, pg., 22, 36, 54, 57, 74, 75, 82, 101, 105, 106, 108, 109, 110, 111, 114, 149, 156, 187, 243, 284, 321 ch. 2, v. 7a, pg., 101 ch. 2, v. 7b, pg., 101 ch. 2, v. 8, pg., 14, 101, 105, 113, 394, 423 ch. 2, v. 8-17, pg., 101 ch. 2, v. 8-9, pg., 101, 105, 113 ch. 2, v. 9, 16, pg., 114, 115, 117, 238, 373, 385 ch. 2, v. 9, 16-17, pg., 114, 115, 117, 385 ch. 2, v. 9, pg., 88, 101, 114, 115, 117, 200, 238, 373, 385 ch. 2, v. 10, pg., 40, 44, 101, 105, 113, 118, 119, 154, 162, 227, 238, 311, 312, 337 ch. 2, v. 10-14, pg., 101, 118, 119, 227, 238, 311, 337 ch. 2, v. 12, pg., 114 ch. 2, v. 13, pg., 118 ch. 2, v. 15, 16, pg., 78 ch. 2, v. 15, 22-25, pg., 114 ch. 2, v. 15, pg., 78, 86, 97, 101, 105, 113, 114, 120, 136, 160, 167, 220, 289, 394, 414 ch. 2, v. 15-16, pg., 114 ch. 2, v. 15-17, pg., 101, 114 ch. 2, v. 16, pg., 36, 98, 116, 122, 123, 124, 125, 127, 128, 129, 131, 154, 156, 163, 199, 204, 210, 292 ch. 2, v. 16-17, pg., 36, 116, 123, 124, 125, 127, 128, 129, 131, 154, 156, 199, 292 ch. 2, v. 17, pg., 54, 88, 98, 103, 114, 115, 127, 132, 133, 163, 171, 174, 187, 196, 200, 206, 251, 257, 270, 293, 294, 313, 378, 383, 397 ch. 2, v. 18, 20, pg., 160 ch. 2, v. 18, pg., 101, 134, 139, 160, 181 ch. 2, v. 18-20, pg., 139 ch. 2, v. 19, pg., 31, 81, 101, 135, 137, 138, 167, 252, 278, 288, 394 ch. 2, v. 19-20, pg., 101, 135, 137, 138, 252, 394 ch. 2, v. 19-20a, pg., 137, 138 ch. 2, v. 20, pg., 78, 82 ch. 2, v. 21, 22, pg., 75 ch. 2, v. 21-22, pg., 101, 141, 149 ch. 2, v. 21-23, pg., 101 ch. 2, v. 22, pg., 124, 142, 143, 167 ch. 2, v. 22b, 24, pg., 143 ch. 2, v. 23, pg., 136, 141, 142, 197 ch. 2, v. 24, pg., 77, 82, 101, 127, 130, 143, 144, 146, 153, 228, 231, 263, 264 ch. 2, v. 25, pg., 101, 113, 147, 165, 169, 198 ch. 3, v. 1, pg., 149, 151, 152, 154, 173, 427 ch. 3, v. 1-24, pg., 204, 205 ch. 3, v. 1-4, pg., 207

ch. 3, v. 1-5, pg., 153, 154, 155, 157, 158, 236 ch. 3, v. 1-7, pg., 354 ch. 3, v. 3, pg., 124, 125, 127, 176, 204 ch. 3, v. 3-4, pg., 127 ch. 3, v. 4, pg., 125, 151, 162 ch. 3, v. 5, pg., 99, 103, 160, 174, 190, 199 ch. 3, v. 5-6, pg., 160 ch. 3, v. 6, pg., 123, 125, 127, 132, 153, 159, 162, 163, 164, 204, 262, 293 ch. 3, v. 7, 10-11, pg., 394 ch. 3, v. 7, pg., 148, 165, 198, 204, 394 ch. 3, v. 8, 10, pg., 168 ch. 3, v. 8, pg., 14, 95, 113, 114, 147, 163, 166, 167, 168, 176, 181, 204, 394 ch. 3, v. 8-10, pg., 166 ch. 3, v. 9, pg., 164, 169, 170, 204 ch. 3, v. 9-12, pg., 164 ch. 3, v. 10, pg., 166, 172, 204 ch. 3, v. 11, pg., 127, 171, 172, 173, 204 ch. 3, v. 11-13, pg., 173 ch. 3, v. 12, pg., 152, 169, 172, 174, 175, 176, 204 ch. 3, v. 12-13, pg., 152, 174, 175, 176 ch. 3, v. 13, pg., 204 ch. 3, v. 14, 17, pg., 193 ch. 3, v. 14, pg., 150, 156, 174, 178, 179, 187, 193, 204, 216, 223, 397 ch. 3, v. 14-15, pg., 178, 179 ch. 3, v. 14-19, pg., 156, 174, 193, 204, 216, 397 ch. 3, v. 15, pg., 120, 167, 171, 178, 180, 181, 183, 187, 194, 202, 205, 206, 207, 235, 243, 245, 257, 288, 332, 348, 351, 354, 389, 390, 400, 403, 408, 440,450 ch. 3, v. 16, pg., 114, 115, 140, 143, 184, 185, 197, 207, 245, 270 ch. 3, v. 16-17, pg., 185, 270 ch. 3, v. 16-19, pg., 114, 115 ch. 3, v. 17, pg., 30, 36, 44, 55, 86, 88, 122, 133, 178, 186, 188, 189, 190, 191, 192, 193, 194, 204, 221, 223, 257, 271, 276, 356, 358, 359 ch. 3, v. 17-18, pg., 30, 44, 86, 88, 358 ch. 3, v. 17-19, pg., 36, 55, 133, 178, 186, 188, 189, 190, 191, 192, 193, 194, 271, 276, 356, 359 ch. 3, v. 18, pg., 187, 188 ch. 3, v. 19, pg., 75, 195, 210, 289 ch. 3, v. 20, pg., 114, 143, 181, 184, 196, 206, 313, 395 ch. 3, v. 21, pg., 167, 169, 172, 181, 195, 198, 205, 206, 210, 212, 368, 373, 374, 394 ch. 3, v. 22, pg., 114, 118, 130, 199, 200, 204, 428 ch. 3, v. 22-24, pg., 114, 118, 204 ch. 3, v. 23, pg., 187, 201 ch. 3, v. 23-24, pg., 201 ch. 3, v. 24, pg., 113, 120, 125, 202, 220, 262, 423 ch. 4, v. 1, 2, pg., 242 ch. 4, v. 1, pg., 162, 207, 236, 395

ch. 4, v. 1-2, pg., 206

HISTORY'S OPENING ACT - Meditations on Genesis 1-11

ch. 4, v. 1-24, pg., 239 ch. 4, v. 1-26, pg., 238 ch. 4, v. 2, pg., 209, 224, 230, 232 ch. 4, v. 3, pg., 46, 127, 156, 210, 211, 212, 237, 351, 398, 425 ch. 4, v. 3-4a, pg., 210 ch. 4, v. 3-5, 26, pg., 398 ch. 4, v. 3-5, pg., 211, 212, 237, 351, 398 ch. 4, v. 3-5a, pg., 211, 212, 295 ch. 4, v. 3-7, pg., 127, 156, 351, 425 ch. 4, v. 4, 26, pg., 181 ch. 4, v. 4, pg., 181, 199, 210, 213, 215, 238, 352, 373, 374, 395 ch. 4, v. 4-8, pg., 215 ch. 4, v. 5, 7, pg., 263 ch. 4, v. 5, pg., 211, 216, 217, 226, 245, 263, 266 ch. 4, v. 5-24, pg., 245 ch. 4, v. 5-6, pg., 216 ch. 4, v. 5-7, pg., 266 ch. 4, v. 5b-7, pg., 217 ch. 4, v. 7, pg., 134, 184, 219, 294 ch. 4, v. 8, 23, pg., 250, 255, 263 ch. 4, v. 8, pg., 218, 225, 250, 255, 263, 394 ch. 4, v. 9, pg., 219, 220, 221, 225 ch. 4, v. 9-10a, pg., 220 ch. 4, v. 10, pg., 127, 220, 221, 222, 274 ch. 4, v. 10-11, pg., 221 ch. 4, v. 10-16, 23-24, pg., 127 ch. 4, v. 11, pg., 223, 270, 379, 394 ch. 4, v. 11-12, pg., 223 ch. 4, v. 11-15, pg., 270 ch. 4, v. 11-16, pg., 379 ch. 4, v. 12, pg., 221, 229, 394 ch. 4, v. 13, pg., 221, 224, 226 ch. 4, v. 13-14, pg., 224, 226 ch. 4, v. 14, pg., 230 ch. 4, v. 15, pg., 226, 230, 234 ch. 4, v. 16, pg., 226, 227, 235, 238, 405, 409, 415, 423 ch. 4, v. 16-23, pg., 405, 409, 415 ch. 4, v. 17, 22, pg., 266 ch. 4, v. 17, pg., 141, 227, 228, 229, 235, 238, 244, 254, 259, 261, 262, 266, 414, 427 ch. 4, v. 17-19, pg., 254 ch. 4, v. 17-22, pg., 228, 259, 262 ch. 4, v. 17-24, pg., 228, 235 ch. 4, v. 19, pg., 230, 244, 260, 263, 266, 313 ch. 4, v. 20-21, pg., 235 ch. 4, v. 20-22, pg., 78, 232, 233, 238, 261 ch. 4, v. 21, pg., 209, 230 ch. 4, v. 21-22, pg., 230 ch. 4, v. 22, pg., 44, 150, 209, 244, 266, 278, 424 ch. 4, v. 23-24, pg., 234, 260, 379 ch. 4, v. 24, pg., 257 ch. 4, v. 25, pg., 181, 206, 208, 235, 252, 408 ch. 4, v. 25-26, pg., 235

ch. 4, v. 26, pg., 47, 127, 202, 206, 209, 210, 228, 229, 230, 237, 244, 291 ch. 5, v. 1, 2, pg., 103 ch. 5, v. 1, pg., 74, 75, 76, 78, 81, 82, 85, 99, 103, 236, 240, 258 ch. 5, v. 1-2, pg., 84, 85 ch. 5, v. 1-3, pg., 239 ch. 5, v. 1-32, pg., 18, 53, 181, 237, 246, 248, 249, 259, 262 ch. 5, v. 1a, pg., 239 ch. 5, v. 1b, pg., 100, 101, 239, 272 ch. 5, v. 1b-6.9a, pg., 100, 101, 272 ch. 5, v. 2, pg., 243, 395, 398 ch. 5, v. 2-32, pg., 409, 415 ch. 5, v. 3, pg., 77, 82, 86, 241, 243, 245 ch. 5, v. 3-32, pg., 244, 245, 251, 262, 405 ch. 5, v. 3-5, pg., 133 ch. 5, v. 4, pg., 206, 228, 235, 242, 261, 447 ch. 5, v. 4-32, pg., 447 ch. 5, v. 5, pg., 133, 196, 206, 250, 394 ch. 5, v. 5-27, pg., 250 ch. 5, v. 22, 24, pg., 245 ch. 5, v. 22, pg., 167, 245, 253, 254, 272 ch. 5, v. 22-24, pg., 253, 254 ch. 5, v. 24, pg., 171, 255, 291 ch. 5, v. 27-28, pg., 296 ch. 5, v. 28-29, 32, pg., 258 ch. 5, v. 29, pg., 245, 252, 256, 305, 307, 337, 352, 356, 399, 402 ch. 5, v. 30, pg., 258 ch. 5, v. 32, pg., 244, 251, 273, 304, 408, 442, 447, 454 ch. 6, v. 1, pg., 260 ch. 6, v. 1-16, pg., 333 ch. 6, v. 1-7, pg., 261 ch. 6, v. 2, pg., 229, 242, 259, 260, 261, 262, 264, 266 ch. 6, v. 2,, pg., 4 ch. 6, v. 3, 13, 17, pg., 273 ch. 6, v. 3, 7, pg., 259, 272 ch. 6, v. 3, pg., 259, 264, 267, 272, 273, 353 ch. 6, v. 4, pg., 261, 265, 266, 270, 383, 413 ch. 6, v. 5, 11, pg., 253, 261, 272 ch. 6, v. 5, 11-12, pg., 272 ch. 6, v. 5, pg., 46, 125, 128, 129, 164, 171, 189, 200, 201, 206, 210, 218, 235, 236, 250, 253, 255, 259, 261, 263, 265, 266, 267, 269, 270, 271, 272, 273, 274, 289, 290, 291, 297, 313, 322, 331, 352, 356, 357, 359, 367, 373, 379, 380, 382, 386, 399, 402, 426, 443, 448 ch. 6, v. 5-6, pg., 271 ch. 6, v. 5-7, pg., 128, 189, 297, 322, 331, 356 ch. 6, v. 6, pg., 269, 331 ch. 6, v. 6-7, pg., 269 ch. 6, v. 7, 12-13, pg., 281

ch. 6, v. 7, 13, pg., 353

ch. 6, v. 7, 17, pg., 406 ch. 6, v. 7, 20, pg., 394 ch. 6, v. 7, pg., 270, 271, 274, 275, 276, 281, 353, 379, 394, 406 ch. 6, v. 8, pg., 267, 271 ch. 6, v. 8-9, pg., 267, 271 ch. 6, v. 9, pg., 99, 100, 101, 167, 239, 258, 272, 273, 274, 275, 284, 301, 322, 343, 349, 393, 394, 399, 403, 441 ch. 6, v. 9-10, pg., 272 ch. 6, v. 9a, pg., 239 ch. 6, v. 9b-10.1a, pg., 100, 101, 301, 403, 441 ch. 6, v. 10, pg., 101, 454 ch. 6, v. 10-9.19, pg., 101 ch. 6, v. 10a, pg., 101 ch. 6, v. 10b, pg., 101 ch. 6, v. 11, 13, pg., 266 ch. 6, v. 11-12, pg., 274, 275 ch. 6, v. 12, pg., 266 ch. 6, v. 13, 17, pg., 288 ch. 6, v. 13, pg., 4, 258, 266, 273, 275, 288, 301, 331, 344, 384 ch. 6, v. 13-21, pg., 344 ch. 6, v. 13-8.19, pg., 273 ch. 6, v. 14, pg., 44, 86, 101, 156, 209, 232, 233, 277, 279, 280, 281, 282, 283, 288, 293, 314, 331, 342 ch. 6, v. 14-16, pg., 101, 156, 277, 279, 280, 288, 293, 342 ch. 6, v. 14-17, 22, pg., 281 ch. 6, v. 14-17, pg., 233, 281, 282 ch. 6, v. 14-21, pg., 331 ch. 6, v. 15, pg., 139, 276 ch. 6, v. 17, pg., 101, 283, 285, 287, 296, 316, 392 ch. 6, v. 17-18, pg., 283 ch. 6, v. 18, pg., 101, 278, 286, 288, 305, 331, 332, 333, 348, 384, 385 ch. 6, v. 18-19, pg., 286 ch. 6, v. 18-20, pg., 101 ch. 6, v. 19, pg., 82, 287, 295, 321, 346, 394 ch. 6, v. 19-20, pg., 287, 321, 394 ch. 6, v. 21, pg., 101, 288, 373 ch. 6, v. 22, pg., 281, 290, 291, 292, 293, 301, 395 ch. 6-11, pg., 285 ch. 6-8, pg., 149 ch. 7, v. 1, pg., 292, 293, 297, 301, 322, 344, 384, 393 ch. 7, v. 1,, pg., 106 ch. 7, v. 1-3, pg., 101, 293 ch. 7, v. 2, 8, pg., 127, 342 ch. 7, v. 2, 9, pg., 199 ch. 7, v. 2, pg., 66, 89, 214, 272, 278, 288, 351 ch. 7, v. 2-3, pg., 294 ch. 7, v. 4, 10, 22, pg., 298, 299, 319 ch. 7, v. 4, 10, pg., 296, 297, 298, 299, 319 ch. 7, v. 4, 8, 23, pg., 394

ch. 7, v. 4, pg., 101, 183, 296, 297, 298, 299, 306, 307, 312, 316, 319, 344, 353, 394, 406 ch. 7, v. 4-10, pg., 101 ch. 7, v. 5, 9, 16, pg., 291, 292, 301 ch. 7, v. 5, pg., 291, 292, 301 ch. 7, v. 6, 11, pg., 303, 304, 337 ch. 7, v. 6, pg., 251, 303, 304, 337 ch. 7, v. 7, 13, pg., 305 ch. 7, v. 7, pg., 305, 313 ch. 7, v. 8-9, pg., 302 ch. 7, v. 9, pg., 39, 313 ch. 7, v. 10-11, 13, pg., 308 ch. 7, v. 10-11, pg., 325 ch. 7, v. 11, 13, pg., 306 ch. 7, v. 11, 24, pg., 305 ch. 7, v. 11, pg., 39, 101, 305, 306, 309, 310, 313, 319, 323, 329, 337, 340 ch. 7, v. 11-12, pg., 313 ch. 7, v. 11-15, pg., 101 ch. 7, v. 12, 17, pg., 311 ch. 7, v. 12, pg., 105, 311 ch. 7, v. 13, pg., 313, 454 ch. 7, v. 13-16, pg., 313 ch. 7, v. 14-16a, pg., 325 ch. 7, v. 16, pg., 101, 312, 314 ch. 7, v. 17, 21, pg., 316 ch. 7, v. 17, pg., 101, 315, 316, 317 ch. 7, v. 17a, pg., 101 ch. 7, v. 17b-18, pg., 101 ch. 7, v. 18, 19, 20, 24, pg., 324 ch. 7, v. 18-20, pg., 319 ch. 7, v. 18-21, pg., 392 ch. 7, v. 18-22, pg., 320 ch. 7, v. 19, pg., 44, 101, 285, 299, 319 ch. 7, v. 19-20, pg., 101, 285, 299 ch. 7, v. 20, pg., 312, 324, 337 ch. 7, v. 21, pg., 101, 264, 266, 319, 321, 349 ch. 7, v. 21-22, pg., 319, 349 ch. 7, v. 21-23, pg., 321 ch. 7, v. 21-24, pg., 101 ch. 7, v. 22, pg., 238, 285, 322 ch. 7, v. 22-23, pg., 238, 322 ch. 7, v. 23, pg., 331 ch. 7, v. 24, pg., 312, 323, 336 ch. 7-8, pg., 88, 325, 326, 327, 329, 330 ch. 8, v. 1, pg., 101, 311, 331, 332, 333, 336 ch. 8, v. 1b-2a, pg., 333 ch. 8, v. 2, pg., 39, 335, 336 ch. 8, v. 2-3, pg., 335 ch. 8, v. 2b, pg., 333 ch. 8, v. 3, 13-14, pg., 305 ch. 8, v. 3, 5, pg., 337 ch. 8, v. 3, pg., 101, 305, 333, 336, 337 ch. 8, v. 3-5, pg., 333, 336 ch. 8, v. 4, pg., 101, 299, 307, 337, 338, 423 ch. 8, v. 4-5, 13-14, pg., 307

ch. 8, v. 4-5, pg., 101, 307 ch. 8, v. 5, pg., 101, 339, 340 ch. 8, v. 6, pg., 101, 278, 279, 341 ch. 8, v. 6-12, pg., 341 ch. 8, v. 6a, pg., 101 ch. 8, v. 6b, pg., 101 ch. 8, v. 7-8, pg., 333 ch. 8, v. 7-9, pg., 101 ch. 8, v. 8, 13, 21, pg., 394 ch. 8, v. 10-13, pg., 101 ch. 8, v. 13, pg., 304, 342, 343 ch. 8, v. 13-14, pg., 304, 342 ch. 8, v. 14, pg., 342 ch. 8, v. 15, pg., 101, 343, 344, 384 ch. 8, v. 15-17, pg., 101 ch. 8, v. 15-19, pg., 343 ch. 8, v. 16-18, pg., 341 ch. 8, v. 17, 19, pg., 344, 346, 347 ch. 8, v. 17, pg., 299, 333, 344, 346, 347, 348, 438 ch. 8, v. 18, pg., 333, 344, 348 ch. 8, v. 18-19, pg., 333 ch. 8, v. 19, pg., 288, 344, 349 ch. 8, v. 20, pg., 47, 115, 127, 199, 209, 210, 237, 238, 273, 295, 342, 351, 352, 356, 374, 375, 395, 398, 415, 438 ch. 8, v. 20-11.32, pg., 438 ch. 8, v. 20-21, pg., 127, 351, 356, 375 ch. 8, v. 20-22, pg., 237 ch. 8, v. 20-9.17, pg., 273, 374 ch. 8, v. 20-9.7, pg., 115 ch. 8, v. 21, pg., 332, 353, 354, 355, 367, 374, 379, 385, 438, 448 ch. 8, v. 21-22, pg., 332, 353, 354, 355, 385, 438 ch. 8, v. 21-9.11, pg., 374 ch. 8, v. 22, pg., 95, 357, 358, 359, 360, 362, 363, 364, 365, 385, 386, 388, 395 ch. 9, v. 1, 7, pg., 348, 368, 369, 450 ch. 9, v. 1, 8, 12, 17, pg., 384 ch. 9, v. 1, pg., 87, 187, 230, 242, 263, 332, 367, 372, 383, 394, 395, 398, 407, 420, 423, 427, 438 ch. 9, v. 1-4, pg., 101 ch. 9, v. 1-7, pg., 367, 384, 385 ch. 9, v. 2, pg., 86, 88, 276, 302, 368, 370, 394, 438 ch. 9, v. 2-3, pg., 214, 367, 373, 374 ch. 9, v. 3, pg., 86, 89, 268, 295, 368, 371, 372, 376, 438 ch. 9, v. 3-4, pg., 89, 368 ch. 9, v. 4, pg., 221, 368, 371, 375 ch. 9, v. 4-5, pg., 375 ch. 9, v. 4-6, pg., 221, 375 ch. 9, v. 5, pg., 156, 179, 222, 224, 226, 235, 270, 368, 371, 377, 378, 379, 380, 381, 382, 414, 438 ch. 9, v. 5-6, pg., 156, 224, 226, 235, 270, 368, 371, 377, 378, 379, 380, 381, 382, 414, 438 ch. 9, v. 6, pg., 127, 138, 368 ch. 9, v. 7, pg., 368, 383

ch. 9, v. 8, pg., 101, 286, 331, 367, 384, 385, 406 ch. 9, v. 8-10, pg., 101 ch. 9, v. 8-17, pg., 286, 331, 367, 384, 406 ch. 9, v. 9, 11, pg., 385 ch. 9, v. 9, pg., 117, 237, 305, 333, 348, 367, 372, 384, 385 ch. 9, v. 9-17, pg., 237, 333, 372 ch. 9, v. 11, 14-15, pg., 385 ch. 9, v. 11, 15, pg., 384 ch. 9, v. 11, pg., 101, 353, 355, 380, 384, 385, 395, 438 ch. 9, v. 11-17, pg., 101, 380 ch. 9, v. 12, pg., 375, 385, 387, 388 ch. 9, v. 12-13, pg., 375 ch. 9, v. 12-17, pg., 385, 387, 388 ch. 9, v. 14-15, pg., 299, 388 ch. 9, v. 15, pg., 389 ch. 9, v. 16, pg., 385, 389 ch. 9, v. 17, pg., 384 ch. 9, v. 18, 22, pg., 396 ch. 9, v. 18, pg., 101, 314, 389, 390, 396, 454 ch. 9, v. 18-19, pg., 389, 390 ch. 9, v. 18a, pg., 101 ch. 9, v. 18b, pg., 101 ch. 9, v. 19, pg., 101, 392 ch. 9, v. 20, pg., 127, 209, 273, 304, 393, 394, 425 ch. 9, v. 20-21, pg., 393, 394 ch. 9, v. 20-27, pg., 127, 273, 444 ch. 9, v. 21, pg., 263, 272, 394 ch. 9, v. 21-24, pg., 263 ch. 9, v. 22, pg., 293, 349, 356, 395, 397 ch. 9, v. 22-24, pg., 395 ch. 9, v. 22-25, pg., 349, 356 ch. 9, v. 23, pg., 394, 399 ch. 9, v. 24, pg., 244, 258, 397, 400 ch. 9, v. 24-27, pg., 397, 400 ch. 9, v. 25, pg., 193, 390, 394, 396, 399, 405, 407, 413, 417, 452 ch. 9, v. 25-26, pg., 394, 413 ch. 9, v. 25-27, pg., 399, 405 ch. 9, v. 26, pg., 398, 399, 404, 405, 408, 415, 442 ch. 9, v. 26-27, pg., 399, 405, 408, 442 ch. 9, v. 27, pg., 253, 398 ch. 9, v. 28, pg., 394, 397, 402, 426 ch. 9, v. 28-29, pg., 258, 402 ch. 9, v. 29, pg., 304, 452 ch. 9-11, pg., 239 ch. 10, v. 1, pg., 99, 273, 280, 333, 390, 454 ch. 10, v. 1-32, pg., 259, 262, 403, 404, 405, 407, 408, 435, 444 ch. 10, v. 1a, pg., 442 ch. 10, v. 1b, pg., 100, 403, 405, 415, 437, 441 ch. 10, v. 1b-11.10a, pg., 100, 415, 420, 437, 441 ch. 10, v. 2-5, pg., 403, 409 ch. 10, v. 3, pg., 417 ch. 10, v. 5, 18, 32, pg., 406, 420

ch. 10, v. 5, 19, pg., 410 ch. 10, v. 5, 20, 31, 32, pg., 406 ch. 10, v. 5, 20, 31-32, pg., 418, 420, 436 ch. 10, v. 5, 20, 31–32, pg., 409 ch. 10, v. 5, 20, pg., 406, 409, 418, 420, 436 ch. 10, v. 5, pg., 392, 406, 407, 409, 410, 418, 420, 422, 436 ch. 10, v. 6, pg., 393, 397, 404, 411 ch. 10, v. 6-20, pg., 404, 411 ch. 10, v. 8, pg., 404, 406, 407, 408, 412, 413, 414 ch. 10, v. 8-12, pg., 406, 407, 408, 412, 413, 414 ch. 10, v. 9, pg., 406 ch. 10, v. 10, pg., 407, 408, 420, 424, 427, 435 ch. 10, v. 10-12, pg., 407, 435 ch. 10, v. 11, pg., 118, 416, 420 ch. 10, v. 11-12, pg., 420 ch. 10, v. 12, pg., 170 ch. 10, v. 14, pg., 404, 412 ch. 10, v. 15-19, pg., 398 ch. 10, v. 18, pg., 412 ch. 10, v. 19, pg., 404, 407, 410, 412, 417, 452 ch. 10, v. 21, pg., 258, 404, 408, 415, 416, 440, 442 ch. 10, v. 21-30, pg., 415, 416 ch. 10, v. 21-31, pg., 404, 408, 440, 442 ch. 10, v. 22, pg., 442 ch. 10, v. 24, pg., 445 ch. 10, v. 25, pg., 252, 403, 407, 408, 415, 419, 420, 422, 442 ch. 10, v. 26, pg., 405 ch. 10, v. 29, pg., 365, 416 ch. 10, v. 30, pg., 407 ch. 10, v. 32, pg., 392, 405, 407, 420 ch. 11, v. 1, 6-9, pg., 420 ch. 11, v. 1, 6, 7, 9, pg., 422 ch. 11, v. 1, 7-9, pg., 429, 430, 431 ch. 11, v. 1, 8-9, pg., 420 ch. 11, v. 1, 9, pg., 232, 420 ch. 11, v. 1, pg., 241, 418, 421, 427, 432, 439 ch. 11, v. 1-9, pg., 138, 228, 389, 406, 422, 434 ch. 11, v. 2, pg., 338, 423 ch. 11, v. 3, pg., 424, 438, 440 ch. 11, v. 3-4, pg., 428 ch. 11, v. 3-9, pg., 428 ch. 11, v. 4, 8-9, pg., 420 ch. 11, v. 4, pg., 46, 420, 424, 425, 426, 427, 428, 429, 430, 433, 440, 442, 453 ch. 11, v. 4-5, 8, pg., 420 ch. 11, v. 4-9, pg., 433 ch. 11, v. 5-6, pg., 428 ch. 11, v. 6, pg., 418 ch. 11, v. 7, pg., 156, 241, 405, 418, 419, 426, 428 ch. 11, v. 7-9, pg., 156, 405, 426 ch. 11, v. 8, pg., 280, 392, 418, 420, 435, 436, 439 ch. 11, v. 8-9, pg., 392, 435, 436, 439 ch. 11, v. 9, pg., 241, 260, 407, 414, 419, 420, 423, 429, 437, 438

ch. 11, v. 10, pg., 18, 53, 100, 181, 246, 248, 249, 258, 259, 262, 405, 408, 415, 438, 440, 441, 442, 443, 444, 448 ch. 11, v. 10-26, pg., 18, 53, 181, 258, 408, 438 ch. 11, v. 10-32, pg., 246, 248, 249, 259, 262 ch. 11, v. 10a, pg., 405, 442 ch. 11, v. 10b-26, pg., 443, 444 ch. 11, v. 10b-27a, pg., 100, 415, 440, 441, 448 ch. 11, v. 11, pg., 100, 379, 390, 426, 442, 447, 451 ch. 11, v. 11-24, 32, pg., 447 ch. 11, v. 11-24, pg., 447, 451 ch. 11, v. 11-26, pg., 379 ch. 11, v. 12-13, pg., 445 ch. 11, v. 13, 15, pg., 414 ch. 11, v. 16, pg., 403 ch. 11, v. 18, pg., 405 ch. 11, v. 26, 32, pg., 453 ch. 11, v. 26, pg., 442, 449, 453 ch. 11, v. 26-31, pg., 449 ch. 11, v. 27, pg., 408, 441, 448 ch. 11, v. 27a, pg., 441 ch. 11, v. 27b, pg., 456 ch. 11, v. 27b-32, pg., 448 ch. 11, v. 28, 31, pg., 436 ch. 11, v. 28, pg., 436, 438, 450, 452 ch. 11, v. 30, pg., 449, 450, 452 ch. 11, v. 31, pg., 424, 452 ch. 11, v. 32, pg., 438, 452 ch. 12, v. 1, pg., 452 ch. 12, v. 1-3, pg., 409, 438, 456 ch. 12, v. 1-4, pg., 424 ch. 12, v. 2, pg., 87, 451 ch. 12, v. 2-3, pg., 87 ch. 12, v. 4, pg., 53, 449, 453 ch. 12, v. 7-8, pg., 415 ch. 12, v. 8, pg., 127, 237, 423 ch. 12, v. 16, pg., 392 ch. 12, v. 17-19, pg., 127 ch. 12, v. 18, pg., 127 ch. 13, v. 4, pg., 127 ch. 13, v. 5, pg., 449 ch. 13, v. 8, pg., 449 ch. 13, v. 11, pg., 423 ch. 14, v. 2-3, 7-8, pg., 404 ch. 14, v. 13, pg., 442 ch. 14, v. 19, 20, pg., 9 ch. 14, v. 19, 22, pg., 9 ch. 15, v. 2, pg., 449 ch. 15, v. 4, pg., 102, 451 ch. 15, v. 4-5, pg., 451 ch. 15, v. 7, pg., 102 ch. 15, v. 9, pg., 295 ch. 15, v. 13, 16, pg., 401 ch. 15, v. 15, pg., 402 ch. 15, v. 16, pg., 398 ch. 15, v. 17, pg., 389

ch. 16, v. 2, pg., 208 ch. 17, v. 1, pg., 253 ch. 17, v. 2, pg., 451 ch. 17, v. 4-6, 16, pg., 453 ch. 17, v. 5, pg., 449 ch. 17, v. 6, pg., 114 ch. 17, v. 7, pg., 287 ch. 17, v. 9, pg., 116 ch. 17, v. 16, pg., 87 ch. 17, v. 17, pg., 451, 454 ch. 18, v. 1-3, pg., 167 ch. 18, v. 3, pg., 271 ch. 18, v. 11, pg., 451 ch. 18, v. 15, pg., 127 ch. 18, v. 16-19.29, pg., 396 ch. 18, v. 18, pg., 400, 404, 439 ch. 18, v. 24-32, pg., 133, 230 ch. 19, v. 4, pg., 272 ch. 19, v. 7, pg., 127 ch. 19, v. 22, pg., 314 ch. 19, v. 33-34, pg., 31 ch. 20, v. 2, pg., 451 ch. 20, v. 3-7, pg., 127 ch. 20, v. 12, pg., 449 ch. 21, v. 1-2, pg., 451 ch. 21, v. 5, pg., 53 ch. 21, v. 8, pg., 103 ch. 21, v. 33, pg., 127, 237 ch. 22, v. 1-14, pg., 211 ch. 22, v. 13, pg., 295 ch. 22, v. 17, pg., 87 ch. 22, v. 18, pg., 400, 407, 409 ch. 22, v. 20-24, pg., 448 ch. 22, v. 21-22, pg., 450 ch. 22, v. 24, pg., 450 ch. 24, v. 10, pg., 452 ch. 25, v. 1-18, pg., 415 ch. 25, v. 1-2, pg., 454 ch. 25, v. 7, pg., 450 ch. 25, v. 12, 19, pg., 441 ch. 25, v. 12-18, pg., 409 ch. 25, v. 18, pg., 118 ch. 25, v. 19, pg., 99 ch. 25, v. 21, pg., 381, 451 ch. 25, v. 21-26, pg., 381 ch. 25, v. 26, pg., 53 ch. 27, v. 27-40, pg., 399 ch. 27, v. 37, pg., 398 ch. 27, v. 43, pg., 441, 452 ch. 28, v. 7, pg., 127 ch. 29, v. 1, pg., 423 ch. 29, v. 31, pg., 146, 208, 231, 451 ch. 30, v. 1, 15-16, pg., 231 ch. 30, v. 1-2, pg., 208 ch. 30, v. 2, 22, pg., 146 ch. 30, v. 22, pg., 331

ch. 30, v. 33, pg., 103, 127 ch. 31, v. 30, pg., 127 ch. 31, v. 53, pg., 448 ch. 34, v. 2, pg., 396 ch. 35, v. 2, 4, pg., 127 ch. 35, v. 3, pg., 103 ch. 36, v. 1, 9, pg., 441 ch. 36, v. 1, pg., 99 ch. 36, v. 33-34, pg., 416 ch. 36-37, pg., 409, 415 ch. 37, v. 2, pg., 441 ch. 38, v. 8-11, pg., 231 ch. 39, v. 7-8, pg., 127 ch. 41, v. 56, pg., 285 ch. 43, v. 32, pg., 442 ch. 45, v. 7, pg., 322 ch. 45, v. 18, pg., 214 ch. 46, v. 13, pg., 416 ch. 46, v. 27, pg., 407 ch. 47, v. 6, pg., 118 ch. 47, v. 9, pg., 53 ch. 48, v. 3, pg., 398 ch. 48, v. 13-14, pg., 399, 454 ch. 49, v. 1-27, pg., 399 ch. 49, v. 10, pg., 398 ch. 49, v. 28, pg., 398 ch. 49, v. 29, pg., 127 ch. 50, v. 10, pg., 296 ch. 50, v. 13, pg., 127 ch. 50, v. 19-20, pg., 131, 182, 299 02 Exodus ch. 2, v. 3, pg., 277 ch. 2, v. 6, pg., 442 ch. 2, v. 24, pg., 331 ch. 3, v. 2, 4, pg., 218 ch. 3, v. 7, pg., 406 ch. 3, v. 13, pg., 252 ch. 3, v. 14, pg., 13, 14, 102 ch. 3, v. 18, pg., 442 ch. 6, v. 2-3, pg., 237 ch. 6, v. 3, pg., 102 ch. 6, v. 7, pg., 116 ch. 6, v. 14-20, pg., 444 ch. 6, v. 16, pg., 99 ch. 8, v. 15, pg., 218 ch. 8, v. 32, pg., 131 ch. 9, v. 12, pg., 218 ch. 12, v. 40, pg., 53, 247, 248 ch. 12, v. 40-41, pg., 247, 248 ch. 13, v. 2, pg., 214 ch. 13, v. 13, pg., 214 ch. 14, v. 21, pg., 334 ch. 15, v. 1-27, pg., 382 ch. 15, v. 10, pg., 334 ch. 15, v. 26, pg., 344 ch. 16, v. 23, pg., 97

ch. 17, v. 8-13, pg., 401 ch. 18, v. 4, pg., 140 ch. 20, v. 1-17, pg., 97 ch. 20, v. 3, pg., 162, 426 ch. 20, v. 3-17, pg., 162 ch. 20, v. 4-6, pg., 212 ch. 20, v. 5, pg., 144 ch. 20, v. 8, pg., 97, 295 ch. 20, v. 9-11, pg., 97 ch. 20, v. 10, pg., 97, 373 ch. 20, v. 11, pg., 9, 32, 35, 36, 95, 149 ch. 20, v. 12, pg., 396 ch. 20, v. 13, pg., 290 ch. 20, v. 14, pg., 145 ch. 20, v. 25, pg., 212, 351 ch. 20, v. 25-26, pg., 212 ch. 21, v. 12-14, pg., 378 ch. 21, v. 22-25, pg., 378, 381 ch. 21, v. 23-25, pg., 380 ch. 21, v. 23–25, pg., 377 ch. 21, v. 24, pg., 235 ch. 21, v. 28, pg., 179, 368 ch. 21, v. 29, pg., 378 ch. 22, v. 1, pg., 126 ch. 23, v. 6-7, pg., 172 ch. 24, v. 9, pg., 407 ch. 24, v. 18, pg., 312 ch. 25, v. 8-9, pg., 400 ch. 25, v. 22, pg., 202 ch. 25, v. 40, pg., 36 ch. 26, v. 30, pg., 36 ch. 29, v. 13, pg., 214 ch. 31, v. 13, 17, pg., 97 ch. 31, v. 16, pg., 388 ch. 31, v. 17, pg., 35, 36 ch. 31, v. 18, pg., 389 ch. 33, v. 17, pg., 271 ch. 33, v. 19, pg., 237 ch. 34, v. 5, pg., 237 ch. 34, v. 6, pg., 173, 313 ch. 34, v. 6-7, pg., 313 ch. 34, v. 7, pg., 397 ch. 34, v. 12-16, pg., 396 ch. 40, v. 16, pg., 212, 291 03 Leviticus ch. 1, v. 4, 9, pg., 351 ch. 1, v. 14, pg., 342 ch. 3, v. 6-17, pg., 214 ch. 4, v. 8-10, pg., 214 ch. 4, v. 11-12, pg., 214 ch. 6, v. 26, pg., 214 ch. 7, v. 26, pg., 376 ch. 7, v. 26-27, pg., 376 ch. 9, v. 24, pg., 217 ch. 10, v. 1-2, pg., 213 ch. 11, v. 1-47, pg., 295

ch. 11, v. 13-15, pg., 341 ch. 11, v. 44-45, pg., 99 ch. 13, v. 45-46, pg., 201 ch. 17, v. 10, 13, pg., 376 ch. 17, v. 11, 14, pg., 376 ch. 17, v. 11, pg., 54, 221, 376 ch. 17, v. 13, pg., 376 ch. 18, v. 6, 10, pg., 147 ch. 18, v. 6, pg., 145, 147, 166 ch. 18, v. 6-18, pg., 145 ch. 18, v. 6-7, pg., 396 ch. 18, v. 9, pg., 228 ch. 18, v. 20, pg., 145 ch. 18, v. 22, pg., 145, 396 ch. 19, v. 2, pg., 99 ch. 19, v. 15, pg., 380 ch. 19, v. 18, pg., 220 ch. 19, v. 19, pg., 41 ch. 19, v. 26, pg., 376 ch. 19, v. 35, pg., 129, 277 ch. 19, v. 35-36, pg., 277 ch. 20, v. 10, pg., 378 ch. 20, v. 13, pg., 145 ch. 20, v. 15-16, pg., 179 ch. 20, v. 17, pg., 147, 396 ch. 20, v. 17-21, pg., 147 ch. 22, v. 27-29, pg., 352 ch. 23, v. 32, pg., 31 ch. 24, v. 13-16, pg., 128 ch. 27, v. 23, 27, pg., 133 ch. 27, v. 28, pg., 193 04 Numbers ch. 1, v. 2, 3, pg., 83 ch. 1, v. 20, pg., 99 ch. 1, v. 22, pg., 82 ch. 5, v. 14-31, pg., 172 ch. 7, v. 12-83, pg., 35 ch. 12, v. 7, pg., 116 ch. 13, v. 32, pg., 266 ch. 13, v. 33, pg., 265, 266 ch. 14, v. 18, pg., 216 ch. 14, v. 45, pg., 401 ch. 18, v. 9-10, pg., 214 ch. 22, v. 28, 30, pg., 149 ch. 23, v. 19, pg., 354 ch. 25, v. 1, pg., 263 ch. 28, v. 3-4, pg., 214 ch. 29, v. 12-38, pg., 35 ch. 31, v. 16, pg., 396 ch. 35, v. 6, pg., 230 ch. 35, v. 9-34, pg., 380 ch. 35, v. 16-33, pg., 378 ch. 35, v. 32, pg., 224 ch. 35, v. 33, pg., 274 05 Deuteronomy ch. 1, v. 39, pg., 163

465

ch. 2, v. 23, pg., 412 ch. 4, v. 1, pg., 116 ch. 4, v. 2, pg., 212 ch. 4, v. 15-19, pg., 212 ch. 4, v. 35, pg., 23 ch. 5, v. 9-10, pg., 293 ch. 5, v. 15, pg., 97 ch. 5, v. 16, pg., 229 ch. 5, v. 33, pg., 294 ch. 6, v. 4, pg., 23 ch. 6, v. 5, pg., 135 ch. 7, v. 1-5, pg., 396 ch. 7, v. 3-4, pg., 262, 263 ch. 7, v. 9, pg., 170 ch. 12, v. 15-16, 23-24, pg., 376 ch. 12, v. 22-24, pg., 376 ch. 12, v. 28, pg., 212 ch. 13, v. 4, pg., 253 ch. 13, v. 11, pg., 377 ch. 13, v. 15, pg., 179 ch. 14, v. 1, pg., 262 ch. 14, v. 19–20, pg., 62 ch. 15, v. 23, pg., 376 ch. 17, v. 2-5, pg., 46 ch. 17, v. 6, pg., 172, 274, 378 ch. 17, v. 7, pg., 378 ch. 17, v. 13, pg., 377 ch. 18, v. 9-14, pg., 426 ch. 18, v. 10-14, pg., 47 ch. 18, v. 15, 18-19, pg., 449 ch. 19, v. 1-21, pg., 380 ch. 19, v. 5-6, pg., 126 ch. 19, v. 15, pg., 172, 380 ch. 19, v. 20, pg., 377 ch. 20, v. 1-20, pg., 382 ch. 20, v. 7-8, pg., 83 ch. 20, v. 17-18, pg., 396 ch. 21, v. 1-9, pg., 221 ch. 21, v. 15-17, pg., 231 ch. 21, v. 21, pg., 377 ch. 21, v. 23, pg., 117 ch. 22, v. 5, pg., 82 ch. 22, v. 8, pg., 126 ch. 22, v. 18, pg., 184 ch. 23, v. 3-6, pg., 449 ch. 23, v. 17-18, pg., 396 ch. 24, v. 5, pg., 82 ch. 24, v. 16, pg., 397 ch. 25, v. 4, pg., 373 ch. 25, v. 5-10, pg., 231 ch. 25, v. 13-15, pg., 126 ch. 25, v. 17-19, pg., 401 ch. 26, v. 5, pg., 416 ch. 27, v. 11-28.68, pg., 294 ch. 28, v. 20, pg., 144 ch. 30, v. 1-20, pg., 134

ch. 30, v. 15-20, pg., 116 ch. 31, v. 20, pg., 214 ch. 32, v. 5, 6, pg., 9 ch. 32, v. 8, pg., 407, 420 ch. 32, v. 15, pg., 214 ch. 32, v. 17, pg., 426 ch. 32, v. 35, pg., 226, 235, 401 ch. 32, v. 52, pg., 449 06 Joshua ch. 1, v. 14, pg., 83 ch. 2, v. 10, pg., 401 ch. 5, v. 13-14, pg., 167 ch. 6, v. 1-26, pg., 230 ch. 8, v. 30-31, pg., 213 ch. 9, v. 5, pg., 342 ch. 9, v. 9, pg., 401 ch. 10, v. 3, pg., 7 ch. 10, v. 12-13, pg., 2 ch. 10, v. 13, pg., 298 ch. 10, v. 41, pg., 118 ch. 11, v. 7, pg., 266 ch. 12, v. 22, pg., 118 ch. 15, v. 23, pg., 118 ch. 15, v. 34, pg., 118 ch. 15, v. 51, pg., 118 ch. 15, v. 56, pg., 118 ch. 20, v. 3-5, pg., 172 ch. 20, v. 7, pg., 118 ch. 21, v. 28, pg., 118 ch. 24, v. 2, 14-15, pg., 440, 448, 452, 453 ch. 24, v. 4, pg., 454 ch. 24, v. 13, pg., 230 07 Judges ch. 3, v. 10, pg., 382 ch. 4, v. 14, pg., 382 ch. 5, v. 1-31, pg., 382 ch. 6, v. 11-16, pg., 167 ch. 6, v. 17, pg., 271 ch. 6, v. 21, pg., 217 ch. 9, v. 23, pg., 429 ch. 13, v. 1-22, pg., 167 ch. 19, v. 22-23, pg., 397 ch. 19-21, pg., 333 ch. 21, v. 25, pg., 83, 344 08 Ruth ch. 3, v. 1-18, pg., 231 ch. 4, v. 10, pg., 231 ch. 4, v. 17, pg., 446 ch. 4, v. 18, pg., 99 09 1 Samuel ch. 1, v. 5-6, pg., 208 ch. 1, v. 19, pg., 331 ch. 2, v. 6, pg., 208 ch. 16, v. 7, pg., 211 ch. 17, v. 4, pg., 266 ch. 25, v. 32, 39, pg., 398

10 2 Samuel ch. 5, v. 9, pg., 230 ch. 6, v. 18, pg., 398 ch. 22, v. 35-51, pg., 382 11 1 Kings ch. 3, v. 5-14, pg., 304 ch. 3, v. 14, pg., 402 ch. 6, v. 1, 37, 38, pg., 53 ch. 6, v. 1, pg., 53 ch. 6, v. 37-38, pg., 133 ch. 7, v. 23-26, pg., 133 ch. 9, v. 20-21, pg., 398 ch. 10, v. 9, pg., 269 ch. 10, v. 22, pg., 411 ch. 11, v. 4, pg., 304 ch. 11, v. 5, 7, pg., 449 ch. 11, v. 32, 36, pg., 230 ch. 14, v. 24, pg., 396 ch. 17, v. 22-23, pg., 256 ch. 18, v. 38, pg., 217 ch. 22, v. 23, pg., 355 12 2 Kings ch. 2, v. 3-12, pg., 256 ch. 4, v. 32-35, pg., 256 ch. 13, v. 21, pg., 256 ch. 19, v. 37, pg., 339 ch. 20, v. 5, pg., 7 13 1 Chronicles ch. 1, v. 1-4, pg., 248, 249 ch. 1, v. 7, pg., 410 ch. 1, v. 10, pg., 413 ch. 1, v. 19, pg., 419 ch. 1, v. 24-27, pg., 444 ch. 1-9, pg., 181 ch. 4, v. 18, pg., 118 ch. 6, v. 72, pg., 118 ch. 13, v. 9-10, pg., 213 ch. 16, v. 31, pg., 270 ch. 21, v. 1, pg., 151 ch. 21, v. 26, pg., 217 ch. 26, v. 31, pg., 99 14 2 Chronicles ch. 7, v. 13-14, pg., 372 ch. 7, v. 14, pg., 133 ch. 8, v. 13-15, pg., 213 ch. 19, v. 7, pg., 284 ch. 26, v. 16-21, pg., 212, 213 ch. 29, v. 25-30, pg., 213 ch. 36, v. 21, pg., 296 15 Ezra ch. 1, v. 1, pg., 307 ch. 2, v. 61-63, pg., 417 ch. 9, v. 8, pg., 322 16 Nehemiah ch. 2, v. 8, pg., 113 ch. 3, v. 13, pg., 118

ch. 8, v. 10, pg., 269 ch. 9, v. 6, pg., 11 ch. 9, v. 25, pg., 214 ch. 11, v. 30, pg., 118 ch. 12, v. 24, pg., 213 ch. 13, v. 19-21, pg., 97 ch. 13, v. 19-22, pg., 128 18 Job ch. 1, v. 1, pg., 258 ch. 1, v. 3, pg., 392 ch. 1, v. 5, pg., 251, 259, 351 ch. 1, v. 6, pg., 150, 151, 262 ch. 1, v. 6-12, pg., 150, 151 ch. 1, v. 8, pg., 283 ch. 1, v. 9-10, pg., 294 ch. 1, v. 15, pg., 266 ch. 1, v. 21, pg., 401 ch. 2, v. 1-7, pg., 150, 151 ch. 2, v. 9, pg., 154 ch. 14, v. 5, pg., 246 ch. 15, v. 14, pg., 163 ch. 25, v. 4, pg., 163 ch. 26, v. 7, pg., 37 ch. 27, v. 4, pg., 127 ch. 31, v. 1, pg., 159 ch. 35, v. 10, pg., 37 ch. 37, v. 18, pg., 38 ch. 38, v. 4, pg., 9, 37, 66 ch. 38, v. 4-7, pg., 11, 151 ch. 38, v. 7, pg., 262 ch. 38, v. 8-11, pg., 39 ch. 38, v. 19, pg., 27 ch. 38, v. 25, pg., 419 ch. 38, v. 29-30, pg., 365 ch. 40, v. 15-24, pg., 346 ch. 40, v. 17, pg., 346 ch. 40, v. 19, pg., 347 ch. 42, v. 12, pg., 392 ch. 42, v. 16, pg., 416 19 Psalms ch. 1, v. 1, pg., 153 ch. 1, v. 3, pg., 419 ch. 2, v. 1-12, pg., 128 ch. 2, v. 2, 7, pg., 116 ch. 2, v. 4, pg., 199, 428 ch. 2, v. 7, pg., 446 ch. 2, v. 12, pg., 395 ch. 3, v. 1-8, pg., 382 ch. 7, v. 11, pg., 269 ch. 8, v. 1, pg., 92 ch. 8, v. 3, pg., 14, 37, 92 ch. 8, v. 3-4, pg., 92 ch. 8, v. 5, pg., 203 ch. 8, v. 5-8, pg., 86 ch. 9, v. 12, pg., 222 ch. 10, v. 17, pg., 353

ch. 14, v. 1, pg., 3, 6, 10, 92 ch. 16, v. 10, pg., 183 ch. 19, v. 1, pg., 14, 48 ch. 19, v. 1-4, pg., 10 ch. 19, v. 1-6, pg., 102 ch. 19, v. 7, pg., 36, 91 ch. 20, v. 2, pg., 140 ch. 22, v. 1, pg., 183 ch. 22, v. 16, pg., 183 ch. 22, v. 18, pg., 183 ch. 24, v. 7-10, pg., 183 ch. 24, v. 8, pg., 382 ch. 24, v. 9, pg., 453 ch. 25, v. 8, pg., 165, 401 ch. 27, v. 1-3, pg., 382 ch. 29, v. 1-11, pg., 384 ch. 29, v. 2, pg., 93 ch. 29, v. 10, pg., 285 ch. 31, v. 15, pg., 7 ch. 32, v. 5-6, pg., 353 ch. 33, v. 6, 9, pg., 37 ch. 33, v. 6-10, pg., 9 ch. 33, v. 6-7, pg., 39 ch. 33, v. 8, pg., 128 ch. 33, v. 10, 14, pg., 429 ch. 36, v. 7, pg., 170 ch. 37, v. 2, pg., 40 ch. 37, v. 13, pg., 199 ch. 39, v. 4, pg., 246 ch. 40, v. 8, pg., 395 ch. 41, v. 9, pg., 183 ch. 42, v. 2, pg., 40, 109 ch. 45, v. 17, pg., 407 ch. 49, v. 15, pg., 183 ch. 51, v. 5, pg., 148, 163, 206, 207, 243, 381 ch. 53, v. 1, pg., 3 ch. 55, v. 9, pg., 419, 429 ch. 62, v. 8, pg., 353 ch. 63, v. 5, pg., 214 ch. 67, v. 4, pg., 128, 407 ch. 67, v. 4-5, pg., 407 ch. 67, v. 6-7, pg., 358 ch. 68, v. 1-3, 21-23, pg., 382 ch. 69, v. 2, pg., 285 ch. 69, v. 21, pg., 183 ch. 72, v. 9, pg., 179 ch. 73, v. 1, pg., 401 ch. 73, v. 21, pg., 269 ch. 74, v. 16, pg., 37 ch. 75, v. 1, pg., 353 ch. 78, v. 23, pg., 39 ch. 78, v. 39, pg., 167 ch. 78, v. 40, pg., 269 ch. 82, v. 1-8, pg., 380 ch. 86, v. 8-10, pg., 95 ch. 86, v. 15, pg., 265

ch. 89, v. 11, pg., 9, 37 ch. 90, v. 10, pg., 246, 254, 266, 445, 447 ch. 90, v. 12, pg., 251, 260 ch. 91, v. 11, pg., 180 ch. 91, v. 16, pg., 229 ch. 94, v. 1, pg., 401 ch. 94, v. 2, pg., 401 ch. 95, v. 5, pg., 37 ch. 96, v. 8, pg., 93 ch. 96, v. 9, pg., 210 ch. 96, v. 10, pg., 2, 128 ch. 98, v. 9, pg., 128 ch. 99, v. 1, pg., 270 ch. 100, v. 3, pg., 37 ch. 100, v. 5, pg., 401 ch. 101, v. 8, pg., 230 ch. 102, v. 25, pg., 37 ch. 103, v. 1-2, pg., 398 ch. 103, v. 1-5, pg., 353 ch. 103, v. 8, pg., 216 ch. 103, v. 19, pg., 425 ch. 104, v. 1-35, pg., 37 ch. 104, v. 2, pg., 27, 57 ch. 104, v. 2-5, pg., 11 ch. 104, v. 5, pg., 2 ch. 104, v. 6, pg., 335 ch. 104, v. 7, pg., 336 ch. 104, v. 8, pg., 336 ch. 104, v. 9, pg., 336 ch. 104, v. 14, pg., 41 ch. 104, v. 15, pg., 393 ch. 104, v. 24, pg., 37, 89, 456 ch. 104, v. 24-26, pg., 37 ch. 105, v. 23, 27, pg., 412, 436 ch. 106, v. 1, pg., 401 ch. 106, v. 22, pg., 412, 436 ch. 107, v. 1, pg., 372 ch. 107, v. 4, pg., 230 ch. 110, v. 1, pg., 181, 395 ch. 113, v. 9, pg., 83 ch. 115, v. 12, pg., 332 ch. 115, v. 16, pg., 367 ch. 116, v. 11, pg., 354 ch. 116, v. 15, pg., 222 ch. 119, v. 1-176, pg., 294 ch. 119, v. 68, pg., 165 ch. 119, v. 89, pg., 333 ch. 119, v. 160, pg., 26 ch. 121, v. 1, pg., 140, 320, 337 ch. 121, v. 1-2, pg., 140 ch. 121, v. 3, 4, pg., 94 ch. 123, v. 1, pg., 425 ch. 124, v. 7, pg., 104 ch. 124, v. 8, pg., 140 ch. 127, v. 1, pg., 230 ch. 127, v. 3, pg., 207, 369

ch. 127, v. 3-5, pg., 369 ch. 127, v. 5, pg., 451 ch. 136, v. 1-26, pg., 353 ch. 136, v. 5-9, pg., 37 ch. 139, v. 4, 16, pg., 131, 182, 223 ch. 139, v. 7, pg., 170 ch. 139, v. 13, pg., 208 ch. 139, v. 14, pg., 108 ch. 141, v. 2, pg., 353 ch. 145, v. 1, 2, 5, pg., 95 ch. 145, v. 17, pg., 165 ch. 146, v. 3, pg., 168 ch. 146, v. 6, pg., 37 ch. 147, v. 4, pg., 94, 136, 259 ch. 147, v. 8, pg., 41 ch. 148, v. 4, pg., 37, 39 ch. 148, v. 4-6, pg., 37 ch. 148, v. 5, pg., 9, 14 20 Proverbs ch. 1, v. 7, pg., 130 ch. 2, v. 17, pg., 144 ch. 3, v. 19, pg., 37 ch. 4, v. 14-15, pg., 153 ch. 8, v. 22-24, 28, 29, pg., 37 ch. 10, v. 1, 23, pg., 47 ch. 10, v. 7, pg., 259 ch. 11, v. 10, pg., 378 ch. 12, v. 10, pg., 373 ch. 15, v. 1, pg., 217 ch. 15, v. 8, 29, pg., 226 ch. 15, v. 13, pg., 269 ch. 16, v. 31, pg., 442 ch. 16, v. 33, pg., 131, 182, 223 ch. 17, v. 15, pg., 173 ch. 18, v. 20, pg., 104 ch. 23, v. 20-21, pg., 123 ch. 25, v. 2, pg., 289 ch. 26, v. 27, pg., 133 ch. 27, v. 1, pg., 300 ch. 27, v. 20, pg., 161 ch. 29, v. 16, pg., 261 ch. 31, v. 10-31, pg., 83 21 Ecclesiastes ch. 1, v. 1,, pg., 207 ch. 1, v. 5, pg., 2 ch. 2, v. 5, pg., 113 ch. 3, v. 1-8, pg., 7 ch. 7, v. 10, pg., 267 ch. 10, v. 18, pg., 133 ch. 11, v. 3, pg., 133 22 Song of Solomon ch. 3, v. 11, pg., 269 ch. 4, v. 13, pg., 113 ch. 7, v. 10, pg., 184 23 Isaiah ch. 1, v. 18, pg., 36

ch. 5, v. 1-7, pg., 395 ch. 5, v. 16, pg., 98 ch. 5, v. 20, pg., 291, 434 ch. 6, v. 2-3, pg., 203 ch. 6, v. 3, pg., 98 ch. 6, v. 10, pg., 104 ch. 7, v. 3, pg., 252, 253 ch. 7, v. 14, pg., 183 ch. 7, v. 15, pg., 163 ch. 8, v. 3, pg., 252, 253 ch. 9, v. 1, 2, pg., 183 ch. 9, v. 7, pg., 183 ch. 10, v. 9, pg., 414 ch. 10, v. 21, pg., 322 ch. 11, v. 1, pg., 183 ch. 11, v. 6-8, pg., 89 ch. 11, v. 6-9, pg., 371 ch. 11, v. 16, pg., 399 ch. 13, v. 10, pg., 47 ch. 13, v. 19-22, pg., 414 ch. 13-24, pg., 407 ch. 14, v. 13-14, pg., 425 ch. 14, v. 24, pg., 24, 182 ch. 15, v. 5, pg., 306 ch. 19, v. 14, pg., 435 ch. 19, v. 23, pg., 399 ch. 21, v. 1-17, pg., 427 ch. 22, v. 13, pg., 123, 268 ch. 24, v. 4-6, pg., 114 ch. 25, v. 2, pg., 230 ch. 26, v. 5, pg., 230 ch. 27, v. 10, pg., 230 ch. 30, v. 25, pg., 419 ch. 37, v. 16, pg., 37 ch. 37, v. 38, pg., 339 ch. 40, v. 8, pg., 333 ch. 40, v. 22, pg., 57 ch. 40, v. 26, pg., 37 ch. 40, v. 28, pg., 9 ch. 42, v. 5, pg., 9, 37, 38, 57 ch. 42, v. 5-7, pg., 9 ch. 42, v. 8-9, pg., 183 ch. 43, v. 1-7, pg., 9 ch. 44, v. 24, pg., 37, 57 ch. 44, v. 28, pg., 183, 354 ch. 45, v. 1, 7, 11-13, pg., 9 ch. 45, v. 1, pg., 183, 354 ch. 45, v. 7, 18, pg., 37 ch. 45, v. 7, pg., 37, 299 ch. 45, v. 12, pg., 9 ch. 45, v. 18, pg., 9, 12 ch. 45, v. 18-19, pg., 9 ch. 46, v. 5, pg., 5 ch. 48, v. 17-18, pg., 294 ch. 49, v. 23, pg., 178 ch. 51, v. 3, pg., 114

ch. 51, v. 13, 16, pg., 37 ch. 52, v. 1, pg., 230 ch. 53, v. 3, pg., 168, 270, 395 ch. 53, v. 12, pg., 183 ch. 54, v. 9, pg., 286 ch. 55, v. 8-9, pg., 165 ch. 56, v. 6, pg., 97 ch. 57, v. 1, pg., 314 ch. 64, v. 8, pg., 298 ch. 65, v. 17, 18, pg., 9 ch. 65, v. 25, pg., 89, 371 24 Jeremiah ch. 3, v. 6-9, pg., 125, 163 ch. 3, v. 23, pg., 320 ch. 4, v. 23, pg., 37 ch. 6, v. 6, pg., 230 ch. 10, v. 10-12, pg., 37 ch. 17, v. 9, pg., 171, 206, 267, 386, 403 ch. 17, v. 10, pg., 182 ch. 18, v. 1-6, pg., 298 ch. 18, v. 7-8, pg., 401 ch. 21, v. 8, pg., 230 ch. 22, v. 29, pg., 98 ch. 29, v. 7, pg., 230, 439 ch. 31, v. 10, pg., 220 ch. 31, v. 35, pg., 37 ch. 32, v. 16, 17, pg., 9 ch. 32, v. 17, pg., 37 ch. 33, v. 20, 25, pg., 37 ch. 33, v. 20-21, pg., 32, 358 ch. 47, v. 4, pg., 404, 412 ch. 51, v. 15, pg., 9, 37 ch. 51, v. 15-16, pg., 9 ch. 51, v. 36, pg., 342 26 Ezekiel ch. 1, v. 4-28, pg., 202, 203 ch. 1, v. 22-26, pg., 38 ch. 1, v. 28, pg., 387 ch. 3, v. 18, pg., 222 ch. 4, v. 4-6, pg., 53 ch. 4, v. 6, pg., 312 ch. 8, v. 10, pg., 66 ch. 9, v. 4, pg., 226 ch. 10, v. 1-22, pg., 203 ch. 10, v. 5, pg., 179 ch. 11, v. 22, pg., 203 ch. 14, v. 9, pg., 355 ch. 14, v. 14, 20, pg., 271, 273, 393 ch. 18, v. 1-32, pg., 131, 153, 163, 182, 223, 299, 397 ch. 18, v. 4, pg., 270 ch. 18, v. 20, pg., 132, 251, 354, 401 ch. 18, v. 23, pg., 265 ch. 21, v. 27, pg., 98 ch. 27, v. 6, pg., 410 ch. 27, v. 23, pg., 118

ch. 29, v. 10, pg., 118 ch. 33, v. 6, pg., 222 ch. 33, v. 11, pg., 401 ch. 36, v. 35, pg., 114 ch. 38, v. 2-3, pg., 410 27 Daniel ch. 1, v. 7, pg., 136 ch. 2, v. 22, pg., 129 ch. 2, v. 32, pg., 427, 436 ch. 2, v. 37-38, pg., 435 ch. 2, v. 44, pg., 428, 436 ch. 3, v. 1-30, pg., 452 ch. 4, v. 28-33, pg., 427, 436 ch. 4, v. 30, pg., 435 ch. 5, v. 1-31, pg., 268 ch. 5, v. 1-4, pg., 263 ch. 5, v. 5-31, pg., 436 ch. 6, v. 22, 26, pg., 334 ch. 8, v. 21, pg., 410 ch. 9, v. 2, pg., 26 ch. 9, v. 4-19, pg., 353 ch. 9, v. 18, pg., 230 ch. 10, v. 20, pg., 410 ch. 11, v. 2, pg., 410 ch. 11, v. 21-35, pg., 354 28 Hosea ch. 1, v. 2-3, pg., 125, 163 ch. 1, v. 10, pg., 262 ch. 4, v. 10, pg., 144 ch. 6, v. 7, pg., 114 ch. 11, v. 1, pg., 183 30 Amos ch. 3, v. 6, pg., 299, 386 ch. 4, v. 7, pg., 105 ch. 5, v. 8, pg., 47 ch. 6, v. 2, pg., 414 ch. 9, v. 7, pg., 404, 412 32 Jonah ch. 1, v. 3, pg., 410, 411 ch. 3, v. 1-10, pg., 128 ch. 3, v. 4, pg., 312, 415 33 Micah ch. 5, v. 2, pg., 183 ch. 5, v. 5-6, pg., 414 ch. 6, v. 6-8, pg., 212 ch. 6, v. 8, pg., 385 ch. 7, v. 17, pg., 178 34 Nahum ch. 1, v. 4, pg., 342 ch. 3, v. 13, pg., 83 35 Habakkuk ch. 2, v. 15, pg., 396 ch. 3, v. 10, pg., 316 36 Zephaniah ch. 3, v. 9, pg., 439 37 Haggai

ch. 1, v. 9, pg., 351 38 Zechariah ch. 9, v. 7, pg., 376 ch. 11, v. 12–13, pg., 183 ch. 12, v. 1, pg., 242 ch. 12, v. 1-2, pg., 9 39 Malachi ch. 1, v. 6-10, pg., 212 ch. 2, v. 10, pg., 9 ch. 2, v. 14, pg., 144 ch. 2, v. 14-16, pg., 145, 231 ch. 3, v. 6, pg., 125, 269 ch. 3, v. 10, pg., 351 40 Matthew ch. 1, v. 1-17, pg., 54, 181, 417 ch. 1, v. 5, pg., 449 ch. 1, v. 21, pg., 252 ch. 3, v. 17, pg., 395 ch. 4, v. 1, pg., 206 ch. 4, v. 1-10, pg., 180 ch. 4, v. 1-11, pg., 158, 395 ch. 4, v. 2, pg., 312 ch. 4, v. 4, pg., 26 ch. 4, v. 6, pg., 160 ch. 4, v. 10, pg., 93 ch. 4, v. 24, pg., 150, 151 ch. 5, v. 2-12, pg., 91 ch. 5, v. 3-11, pg., 194 ch. 5, v. 3-12, pg., 395 ch. 5, v. 5, pg., 417 ch. 5, v. 13, pg., 306, 315 ch. 5, v. 16, pg., 294 ch. 5, v. 17-19, pg., 98, 379 ch. 5, v. 17-20, pg., 292 ch. 5, v. 17-48, pg., 116 ch. 5, v. 21-22, pg., 219 ch. 5, v. 21-23, pg., 224 ch. 5, v. 22, pg., 217 ch. 5, v. 27, pg., 145 ch. 5, v. 29, pg., 159 ch. 5, v. 38-48, pg., 382 ch. 5, v. 44, pg., 217 ch. 5, v. 45, pg., 91, 171, 198, 261, 358, 372 ch. 6, v. 9, pg., 98, 398 ch. 6, v. 11, 25-32, pg., 89 ch. 6, v. 24, pg., 134 ch. 6, v. 25-33, pg., 198 ch. 6, v. 25-34, pg., 372 ch. 6, v. 33, pg., 440 ch. 7, v. 7-8, pg., 353 ch. 8, v. 11-12, pg., 417 ch. 8, v. 16, pg., 110, 202, 262 ch. 8, v. 21-22, pg., 453 ch. 8, v. 31, pg., 150, 151 ch. 9, v. 25, pg., 256 ch. 10, v. 16, pg., 219

ch. 10, v. 29, pg., 332 ch. 10, v. 34-35, pg., 383 ch. 10, v. 37-38, pg., 452 ch. 11, v. 30, pg., 385 ch. 12, v. 1-8, pg., 99 ch. 12, v. 34, pg., 153 ch. 12, v. 41-47, pg., 133 ch. 13, v. 24-30, pg., 293 ch. 13, v. 38, pg., 180 ch. 13, v. 42, pg., 297 ch. 13, v. 55, pg., 304 ch. 14, v. 3-5, pg., 128 ch. 14, v. 15-21, pg., 56 ch. 14, v. 19, pg., 123 ch. 15, v. 18, pg., 153 ch. 16, v. 18-19, pg., 439 ch. 16, v. 22, pg., 154 ch. 16, v. 23, pg., 154 ch. 16, v. 27, pg., 174, 182 ch. 17, v. 4, pg., 256 ch. 17, v. 24-27, pg., 133 ch. 18, v. 16, pg., 274 ch. 19, v. 3-8, pg., 145, 231 ch. 19, v. 3-9, pg., 143 ch. 19, v. 4, pg., 9, 37, 75, 82, 97, 143, 231 ch. 19, v. 4-5, pg., 97, 143 ch. 19, v. 4-6, pg., 82, 231 ch. 19, v. 30, pg., 104 ch. 20, v. 34, pg., 334 ch. 21, v. 18-22, pg., 179 ch. 21, v. 43, pg., 417 ch. 22, v. 23-33, pg., 231 ch. 22, v. 30, pg., 203, 262 ch. 22, v. 42, pg., 170 ch. 23, v. 24, pg., 256, 411 ch. 23, v. 34-35, pg., 222 ch. 23, v. 35, pg., 207, 219 ch. 23, v. 37, pg., 306 ch. 23, v. 38, pg., 417 ch. 24, v. 7, pg., 356 ch. 24, v. 14, pg., 128 ch. 24, v. 15-21, pg., 314 ch. 24, v. 22, pg., 439 ch. 24, v. 29-30, pg., 47 ch. 24, v. 35, pg., 333 ch. 24, v. 36, pg., 276, 299, 386 ch. 24, v. 36-39, pg., 299 ch. 24, v. 36-44, pg., 276 ch. 24, v. 37-38, pg., 123, 244 ch. 24, v. 37-39, pg., 281, 286, 293 ch. 24, v. 37-39, pg., 308 ch. 24, v. 38, pg., 268, 308 ch. 24, v. 39, pg., 285 ch. 24, v. 44, pg., 309 ch. 25, v. 1-13, pg., 315 ch. 25, v. 21, pg., 294

ch. 25, v. 41, pg., 192 ch. 26, v. 42, pg., 134 ch. 26, v. 52, pg., 379, 383 ch. 27, v. 25, pg., 222 ch. 27, v. 29, pg., 187 ch. 27, v. 52-53, pg., 256 ch. 27, v. 59, pg., 395 ch. 28, v. 18, pg., 395, 440 ch. 28, v. 18-20, pg., 440 ch. 28, v. 19, pg., 128, 399, 406, 407, 409, 418, 428, 436, 440 ch. 28, v. 19-20, pg., 128, 399, 440 41 Mark ch. 1, v. 1, pg., 58 ch. 2, v. 23-28, pg., 97 ch. 3, v. 4-5, pg., 99 ch. 3, v. 14, pg., 135, 139 ch. 3, v. 29, pg., 402 ch. 6, v. 3, pg., 304 ch. 7, v. 6-13, pg., 212 ch. 8, v. 23, pg., 334 ch. 9, v. 48, pg., 297 ch. 10, v. 6, pg., 18, 37, 207 ch. 10, v. 6-8, pg., 207 ch. 14, v. 25, pg., 168 ch. 14, v. 33, 34, pg., 139 ch. 14, v. 33-34, pg., 135 ch. 15, v. 23, pg., 395 ch. 15, v. 24, pg., 395 42 Luke ch. 1, v. 28, 42, 45, 48, pg., 400 ch. 1, v. 30, pg., 271 ch. 1, v. 35, pg., 98, 381 ch. 1, v. 37, pg., 451 ch. 1, v. 41-44, pg., 381 ch. 1, v. 42, pg., 395 ch. 1, v. 49, pg., 98 ch. 2, v. 7, pg., 214 ch. 2, v. 22-23, pg., 214 ch. 3, v. 14, pg., 383 ch. 3, v. 23, pg., 54, 75, 141, 181, 245, 304, 409, 417, 441, 446 ch. 3, v. 23-38, pg., 54, 75, 141, 181, 245, 409, 417, 441 ch. 3, v. 34-36, pg., 442, 444 ch. 3, v. 36, pg., 4, 248, 442, 444, 445, 446 ch. 3, v. 36-38, pg., 248, 249, 442, 446 ch. 3, v. 38, pg., 77, 116, 162, 236 ch. 4, v. 34, pg., 98 ch. 4, v. 39, pg., 334 ch. 7, v. 9, pg., 383 ch. 7, v. 14-15, pg., 256 ch. 7, v. 30, pg., 24 ch. 8, v. 5-7, pg., 304 ch. 8, v. 17, pg., 129 ch. 8, v. 54-55, pg., 256

ch. 10, v. 1, pg., 407 ch. 10, v. 18, pg., 181 ch. 10, v. 20, pg., 427 ch. 10, v. 25-37, pg., 220 ch. 11, v. 15, pg., 151 ch. 11, v. 49-51, pg., 219 ch. 11, v. 50, 51, pg., 207 ch. 12, v. 40, pg., 386 ch. 12, v. 52, pg., 133 ch. 13, v. 6-9, pg., 417 ch. 13, v. 15, pg., 373 ch. 15, v. 1-10, pg., 170 ch. 16, v. 31, pg., 339 ch. 17, v. 26-27, pg., 299 ch. 17, v. 26-27, pg., 308 ch. 17, v. 27, pg., 266, 285 ch. 19, v. 9, pg., 417 ch. 19, v. 14, pg., 124 ch. 20, v. 34-36, pg., 82 ch. 22, v. 19-20, pg., 395 ch. 22, v. 31-32, pg., 180 ch. 22, v. 36, 38, pg., 383 ch. 22, v. 44, pg., 187 ch. 23, v. 41, pg., 379 ch. 23, v. 43, pg., 113, 167, 171, 395 ch. 24, v. 30, pg., 123 ch. 24, v. 39, pg., 110, 202, 262 ch. 24, v. 47, pg., 406 ch. 24, v. 50, pg., 395 43 John ch. 1, v. 1, pg., 25, 140 ch. 1, v. 10, pg., 25 ch. 1, v. 12, pg., 180 ch. 1, v. 14, pg., 381 ch. 1, v. 29, pg., 395 ch. 2, v. 1-11, pg., 56 ch. 2, v. 19, 21, pg., 453 ch. 3, v. 3, pg., 349 ch. 3, v. 7-8, pg., 403 ch. 3, v. 8, pg., 349 ch. 3, v. 15-16, pg., 395 ch. 3, v. 16, pg., 196, 269, 354, 383, 401, 407, 409 ch. 3, v. 16-18, pg., 134 ch. 4, v. 23-24, pg., 212, 440 ch. 4, v. 24, pg., 13, 21, 42, 111, 167, 351 ch. 5, v. 17, pg., 94 ch. 5, v. 19, pg., 116 ch. 5, v. 40, pg., 383 ch. 6, v. 37, pg., 24 ch. 6, v. 57, pg., 40, 116 ch. 7, v. 7, pg., 134 ch. 7, v. 53-8.11, pg., 378 ch. 8, v. 12, pg., 388, 438 ch. 8, v. 31-41, pg., 417 ch. 8, v. 34, pg., 132, 182 ch. 8, v. 39, pg., 449

ch. 8, v. 44, pg., 150, 151, 180, 355 ch. 9, v. 1-3, pg., 165 ch. 9, v. 2-3, pg., 386 ch. 9, v. 3, pg., 165 ch. 9, v. 6-7, pg., 334 ch. 10, v. 35, pg., 26 ch. 10, v. 37-38, pg., 354 ch. 11, v. 35, pg., 269 ch. 11, v. 43-44, pg., 256 ch. 11, v. 52, pg., 180 ch. 12, v. 31, pg., 151, 181 ch. 12, v. 50, pg., 116 ch. 13, v. 2, pg., 152 ch. 13, v. 17, pg., 294 ch. 13, v. 19, pg., 183 ch. 14, v. 13-14, pg., 226 ch. 14, v. 15, pg., 116, 134, 218, 291, 294 ch. 14, v. 18, pg., 389 ch. 14, v. 31, pg., 116 ch. 15, v. 9, pg., 134 ch. 15, v. 13, pg., 395 ch. 15, v. 14-15, pg., 292 ch. 16, v. 11, pg., 181 ch. 16, v. 23-24, pg., 353 ch. 17, v. 2, pg., 395 ch. 17, v. 9, pg., 115 ch. 17, v. 11, pg., 439 ch. 17, v. 21, pg., 260, 395 ch. 17, v. 21-23, pg., 260 ch. 17, v. 24, pg., 134 ch. 20, v. 22, pg., 106 ch. 20, v. 25, pg., 161 ch. 21, v. 12, pg., 168 44 Acts ch. 1, v. 8, pg., 400 ch. 1, v. 9, pg., 21, 167, 256 ch. 1, v. 9-10, pg., 167, 256 ch. 1, v. 11, pg., 296 ch. 2, v. 5, 11, pg., 440 ch. 2, v. 5, pg., 406, 434, 440 ch. 2, v. 5-11, pg., 434 ch. 2, v. 8, pg., 422 ch. 2, v. 9, pg., 409, 416 ch. 2, v. 9-11, pg., 409 ch. 2, v. 16-20, pg., 47 ch. 2, v. 22-23, pg., 181 ch. 2, v. 23, pg., 24, 131, 165, 182, 299 ch. 2, v. 31, pg., 187 ch. 2, v. 38, pg., 134, 287 ch. 2, v. 38-39, pg., 287 ch. 2, v. 39, pg., 293 ch. 3, v. 14, pg., 98 ch. 4, v. 19-20, pg., 126 ch. 4, v. 24, pg., 37 ch. 4, v. 27, 30, pg., 98 ch. 4, v. 27-28, pg., 24, 131, 165, 182, 299

ch. 4, v. 32-37, pg., 221 ch. 5, v. 1-11, pg., 213, 224 ch. 5, v. 5, pg., 334 ch. 5, v. 29, pg., 126, 293 ch. 6, v. 15, pg., 453 ch. 7, v. 2-3, pg., 452 ch. 7, v. 4, pg., 53, 452, 453 ch. 7, v. 55, pg., 453 ch. 10, v. 1-11.18, pg., 375 ch. 10, v. 9-16, pg., 376 ch. 10, v. 10-16, 34, pg., 288 ch. 10, v. 34, pg., 284, 313 ch. 13, v. 48, pg., 24, 131, 182, 223 ch. 14, v. 15, pg., 37 ch. 14, v. 17, pg., 123, 228 ch. 15, v. 14, pg., 399, 400, 406 ch. 15, v. 14-17, pg., 399, 400 ch. 15, v. 20, pg., 145, 376 ch. 15, v. 23-29, pg., 376 ch. 16, v. 3, pg., 406 ch. 17, v. 16, pg., 274 ch. 17, v. 24, 25, 28, pg., 89 ch. 17, v. 24, 26, pg., 37 ch. 17, v. 24, 30, pg., 9 ch. 17, v. 24-26, pg., 420 ch. 17, v. 24-28, pg., 149 ch. 17, v. 25, pg., 212 ch. 17, v. 26, pg., 75, 246, 260, 389, 394, 406, 407, 418 ch. 17, v. 28, pg., 94, 208, 283, 310, 314, 428 ch. 17, v. 29, pg., 77, 162 ch. 17, v. 30, pg., 128, 261 ch. 17, v. 31, pg., 308 ch. 18, v. 6, pg., 417 ch. 21, v. 25, pg., 376 ch. 24, v. 15, pg., 109, 208, 256 ch. 25, v. 11, pg., 379 45 Romans ch. 1, v. 4, pg., 395 ch. 1, v. 18, pg., 5, 9, 36, 127, 183, 402 ch. 1, v. 18-19, pg., 127 ch. 1, v. 18-20, 25, pg., 9 ch. 1, v. 18-23, pg., 5 ch. 1, v. 19, 20, pg., 37 ch. 1, v. 19, pg., 372 ch. 1, v. 19-20, pg., 183 ch. 1, v. 20, pg., 84, 127, 354 ch. 1, v. 20-23, pg., 127 ch. 1, v. 21, pg., 10, 81, 133, 190, 206, 212, 240, 274, 352 ch. 1, v. 21-22, pg., 133 ch. 1, v. 21-23, pg., 274 ch. 1, v. 21-25, pg., 212 ch. 1, v. 22, pg., 10, 83, 84 ch. 1, v. 23, 25, pg., 83 ch. 1, v. 24, pg., 83, 127, 145, 264, 274, 359

ch. 1, v. 24-25, pg., 359 ch. 1, v. 24-27, pg., 127 ch. 1, v. 24-28, pg., 274 ch. 1, v. 24–28, pg., 145 ch. 1, v. 25, pg., 60, 66, 159 ch. 1, v. 26-27, pg., 82 ch. 1, v. 28-31, pg., 127 ch. 1, v. 28-32, pg., 266 ch. 1, v. 29, pg., 47, 145, 274 ch. 1, v. 29-23, pg., 47 ch. 1, v. 29-31, pg., 274 ch. 1, v. 32, pg., 127, 153, 160, 235, 401 ch. 2, v. 11, pg., 284, 313 ch. 2, v. 14-15, pg., 127 ch. 2, v. 28-29, pg., 417 ch. 3, v. 2, pg., 400 ch. 3, v. 4, pg., 54, 354 ch. 3, v. 10-13, pg., 267 ch. 3, v. 23, pg., 164 ch. 3, v. 25-26, pg., 382 ch. 3, v. 29, pg., 407 ch. 4, v. 11-12, pg., 417 ch. 4, v. 13-17, pg., 385 ch. 4, v. 19, pg., 451 ch. 5, v. 6, pg., 59 ch. 5, v. 8, pg., 91, 165, 173, 186, 196, 270, 401 ch. 5, v. 12, 17, pg., 162 ch. 5, v. 12, pg., 55, 75, 97, 115, 133, 162, 163, 164, 187, 242 ch. 5, v. 12-14, pg., 242 ch. 5, v. 12-21, pg., 75, 115, 164 ch. 5, v. 14, pg., 251 ch. 5, v. 15-21, pg., 242 ch. 5, v. 17-18, pg., 251 ch. 6, v. 1, pg., 133 ch. 6, v. 16, pg., 132 ch. 6, v. 17-18, pg., 132 ch. 6, v. 23, pg., 131, 182, 223, 251, 260, 299 ch. 7, v. 7, pg., 93 ch. 7, v. 9, pg., 93 ch. 7, v. 12, pg., 98, 292 ch. 7, v. 14, 25, pg., 132 ch. 7, v. 21-23, pg., 200 ch. 7, v. 24, pg., 153 ch. 8, v. 14, pg., 262, 440 ch. 8, v. 19-22, pg., 9, 55, 192 ch. 8, v. 20, 22, pg., 188, 345 ch. 8, v. 20, pg., 54, 70, 133, 188, 276, 345 ch. 8, v. 20-21, pg., 276 ch. 8, v. 20-22, pg., 54, 133 ch. 8, v. 21, pg., 15, 149, 189, 431 ch. 8, v. 21-22, pg., 149, 431 ch. 8, v. 22, pg., 30, 121, 192, 257, 332, 359, 395 ch. 8, v. 22-23, pg., 395 ch. 8, v. 23, pg., 29 ch. 8, v. 25, pg., 343

ch. 8, v. 28, pg., 24, 186, 314, 316 ch. 8, v. 28-30, pg., 24 ch. 8, v. 29, pg., 23, 131, 182, 223 ch. 8, v. 29-30, pg., 131, 182, 223 ch. 8, v. 31-39, pg., 98 ch. 8, v. 35-39, pg., 116 ch. 9, v. 1-29, pg., 131, 182, 223 ch. 9, v. 11, pg., 24 ch. 9, v. 19, pg., 131, 152, 165, 174, 218 ch. 9, v. 19-20, pg., 131, 174, 218 ch. 9, v. 19-21, pg., 165 ch. 9, v. 20, pg., 225, 298 ch. 9, v. 20-23, pg., 298 ch. 10, v. 1-3, pg., 417 ch. 10, v. 13, pg., 237 ch. 11, v. 5, pg., 322 ch. 11, v. 33, pg., 63 ch. 11, v. 36, pg., 14, 95 ch. 12, v. 1, pg., 99 ch. 12, v. 2, pg., 190 ch. 12, v. 13, pg., 440 ch. 12, v. 17-21, pg., 382 ch. 12, v. 19, pg., 217, 226, 380 ch. 12, v. 20, pg., 439 ch. 13, v. 1-4, pg., 126 ch. 13, v. 1-5, pg., 128, 235, 380 ch. 13, v. 1-7, pg., 138, 380, 382 ch. 13, v. 4, pg., 226, 379, 383 ch. 13, v. 5-7, pg., 126 ch. 13, v. 9, pg., 145 ch. 13, v. 13, pg., 393 ch. 13, v. 14, pg., 199 ch. 14, v. 7-8, pg., 210 ch. 14, v. 10, pg., 174, 283 ch. 16, v. 20, pg., 151, 180, 181 ch. 16, v. 26, pg., 13 46 1 Corinthians ch. 1, v. 18-25, pg., 10 ch. 1, v. 19, 27, pg., 444 ch. 1, v. 25, pg., 456 ch. 2, v. 9, pg., 385 ch. 6, v. 3, pg., 78, 180, 203 ch. 6, v. 9, pg., 144, 145, 264 ch. 6, v. 12-13, pg., 123 ch. 6, v. 18, pg., 264 ch. 7, v. 9, pg., 264, 368 ch. 7, v. 14, pg., 287, 293 ch. 8, v. 6, pg., 37 ch. 9, v. 19-23, pg., 58 ch. 9, v. 20-22, pg., 440 ch. 10, v. 12, pg., 394 ch. 10, v. 13, pg., 146, 331 ch. 10, v. 31, pg., 95, 210 ch. 11, v. 2-34, pg., 212 ch. 11, v. 3, 9, pg., 140, 143 ch. 11, v. 3, pg., 185

ch. 11, v. 8, 9, pg., 37 ch. 11, v. 8-9, pg., 75 ch. 11, v. 14-15, pg., 82 ch. 11, v. 27-30, pg., 201 ch. 11, v. 29, 30, pg., 213 ch. 13, v. 4, pg., 216 ch. 14, v. 1-40, pg., 212 ch. 14, v. 9, 11, pg., 440 ch. 14, v. 33, 40, pg., 59 ch. 14, v. 34-35, pg., 185 ch. 14, v. 40, pg., 212 ch. 15, v. 10, pg., 272 ch. 15, v. 21, pg., 55, 192 ch. 15, v. 21-22, pg., 192 ch. 15, v. 22, pg., 75, 97, 115, 125, 141, 228 ch. 15, v. 24, pg., 181 ch. 15, v. 26, pg., 196, 251, 395 ch. 15, v. 35-49, pg., 196 ch. 15, v. 38-41, pg., 262 ch. 15, v. 39-40, pg., 148 ch. 15, v. 42-43, pg., 109 ch. 15, v. 44, pg., 256 ch. 15, v. 45, pg., 82, 115, 169, 180, 187, 192, 302, 356, 395, 403 ch. 15, v. 45-49, pg., 82 ch. 15, v. 47, pg., 395 ch. 15, v. 54-55, pg., 384 47 2 Corinthians ch. 2, v. 11, pg., 152 ch. 2, v. 16, pg., 316 ch. 4, v. 4, pg., 151 ch. 4, v. 6, pg., 28, 37, 388 ch. 5, v. 10, pg., 174, 283 ch. 6, v. 6, pg., 343 ch. 6, v. 14, pg., 262, 263 ch. 6, v. 18, pg., 116 ch. 10, v. 4, pg., 382 ch. 11, v. 3, pg., 150, 179 ch. 11, v. 14, pg., 78 ch. 12, v. 3, pg., 113 ch. 13, v. 1, pg., 172 48 Galatians ch. 1, v. 8, pg., 193 ch. 1, v. 16-18, pg., 452 ch. 2, v. 3, pg., 406 ch. 3, v. 7, 29, pg., 417, 439 ch. 3, v. 13, pg., 117, 177, 187, 224 ch. 3, v. 13-14, pg., 177 ch. 3, v. 17, pg., 53, 54 ch. 3, v. 28, pg., 260, 440 ch. 4, v. 4, pg., 59, 181 ch. 5, v. 18, pg., 440 ch. 5, v. 19-21, pg., 257 ch. 5, v. 21, pg., 123 ch. 5, v. 22-24, pg., 395 ch. 6, v. 16, pg., 237, 417

49 Ephesians ch. 1, v. 4, pg., 24, 98, 349 ch. 1, v. 4-5, pg., 24 ch. 1, v. 10, pg., 59 ch. 1, v. 11, pg., 24 ch. 2, v. 1, pg., 132, 196 ch. 2, v. 1-3, pg., 180 ch. 2, v. 2, pg., 150, 151 ch. 2, v. 8-10, pg., 9, 272 ch. 2, v. 8-9, pg., 294 ch. 2, v. 12, pg., 133, 438 ch. 2, v. 15, pg., 349 ch. 2, v. 20, pg., 440 ch. 3, v. 9, pg., 9, 24 ch. 3, v. 11, pg., 24 ch. 3, v. 20, pg., 385 ch. 4, v. 17, pg., 190 ch. 4, v. 23, pg., 77, 190 ch. 4, v. 23-24, pg., 77 ch. 4, v. 24, pg., 98, 99 ch. 4, v. 26, pg., 217 ch. 4, v. 30, pg., 216, 269 ch. 5, v. 3, pg., 264 ch. 5, v. 4, 20, pg., 89 ch. 5, v. 16, pg., 7 ch. 5, v. 18, pg., 145, 440 ch. 5, v. 19-21, pg., 353 ch. 5, v. 21-33, pg., 185 ch. 5, v. 22-24, pg., 185 ch. 5, v. 25-29, pg., 144 ch. 5, v. 28-33, pg., 234 ch. 5, v. 32, pg., 142 ch. 6, v. 3, pg., 229 ch. 6, v. 8, pg., 294 ch. 6, v. 11, pg., 152 ch. 6, v. 12, pg., 110, 150, 202, 203, 262 ch. 6, v. 13, pg., 218 ch. 6, v. 17, pg., 382 50 Philippians ch. 1, v. 23, pg., 257 ch. 2, v. 7-8, pg., 395 ch. 2, v. 10, pg., 179 ch. 2, v. 12, pg., 283 ch. 4, v. 6, pg., 353 **51** Colossians ch. 1, v. 15, 16, pg., 9 ch. 1, v. 15, pg., 9, 23, 55, 77 ch. 1, v. 15-17, pg., 55 ch. 1, v. 16, 17, pg., 37 ch. 1, v. 16, pg., 11, 12, 20, 37, 74, 165, 428 ch. 1, v. 16-17, pg., 20 ch. 1, v. 17, pg., 11, 14, 94, 208, 270, 283, 310, 334, 357 ch. 1, v. 19, pg., 21 ch. 1, v. 20, pg., 192, 395 ch. 1, v. 22, pg., 99

ch. 1, v. 25, pg., 24 ch. 2, v. 9, pg., 21 ch. 2, v. 15, pg., 181 ch. 2, v. 18-23, pg., 212 ch. 3, v. 10, pg., 9, 77, 190 ch. 3, v. 11, pg., 260, 406, 434, 440 ch. 3, v. 16-17, pg., 353 ch. 3, v. 17, 23, pg., 210 ch. 3, v. 18, pg., 185 ch. 4, v. 5, pg., 59 52 1 Thessalonians ch. 2, v. 14-16, pg., 417 ch. 4, v. 16, pg., 168, 256 ch. 4, v. 16-17, pg., 256 ch. 5, v. 6-8, pg., 393 ch. 5, v. 23, pg., 106 53 2 Thessalonians ch. 2, v. 11, pg., 355 ch. 3, v. 10, pg., 97, 121, 289 54 1 Timothy ch. 1, v. 8, pg., 292 ch. 2, v. 2, pg., 384, 439 ch. 2, v. 4, pg., 285 ch. 2, v. 11-12, pg., 185 ch. 2, v. 11-14, pg., 97 ch. 2, v. 13, pg., 37, 75, 85, 141, 185 ch. 2, v. 13-15, pg., 185 ch. 2, v. 14, pg., 154 ch. 2, v. 15, pg., 245 ch. 4, v. 3, pg., 135 ch. 4, v. 4, pg., 37 ch. 5, v. 8, pg., 121, 289 ch. 5, v. 14, pg., 135, 368 ch. 6, v. 15, pg., 59 55 2 Timothy ch. 1, v. 9, pg., 6, 15, 269 ch. 2, v. 26, pg., 152 ch. 3, v. 2-5, pg., 266 ch. 3, v. 8, pg., 296, 314 ch. 3, v. 16, pg., 26, 119, 239, 259, 283, 407 ch. 3, v. 16-17, pg., 119, 239, 259, 283, 407 ch. 4, v. 7-8, pg., 294 56 Titus ch. 1, v. 2, pg., 6, 15, 269, 354 ch. 1, v. 15, pg., 166 ch. 2, v. 2-12, pg., 393 ch. 2, v. 4-5, pg., 83 ch. 2, v. 5, pg., 294 ch. 3, v. 1, pg., 126 58 Hebrews ch. 1, v. 1, pg., 26, 100 ch. 1, v. 1-2, pg., 156 ch. 1, v. 2, pg., 37, 74 ch. 1, v. 3, pg., 270 ch. 1, v. 7, 13-14, pg., 110, 202, 262 ch. 1, v. 14, pg., 180

ch. 2, v. 1-3a, pg., 133 ch. 2, v. 2, pg., 379 ch. 2, v. 7, pg., 203 ch. 2, v. 9, pg., 395 ch. 2, v. 10, pg., 395 ch. 2, v. 14, pg., 181, 192 ch. 2, v. 14-15, pg., 192 ch. 2, v. 16, pg., 192, 262 ch. 4, v. 9, pg., 97, 115 ch. 4, v. 9-10, pg., 97 ch. 4, v. 13, pg., 9 ch. 4, v. 16, pg., 169 ch. 6, v. 13, pg., 26 ch. 6, v. 18, pg., 354 ch. 7, v. 7, pg., 398 ch. 7, v. 14, pg., 398 ch. 7, v. 26, pg., 98 ch. 7, v. 27, pg., 192, 374 ch. 8, v. 7, pg., 251 ch. 9, v. 13-14, pg., 356 ch. 9, v. 22, pg., 199, 212, 374 ch. 9, v. 27, pg., 206, 251, 275, 283, 384, 401, 443 ch. 10, v. 4-14, pg., 353 ch. 10, v. 7, pg., 116 ch. 10, v. 22, pg., 169 ch. 10, v. 25, pg., 295 ch. 10, v. 28, pg., 380 ch. 10, v. 30, pg., 401 ch. 11, v. 1-40, pg., 255 ch. 11, v. 3, pg., 8, 11, 15, 19, 27, 37, 38, 148 ch. 11, v. 4, pg., 207, 211, 221 ch. 11, v. 5, pg., 254, 256 ch. 11, v. 6, pg., 294 ch. 11, v. 7, pg., 243, 244, 271, 273, 281, 283, 287, 290, 293, 299, 301, 306, 394 ch. 11, v. 8-10, pg., 409 ch. 11, v. 8-12, 17-19, 23-28, pg., 449 ch. 11, v. 10, pg., 230, 415, 427, 428, 440, 453 ch. 11, v. 11, pg., 451 ch. 11, v. 20, pg., 454 ch. 11, v. 32-34, pg., 383 ch. 11, v. 38, pg., 254 ch. 11, v. 39, pg., 236 ch. 12, v. 1, pg., 291 ch. 12, v. 2, pg., 161, 269, 395 ch. 12, v. 14, pg., 382 ch. 12, v. 16, pg., 123, 296, 314 ch. 12, v. 22-23, pg., 439 ch. 12, v. 24, pg., 222 ch. 12, v. 28, pg., 94, 214, 353 ch. 13, v. 2, pg., 440 ch. 13, v. 4, pg., 144, 145, 264 ch. 13, v. 15, pg., 238, 353 ch. 13, v. 20, pg., 116, 117, 286 59 James ch. 1, v. 13, pg., 152, 174, 355

HISTORY'S OPENING ACT - Meditations on Genesis 1-11

ch. 1, v. 14, pg., 174 ch. 1, v. 17, pg., 91, 122, 142, 269, 353, 372 ch. 1, v. 19-20, pg., 217 ch. 2, v. 1-13, pg., 133 ch. 2, v. 10, pg., 125, 292, 394 ch. 2, v. 10-11, pg., 125 ch. 2, v. 17, pg., 283 ch. 2, v. 19, pg., 94 ch. 3, v. 7, pg., 66 ch. 3, v. 9, pg., 37 ch. 4, v. 1-3, pg., 217 ch. 4, v. 7, pg., 152, 154, 218 ch. 4, v. 13-14, pg., 300 ch. 4, v. 15, pg., 300 ch. 5, v. 14, pg., 226 ch. 5, v. 15, pg., 226 ch. 5, v. 16, pg., 226 60 1 Peter ch. 1, v. 13, pg., 393 ch. 1, v. 16, pg., 99 ch. 1, v. 25, pg., 333 ch. 2, v. 5, 9, pg., 98 ch. 2, v. 5, pg., 98, 215 ch. 2, v. 13-14, pg., 128 ch. 3, v. 1-6, pg., 143, 185 ch. 3, v. 3, pg., 198 ch. 3, v. 15, pg., 282 ch. 3, v. 19, pg., 296, 314 ch. 3, v. 20, pg., 244, 258, 265, 266, 281, 283, 286, 305, 403 ch. 3, v. 20-22, pg., 258, 283, 403 ch. 3, v. 21, pg., 283 ch. 4, v. 3, pg., 393 ch. 4, v. 7, pg., 393 ch. 4, v. 19, pg., 9 ch. 5, v. 8, pg., 152, 154, 218, 393 ch. 5, v. 8-9, pg., 218 ch. 5, v. 13, pg., 436 61 2 Peter ch. 2, v. 4, pg., 151, 169, 192, 202, 262 ch. 2, v. 5, pg., 202, 210, 238, 244, 253, 264, 272, 282, 283, 285, 286, 402 ch. 3, v. 2-7, pg., 49 ch. 3, v. 3-10, pg., 283 ch. 3, v. 3-7, pg., 299, 308 ch. 3, v. 4, pg., 265, 276, 296, 360 ch. 3, v. 4-6, pg., 360 ch. 3, v. 4-7, pg., 276 ch. 3, v. 5, pg., 19, 21, 26, 37, 333 ch. 3, v. 6, pg., 119, 285, 322 ch. 3, v. 6-7, pg., 322 ch. 3, v. 7, 10-12, pg., 15, 189, 386 ch. 3, v. 7, 12-13, pg., 7 ch. 3, v. 7-10, pg., 12 ch. 3, v. 7-12, pg., 357 ch. 3, v. 7-13, pg., 30

ch. 3, v. 9, pg., 265, 297 ch. 3, v. 10, 13, pg., 358 ch. 3, v. 10, pg., 86, 276, 300, 358, 359 ch. 3, v. 10-12, pg., 86, 359 ch. 3, v. 10-12, pg., 192 ch. 3, v. 10-13, pg., 276 ch. 3, v. 11-13, pg., 283, 315 ch. 3, v. 13, pg., 15, 86, 91, 189, 192, 196, 306, 357, 359, 386 ch. 3, v. 16, pg., 26 62 1 John ch. 1, v. 5, pg., 27 ch. 1, v. 9, pg., 353 ch. 2, v. 13, pg., 151 ch. 2, v. 16, pg., 161 ch. 3, v. 1-2, pg., 395 ch. 3, v. 8, pg., 180, 181 ch. 3, v. 8-10, pg., 180 ch. 3, v. 12, pg., 212 ch. 3, v. 16, pg., 91 ch. 4, v. 8, 16, pg., 170 ch. 4, v. 19, pg., 170 ch. 5, v. 3, pg., 294, 385 ch. 5, v. 3-4, pg., 294 ch. 5, v. 13, pg., 42 ch. 5, v. 14, pg., 226, 353 65 Jude 9, 296, 314 v. 6, pg., 151, 206, 262 v. 11, pg., 219 v. 13, pg., 31 v. 14, pg., 238, 249, 253, 254, 258 v. 15, pg., 253, 266 v. 25, pg., 25 66 Revelation ch. 1, v. 8, pg., 395 ch. 1, v. 18, pg., 395 ch. 2, v. 7, pg., 113, 201, 395 ch. 2, v. 13, pg., 230 ch. 2, v. 14, pg., 263 ch. 2, v. 17, pg., 427, 442 ch. 2, v. 22, pg., 125, 163 ch. 3, v. 7, pg., 98 ch. 3, v. 12, pg., 230 ch. 4, v. 3, pg., 387 ch. 4, v. 8, pg., 98 ch. 4, v. 11, pg., 9, 14, 37, 48, 93, 95, 149, 384 ch. 5, v. 5, pg., 398 ch. 5, v. 11, pg., 202 ch. 6, v. 4-8, 12, pg., 356 ch. 6, v. 9-10, pg., 222 ch. 7, v. 9, pg., 180, 359, 384, 390, 395, 406, 407, 409, 439, 440 ch. 7, v. 11, pg., 202 ch. 7, v. 14, pg., 199 ch. 9, v. 5, 10, pg., 336

ch. 10, v. 1, pg., 387 ch. 10, v. 3-4, pg., 384 ch. 10, v. 5-7, pg., 9 ch. 10, v. 6, pg., 37 ch. 12, v. 4, pg., 151 ch. 12, v. 7-9, pg., 151, 179 ch. 12, v. 9, pg., 150, 151, 179 ch. 14, v. 7, pg., 9, 37 ch. 14, v. 8, pg., 436 ch. 16, v. 13, pg., 152 ch. 16, v. 19, pg., 436 ch. 17, v. 5, pg., 413, 435, 436 ch. 18, v. 1, pg., 435 ch. 18, v. 1-24, pg., 427, 435, 436 ch. 18, v. 2, pg., 230 ch. 19, v. 9, pg., 168, 269 ch. 19, v. 10, pg., 74, 203 ch. 19, v. 16, pg., 453 ch. 19, v. 20, pg., 152 ch. 20, v. 1-2, pg., 151 ch. 20, v. 2, pg., 150, 151, 179, 267, 274 ch. 20, v. 2-3, pg., 151 ch. 20, v. 3, pg., 386

ch. 20, v. 10, pg., 152, 181, 435 ch. 21, v. 1, pg., 19 ch. 21, v. 1-27, pg., 114 ch. 21, v. 1-8, pg., 152 ch. 21, v. 2, 10, 14-23, pg., 230 ch. 21, v. 2, 10-27, pg., 427 ch. 21, v. 3-4, pg., 91, 322 ch. 21, v. 4, pg., 89, 185, 196, 427 ch. 21, v. 8, pg., 300 ch. 21, v. 9-21, pg., 120 ch. 21, v. 22, pg., 453 ch. 21, v. 23, pg., 27, 30 ch. 21, v. 25, pg., 19, 31 ch. 22, v. 1-2, pg., 120 ch. 22, v. 2, 14, pg., 89, 201 ch. 22, v. 2, 19, pg., 114, 115, 373 ch. 22, v. 2, pg., 101, 427 ch. 22, v. 3, pg., 395 ch. 22, v. 5, pg., 19, 27, 31 ch. 22, v. 8-9, pg., 203 ch. 22, v. 9, pg., 74 ch. 22, v. 14, pg., 194, 230 ch. 22, v. 19, pg., 230

Selected Biblical and Extra-Biblical Historical Persons Index²⁸

Aaron, 184 Abihu, 213 Abimelech, 452 Abydenus, 433 Adah. 231 Ahuizotl, 430 Alexander, 184, 347, 398, 408, 411, 428, 437 Ananias, 213, 224 Andree, Richard, 331 Antiochus, 354, 437 Apostle John, 42, 162 Apostle Paul, 6, 15 Aquinas, 127, 383 Aram, 417, 418 Araunah, 402 Archestratos, 268 Aristotle, 66, 127, 134 Arpachshad, 404, 408, 416, 417, 418, 442, 443 Arphaxad, 446, 447, 524 Asaph, 302 Ashkenaz, 410, 445 Ashoka, 428 Athaliah, 237 Athanasius, 12 Attila, 266, 414, 428 Augustine, 53, 106, 205, 206, 283, 383 —B— Balaam, 150, 263, 450 Balboa, Vasco Nunez de, 412 Bateman, Robert, 168 Beecher, 308 Beethoven, Ludwig van, 30 Behe, Michael, 68 Belshazzar, 229, 268, 437 Benedict, 377 Berkhof, Louis, 106 Berossus, 339 Bosch. Hieronymus, 215 Boston, Thomas, 206 Breasted, James, 424 Brendan, 412 Brown, Louise, 146, 243 Bryce, James, 339 Buddha, Gautama, 128, 307 -C-Caboto, Giovanni, 412 Caesar, Julius, 268, 428 Cainan, 4, 445, 446, 447, 524 Calvin, John, 33, 113, 283, 352, 388, 395, 410, 454 Camping, Harold, 387

Canaan, 53, 113, 120, 218, 266, 390, 391, 394, 395, 397, 398, 400, 406, 408, 411, 413, 427, 430, 434, 439, 442, 450, 451, 453, 454, 523 Carmeli, Moshe, 57 Cartier, Jacques, 412 Champlain, Samuel de, 412 Charlemagne, 24, 277, 437 Cheops, 304 Chesterton, G. K., 47 Chomsky, Noam, 434 Churchill, Winston, 192 Cicero, 268 Columbus, Christofer, 387, 412 Constantine, 339, 383 Copernicus, Nicolaus, 2, 3 Crick, Francis, 43, 64, 67, 111, 310 Cristina, Maria, Duchess of Teschen, 2 Cusah, 433 Cyprian, 383 Cyrus, 184, 307, 354, 411, 417, 428, 437 —D— Da Vinci, Leonardo, 347 Daniel, 184 Darius, 242 Darwin, Charles, 9, 66, 68, 71, 72, 92, 308, 310, 444 Davies, Paul, 29 Davis, John. 86 Dawkins, Richard, 8, 91, 401, 427 Dembski, William, 42 Dias, Bartolomeu, 412 Diderot, Denis, 310 Dobson, Ed, 387 Dorfman, Andrea, 76 Drake, Francis, 412 Durant, Will, 137, 304 —E— Eber, 96, 242, 253, 366, 401, 404, 405, 408, 417, 420, 423, 427, 442, 443, 446 Edwards, Jonathan, 298, 387 Ehrlich, Paul, 87, 371 Einstein, Albert, 6, 15, 28, 56, 57, 64, 92, 310 Eisenhower, Dwight, 192 Eliezer, 450 Elijah, 15, 28, 102, 256, 257 Elisha, 102 Elishah, 411 Elizabeth, 452 Enosh, 236, 237, 250, 253 Ephraim, 400, 447, 455 Epicurus, 165 Esau, 123, 269, 399, 410, 442, 447, 455

²⁸ A few key historical persons are excluded because their names appear too often in the text of this document to include in an index; namely Adam, Eve, Noah, Jesus, and Paul.

Esther, 47, 333 Euler, Leonhard, 61 Eusebius, 53, 339, 433 Exiguus, 305 Ezra, 249 —F— Falwell, Jerry, 387 Forman, Dave, 86 Freud, Sigmund, 427 —G— Gabriel, 151, 203, 277 Galileo, Galileo Galilei, 2, 3 Gascoyne, Captain John, 339 Gauguin, Paul, 268 Gauss, Carl, 18 Gideon, 272 Gingerich, Owen, 1 Goebbels, Joseph, 8 Golay, Marcel, 67 Goliath, 266 Gomer, 410 Gosnell, Kermit, 381, 382 Gould, Stephen Jay, 70 Grünbaum, Adolf, 13 —H— Habakkuk, 302 Hadassah, 47 Hagar, 449, 452 Hagee, John, 47 Haldane, John, 310 Hammurabi, 128, 437 Hannah, 208, 452 Hanno, 411 Hartnett, John, 57 Hatchett, Desmond, 229 Hawking, Stephen, 11, 13, 49, 427 Heidegger, Martin, 13 Heisenberg, Werner, 223, 310 Herod, 128, 181, 222 Herodotus, 304, 411 Hippolytus, 382 Hitchens, Christopher, 8, 313 Hitler, Adolf, 152, 192, 266, 401, 414, 428, 437, 449 Hodge, Charles, 308 Homer, 410 Hooke, Robert, 68 Hoyle, Fred, 29 Huangdi, 304 Humbaba, 266 Hume, David, 5, 79, 165 Hussein, Saddam, 401 Hutton, James, 285 Huxley, Thomas, 391, 427 —I— Isaiah declared woe, 292

named future Cyrus, 184 named his sons as prophecies, 252, 254 prophesied, 354, 415 spoke of Jerusalem, 123 vision, 98 Isaiah, who wept over, 306 Ishmael, 410, 418, 442, 449 Ixtlilxochitl, 433 __J__ Jabal, 239 Japheth, 24, 100, 245, 250, 252, 253, 258, 274, 397, 398, 399, 400, 401, 404, 405, 406, 408, 409, 410, 411, 412, 413, 416, 417, 418, 421, 425, 436, 438, 443, 445, 447, 454.523 Jastrow, Robert, 16 Jeremiah, 32, 302, 413, 440 Ioh book of, 152, 171, 333, 366, 417 directed by God, 347 early patriarch, 227 God to Satan about, 302 lived 140 years, 417 made a covenant, 160 offered sacrifices, 251, 259 problem of evil, 333 remained faithful, 284 righteous man, 259 same person as Jobab, 366, 417 Satan's claim, 295 temptation, 154 Jobab, 366, 417 John accused Herod, 128 acepts account of creation, 9 God is love. 172 Greek word 'with' God, 140 Jesus is the Word, 41 metaphor 'God is light', 27 Satan as 'ancient serpent', 180 tree of life, 114 John the Baptist, 102, 383 Joktan, 366, 404, 405, 408, 409, 417, 418, 443 Jonah about 775 BC, 411 learned lesson, 170 swallowed by a large fish, 157 visit to Neneveh, 128, 415 Joseph NT adopted father of Jesus, 447 Christ birth, 118 Joseph OT age at death, 444 mourned over Jacob, 296 Potiphar prospered, 306 Josephus, 339, 411, 414, 445

Joshua

conquest under, 398, 401 defeated the Amorites, 47 divided the land, 420 lived to be 110, 446 movement of sun, 2 Jubal, 239 Judah, 306, 399, 415, 444, 448 Jude Enoch a prophet, 255 Enoch seventh from Adam, 249 Enoch's words, 254 Justinian, 173 —K— Kant, Immanuel, 6, 85 Kepler, Johannes, 3 Keturah, 446, 455 Kim Il Sung, 152 Jong-un, 449 Kline, Meredith, 114 Kuhn, Thomas, 74, 349 _L_ Lactantius, 383 Lamach, 229 Layard, Henry, 416 Leakey, Richard, 76 Lehabim, 445 Leibniz, Gottfried Wilhelm, 26, 61 Lemonick, Michael, 76 León, Juan Ponce de, 412 Liguori, Nick, 331 Linnaeus, Carl, 66 Lisle, Jason, 56 Lister, Joseph, 74 Lud, 417 Luther, Martin, 2 --M---Magog, 410, 411 Magueijo, Joao, 29, 56 Malthus, Thomas, 87 Manetho, 304 Mao, Zedong, 266, 414 Margulis, Lynn, 69 Mather, Cotton, 387 Mehujael, 229 Melanchthon, Philipp, 2 Melchizedek, 389, 442 Memes, 413, 437 Mendeleev, Dmitri, 310 Meshech, 410, 411 Methodius, 165, 250 Methuselah, 203, 239, 245, 246, 249, 250, 251, 252, 253, 254, 257, 258, 260, 264, 296, 403, 442 Micah, 415 Milcah, 449, 451, 453

Miller Hugh, 35 Stanley, 64, 65 Milton, John, 130 Mizraim, 412, 413, 437, 445 Morfran, Madoc, 412 Morgentaler, Henry, 449 Morris, Henry, 1 Munch, Edvard, 180 _N_ Naamah, 239 Nabonidus, 437 Nadab, 213 Nahor, 442, 443, 449, 451, 453 Naomi, 447 Napier, John, 387 Nebuchadnezzar, 228, 254, 427, 428, 436, 437, 445 Nehemiah, 128 Newton Isaac, 3, 61, 92, 310, 387, 430 John, 215 Nimrod, 404, 405, 407, 408, 409, 413, 414, 415, 416, 417, 420, 421, 423, 425, 426, 427, 428, 436, 437, 457, 523, 524 Nimrud, 416, 426 Noriega, Manuel, 449 Nostradamus, 387 _0_ Oard, Michael, 317, 318, 360 Obed, 447 Origen, 11, 250, 283, 383 —P— Paine, Thomas, 139 peleg, 420 Peleg, 96, 252, 366, 404, 405, 406, 408, 409, 411, 416, 417, 418, 420, 421, 441, 443, 444, 524 Peter ark symbolizes Christ, 283 Noah constructed ark, 281 of new heavens and earth, 284 Paul's writings as Scripture, 26 people must apply self-control, 394 Satan tried to tempt Jesus through, 154 sceptics in the last days, 37, 49, 297 supports man's headship, 143 teaches 'law' of entropy, 12 universe will be consumed, 192 world was deluged, 119 Phinehas, 389 Pilate, 222 Pizarro, Francisco, 412 Plato, 341 Polo, Marco, 347 Potiphar, 306 —R— Rachel, 208, 324, 449, 452

HISTORY'S OPENING ACT - Meditations on Genesis 1-11

Rahab, 306, 402 Rawlinson, John, 415 Rebekah, 449, 452 Reu, 406, 411, 416, 417, 442 Reumah, 451 Rousseau, Jean-Jacques, 35, 267 Ruth, 450 <u>_____</u> Samson, 333, 445 Sapphira, 213, 224 Sarah sarah, 452 Sarah, 237, 354, 446, 452, 455 sarai, 198, 208, 449, 450, 451, 452, 453, 525 sarai, 452 Sargon, 96, 242, 356, 416, 436, 437 Seba, 412 Serug, 442 Sheba, 412 Shelah, 404, 408, 436, 442, 443, 446, 447 Stalin, Joseph, 96, 152, 428 —T— Tamerlane, 428 Terah, 100, 409, 410, 416, 439, 441, 442, 443, 444, 448, 449, 450, 451, 453, 454, 455, 524, 525 Tiglath-Pileser, 437 Tiras, 411 Tubal, 230, 232, 239, 245, 411 Tubal-Cain, 230, 232, 239, 245 Tycho, Brahe, 3 Tyndale, William, 103

U Ussher, James, 53, 260, 387 Uzzah, 213 Uzziah, 213 __V__ Vernet, Jacob, 35 Vespucci, Amerigo, 412 Voltaire, François-Marie Arouet, 35 _____ Warhol, Andy, 428 Warren Rick, 221 Robin, 73 Watson, James, 43, 64, 310 Wegener, Alfred, 74, 420 Wesley, John, 387 Whitcomb, John, 1 Whorf, Benjamin, 434 Wilson, E. O., 1 Wolfe, Tom, 431 Wright, Christopher, 429 Wycliffe, John, 103, 140 _X_ Xenophon, 415 Xerxes, 242 —Z— Zanoah, 119 Zechariah, 203 Zephaniah, 440 Zillah, 231

Subject Index

—A—

Abiogenesis abiogenesis, 64, 65, 522 hydrothermal vents, 62, 64 inert chemicals, 110, 208 probability calculations, 67 self-organizing matter, 22, 36, 42, 44, 64, 65, 67, 69, 358, 435 aboriginals, 281, 331, 347, 352, 366, 391, 393, 394, 407, 422, 433 Abortion abortifacients, 292 abortion, 87, 88, 124, 126, 127, 146, 147, 209, 220, 222, 232, 243, 261, 264, 274, 381, 382, 406 abortionists, 378, 382 murder, 381, 382, 530 pro-abortion, 382 Roe vs Wade, 1973, 146, 382 sex-selective, 146, 382 slaughter of unborn, 87, 88, 112, 146, 159, 177, 209, 222, 240, 373, 379, 382, 385, 435 abstinence, 252 Accad, 415 Adam and Eve adam - ground, 82, 105, 138, 250 covering nakedness, 167, 169, 170, 198, 199 creativity, 63, 78, 79, 81, 108, 110, 137, 191, 234, 252 dirt, 250, 253 Dirt, 250 Eve from Adam, 142 expulsion, 47, 149, 199, 202, 203, 205, 226, 230, 254, 312, 424, 526 expulsion, access prevented, 202 forgiven, 193 funeral, 251 ish, 143 ishshah. 143 man not his own creator, 240 naming animals, 137, 167 obedience test, 130, 200, 201 pre-fall state, 206 real pair or first humans, 75 temptation & first sin, 40, 54, 88, 104, 114, 123, 124, 125, 129, 130, 131, 132, 133, 134, 148, 154, 155, 158, 159, 160, 161, 162, 163, 164, 168, 171, 172, 174, 176, 184, 185, 187, 194, 196, 197, 200, 201, 205, 206, 207, 251, 265, 269, 270, 294, 301, 395 temptation & first sin, Satan's diversionary tactic, 155 addiction, 146, 169, 187 adonai, 102 adrenaline, 217 adrenals, 107

adultery, 125, 128, 145, 160, 162, 163, 164, 170, 221, 231, 263, 264, 275, 355, 356, 379, 395, 397 adzes, 278 Aegean islands, 411 aerobic, 72 aesthetic goodness, 30, 90, 91, 94 aesthetics, antithesis of postmodernism, 30 aether. 63 affluenza, 177 Africa circumnavigated, 411 agender, 83 agnosticism, 10 Agricultural hinterlands, 453 knowledge, 438 techniques, 81, 370, 425 agriculture, 78, 187, 195, 209, 370, 438 Akkad, 415, 416, 427, 436 Akkadian, 242, 355, 415, 420, 436 Akkadians, 47 alcohol, 146, 167, 175, 177, 224, 275, 395 alcoholic, 177, 394 Aletheia, 355 algae, 110, 329 Algonquians, 331, 366 alkaline, 330 alkaloids, 275 allah, 103 Allah, 58, 91, 127, 184, 229 altars, 177, 178, 211, 348, 351, 416 altruism, 73, 171, 432 amino acids, 43, 64, 65, 67 Amish, 195 ammonia, 64, 65 Ammonites, 405, 450 amniotic egg, 72 amoral, 29, 30 Amorites, 47, 398, 437 amphibians, 66, 72, 92, 244, 322, 348 Anabaptists, 383 anaerobic, 72 analgia, 186 Anasazi, 347 Anatolia, 437 Ancestry common, 69 human physical, 75, 418 spiritual, 237 Andes, 350, 361 androgynous, 82, 83 angelic-human hybrids, 262, 266 angelic-human intermarriage, 262

Angels angels, 23, 63, 64, 77, 78, 79, 83, 106, 110, 111, 150, 151, 153, 180, 203, 204, 206, 221, 224, 262, 266, 349, 436, 526 archangels, 203 carry messages, 203 cherubim, 202, 203, 211, 237 seraphim, 98, 203 anger-response, 217 Angkor, 348 anglophone, 430 Anguilla, 351 angular momentum, 50, 51, 59 animal-human hybrids, 262 Animals not morally culpable, 29, 276, 285, 455 shedding human blood, 371, 384 animate life, 86, 90, 106, 223 animation and animatronics, 242 Ankara, 351 annihilation, 108, 155, 195, 216, 222, 271, 354, 357, 437, 439, 441 Antarctica, 325, 340, 361, 363, 366, 393, 422 anteaters, 351 Antediluvians, 123, 191, 234, 255, 277, 301, 314, 316, 322, 372, 380, 390, 394 Anthropic Principle anthropic, 12, 48 anthropic principle, 48, 49, 522 oceans as example, 48 anthropoid, 209 anthropologists, 65 anthropomorphic, 223, 270 antibiotics, 73 antibodies, 107 antigen, 72 antimatter, 20, 50 anti-Semitism, 418 anti-theists, 274 Anu, 39 Apate, 355 apes, 10, 25, 37, 75, 76, 81, 106, 171, 240, 260, 391, 392, 432, 455 apocalyptic, 47, 337, 343, 344, 356 Apostles, 23, 26, 37, 213, 214, 257, 407 Apostolic age, 185 Apostolic Church, 213 Appalachian Mountains, 39, 340 aqueducts, 78, 279, 425 Arabia, 404, 412, 437, 453 Arabian Peninsula, 412, 416, 417 Arabs, 418 Aramean, 417 Ararat, 286, 326, 331, 337, 338, 339, 340, 351, 404, 424, 442, 529 Aratta, 423, 433

archaeology, 16, 49, 53, 157, 209, 241, 260, 304, 340, 404, 412, 415, 419, 421, 422, 425, 426, 431, 432, 444, 451, 453, 457 Arctic, 190, 320, 361, 363, 364, 366, 367 argon, 17, 247 Arian, 12 Ark floated, 326 Ark of the Covenant, 202 armadillos, 351 Armenia, 339, 417 arrowheads, 366 artificial intelligence, 42, 138, 223 arum, 151 Aryan purity, 406 Aryans, 410, 413 asexual organisms, 72 Ashkenazi, 410, 418 Ashtaroths, 211, 263 Ashurism, 238 Asshur, 119, 417 Assyria, 12, 118, 119, 238, 409, 413, 415, 420, 451 Assyrians, 339, 411, 415, 417, 420, 433 Astrology astrology, 10, 27, 46, 47, 97, 387, 426, 427 cosmic cycles, 46 planets, 60, 96 sun, 27 astronomy, 309 astrophysicists, 52, 435 asummim, 151 asymptotic decay, 247, 448 atheism, 5, 17, 61, 91, 93, 126, 165, 208, 223, 240, 267, 274, 291, 308, 313 atheism, neo, 8, 16, 175 Athenian council, 37, 75, 260, 308, 390, 407, 408, 419 Atlantic, 311, 411, 412 Atlantis, 120, 233, 341 Atlit-Yam, 422 Atmosphere atmosphere, 11, 21, 38, 39, 48, 49, 64, 105, 248, 299, 311, 312, 329, 335, 361, 362, 364, 521 canopy, 105, 311, 448 protection from meteors, 49 water cycle, 335 water vapour, 38, 39, 40, 48, 55, 105, 208, 247, 311, 448 atom nucleus, 20 atoms, 5, 8, 11, 15, 20, 28, 42, 50, 51, 75, 92, 223, 247, 277 atonement, 126, 167, 182, 197, 199, 200, 211, 213, 295, 308, 352, 353, 368, 374, 376, 383, 395 Atonement Cover, 202 Atrahasis, 331 Auca, 430 Auschwitz, 381 autocracies, 271

beetles, 343

automatons, 131 automobiles, 43, 61, 68, 108, 252 axons, 112 Aztec, 430 —B— Baal, 39, 211, 229, 415, 454 Ba'al Hammon, 412 Babel Babel, 1, 24, 138, 139, 197, 203, 228, 230, 234, 242, 250, 260, 286, 304, 331, 390, 392, 393, 398, 403, 404, 406, 407, 408, 409, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 445, 451, 457, 530, 531 Babelites, 426, 427, 429 balal, 415 Tower of Babel between 2245 and 2215 BC, 406, 411, 416, 419, 421, 423, 436, 438 temple, 423, 425, 440, 454 tower construction, 24, 138, 230, 234, 242, 250, 280, 286, 331, 390, 392, 398, 403, 404, 407, 408, 409, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 426, 427, 428, 429, 431, 435, 436, 438 baby-boomers, 448 Babylon, 10, 91, 181, 263, 409, 414, 415, 424, 426, 427, 428, 433, 435, 436, 437, 440 Babylonia, 12, 96, 263, 405, 415, 424 Babylonian Captivity, 102 Babylonian contemporaries, 38 Babylonian creation accounts, 8, 19 Babylonian empire, 87, 403, 413, 426, 428, 437 Babylonians, 39, 47, 304, 401, 415 Babylons, 437 bacchanalia, 268 Bacchus, 268 bacteria, 57, 64, 69, 72, 73, 89, 110, 189, 190, 242 Bagan, 322 Baghdad, 415, 416 Bahaism, 200 baleen, 62 balil, 431 bandicoots, 351 baptism, 99, 201, 258, 283, 375, 382, 386, 389, 403, 440 barrenness, 208, 237, 449, 451, 452 basalt, 339 Basque, 432 bats, 62 Bay of Cambay, 422 bdellium, 114 bears, spectrum of niches, 350 Beast of Revelation, 152 Beelzebub, 151 beer, 394

Benjaminites, 397 benthic creatures, 321 Bering Strait, 393, 404, 422 bestiality, 263, 275 Bethlehem, 47, 181, 183, 184 **Bible translations** Geneva Bible (1599), 103 Septuagint, 103, 114, 246, 248, 266, 353, 393, 417, 445,454 Tyndale (1530), 103 Vulgate, 103 Wycliffe (1390), 103, 140 **Big Bang** Big Bang, 2, 6, 15, 57 cosmic explosion, 15 cosmic inflation, 29 curvilinear motion, 50 inflationary universe, 29 binocular vision, 108 biochemical, 17, 44, 166, 394, 435 bioethics, 156 **Biological** classification, 66 decomposition, 40, 54, 88 forms, 8 life, 40, 54, 109, 110 organisms, 72 populations, 70 taxonomies, 66, 70, 288 biologist, 111, 371 bioluminescence, 72 biomes, 44, 45 bi-pedal, 107 birds, 62, 341 Birs, 426 bison, 288, 360 bitumen, 278, 280, 425, 426, 435, 441 bladder, 107 blasphemy, 5, 26, 27, 47, 75, 94, 128, 130, 163, 175, 211, 221, 356, 379, 381, 388, 403 Blastocysts, 244 blessings, 115, 134, 155, 159, 162, 164, 172, 193, 194, 202, 203, 225, 228, 287, 291, 293, 294, 295, 297, 300, 332, 353, 357, 358, 370, 386, 396, 399, 400, 408, 409, 439, 447, 525, 526 Blood abstain from, 269, 368, 376, 377 clotting, 24, 108 pressure, 217 satisfaction, 173 tribute, 376, 377, 530 vessels, 10, 18, 108 boats, 36, 312, 316, 393, 411, 426 body, complexity, 107 Boghazkoy, 286

Bolsheviks, 96 Bo-lu-en. 250 bone knitting, 108 Bonneville Salt Flats, 363 bonobos, 76 Book of Enoch, 266 Borsippa, 426 bosons, 92 Bow River, 300 Boxgrove Quarry, 412 brain, 107 Brain activity, 111 brain-body, 11 capacity, 80, 81 cavity, 76 complexity, 112 death, 110, 113 eating (cannibalism), 269 emulation, 112, 113 human unique, 138 hypothalamus, 10 injury, 21, 72, 81, 111, 191 scanning, 111 signals control machines, 111, 112 stimulation, 111 brain of worm, 112 brass, 150 breath of God, 22, 77, 149, 335 breath of life, 22, 37, 39, 74, 78, 88, 106, 107, 109, 110, 133, 242, 284, 288, 322 bricks, 90, 425, 426, 428, 429, 430, 435, 441 bronze, 209, 210, 232, 234 Bronze Age, 425, 438, 444 bronze bell, 234 Buddhism, 12, 13, 16, 27, 134, 200, 238, 333 bumble bee, 93 Burgess Shell, 320 burial, 209, 210, 318, 347, 438 burqa, 58 burrowing, 328 -C-C. elegans, 65 Cainites, 229, 236, 237 Calah, 415 Calcium exoskeletons, 330 human body, 107 seawater, 321 calcium carbonate, 329, 330 Caledonides, 39, 340 Calendar calendars, 46, 304, 305, 306, 307, 325, 326, 338, 427, 438 Chinese, 304, 427, 438 Gregorian, 305

Jewish, 46, 304, 305 quasi-lunar months, 324, 326 Calneh, 415 camas, 346 camels, 66, 214, 256, 288, 335, 346, 351, 360, 365, 393, 412 Canaanites, 19, 263, 266, 276, 391, 397, 398, 401, 402, 403, 405, 406, 408, 413, 418, 420, 434 Canada, 4, 92, 144, 320, 361, 362, 364, 370, 371, 381, 382, 419, 427, 430 Canadian Shield, 320 canals, 120, 420, 421, 438 cancer, 55, 190, 196, 201, 306, 313, 420, 448 Canidae, 70 Canini, 70 canis, 346, 435 cannibalism, 210, 269 Canopus, 422 Canyon Lake, 338 canyons, 17, 338, 339, 357 Caphtor, 413 Caphtorim, 405 capillaries, 107 capital punishment, 227, 377, 378, 379, 380, 381, 530 capital punishment, no vindictiveness, 381 capriciousness, 5, 29, 91, 92, 158, 179, 186, 271, 276, 331, 355, 358, 367, 401, 402 carbohydrates, 69, 88 carbolic acid, 74 Carbon carbon, 107, 247 carbon 14, 18, 247, 248, 348, 426, 438 carbon-based life, 106 dissolved, 18 emissions trading, 367 radiocarbon, 157, 247, 304 carbon dioxide, 10, 65, 67, 107, 329, 361, 366 carbon monoxide, 65, 341 carbon-based computer, 106, 182 carbonic acid, 338 carcasses, 282, 342, 343, 344, 360, 364, 366, 377 Carchemish, 415 carcinogens, 448 cardiovascular, 107 Carib, 331 carnivorism, 89, 188, 269, 289, 303, 371 carrion, 342, 343 Carthage, 411 Carthaginians, 398, 411, 413 cartilage, 107 Cascades, 362 case-law, 367 Casluhim, 405, 413 Cassini, 92 catastrophism, 276, 317, 323, 327, 328 Cathay, 413

Causality Aristotelian, 132 causation, 6, 8, 14, 46, 51, 76, 80, 105, 132, 164, 198, 208, 248, 300, 309, 310, 335, 361, 430, 448 conditionals, 133, 134, 524 uncaused causes, 12 cavemen, 391, 421 caves, 209, 210, 338, 339, 360, 363, 391, 392, 438 celestial bodies, 46 celestial joys, 298 celestial luminaries, 334 celestial mechanics, 92 celestial north, 304 celestial objects, 46, 47, 55, 56, 57, 97, 426, 427 celestial phenomena, 47 Cell 100B in human body, 112 alien, 107 animal, 69 blood, 18, 69, 107, 348 cellular 'machines', 67, 68, 69, 522, 523 communication, 71 complexity, 43, 64, 67, 68, 69, 71, 89, 92, 93, 112 copying, 67 cytokinesis, 243 cytoplasm, 68, 72 debris, 69 decay, 71 density of data storage in DNA, 43, 92 development, 71 dinosaur, 18 division, 10, 71, 243, 244, 345 do not die, Biblical sense of death, 189 eukaryote, 72 exterior. 71 free-living, 65 from pre-existing material, 68 gamete, 43, 345 genetically identical, 71 harmful, 55 immune, 107 information, 68, 71 kinesins, 68 lysosomes, 69 membranes, 69 merging, 452 microtubules, 68, 71 mitochondria, 68, 198, 391, 419, 437 mitosis, 72, 243, 345 nanomachines, 68 nerve, 111, 112 non-gamete, 345 not amorphous blobs, 68, 310 nuclear membrane, 72 nuclei, 11, 68 nucleolus, 68

nucleus, 43, 68, 92, 141 organelles, 69 organic, 65, 68 origin, claim, 65, 67, 68 photovoltaic, 27 prokaryote, 72 reproduction, 11, 44, 65, 67, 69, 71, 107, 196, 345 self-assembly, 68 sensing damage, 44 simulation, 65 solar. 88 somatic, 345 stomach, 69 structure, 71, 92, 208, 392 surface, 88 transportation, 71 wall, 68 white, 107 cellulose, 72 centrifugal, 417 centripetal, 50 centrosome, 71 ceramic, 124, 425 Ceremonial clean animals, symbolic, 296 practices, 98, 99, 296 system, 214, 291, 353, 377, 386, 426 uncleanness, 375 CERN, 15 Cesium-133, 277 CFLs, 195 CGI, 242 Chaldeans, 47, 339, 433, 437, 453, 454 chalk, 325, 329 charge-to-mass ratio, 28 chattel, 261 Chemosh, 450 childbearing, 185, 186 children, a blessing, 370 chimera, 41 chimpanzees, 78, 373 China China, 47, 87, 88, 92, 96, 221, 222, 250, 261, 304, 331, 340, 348, 369, 371, 377, 382, 393, 404, 413, 423, 433, 437 Shang Dynasty, 304, 393, 413 Chinese ancestors, 304, 446 clothing, 58 Han, 331, 413 Yin and Yang, 153 chitin, 72 chromium, 60, 371 chromosomes, 72, 83, 141, 189, 244, 310, 345, 382 chronicler, 229, 249, 253, 416, 454 chronicles, 405, 455

Chronology and Genealogy chronologies, 1, 16, 34, 35, 53, 54, 117, 157, 236, 245, 246, 247, 248, 249, 250, 258, 259, 260, 304, 325, 326, 334, 337, 342, 365, 405, 422, 426, 438, 443, 444, 445, 451, 526, 527, 530, 531 chronometer, 248, 249, 446 genealogy, 1, 4, 17, 53, 54, 75, 99, 100, 101, 181, 229, 230, 232, 236, 239, 245, 246, 247, 248, 249, 250, 252, 253, 257, 258, 259, 260, 261, 263, 303, 304, 400, 404, 408, 409, 410, 412, 416, 418, 420, 421, 426, 438, 441, 442, 443, 444, 445, 446, 447, 449, 451, 531 chronology of flood events, 326 Church anti-Babel, 453, 454 unproductive, 179 Cimmerians, 410 circadian, 358 circumcision, 201, 375, 388, 389, 407, 418 cis-gender, 83 cisterns, 335, 341 Cities cities, 181, 230, 231, 236, 261, 274, 322, 387, 403, 404, 405, 415, 416, 417, 421, 422, 425, 428, 433, 439, 453 symbolic of wickedness, 230 City of God, 237, 253, 255, 257, 416, 428, 440, 441, 454, 457 City of Man, 237, 255, 416, 426, 428, 441 city-state, 454 civil magistrates, 127, 128, 129, 157, 200, 225, 227, 271, 367, 379, 380, 381, 383 Civilization civilization, 85, 137, 138, 185, 209, 210, 218, 229, 232, 233, 239, 246, 260, 268, 304, 322, 323, 333, 370, 394, 398, 404, 410, 421, 422, 425, 436, 531 oldest, 304 clay, 41, 62, 64, 106, 241, 242, 250, 260, 298, 304, 425, 437, 441 climatologists, 361 cloning, 142, 242, 243, 244 clouds, 38, 39, 40, 50, 51, 55, 57, 189, 192, 297, 311, 387, 388 Clovis, 366 coal, 10, 44, 45, 86, 112, 234, 247, 248, 258, 319, 322, 324, 325, 328, 359, 370 Coastland Peoples, 411, 421, 530, 531 coastlands, 298, 312, 393, 411, 412 collagen, 18, 348 colonies, 411, 412, 413, 421 colonization, 351 colophon, 4, 99, 258, 406, 416, 442, 449 comets, 48, 51, 52, 65, 136, 191, 323, 324, 360, 361 common grace (see also, Grace, general), 439 Communication content is transmitted, 42

has a purpose, 42 has meaning, 42 in words, 25 is structured, 42 provides direction, 42 Communism, 222 Computers applications, 93 **BIOS**, 80 boot-up problem, 80 brain comparison, 112 brain emulation, 112, 113 chips, 36 communication, 36, 109 Computerized Numerical Control (CNC), 61 emulation, 42, 112, 113 engineers, 108 games, 168 human, carbon-based, 182 industry, 112 manufacturing, 78 mind work, 122 monitors, 87, 111 not creative, 42, 110 not sentient, 13 programming, 42, 131, 133, 135, 345 quantum, 110 scientists, 110, 138 storage, 43 systems, 43, 90, 190 technologies, 230 transcendence, 112 conception, 185, 208, 452, 526 concubines, 146, 147, 194, 450, 451, 452 confession of sin, 169, 170, 174, 175, 178, 205, 353 Confucianism, 200, 238 consecration, 215, 441 consensus thinking, 73, 74, 522, 523 Constants in nature, 12, 28, 29, 51, 56, 61, 311 may not be constant, 29, 56 Planck's, 48 continental land mass, 70, 104, 113, 320, 325, 362 continental land mass, single, 39, 40, 74, 120, 286, 303, 319, 329, 335, 336, 340, 420 Contra Celsus, 250 Copernican model, 2, 310 coral, 330 Coriolis Effect, 317, 327 corn, 195, 342, 367, 370 cosmetic surgery, 195, 244 cosmic background radiation, 49, 50 cosmic rays, 18, 248 cosmogenic myth, 11, 49, 403 cosmogony, 22, 28, 32

HISTORY'S OPENING ACT - Meditations on Genesis 1-11

cosmological, 1, 2, 3, 5, 6, 15, 17, 19, 20, 29, 49, 50, 51, 52, 53, 55, 57, 157, 260, 311 cosmology, 1, 16, 18, 19, 34, 35, 38, 50, 51, 82, 90, 95, 96, 435 Covenants Abrahamic, 386, 450 bloody elements, 389 ceremony, 238, 287, 375, 386, 389 community, 441 covenant, 214, 262, 358 covenant of works, 116 covenantal, 1, 4, 82, 85, 86, 98, 99, 103, 116, 117, 118, 134, 170, 198, 201, 213, 214, 261, 263, 271, 285, 287, 288, 291, 303, 314, 331, 332, 349, 358, 374, 376, 388, 389, 390, 442, 443 Covenant-God, 315 covenant-mediators, 118, 174 covenants, 3, 86, 98, 115, 116, 117, 174, 201, 287, 385, 386, 389, 524 covenant-treaty, 117 Creation, 114, 115, 116, 117, 164, 201, 243, 287, 374, 375, 385, 388, 389, 395, 524 Davidic, 116, 117, 389, 399 Eternal, 117, 287 family, 307, 417, 451 grace, 172 Grace, 117, 358, 385, 388, 408 heir, 443 Life, 384, 530 line, 441, 442, 450, 451, 452, 531 making, 287, 386 mediator, 109, 115, 117, 125, 164, 173, 188, 198, 205, 211, 286, 287, 288, 290, 305, 354, 385, 395, 396 Mosaic, 4, 31, 46, 66, 86, 97, 98, 116, 117, 148, 211, 213, 214, 215, 250, 374, 376, 377, 379, 386, 387, 398 National, 375, 389 New, 116, 134, 164, 202, 213, 287, 288, 374, 375, 385, 386, 387, 388, 389, 396 Noahic administration, 287 announcement, 286, 527 blessing, 408 ordinances, 377 promised continuity, 299, 368, 386, 390, 530 rights and responsibilities, 368 obligations, 118 Priestly, 389 promise, 452 Redemption, 9, 389 signs, 389, 530 Sinai, 98, 134, 252, 286, 375, 389 symbols, 201 tribute, 118, 376 coveting, 128, 129, 160, 162, 163, 200, 215, 216, 356 craters, 311

creation account, Genesis, 8, 22, 23, 24, 25, 27, 32, 33, 34, 37, 40, 82, 83, 89, 104, 106, 147, 149, 199, 250, 301, 322, 334 creation of vegetation, 40, 41, 42, 44, 45, 104, 105, 258 creation of vegetation, myth, 250 Cree, 331, 414 creeping things, 66, 288, 322 Cretans, 355 Crete, 411, 413, 437 crocodiles, 323, 348, 363 Cronos, 445 cross-dressing, 82 crustaceans, 62 cryonics, 197 crystals, 56, 67 cubit, 139, 277, 278, 279, 281, 312, 319 Cumberland, 410 Curse hostile climate, 228, 424, 448 on creation, 79, 81, 89, 98, 188, 193, 194, 195, 289, 359, 371, 395 curses, 43, 115, 134, 188, 194, 216, 287, 295, 386, 396, 397, 400, 408, 409 cursing, 30, 88, 97, 122, 134, 161, 178, 179, 185, 187, 188, 193, 194, 197, 198, 202, 222, 224, 257, 287, 291, 395, 397, 398, 400, 406, 418, 430, 452, 453 Cush, 96, 118, 119, 405, 408, 412, 413 Cymro, 410 Cymry, 410 cypress, 278 Cyprus, 411 -Ddarkness, 19, 27, 28, 30, 31, 48, 51, 96, 101, 170, 180, 229,360 Darwin's Bulldog, 391 D-branes, 310 Dead Sea Scrolls, 314 Death 'and he died', ever-present reality, 245, 255, 403, 443 debt of sin, 201 defined by God, 155 'dying you shall die', 98, 131, 196, 251, 398 physical, 54, 132, 133, 189, 196, 206, 251, 255, 314, 385, 451, 454, 456, 522, 524, 527, 531, 532 spiritual, 104, 196, 206, 251 debt, 357, 369 deception, 44, 151, 152, 154, 161, 163, 164, 174, 175, 216, 219, 355 Deep Time 13.8B years, 359 14B years, 10, 18, 32, 49, 51, 52, 53, 58, 67, 247 4.5B, 1, 2, 17, 18, 32, 52, 54, 247, 321, 323, 359, 431 long-ages, 4, 17, 39, 95, 248, 311, 318, 446 Deism, 8, 9, 12, 19, 37, 48, 139, 198, 223, 228, 308, 374 deity, 12, 94, 103, 155, 165, 260, 427 demigods, 91, 152, 262, 266, 404, 445, 446, 530, 531

demiurge, 8, 12 democracy, 230, 232 demographics, 369 demons, 1, 9, 11, 94, 150, 151, 153, 154, 155, 181, 192, 203, 204, 262, 266, 275, 284, 294, 427, 440, 453 dendrites, 112 desalination, 371 Deserts Antarctica, 361, 363 deserts, 350, 363, 367 eastern Libya, 363 expansion, 367 miracles, 289, 397 North Africa, 363 polar, 363 Sahara Desert, 363, 367 wandering tribe, 239 designer babies, 146 despotism, 86, 185, 235, 266, 271, 275, 437 determinism, 111 Devil, 151, 155 devils, 153 Devils Tower, 339 devolution, 323, 432 diamonds, 248 digestion, 54, 88, 89, 107, 122 Dinosaurs Acrocanthosaurus, 348 Allosaurus, 343, 348 Apatosaurus, 343 Argentinosaurus, 347 Behemoth, 347 Brachiosaurus, 347 brontosaurus, 347 dinosaurs, 3, 18, 62, 103, 282, 317, 318, 319, 320, 323, 324, 325, 346, 347, 348, 360, 372, 414, 455, 528, 529 egg deposits, 317, 318 egg deposits, vegetation, 319 extinction, 40, 62, 88, 110, 323, 324, 348 Massospondylus, 348 Nothosaurus, 348 pterosaurs, 347 sauropods, 280, 347 Shunosaurus, 348 stegosaurs, 347, 348 triceratops, 347 Vulcanodon, 348 disease, 133, 134, 177, 188, 190, 194, 196, 205, 235, 244, 246, 247, 294, 360, 402, 448 disembodiment, 111, 113, 256 disobedience, excuses, 175 diurnal, 47 DNA-RNA DNA, 11, 41, 43, 44, 64, 65, 67, 68, 70, 71, 72, 89, 92, 93, 111, 112, 141, 188, 189, 190, 195, 198, 208,

242, 243, 244, 262, 310, 345, 382, 390, 391, 419, 435, 437, 522 DNA recombination, 242, 243, 244, 345 double helix, 43, 44, 68, 92 mDNA, 198, 437 nuclear transfer techniques, 242 nucleotides, 43, 189, 190 RNA, 43, 65, 68, 71 three-dimensional interactions, 67 three-dimensional structure, 44 transcription, 43, 44, 112, 189, 190, 242, 359 Dodanim, 411 Dolly, sheep, 244 Dolos, 355 dolphins, 72, 288, 327 domestication, 66, 209, 288, 393, 432 Doppler Effect, 52 double-planet, 48 dove, 101, 295, 326, 342 Dragons Chinese accounts, 347 dragons, 150, 151, 347, 348, 414 dragon-slayer, 414 legends, 347, 348 drought, 40, 44, 258 dualism, 8, 9, 19, 111, 152, 153, 164, 165 duodenal ulcer, 73 dynasties, 228, 229, 231, 246, 275, 304, 413, 416, 429, 436, 437, 449, 450, 453 dysphemism, 416 —E— E = mc2.28eagles, 63, 202, 203 Earth's Division earthquake, 420 erez, 420 irrigation ditch, 420 niplega, 420 palgu, 420 peleg, 420 pulukku, 420 Easter, 387 Easter Island, 393 Easter tables, 305 eber, 443 Eclipses earliest recorded, 304, 438 eclipses, 47 solar, 223, 247, 304, 438, 445 tetrad, 47 eco-doomsayers, 370 ecological disasters, 356 ecological niches, 41, 70, 303, 346, 350 ecological stress, 365 ecological zones, 327 Eden, greater, 202

edentates, 351 Edomite, 128, 417 eggs, 71, 72, 88, 92, 146, 147, 209, 243, 244, 269, 317, 318, 319, 345 Egypt, 12, 19, 38, 47, 53, 78, 96, 97, 102, 150, 184, 209, 215, 234, 241, 260, 263, 278, 304, 335, 341, 366, 388, 404, 405, 406, 408, 411, 412, 413, 417, 422, 427, 437, 443, 445, 450 Elam, 416, 418 Elamites, 416, 436 Elan, 433 electron, 28, 67 elephants, 69, 79, 343, 347, 364 emanationism, 8, 27, 37 embryos, 71, 147, 209, 243, 244, 319 empire-building, 420, 421 empires, 267, 275, 356, 417, 428, 437, 453 empirical evidence, 1, 2, 5, 49, 52, 73, 76, 79, 163, 248, 330, 392, 431, 438, 448 empirical methods, 2, 16, 17, 23, 25, 28, 42, 56, 57, 61, 64, 65, 71, 72, 81, 92, 96, 110, 111, 124, 138, 157, 158, 244, 267, 311, 324, 328, 349, 455, 457 empiricism, 17, 157, 158, 525 Enchiridion, 205 encyclopaedists, 310 end of the world, predictions, 359, 360, 371, 387, 529 endocrine, 107 endothelium, 108 energy conversion, 67 Enewetok Atoll, 330 English Bill of Rights, 172 English common Law, 127, 172, 173, 204, 380 Enki, 77, 355, 433 Enlightenment, 9, 85 Enlil, 39, 423, 433 Enmerkar, 423, 433 entitlement mentality, 121, 159, 202, 232 entropy, 7, 12, 29, 30, 54, 189, 192, 193 Enuma Elish, 8, 19, 63 environmental degradation, 370 environmentalism, 85, 86, 361 environmentalists, 369 envy, 162, 215, 216, 217, 218, 219, 233, 526 enzymes, 43, 65, 68, 69 epicycles, 2 epigenetic, 70, 71, 321, 522, 523 epistemology, 5, 16, 157 equinox, vernal, 338 Erech, 415 Eridu, 331, 355, 423, 433 erosion, 17, 18, 45, 49, 57, 88, 187, 318, 321, 324, 325, 327, 329, 336, 338, 339, 343, 365, 394 eschatology, 194, 418, 441 eternal life, 107, 109, 115, 134, 169, 197, 198, 201, 204, 209, 219, 256, 257, 384, 385, 386, 396 eternity, 6, 7, 115, 117, 174, 196

ethanol, 10, 367 ethics, 5, 158 Ethiopia, 96, 404, 412 ethnicity, 86 ethnocentrism, 205, 260, 298, 381, 390, 404, 406, 407, 418, 440 eugenics, 87, 406 Euphrates, 113, 119, 238, 413, 415, 417, 424, 443, 453 euthanasia, 87, 220 evangelical, 456 evangelism, 58, 59, 120, 121, 283, 390 evangelists, 58, 221, 265 evaporation, 49, 329, 363, 364 evening and morning, 31, 32, 95 Evil all the time, 201, 206, 267 detestable acts, 229, 395 evil, 91, 152, 153, 165, 220, 240, 525 evil called good, 435 existence of, 165 immorality corrupt morals, 198 degeneracy, 273 pervasive, 88, 147, 261, 267, 273, 274, 276, 283, 308, 391 societal decay, 91, 148, 177, 191, 233, 240, 271, 294, 315, 360, 382 lawlessness, 267, 292, 380 licentiousness, 148, 152, 275 moral autonomy, 6, 85, 124, 130, 133, 160, 176, 186, 200, 244, 377, 456 moral foolishness, 3, 130, 157, 230, 267, 310 moral relativism, 84, 124, 132, 166, 378, 380, 403 sin, 126, 133, 162, 166, 170, 172, 176, 178, 181, 192, 197, 200, 219, 261, 263, 525, 527 sin, defined by God, 130 sinners, 93, 129, 132, 148, 151, 176, 183, 213, 218, 253, 255, 256, 290, 301, 344 unrestrained, 272 why did God permit, 165 Evolution ape-like, 37, 75, 76, 106, 240, 260, 391, 392 attributed to genetics, 73 axiom, genomic complexity increases, 189 biological theories of origins, 3 cannot explain convergence, 72 chemical, 65 Darwinian, 66, 187 Darwinism, 66, 76, 308, 427 evolution, 1, 2, 3, 4, 8, 9, 12, 17, 18, 25, 27, 30, 33, 34, 35, 37, 40, 41, 51, 52, 54, 55, 62, 65, 66, 68, 69, 70, 71, 72, 73, 74, 75, 76, 81, 82, 83, 86, 88, 89, 90, 91, 92, 93, 94, 95, 106, 108, 110, 137, 138, 141, 143, 146, 157, 171, 177, 186, 189, 190, 193, 196, 198, 199, 200, 209, 228, 229, 233, 234, 239, 240, 241, 242, 244, 248, 249, 251, 260, 266, 281, 308, 317,

HISTORY'S OPENING ACT - Meditations on Genesis 1-11

318, 321, 323, 324, 327, 345, 346, 347, 360, 367, 371, 373, 374, 391, 392, 405, 410, 419, 423, 431, 432, 442, 444, 448, 455, 456, 522, 523 hoax, 76 life's 'creator', 228 macroevolution, 149 punctuated equilibria, 70 theistic, 1, 94 evolutionist, 16, 62, 64, 67, 69, 70, 71, 72, 73, 74, 76, 83, 93, 138, 141, 187, 189, 190, 198, 321, 327, 346, 347, 348, 374, 391, 392, 431 exoskeleton, 330 expiation, 353 exponential decay, human ages, 445 exponential population growth, 261 external stimuli, 69, 80, 131, 218 Extra-Biblical evidence not needed, 340 pre-flood technology, 234 Extra-Biblical records Anglo-Saxon records, 250 brick making, 425 dates, 247, 445 destruction Jerusalem, 303 documents, 262 flood legends, 26, 250, 280, 281, 304, 330, 331, 412, 422, 528 flood legends, Cree, 331 flood legends, Gilgamesh Epic, 280 flood legends, Karina, 331 flood legends, Mahabharata, 280, 331 flood legends, North and South American, 331 flood legends, Sumerian, 280 flood legends, Toltec, 422 genealogies, 249, 250, 444, 526, 531 Hebrew traditions, 296, 314 Irish Chronicles, 250, 314 Jason and the Argonauts, 363 language disruption, 422, 432, 433, 531 Nimrod, 416 offerings, 218 patriarch legends, 250, 445, 446, 450 post-flood migrations Amerindian legends, 422 Lenni-Lenape, 331, 366 nations, 404, 410, 411, 423 Tower of Babel Choctaw, 422 extraterrestrial intelligence, 25, 75, 193 extraterrestrial UFOs, 192 eyewitnesses, 26, 100, 118, 164, 173, 274, 340, 348, 390, 427 —F farming, 394 fatalism, 132, 177, 178, 224, 335 fates, 358

feathers, 72, 324 females, 141, 264 feminism, 84, 85, 143, 177, 185, 232, 240 fermentation, 394 Fertile Crescent, 424 fertility rites, 263 fig tree, cursed, 179 Firstborn appointed heir, 245, 258, 391, 398, 400, 409, 445, 447, 451,454 birthright, 123, 218, 253, 269, 391, 442 blessings, 400 consecration, 215 inheritance rights, 447 natural, 207, 208, 229, 230, 258, 398, 401, 445, 447, 454, 455 redemption, 215 fission, 72 fissures, 311, 335, 340 Flood 1,656 years from creation, 53, 105, 120, 245, 249, 251, 261, 304, 388 120-year warning, 265, 266, 307 150-day period, 101, 324, 325, 326, 327, 332, 337, 338 about 2345 BC, 304, 305, 327, 330, 336, 350, 365, 390, 392, 393, 405, 416, 422, 436, 438, 445, 455, 456 advance, 326 Aquifers aquifers, 311, 324, 335 freshwater, 371 underground water reservoirs, 311, 338 boulder transport, 338 Catastrophic Tectonic Failure, 311, 528 continental breakup continental drift, 341, 361, 420, 421 crustal plates, 17, 39, 41, 70, 286, 309, 311, 312, 335, 336, 337, 339, 341, 361, 362 Pangaea, 39, 40 rift valleys, 339 Rodinia, 39 seafloor spreading, 74, 341, 420 single continent, 279, 340, 341, 529 subduction, 312, 339, 341 uplift, 336, 337 currents, 284, 316, 317, 318, 319, 320, 325, 327, 335, 337, 341 date, 307, 308 date, relative to Noah, 307 deposits ash, 328 calcium, 329 chalk, 329 deposits, 329, 338 salt domes, 329 vegetation, 45, 258, 319, 325, 328

earthquakes, 258, 279, 284, 299, 302, 311, 319, 324, 335, 336, 337, 338, 339, 357 extinctions, 136, 279, 300, 323, 327, 347, 354, 365, 529 extinctions, supposed 60M years, 323, 346, 347 extinctions, supposed extraterrestrial causation, 323, 327 floating vegetation, 284, 317, 325 flood-advance, 325, 337, 338 floodwaters, 119, 246, 249, 251, 265, 279, 281, 284, 285, 288, 297, 298, 300, 309, 312, 315, 316, 318, 320, 322, 324, 326, 336, 338, 339, 341 forty-day period, 312, 313 fountains of the deep, 210, 311, 320, 330, 336 geological changes, 300 geological evidence, 330, 331 geological formations, 45, 158, 320, 329, 330, 337, 339 geological processes, 339 geological trends, 39, 340 hovering Spirit, 334 hydrothermal eruptions, 339 kataklusmos, 285 large waves, 279 local flood theory, 1, 40, 157, 285, 299, 319, 320, 322, 323, 324, 327, 328, 331, 456 mabbul, 285 maximum, 324, 325, 529 mesas, 339 migration inland, 298 oceans depth, 40, 286, 320 formation, 286, 312, 319, 320, 327, 335, 336, 341 recession, air currents, 335 recession, earth drying, 343 retreat, 189, 280, 281, 286, 299, 317, 324, 325, 326, 335, 336, 337, 338 runoff, 338 scavenging, 319 sediments currents, 317, 320, 327, 338 lack of evidence of vegetation between layers, 324 salt, 325, 329 salt flats, 363 sandstone, 339 seabed, 325, 338 sedimentary rock, 17, 45, 113, 282, 286, 304, 317, 318, 319, 320, 321, 322, 325, 327, 328, 330, 336, 338, 339 sediments, 18, 45, 234, 313, 316, 317, 318, 319, 320, 321, 324, 325, 326, 327, 328, 329, 330, 338, 339, 340, 343, 344, 365 silt, 316, 322 strata, 62, 113, 189, 247, 249, 285, 321, 324, 330, 338, 339 tracks, 318, 319

seven-day delay, 296, 297 seven-day intervals, 342 seven-day notice, 296, 297 trigger, 248, 309, 311, 312, 335 'un-creation', 312 vertebrate remains, 343 week of grace, 296, 351, 528 worldwide, 286, 299 worldwide catastrophe, 285, 317, 354, 356 year's since, 210, 248, 282, 323, 346, 350, 351, 388, 393 flukes, 62 foraging, 76, 318, 364, 393 foreordination, 153, 283, 296 forged implements, 210, 232, 235 Forgiveness available, 91, 169, 172, 288, 297, 394 given, 197 not sought, 166, 224, 226 required, 255 shedding of blood required, 212 sought, 254, 308 fortune-tellers, 47 Fossils age, 89 Archaeopteryx, 62, 324 Australopithecus, 75, 76 bone beds, 317, 318, 319, 324 bone pieces, 76, 348 bone ridge, 391 Cambrian Explosion, 3, 320, 321, 431, 528 Cambrian rocks, 320, 321 chimplike, 76 clams, 328 crinoid. 319 Cro-Magnon, 209 footprints animal, 317, 318, 319, 325, 326, 327 bird, 324 dinosaur, 317, 318, 320, 325, 528 human, 266 formation today, 327 fossil-laden sediment, 338 fossils, 3, 17, 18, 39, 41, 44, 45, 54, 55, 62, 68, 69, 70, 75, 76, 89, 189, 249, 266, 269, 282, 286, 289, 303, 317, 318, 319, 320, 321, 322, 323, 324, 325, 327, 328, 330, 336, 338, 339, 340, 346, 347, 348, 350, 357, 359, 362, 365, 371, 391, 392, 431 Hominidae, 137 Homo erectus, 407, 419, 437 Homo floresiensis, 407 Homo habilis, 407 Homo Naledi, 76 Homo sapiens, 1, 266, 392, 419, 421, 435, 437 Homo species, 407 ichthyosaur, 327

index fossils, 18 Lucy, 76 Olduvai Gorge, 76 petrification, 330, 362 polystrate, 324, 328, 330 proto-bird, 62 pterodactyl, 347 Rodhocetus, 62 silica mineralization, 330 soft tissue, 18, 348 strata, 39, 336, 340 fracking, 370 Francophone, 430 Frankenstein, 242 Franklin Expedition, 190 fratricide, 219 free will, 24, 111, 131, 132, 133, 164, 165, 182, 183, 335, 349 friction, 54 fruit-bearing, 41 fruitful and multiply, 88, 123, 163, 166, 178, 184, 187, 209, 236, 242, 261, 349, 359, 369, 370, 384, 399 fruitful and multiply, animals, 345, 377 fruits, 88, 187, 201, 212, 269, 374, 440 fulgurites, 18 fungi, 110 —G— Galaxies extra-solar systems, 51 galactic dust, 456 galaxies, 12, 15, 28, 32, 38, 46, 48, 49, 50, 52, 55, 56, 57, 58, 59, 65, 75, 89, 189, 193, 208, 359 galaxy-clusters, 52, 61, 208 interstellar clouds, 51 Milky Way, 55, 75 NGC 7319, 52 NGC 7603, 52 spiral galaxy, 52, 193 Galilee, 184 gallbladder, 107 Garden of Eden climate, 114 Garden of Eden, 34, 40, 55, 89, 104, 105, 113, 118, 120, 125, 135, 147, 163, 187, 191, 201, 202, 203, 206, 211, 214, 215, 224, 227, 228, 230, 251, 254, 258, 263, 270, 282, 303, 312, 325, 331, 337, 372, 384, 388, 403, 410, 429, 456, 524 geographic features, 119, 136, 312 geographic names, 119, 424 geology, 118 God walked in, 95, 167, 168 garments, 169, 195, 198, 199, 200, 210, 344 gas chambers, 381 gas, force of, 50 Gaul, 410, 411 Gauls, 31

Gaw, 250 Gaza, 418 gender, 83, 84, 523, 526 gender-inclusive, 84, 85, 523, 526 gender-neutral, 84, 85 gene-editing, 244 genes, 43, 44, 65, 67, 71, 73, 141, 146, 149, 189, 190, 205, 244, 345, 427, 434, 435, 448 genes, recessive, 434 Genetic cloning, 244 complexity, 67, 70, 346, 455, 522, 523 modification, 190 re-engineering, 195 traits, 71, 83, 168 variety, 70, 345, 346, 407, 419, 434 geniuses, 192, 244 genocide, 87, 163, 171, 173, 189, 205, 219, 275, 298, 382, 401, 402, 406 genome, 65, 69, 70, 73, 89, 92, 146, 187, 189, 190, 208, 242, 255, 266, 302, 310, 345, 346, 359, 371, 437, 448 Genomic Decay encoding errors, 195 extinction, 63, 190, 360 genetic decay, 18, 55, 91, 189, 190, 191, 193, 195, 244, 245, 449, 525 genotype, 346, 390, 391, 419 geographic zones, 41 geography, 17, 40, 113, 118, 119, 120, 194, 228, 320, 382, 420 geo-political relevance of Genesis account, 417 Germanic peoples, 31, 445 Giants fascination, 266 giants, 266 gigantes, 266 legends, 266 Nephilim, 266 translation confusion, 266 Gibraltar, 391, 404, 411, 413 Gihon, 118, 119 Gilgamesh, 280, 281, 307, 331, 415, 442 Glacier National Park, 366 global catastrophe, never again, 357 Global cooling 1645 to 1715, 366 Time magazine, April 1977, 367 Global warming anthropogenic, 358, 361, 366, 367 global warming, 356, 358, 361, 366, 367, 529 morality, 367 gluons, 20, 63, 92 glyphs, 241 Gnosticism, 8, 30, 77, 106, 198 Gobi Desert, 361, 363 god, el, 229

God-particle, 15 God's attributes aseity, 9, 13, 14, 23, 26, 41, 77, 103, 108, 153 changeless, 269 communicator, 24, 61, 65 converting grace, 174 converting power, 384 covenant-keeper, 238 covenant-love, 349 creative, 123, 142 creator, 7, 53, 89, 94, 102, 124, 135, 149, 175, 191, 208, 238, 293, 294, 298, 302, 344, 399, 400, 408, 426, 436 creator and sovereign, 14, 125 creator of life, 21 creator of universe, 8, 11, 13, 15, 16, 23, 34, 38, 44, 48, 54, 57, 74, 89, 93, 122, 165, 172, 188, 260, 456 divine nature, 6, 59, 200, 243 divine will, 116 Elohim, 22, 102, 103 eternal plans and purposes, 24, 37, 108, 132, 165, 167, 178, 224, 283, 356, 439 eternal word, 333 eternality, 12, 13, 21, 23, 24, 42, 77, 90, 108, 153, 182, 256 foreknowledge, 23, 182, 223, 268 holiness, 98, 165, 202 I Am, 14, 103 immutability, 61, 91, 125 intelligent designer, 41, 72, 88, 280 lawgiver, 93, 94, 124, 130, 160, 174, 226, 399 morally good, 27, 30, 165 omnipotence, 6, 46, 108, 165, 184, 200 omnipresence, 61, 113 omniscience, 14, 23, 42, 48, 77, 81, 108, 140, 155, 170, 172, 176, 184, 221, 223, 226, 332, 386 pre-existent information, 42 providence, 14, 75, 82, 100, 103, 105, 116, 121, 132, 140, 147, 175, 209, 225, 252, 275, 283, 298, 303, 332, 334, 335, 344, 400, 420, 430, 435, 441, 442, 449.452 providence, timing of events, 246, 249, 344 regret, 269, 270 saving grace, 172 self-attesting, 402 self-revelation, 25, 149, 171, 354 sovereignty, 9, 49, 94, 115, 118, 124, 130, 132, 133, 153, 176, 183, 186, 191, 204, 218, 219, 238, 240, 243, 260, 293, 300, 303, 320, 322, 344, 400, 406, 408, 417, 419, 426, 427, 436, 457 spirit being, 21, 22 steadfast love, 171 superhuman, more than, 224 sustainer, 46, 89, 102, 120, 400, 402, 408 transcendence, 6, 9, 25, 98, 191, 200, 228, 238

trinity, 5, 14, 21, 22, 23, 24, 61, 74, 82, 97, 98, 99, 118, 135, 140, 192, 199, 250, 287, 326, 357, 430, 457, 521, 523 trustworthiness, 9 truthful, 8, 158, 282, 354, 355, 438 Golgotha, 389 Gomerians, 410 Gomer-land, 410 Gomorrah, 96, 263, 315, 403, 405, 413, 424, 450, 453 Good Samaritan laws, 221 good, why it exists, 171 Goshen, 119 governments, 86, 88, 117, 121, 125, 126, 127, 130, 138, 139, 140, 143, 145, 152, 175, 177, 195, 231, 240, 261, 264, 271, 275, 290, 309, 353, 356, 367, 369, 373, 378, 380, 415, 428, 436, 453, 524 government-subsidized health care, 353 GPS, 6, 11, 56, 57, 340 Grace general (common), 78, 91, 192, 229, 240, 262, 264, 267, 314, 355, 373, 388, 408, 439, 440, 531 grace, 116, 205, 291, 524 kingdom of, 118 special, 439 Grand Canyon, 17, 327, 328, 330, 338 graphemes, 241 gravity, 6, 10, 19, 20, 24, 28, 48, 50, 52, 55, 56, 57, 60, 61, 64, 279, 281, 310, 327, 397, 456 gravity waves, 456 Great Basin, 363 Greece, 12, 63, 91, 92, 234, 263, 408, 411, 422, 427 Greek demigods Titans, 266, 446 Greek gods Gaia, 9, 445, 446 Hera, 355, 445 Hercules, 333, 341, 404, 411, 445 Hermes, 445 Kronos, 412 Naphtuhim, 445 Olympians, 266, 355, 445 Poseidon, 445 Prometheus, 242 Zeus, 355, 445 Greeks, 7, 12, 31, 47, 49, 111, 148, 268, 279, 355, 401, 407, 411, 412, 425, 445 greenhouse gasses, 361, 367 Greenland, 39, 281, 331, 340, 361, 366, 393, 412, 422 Greenland, faming 1300 AD, 366 Greenwich meridian, 248 growth stimuli, 40, 109 Guadalupe River, 338 guilt, 147, 149, 166, 167, 168, 169, 170, 172, 173, 174, 175, 176, 178, 202, 204, 205, 206, 211, 220, 229, 243, 355, 381 Gulf of Guinea, 412, 413

Gulf Stream, 364 -H-H. pylori, 73 H1N1, 354 H2O, 65, 80 Hadron Collider, 15 Hague Convention, 383 Hamazi, 433 Hamites, 411, 417, 421, 436 Hao, 423 Haran, 53, 442, 443, 449, 450, 451, 453, 454, 455 Havilah, 118, 119, 238 Haywain Triptych, 215 heart of man needs changing, 349, 396 heart of man needs changing, cleansing outward only, 275, 386 heart rate, 217 heaven, 9, 11, 21, 26, 31, 77, 114, 115, 122, 155, 167, 180, 182, 184, 192, 202, 203, 204, 212, 222, 228, 252, 256, 280, 285, 286, 295, 297, 298, 299, 307, 311, 313, 320, 332, 384, 387, 390, 394, 396, 400, 403, 407, 409, 416, 426, 428, 429, 430, 433, 440 heavenly choirs, 140 heavens, 7, 11, 12, 14, 18, 19, 23, 27, 30, 35, 38, 39, 48, 89, 101, 104, 109, 114, 121, 149, 153, 156, 178, 189, 197, 250, 269, 284, 311, 312, 324, 333, 357, 372, 387, 414, 429 Hedypatheia, 268 helium, 18, 50 hell, 7, 11, 26, 31, 134, 135, 153, 155, 164, 177, 192, 203, 215, 219, 228, 262, 271, 283, 294, 295, 297, 298, 300, 301, 378, 440, 528, 529 Hellas, 411 Hellenistic, 398, 444 Hellenization, 408 Hellespont, 411 helper fit for husband, 140, 141, 144, 161, 174, 185, 272 helpers together, 140, 524 hemoglobin, 72, 89, 423 Herakleion, 422 heritable traits, 70, 71 hermaphroditism, 83 Higgs boson, 15, 20 Higgs-like particle, 15 Himalayan Mountains, 320, 336, 338, 341 Hindu, 15, 21, 333 Hinduism, 12, 27, 185, 199, 200, 238, 240, 261, 373, 376, 427 hippopotamuses, 62, 347, 363 Hit, Iraq, 426 Hittites, 286, 386, 413 Holiness ceremonial, 99 definition, 355 endorsed by Jesus, 99 everlasting, 99, 256, 323, 428

forsaken, 203 scorned in Church, 99 to be displayed by believers, 32, 99, 253, 254, 273, 309, 441 Hollywood, 333 Holy Spirit, 6, 15, 22, 23, 37, 77, 99, 100, 103, 109, 118, 132, 134, 144, 152, 164, 169, 178, 183, 206, 212, 215, 217, 226, 239, 254, 255, 258, 259, 264, 275, 290, 293, 295, 301, 313, 334, 335, 350, 384, 403, 404, 407, 425, 441, 447 homchirality, 72 homeostasis, 11, 40, 109 hominoids, 76, 225, 229, 391 Homo Faber, 78, 523, 526 homogeneity, 50 homosexuality, 73, 83, 126, 127, 128, 140, 145, 146, 177, 207, 218, 232, 263, 274, 275, 276, 292, 360, 388, 397, 398 Hope after flood, 337 confident, 257, 258 expressed in naming, 257 faith engendered, 254 false, 55, 65, 75, 193, 257, 317 for everlasting life, 258, 385 for future, 171, 197, 198, 203, 284, 290, 385 found in God's word, 16 hope, 55, 81, 197, 202, 205, 230, 236, 237, 241, 243, 245, 253, 256, 257, 258, 272, 288, 306, 345, 349, 388, 403, 457 in bodily resurrection, 257 in everlasting paradise, 172 in God, 213, 220, 230, 257, 307 in God's promises, 207 in Jesus, 200, 211, 252, 253, 457 in midst of curse, 188, 197, 288 natural, 257, 306, 439 none for future, 197, 274, 439 of Gospel, 315 persevere, 188 renewed, 172, 332 sign, 251, 252, 260, 268, 288 source, 233 what is ours, 257 hormones, 69, 107, 448 horses, 66, 76, 214, 271, 288, 365, 372, 393, 413 Horseshoe Falls, 365 humanoid, 260, 390 Humans dominion mandate, 78, 85, 368, 371, 372, 523, 529 duality, 111 humans, 25, 69, 137, 198, 234, 392 image-bearers of God, 23, 25, 30, 36, 59, 62, 74, 77, 78, 80, 81, 82, 83, 85, 86, 87, 90, 106, 108, 109, 118, 127, 135, 138, 140, 143, 149, 156, 168, 172,

193, 203, 204, 223, 233, 234, 235, 240, 241, 243, 245, 255, 270, 349, 378, 382, 407, 414, 429 image-bearers of God, communicator, 25 interbreeding, 70, 392, 419 noble creation, 130 not lump of cells, 382 sub-sovereigns, 14, 89, 93, 121, 159, 287, 288, 290, 296, 303, 371, 372, 395, 415 hunting-gathering, 81, 209, 228, 230, 394, 438 Hutus, 381 hybrids, 41, 70, 195, 244, 266, 288 hydrocarbons, 359 hydrodynamics, 327 hydrogen, 21, 50, 64, 65, 107 hydrogen sulfide, 65 hydrological cycle, 38, 39, 44, 57, 88, 105, 388 hydrology, 3 Iapetus, 410, 445 Ice Age 1816 AD, year without summer, 362 aerosols, 362, 363 albedo effect. 362 atmospheric 'pollutants', 366 atmospheric cooling, 362 atmospheric dust, 366 atmospheric moisture, 361 atmospheric ozone layer, 359 climate conditions, 360, 361, 364, 365, 366 conductive cooling, 364 continent-wide, 350, 361, 366, 393, 422 convection cycle, 364 deep freeze (1650 BC), 360, 364, 365, 366 extinctions hunted, 360 mammals, 365, 367 mammoths, 324, 360, 361, 364, 365, 366, 529 recent, 69, 350 sudden, 360 glaciers, 90, 299, 321, 336, 339, 340, 361, 362, 363, 364, 365, 366, 367, 393, 422 glaciers, depth, 366 Holocence, 421 ice age, 41, 48, 60, 61, 69, 70, 299, 323, 336, 339, 346, 347, 350, 351, 360, 361, 362, 363, 364, 365, 366, 367, 393, 415, 421, 422, 456, 529, 531 ice dam, 360 ice-sheet, 367 interglacial periods, claim, 365, 421 legends aboriginal peoples, 366, 422 mammoths, 360, 361, 364, 365, 366, 529 mastodons, 360, 365 melt-off, 361, 363, 366, 367 migration, 366 moraines, 336, 366 oceans

cooling, 336, 361, 362, 363, 364, 365, 366, 367 currents, 363 depth, 361 frozen, 366 snow, 362, 363, 364, 424 recession, 365, 366, 367 sabre-toothed tigers, 365 saltwater, 364 sea level, 422 summers, 362, 415, 529 vegetation, 362 vegetative cover missing, 362 vegetative material missing, 362 winters, 361, 362, 363, 364, 366 world population estimate, 439 ice-core, 361 Iceland, 362, 393 Idolatry gods, 5, 8, 21, 22, 23, 39, 46, 47, 63, 77, 91, 92, 94, 96, 102, 103, 152, 162, 171, 174, 200, 201, 229, 262, 274, 276, 310, 331, 353, 355, 358, 380, 400, 402, 404, 409, 426, 430, 433, 439, 440, 445, 451 idolatry, 27, 83, 91, 127, 160, 162, 163, 199, 200, 211, 213, 214, 274, 275, 379, 403, 439, 441, 442, 450, 453, 454, 526 idols, 125, 147, 153, 160, 162, 191, 234, 274, 322, 377, 400, 403, 449, 453 self-worship, 200 igneous rocks, 17, 320 iguanas, 351 images, 200 imam, 356 immortality, 21, 81, 106, 108, 109, 110, 133, 163, 172, 187, 189, 190, 191, 196, 197, 201, 205, 206, 209, 384, 430, 446, 448, 524 immortality, repair of body faster than decay, 448 immune system, 11, 24, 89, 107 imperialism, 59, 406, 409, 414, 428 imprecation, 398 in vitro fertilization, 146, 242, 243 Inanna, 47 inbreeding, 229, 303 Inca, 347, 422 incest, 145, 263, 379, 434 incisors, 188 indigenous peoples, 331, 422, 434 Indo-European, 417, 423, 432 Indus River, 437 Industrial activity, 361, 367 age, 281 economy, 232, 261 processes, 438 techniques, 234 inertia, 7 infanticide, sex selected, 87, 261

infertility, 147 inherit the earth, 418, 450 inorganic, 17, 41, 188, 328 instantons, 20 integumentary system, 107 Intelligent Design Complex, Specified Information, 43, 522 designer, 36, 69, 89, 93, 138, 345 designer. God, 68 irreducibly complex, 65, 68 into the Ark, 292, 528 intoxication, 275 intracytoplasmic, 146 Inuit, 233, 419 Ionian, 411 ionizing, 49 IQ, 80, 81 Iran, 339, 404, 410, 411, 416, 417, 424 Iraq, 119, 413, 415, 416, 417, 426 Ireland, colonization in 1448 BC, 250 Irish monk, 412 Iron Age, 233, 281, 425, 438, 451 iron implements, 232, 234, 235, 278, 413 Iroquois, 49, 365, 366 irresponsibility, curse/cult of, 176, 177, 178 irrigation, 420, 425, 438 Ishtar, 47 Islam, 12, 91, 92, 103, 127, 145, 185, 200, 217, 222, 238, 240, 261, 264, 292, 333, 360, 373, 418, 430 isotopes, 17, 56, 60, 247, 304, 348, 426, 438 Iyapeti, 410, 413 —J— Jah-hu, 250 Japhethites, 406, 407, 411 Jasher, 314, 444 Javan, 401, 408, 410, 411 jealousy, 151, 154, 171, 180, 191, 208, 232 Jebusites, 405 Jehovah's Witnesses, 12, 108, 200, 387 Jericho, 306, 401 Jerusalem, 53, 54, 114, 121, 123, 181, 231, 237, 269, 303, 306, 309, 315, 377, 405, 428, 445 Jesus Christ antitype of Noah, 253 covered by his blood, 174 firstborn or Mary, 215 firstborn, without blemish, 215 forgives, 186 fulfilled the law, 115 God-man, 9, 26, 37, 75, 77, 95, 134, 143, 167, 168, 180, 181, 192, 240, 252, 256, 270, 271, 297, 357, 385, 386, 442, 454 incarnation, 12, 32, 35, 77, 152, 167, 181, 182, 184, 192, 454, 457 messiah, 178

messianic king, 181, 194, 207, 291, 306, 379, 404, 408, 409, 410, 441, 525 not a second Adam, last Adam, 396, 403 paid debt of sin, 93, 177, 186, 211, 442 redeemer, 100, 120, 126, 167, 172, 182, 196, 200, 206, 208, 216, 236, 237, 245, 253, 270, 271, 292, 333, 375, 435 saviour, 58, 94, 109, 149, 182, 211, 233, 238, 297, 305, 355, 391, 457 shed blood, 103, 150, 167, 205, 212, 222, 268, 374, 375, 389, 396, 439 soteriology, 157 tends his garden, spiritual, 396 virgin conception, 1, 34, 54, 90, 157, 178, 181, 183, 260, 326, 456 Joktanites, 405, 420 joule-seconds, 48 Jubilees, 314 judgement from God, 123, 129, 134, 167, 170, 173, 174, 178, 179, 181, 194, 203, 222, 227, 235, 246, 249, 251, 252, 254, 258, 259, 261, 264, 265, 266, 271, 272, 276, 282, 283, 284, 286, 288, 291, 294, 297, 298, 300, 301, 307, 308, 313, 315, 320, 322, 345, 351, 352, 354, 357, 360, 377, 385, 387, 388, 414, 428, 436, 439 Juno, 445 jurisprudence, 173, 227 justified by faith, 272 —K kangaroos, 350, 351 Karina, 331 Kellog-Briand Pact, 383 Khittae, 413 Khmer Rouge, 381 kidnapping, 434 kidneys, 107, 187, 215 kilns, 254, 425 kilogram, 139, 277 Kinds animals, 37, 41, 59, 66, 69, 70, 81, 82, 101, 135, 188, 271, 281, 284, 288, 289, 295, 296, 303, 423, 522 animals, to ark, 340 ceremonially clean, 353 genus, 41 in ark, 136, 279, 288, 289, 296, 394 interbreeding, 41, 70, 288, 346 not species, 70, 281, 288, 289, 346 plants, 41, 351 post-flood distribution, 351 kinesins, 69 king-lists, 444 Kittim, 411 koala, 351 Krishna, 128 Krypton-86, 277 Kurds, 401

-Llabour, 46, 87, 93, 96, 97, 98, 99, 114, 121, 122, 185, 195, 202, 210, 224, 232, 278, 289, 291, 293, 297, 308, 309, 316, 357, 369 Lake Bonneville, 363 Lake Chad, 363 Lake Erie, 363 Lama, 250 Languages Aramaic, 417, 419, 423 Bantu, 432 causative, 432 cognates, 103, 138, 197, 423 complexity, 138, 418, 431, 530, 531 desiderative, 432 grammars, 25, 85, 138, 431, 432, 434 Hindi, 432 inchoative, 432 infinitives, 432 injunctive, 432 languages, 3, 14, 24, 25, 36, 58, 76, 80, 81, 85, 87, 103, 137, 138, 139, 143, 174, 197, 203, 209, 210, 241, 242, 260, 269, 286, 334, 335, 349, 386, 390, 392, 393, 401, 404, 406, 407, 413, 415, 416, 417, 419, 420, 421, 422, 423, 426, 427, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 444, 445, 455, 524, 531 Latin, 12, 103, 278, 419, 423, 432 mature appeared suddenly, 423 monogenesis, 423 pronouns, 84, 523, 526 proto-human, 431 proto-language, 423, 431 proto-Semitic, 138, 197, 423 Sanskrit, 280, 331, 432 Semitic, 98, 229 syllabic, 434 vocabulary, 423, 432 vocabulary influences thought, 434 West-Semitic, 119 Laurentian Plateau, 320 lava, 17, 188, 330, 339, 362 Law of God antediluvian ordinances, 368 ceremonial law, 377 commandments, 4, 24, 34, 35, 91, 97, 125, 126, 127, 128, 129, 133, 157, 162, 163, 214, 215, 218, 290, 367, 368, 373, 377, 381, 389, 397, 428, 457, 524 creation ordinances, 97, 125, 128, 129, 132, 174, 368 defiance of, 230, 275, 414, 427 eternal, 126, 163 God's tribunal, 173, 174, 265, 525 law to be obeyed universally, 4, 9, 66, 86, 88, 93, 99, 118, 124, 125, 126, 127, 128, 130, 131, 132, 134, 140, 145, 146, 152, 158, 159, 162, 165, 170, 173, 174, 175, 176, 195, 200, 205, 207, 212, 217, 219,

232, 254, 269, 276, 285, 290, 291, 292, 333, 367, 368, 378, 380, 381, 383, 384, 403, 409, 414, 427, 430, 457, 524 moral Law, 127, 291, 292, 367, 368, 377, 524 Mosaic Law, 31, 148 New World Constitution, 367, 529 talion, 236, 378, 381 law of non-contradiction, 13 laws necessary, 226 laziness, 176, 202, 216 Legends ancestor worship, 446 based on Genesis, 431, 445 claim about Bible, 1, 37, 38, 262, 285, 456 fountain of youth, 109 Norse, 266, 281, 331, 355, 412, 445 Sumer creation myth, Ninmah, 77 legislators responsible to God's law, 130, 145, 157, 378 lemur-like, 10 leptons, 92 lesbians, 146, 185 Levirate, 232 Light electromagnetic spectrum, 19, 20, 24, 27, 64, 277 gamma ray energy, 52 light, 27, 28, 30, 47, 55, 56, 521 light wave, 42 light-bearers, 27, 28, 46, 60 propagation through ether, 51 quantum, 27, 48 speed decline, 28 speed, 3, 28, 29, 49, 51, 56 UV, 49 waves and particles, 27 limestone, 319, 329, 338, 391 lions, 365 lipids, 69 Literary techniques acrostics, 117, 333 allegory, 106, 333, 344 alliteration, 333 chiasm, 101, 102, 104, 117, 333, 334 hyperbole, 34, 320, 333 idiom, 98, 104, 131, 133, 148, 333, 357 merism, 312 metaphor, 2, 9, 19, 27, 33, 34, 37, 137, 143, 179, 181, 228, 249, 254, 255, 308, 333, 420, 455 metonymy, 161, 166, 215, 333, 420, 423 parables, 170, 333 textual parallels, 101 thought parallels, 117 wordplays, 47, 117, 143, 197, 333, 401, 421, 423 liver, 107, 215 livestock, 66, 178, 187, 232, 239, 278, 288, 322 Living being

animating principle, 62, 106, 109, 110, 242, 284, 384 beings, 54, 63, 64, 74, 101, 107, 110, 189, 199, 334 chawa, 197 chaya, 197 corporeality, 167 creature, 22, 40, 54, 62, 63, 65, 88, 89, 110, 131, 133, 189, 193, 285, 455 nephesh, 106 swarming, 62, 65, 322, 346, 348, 439 lizards, 351 llamas, 66, 288, 303, 346, 351 Lo-han, 433 long life, millennium, 251, 254, 257, 271, 395, 396, 439, 448 Lord's Supper, 14, 136, 201, 202, 213, 375, 388, 389, 390 Lo-shan, 433 luck, 196, 300, 353 Lusu, 250 -M-M. genitalium, 65 Madai, 410, 411 Magi, 10, 47 Magna Carta, 172 Magnetic field, 18, 48, 52, 359, 371 force. 18 rocks, 39, 340 magnetosphere, 189, 193 Mahabalipuram, 422 Mahalalel, 250, 253 Malay Peninsula, 393 malediction, 194 mammals, 33, 66, 136, 317, 321, 322, 365, 366, 367 manufactured items, durability, 79, 108 manuscripts, 447 Marriage brother-sister, 145, 229, 245 consanguinity, 229 intermarriage, 4, 263, 434 marriage, 4, 83, 84, 97, 126, 127, 128, 130, 135, 140, 141, 142, 143, 144, 145, 146, 147, 148, 177, 185, 187, 209, 229, 231, 232, 240, 242, 259, 261, 262, 263, 264, 267, 268, 274, 293, 309, 368, 369, 379, 389, 390, 434, 435, 437, 447, 455, 524 monogamous, 145, 231 remarriage, 231 marshes, 57, 120, 415 marsupials, 66, 72, 303, 351 martyrdom, 220, 222 Maslow's hierarchy, 191 material stimuli, 76 materialism, 5, 6, 8, 9, 10, 12, 17, 18, 19, 22, 29, 36, 42, 45, 49, 50, 52, 53, 55, 61, 63, 76, 78, 82, 86, 91, 110, 111, 113, 171, 186, 193, 196, 200, 261, 276, 309, 311, 327, 350, 351, 359, 402, 427, 448, 456, 457 **Mathematics**

algorithms, 42, 61, 108 arithmetic, 36, 81, 134, 191 associative, 36, 134 commutative, 36 concepts, 36, 81 distributive, 36 equations, 20, 36, 61 Fibonacci sequence, 61 logarithmic scales, 444, 448 mathematics, 15, 16, 20, 26, 35, 36, 60, 61, 62, 84, 191, 445, 521, 522, 523 not invention, 61 numbering system, Sumerian, 246 numbers abstraction, 6 binary, 25, 42, 43, 62 cardinal, 35 odd, 61 ordinals, 32, 35, 36 Roman numerals, 246 sexagesimal system, 246 symbolic, 408 universals, 13 pi, 61, 419 Pythagorean Theorem, 61 symbols, 42 terms, 36, 61 Mature creation creation, 17, 40, 41, 56, 57, 149 seed-bearing plants, 41, 56 Mayans, 304, 406, 422, 438 measurement standards, 277, 278 meat eating, 89, 214, 296, 368, 373, 374, 375, 376, 529, 530 megaliths, 421, 422, 425, 438 meiosis, 72, 345 meiotic, 346 melanosomes, 420 memorial, 98, 259, 307, 308, 323, 338, 443 Mennonites, 383 Mesay, 433 Mesoamerica, 348, 427 Mesolithic, 393 Mesopotamia, 8, 19, 46, 96, 113, 118, 209, 280, 322, 331, 339, 393, 404, 405, 411, 412, 413, 415, 416, 417, 420, 421, 424, 425, 427, 434, 436, 437, 438, 439, 442, 444, 453 metabolism, 10, 40, 68, 69, 72, 88, 109, 110, 187, 281, 289 metadata, 44, 67 metallurgy, 210, 234, 425 metals, 50, 86, 210, 232, 233, 371, 421 metamorphic, 320 metamorphosis, 72 metaphysics, 13 meteorological, 367

meteors, 49, 65, 328, 356, 361 meter, 139, 277 methane, 65, 323 Miao, 250, 331, 433 Miautso, 250, 331, 423, 433 mid-Atlantic ridge, 341 Midrashic, 444 Migration animals, 302 birds, 11, 302 butterfly, 92 migratory behaviour, 209 usual pattern, 364 mind and brain, 36, 76, 80, 81, 109, 110, 111, 112, 113, 191, 524 mineralization, 44, 330 miracles, 32, 47, 61, 67, 90, 142, 150, 152, 157, 204, 208, 260, 309, 310, 315, 335, 354, 397, 437, 452 misanthropes, 135 miscarriages, 185 missionaries, 24, 58, 59, 122, 265, 283, 394, 408 Mississippi River, 120 Moabites, 263, 405, 450 modernism, 58, 59 Molech, 402, 450 molecular, 19, 65, 67, 68, 71 molecules, 41, 44, 62, 64, 65, 67, 68, 69, 71, 72, 80, 82, 93, 107, 110, 111, 112, 208, 384, 435 monarchy, 118, 184, 399, 405, 428, 436, 437 monistic, 111 monkeys, 303 monotheism, 19, 47, 238 Moon 'blood' moons, 47 climate stabilizer, 60 earth's satellite, 60 moon, 2, 18, 36, 46, 48, 52, 54, 59, 60, 96, 105, 189, 223, 268, 310, 311, 426, 449, 453, 522 ocean currents, 60 orbit increased distance per year, 18 Pacific Ocean theory, 59 prevents earth's wobble, 60 moon-god cult, 453 Morality accountability, humans, 79, 85, 99, 112, 113, 125, 131, 141, 164, 165, 179, 233, 244, 269, 356, 524 accountability, machines, 177 biotechnologies, 243, 244 cloning, 244 goodness, 30, 90, 130, 153, 404 humans, moral beings, 29, 77, 108, 148, 159, 183, 187, 203, 234 innate sense, 171, 178, 236 lessons, 9 myths, 1, 34, 41, 45, 73, 91, 110, 124, 125, 126, 127, 134, 152, 159, 243, 275, 378, 379, 401, 427

not in Islam, 91 regulations, 1, 16, 24, 85, 91, 125, 127, 145, 157, 159, 165, 191, 226, 235, 243, 277, 291, 368, 378, 439 morphology, 66 mortality, 261, 429, 430, 448 mortar, 425, 426, 441 mosquitoes, 373 Mount Cameroon, 412 Mount Ebal, 295 Mount Gerizim, 295 Mount Kakulima, 412 Mt. Everest, 40, 319, 338 Mt. Hornaday, 330 Mt. Kilimanjaro, 361 multicellular, 40, 68, 69, 71, 72, 88, 321 multiverse, 11, 12, 15, 256, 311, 435 Murder blood vengeance, 380 bloodshed, 199, 221, 222, 224, 371, 382, 383, 384, 414 deterrent, 378 murder, 4, 73, 125, 126, 127, 128, 129, 130, 133, 153, 157, 159, 160, 163, 164, 165, 173, 177, 181, 189, 204, 207, 208, 216, 218, 219, 220, 221, 222, 224, 225, 226, 227, 229, 235, 236, 237, 251, 255, 263, 265, 276, 292, 333, 356, 368, 377, 378, 379, 380, 381, 382, 383, 384, 395, 397, 435, 530 premeditated, 219, 377 sex-selective, 261 muscle tightening, 217 musculoskeletal, 107 musicians, 42, 210, 239 Muski, 411 Muskovi, 411 Musku, 411 Muslims, 58, 305, 377, 381, 418 **Mutations** cosmic radiation, 448 information loss, 70, 189, 190, 346 mutations, 18, 44, 70, 71, 72, 75, 138, 149, 189, 190, 198, 229, 244, 311, 323, 345, 448 mysticism, 177, 424 mythology, 5, 8, 9, 10, 11, 12, 17, 19, 33, 34, 38, 40, 45, 49, 51, 63, 65, 73, 77, 82, 90, 91, 99, 100, 106, 120, 122, 124, 130, 138, 141, 149, 151, 165, 171, 180, 196, 209, 239, 241, 246, 250, 256, 262, 266, 274, 275, 281, 298, 299, 305, 307, 323, 327, 329, 331, 333, 347, 352, 355, 403, 404, 406, 409, 410, 415, 423, 435, 436, 442, 444, 445, 446, 455, 456 -N-Nakedness nakedness, 114, 141, 147, 148, 151, 166, 169, 171, 172, 173, 198, 207, 212, 272, 395, 396, 397, 400, 455 symbolic of complete openness, 148 symbolic of shame, 213 names, symbolic representation, 137

naming, 31, 36, 136, 137, 138, 139, 143, 151, 182, 206, 237, 252, 253, 287, 386, 390, 391 narcissism, 200 Nationalism geographic or political associations, 429 nationalism, 406, 417, 430, 434, 440, 441 nation-states, 451 natural gas, 18, 45, 195, 370 Natural Law, 127 natural selection, 1, 2, 70, 71, 73, 138, 146, 171, 187, 189, 196, 311, 323, 346 naturalism, 2, 3, 6, 10, 16, 17, 21, 27, 28, 34, 35, 40, 48, 49, 50, 51, 53, 79, 193, 327, 423 Nazism, 381, 382, 402, 406, 428, 430 Neanderthals brain capacity, 391 cranial volume. average, 391 cranium, 391 neanderthalensis, 407 Neanderthals, 10, 76, 209, 225, 390, 391, 392, 405, 412, 419, 421, 437, 530 Negro Project, 406 nematodes, 65 Neo-Assyrian, 437 Neo-Babylon, 228, 411, 427, 428, 437 Neo-catastrophists, 328 Neolithic Age, 209 Nephilim supposed giants, 262, 266 translation of nephilim, 4, 266 tyrants, 262, 265, 266, 384, 409, 413, 414, 527 neurons, 65, 112, 113 neutrinos, 57 neutrons, 20, 50 new creation, 7, 9, 15, 24, 28, 45, 81, 189, 211, 254, 323, 333, 334, 359, 387, 435, 448 New Guinea, 393, 438 New Plymouth Colony, 252, 352 Nga-shur, 433 Niagara Escarpment, 365 Niagara Falls, 365 Niagara Gorge, years to form, 365 Nicaea, Council of, 12 nihilism, 48, 152, 228 Nile, 363, 405, 412, 413, 437 Nineveh, 313, 403, 415, 426 Nippur, 415 nitrogen, 43, 48, 107 Noah, type for saviour, 245, 259 Noahide laws, 4 Noah's Ark animal bedding, 279, 289 animal geographic distribution, 303 animals, two of each kind, 281, 345 animals, two of each kind (25,000 pairs), 279 barge-like, 278, 279, 332, 343

building, 156, 252, 258, 259, 265, 274, 279, 283, 285, 287, 289, 293, 294, 295, 301, 302, 306, 315 capacity, 279 capsize, not, 279, 316, 332 dimensions, 278 entry, 306, 528 exit, 344, 529 floated, 315, 528 fraud discovery, 340 ingenuity of design, 280 largest single structure of the age, 291 location Durupinar, 339 location of construction, 312 location post flood, 340 provisioning, 289, 290 rested on mountains, 337, 338, 339, 529 safety, 210, 284, 527 seaworthiness, 281 sign, 281, 527 specifications, 278, 527 substantiality, 280, 527 suitableness, 279, 527 symbolism, 283, 527 symbolizes Christ, 283 waterproof, 278, 279, 280, 315, 338 withstand large waves, 279, 316 Noah's holiness, 272 Noah's piety, 254, 272, 273, 285 Noah's righteousness, 272, 273 Noah's total obedience, 292, 301 Nod land of nothing, 226, 227, 228, 229, 230, 238, 424, 526 symbolic of man's state, 228 Non-literal interpretations Analogical Days, 34 day-age, 3, 33 Days of Revelation or Divine Fiat, 34 Eden-Only, 34 Expanding/Slowing Time, 33 Focus on Palestine/Temple, 34 gap-theory, 3, 33, 309, 528 harmonizing views, 33 Literary Framework, 33 non-harmonizing, 33 poetry, 33 pre-existing matter, 8, 38, 45, 91 pre-existing mind or force, 12, 13 symbolic account, 75, 258, 399 symbolic ages, 246 North Pole, 277 Nu (Noah), 446 Nuah (Noah), 250 Nuclear force, 48, 63 holocaust, 354, 356

reactions, 51 reactor. 359 nucleic acids, 69 -0-Occam's razor, 60 Oceans currents, 21, 335 salt, 279 Odin, 445 Odyssev, 410 oil, 18, 45, 86, 359, 370, 373, 426 oil reserves. 370 Olancha, 234 ontological, 5, 8, 11 oocytes, 261 Oort Cloud, 52 open theism, 132, 223, 268, 335, 349 OpenWorm, 65 opiates, 195 oral tradition, 241 oral transmission, 138, 241, 406, 431, 442, 451 Orbits dust. 51 earth, 52, 361 galaxies, 50 moon, 18, 60 planets, 10, 48, 51, 60, 61 satellites, 56 spaceship, 112 Organs body, 107 development, not evolution, 72, 83 durability, 108 genital, 166, 262 transplant, 197 orgies, 263, 402 original sin, 45, 82, 148, 163, 164, 201, 207, 218, 228, 284, 286, 312, 324, 456 Osiris, 445 ovarian, 83, 146, 147 ovaries, 243 ovulation, 148 ovum, 209, 244 oxidizing, 196 oxygen, 21, 48, 60, 89, 107, 321, 323 -Ppacifism, 382, 383, 384 Paganism animism, 29, 238 celestial deities, 47, 426 cosmic deities, 46 female deities, 263 national deities, 453 paganism, 5, 21, 22, 23, 27, 29, 33, 39, 46, 59, 91, 97, 100, 110, 117, 134, 185, 238, 262, 269, 285, 291,

353, 355, 372, 386, 394, 409, 415, 418, 427, 436, 443, 449, 451, 453, 457 pain, 89, 109, 122, 142, 168, 169, 184, 185, 186, 187, 188, 191, 193, 194, 195, 208, 209, 217, 245, 257, 258, 270, 298, 356, 373, 396, 397, 403, 525 Paleolithic, 209, 210 paleontology, 1, 53, 76, 209, 239, 317, 318, 323, 347, 348 Palestine, 34, 246, 398, 401, 404, 408, 411, 412, 413, 418, 437, 442, 443, 454 Pandora, 355 pangender, 83 P'an-Ku, sun god, 266 pantheism, 12, 15, 21, 27, 91, 373, 427 pantheons, 29, 46, 47, 96, 171, 355, 415, 423, 425, 426, 427, 430, 431, 440, 445 papyrus, 242 paradise, 44, 45, 55, 79, 89, 102, 105, 109, 114, 120, 121, 122, 135, 139, 140, 147, 148, 149, 162, 167, 168, 172, 181, 182, 186, 189, 192, 195, 202, 205, 209, 211, 240, 254, 257, 269, 270, 288, 298, 301, 306, 313, 333, 357, 372, 385, 387, 396, 408, 425, 430, 441, 456 parallax, 52 parasites, 65, 72 Parthenon, 30, 279, 425 Passover, 201, 374, 389 paternalism, 290, 350 patience, God's, 264, 265, 267, 283, 382, 444 patriarchs, 23, 34, 46, 53, 55, 89, 102, 103, 126, 127, 128, 171, 189, 214, 227, 230, 231, 235, 237, 238, 239, 241, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 256, 258, 259, 260, 261, 295, 347, 355, 384, 396, 399, 400, 406, 410, 416, 417, 418, 439, 442, 443, 444, 446, 447, 448, 449, 451, 452, 453, 454, 455, 527 patriarchy, 225, 232, 261, 296, 352, 400, 402 patrilineal, 261 Pavlopetri, 422 peccaries, 365 pederasty, 263, 264 Pelegites, 420 Pentateuch, 8, 19, 34, 102, 194, 377, 405, 450, 454 Pentecost, 401, 440 Pentecostal, 423 Peor, 397, 450 permafrost, 364, 365, 366 persecution, 181, 184, 207, 222, 354, 383, 417 Persia, 47, 92, 118, 119, 128, 242, 354, 393, 408, 411, 416, 419, 427, 428, 437, 444, 445 PETA, 373, 376 petroleum, 280 Pharaohs, 219, 222, 224, 304, 354 Pharisees, 379 phenomenological, 2, 286 phenotypes, 73, 87, 189, 190, 205, 260, 346, 390, 406, 407, 418, 430, 434, 435, 440 Philistines, 405, 413 Phoenicians, 341, 398, 405, 411, 412, 413, 421, 422

phosphate, 43, 107, 371, 372 phosphorus, 107 photons, 27, 51, 277 photosynthesis, 47, 48, 67, 88, 89 phyla, 72, 321, 431 phytoplankton, 329 Pilgrims, 352 Pillars of Hercules, 341, 411 Piri Reis Map, 363 Pisces, 387 Pishon Pihon, 119 Pishon, 118, 119 Pison, 119 pitch, 278, 280, 281, 332, 339, 343, 425 placental, 66, 72 Planck's constant, 277 Planets asteroids, 48, 67, 311, 323, 324, 327 cosmic 'vacuum cleaners', 48 Earth axis, 31, 420 axis tilt, 21, 31, 46, 48, 60, 304, 420, 445 axis tilt, else frozen, 48 axis wobble duration, 304 axis wobble/precession, 304 crust, 248, 317, 319, 320, 325, 329, 334, 336, 341, 361, 362 half-life magnetic field decay, 18, 330 mantle, 311, 319, 334, 336, 341 precession of axis, 304 rotation, 7, 21, 31, 60, 358 rotation speed, 299 solstices, 46, 47 unformed, 19, 23, 156 young, 10, 17, 282, 521 Jupiter, 48, 52, 60 Jupiter & Venus, 96 Mars, 48, 59, 60, 193 Mercury, 52 moons, 10, 47, 51, 60, 355 orbits, 51 planetary, 31, 47, 48, 50, 52, 59, 60, 90, 189 planetoid, 60 planets, 3, 10, 15, 18, 19, 28, 35, 46, 48, 49, 51, 57, 59, 60, 61, 65, 87, 88, 89, 90, 91, 96, 192, 193, 223, 233, 234, 246, 283, 358, 359, 387, 426 retrograde motion, 51, 60 revolution, 46, 59, 60, 61, 96, 305 rotation, 51, 358 Saturn, 48, 59, 92 Uranus, 51 Venus, 48, 51, 60 plasma, 19, 20 Plum Creek, 365 pluralism, 91, 124, 125, 126

pollination, 33, 41, 72 pollution, 370 polonium, 248 polygamy, 145, 146, 207, 218, 231, 232, 235, 255, 263, 264, 275, 455, 526 polygenesis, 423, 431 polytheism, 8, 21, 23, 91, 238, 414, 439, 449, 453, 454 Popol Vuh, 422 Population Bomb, 87, 370, 529, 530 population multiplication, 87, 260, 261, 523, 527 pornography, 154, 264 Portuguese explorer, 412 Post-flood re-creation, 334 re-habitation, 343 topography, 336 vegetation, 316, 325, 335, 343, 344, 351, 394 vegetation, succulent growth, 364 Post-flood migration animals, 350, 351 barriers, 424 darker skinned, 419, 420, 435 from Caphtor, 413 from Middle East, 24, 233, 391, 392, 404, 413, 417, 419, 421, 422, 430, 437, 438, 445 from single point, 391 genetic segregation, 419 genotype, 435 geographic distribution, 420 geographic origin, 419 homogenous groups, 419, 438 Recent Out of Africa theory, 419 repopulation, 259, 273, 279, 299, 337, 351, 384, 390, 392, 393 resisted, 425, 427, 430, 431 to Australia, 393 to China, 393 to China, before 1600 BC, 393 to Nordic areas, 410 to South Pacific, 404, 413, 421, 422 travel by ship, 393, 422 vegetation, 351 world-wide dispersal, 237, 242, 281, 304, 331, 362, 366, 390, 392, 393, 404, 406, 407, 412, 413, 416, 418, 419, 421, 422, 424, 426, 427, 431, 437, 438, 440, 441, 451, 530, 531 world-wide dispersal, directed by God, 419, 434, 438, 439 postmodernism, 30 potassium, 17, 247 pre-born babies, 382 Precambrian, 320, 321 precipitation, 361, 362, 363, 365, 367, 415, 424, 529 pre-Columbian Mesoamerica, 348 predestination, 24, 132, 164, 165, 175, 182, 183, 193, 219, 223

Pre-flood audience, early portion of Genesis, 120, 239 climate, 44, 45, 228, 306, 366 river valleys, 120 topography, 40, 44 pregnancy, 209, 244, 371 pre-hominoids, 1, 75, 76, 190, 392, 432 prejudice, 73, 205, 260, 390, 406, 434, 435, 440, 531 presuppositions, 5, 15, 16, 27, 32, 48, 53, 61, 74, 80, 157, 304, 323, 328, 346, 349, 357, 402, 438, 457, 525 pride, 158, 217, 355, 435 primates, 75 primordial Eve, 141 Primordial Existential Question, 13 Primordial state earth, 18, 19, 39 life, 62 matter, 13 primeval environment, 12, 64 primordial state, 18, 521 sea, 8, 19 private sins, none, 160 problem of induction, 5, 79, 80, 358 procreation, 62, 83, 144, 147, 185, 196, 242, 245, 261, 264, 275, 452 prodigies, 81, 244 profane, 42, 98, 99, 394 profanity, 161, 276 Promised Land, 450 prophecy, 26, 48, 74, 118, 137, 181, 182, 184, 194, 208, 213, 239, 245, 252, 253, 254, 257, 258, 259, 266, 293, 297, 306, 308, 309, 312, 313, 338, 352, 354, 391, 397, 398, 399, 400, 401, 402, 403, 405, 406, 409, 415, 420, 443, 448 prophets, 9, 26, 38, 47, 114, 124, 152, 156, 184, 211, 213, 214, 219, 222, 227, 253, 255, 264, 352, 354, 377, 403, 408, 436, 450 prostitution, 229, 263, 379, 397, 398, 402, 427, 435, 453 proteins, 18, 44, 64, 65, 68, 69, 72, 88, 141, 208, 345, 348 Protestants, 24, 77, 194, 212 protons, 20, 50 protoplasm, 68 protozoa, 143, 373 Psalmists, 3, 26, 90, 108, 170, 294, 332, 402, 457 pseudo-science, 16, 17, 521 psychiatry, 175 psychoanalysis, 13 psychology, 1, 16, 84, 112, 134, 141, 142, 144, 145, 147, 148, 157, 158, 166, 167, 168, 170, 183, 186, 191, 196, 205, 217, 221, 224, 234, 290, 309, 456 Psychomachia, 344 psychopathy, 129, 157, 164, 414, 435 puerperal fever, 74 pulmonary embolism, 108 Punic Wars, 399 Puritans, 206, 252

pygmy chimpanzees, 76 **Pyramids** 12th Dynasty, 445 apex stone, 445 Giza, 78 pyramids, 78, 234, 278, 304, 421, 425, 445 -Qqantum mechanics, 182, 223 quaking bogs, 44 quantum mechanical wave-particle duality, 310 quantum states, 24, 182 quantum wrinkle, 9, 12, 15, 46, 92 quark-gluon, 19 quarks, 20, 92, 208 quartzite, 338 quasars, 50, 51, 52, 56 questioning God, 1, 156, 249, 251, 298, 402, 455, 456 Quetzelcoatlus, 347 Quiche, 422 Qur'an, 26, 27, 91, 183, 184, 333, 356 —R rabbinical tradition, 454 rabbis, 22, 231 race, 237, 407 radiation, 17, 39, 49, 50, 55, 71, 189, 196, 247, 277, 323, 364.448 radioactive, 18, 29, 48, 57, 247, 248, 311 radiohalos, 248 radioisotopes, 3, 17, 245, 247, 248, 249 rafts, 44, 45, 351 rain, 9, 39, 44, 57, 88, 104, 105, 120, 148, 262, 282, 284, 298, 299, 300, 306, 307, 308, 309, 311, 312, 313, 314, 316, 324, 326, 327, 329, 332, 335, 337, 341, 342, 344, 363, 364, 388, 528, 529 rainbow, 201, 274, 375, 385, 386, 387, 388, 389, 390, 530 rape, 73, 164, 165, 189, 217, 275, 276, 379, 397 rationalization defending false beliefs, 17, 35, 106, 285, 299 rationalization for sinning, 134, 156, 159, 160, 175, 177, 292, 302, 395 raven, 101, 326, 342 Rayonnant Rose window, 30 rebellion, 87, 91, 108, 151, 153, 155, 169, 180, 196, 198, 203, 220, 287, 322, 388, 430, 439 rebirth. 206 recreation, 216, 359 Red Sea crossing, 335, 411, 412 seabed, 335 redactor, 405 redshift, 52, 56 reefs, 330 Reformation, 2, 24, 77, 212, 215, 228, 383 Rehoboth-Ir, 415 rejuvenation, 109, 197, 344, 452 relativity, 2, 3, 6, 15, 28, 56, 57, 64, 92, 310

religions, 7, 8, 9, 12, 16, 17, 27, 29, 33, 38, 39, 46, 47, 49, 76, 77, 79, 82, 86, 94, 96, 102, 103, 129, 134, 140, 152, 156, 164, 165, 170, 174, 176, 178, 181, 185, 199, 200, 221, 228, 229, 230, 231, 238, 240, 264, 276, 291, 360, 373, 376, 403, 409, 414, 416, 417, 423, 426, 427, 430, 431, 434, 436, 439, 440, 531 religious, 8, 9, 16, 17, 21, 27, 46, 47, 49, 76, 86, 87, 97, 127, 129, 143, 156, 166, 177, 183, 184, 196, 209, 215, 229, 230, 238, 263, 268, 296, 306, 307, 309, 322, 333, 338, 347, 372, 374, 376, 392, 397, 398, 402, 406, 415, 418, 419, 426, 428, 430, 432, 436, 437, 438, 441, 451, 453 remorse, 226 Remus, 404 Renaissance, 148, 154 repentance, 24, 75, 91, 93, 120, 126, 128, 132, 133, 166, 169, 174, 175, 178, 181, 182, 194, 196, 197, 200, 201, 202, 203, 204, 208, 215, 217, 218, 219, 220, 224, 225, 226, 227, 243, 253, 256, 259, 262, 265, 268, 272, 276, 282, 283, 290, 297, 298, 300, 301, 306, 313, 350, 373, 381, 382, 385, 387, 397, 402, 440, 451, 457 reprobates, 226, 228 reproduction, 40, 41, 63, 66, 68, 69, 72, 81, 83, 89, 92, 107, 109, 146, 147, 187, 196, 209, 222, 264, 346, 369, 385, 420 reproduction, responsibility, 368 reproductive technologies, 146, 243, 525, 527 reptiles, 33, 35, 62, 66, 72, 150, 179, 288, 317, 321, 322 Resen, 415 reservoirs, 38, 311, 338 resin, 278, 280, 425 respiration, 54 respiratory system, 107 responsibility for sin, 152, 153, 164, 174, 177, 178, 360 responsibility for sin, Adam, 115, 164 responsibility, care for animals, 285, 290, 296, 380 responsibility, denial of, 109, 129, 152, 172, 175, 176, 177, 178, 187, 205, 206, 220, 221, 226, 373 responsibility, mutual, 221 responsibility, personal, 86, 112, 130, 131, 132, 161, 175, 178, 202, 205, 224, 257, 300, 334, 335 restitution, 126, 205 resurrection, 1, 21, 32, 34, 55, 77, 90, 94, 97, 98, 99, 107, 109, 133, 153, 157, 167, 172, 180, 181, 184, 187, 188, 192, 197, 209, 252, 256, 260, 265, 267, 274, 275, 326, 385, 387, 396, 456 retirement, 121, 127 retribution, 225, 236, 271, 322, 378, 402, 441 revelation from God, 1, 4, 8, 9, 14, 16, 22, 23, 25, 26, 42, 74, 79, 96, 102, 128, 143, 152, 156, 157, 167, 169, 173, 183, 184, 200, 210, 211, 214, 218, 227, 238, 239, 258, 267, 293, 301, 354, 438, 440 revival, 360, 380 rhinoceroses, 86, 360, 370 Rhodes, 411 Riau, 434

rib, 141, 142, 149, 208 ribosomal. 68 rickets, 420 righteousness, 117, 169, 174, 199, 203, 207, 211, 239, 243, 254, 255, 256, 264, 272, 273, 274, 283, 284, 285, 287, 290, 292, 293, 298, 306, 322, 357, 383, 403 rights mentality, 202 riots, 369 rivers, 40, 44, 55, 56, 57, 86, 105, 113, 118, 119, 120, 121, 209, 228, 238, 312, 338, 343, 363, 393, 415, 417, 421, 422, 424, 426 robotics, 107, 124 Rocky Mountains, 320, 339, 362 Rodanim, 411 Roe effect, 88 role-hierarchy, 185 Roman census, 118, 183 Roman emperors, 222 Roman Empire, 344, 398 Roman era, 383, 422 Roman feasts, 123 Roman gods Fortuna, 38, 427 goddess, 38 Jupiter, 445 Mars & Mercury, 96 Neptune, 445 Saturn, 96 Uranus, 445, 446 Venus, 47 Roman laws, 173 Roman occupation of Judea, 401 Roman officials, 268, 381 Roman participation in death of Jesus, 181 Roman records, 363 Roman society, 148 Roman torture, cross, 118, 317 Romana, 275 Romania, 411 Romanovs, 198 Rome, 78, 87, 118, 230, 234, 263, 275, 305, 370, 398, 427, 428, 437 Romulus, 404 Rosetta Stone, 411 rubidium, 248 —S— Sabbath God rested, 4, 37, 96, 97, 149 sabat, 95 sabata, 308 sabbath, 95, 97, 297, 345, 399 Sabbath, 3, 4, 9, 34, 35, 37, 95, 96, 97, 98, 99, 114, 115, 122, 125, 128, 129, 143, 163, 168, 193, 201, 207, 211, 220, 221, 237, 297, 300, 307, 308, 309, 313, 326, 337, 342, 343, 345, 351, 352, 353, 368, 379, 389, 390, 523

sabbathed, 97 Sabbath-keeping, 97 seventh-day, 308 symbolic dimensions, 98 tribute of time, 295 Sabtah, 412 sackcloth, 123, 269 Sacraments sacraments, 9, 387, 388 signs/seals, 115, 201, 388 Sacrifices bloodless, 375, 389 bloody, 376, 377, 395 ceremonial, 66, 199, 272, 288, 295, 296, 353, 389 firstborn, 211, 214, 215, 217, 374, 526 lamb, 103, 214, 308, 374, 396 sacrifices, 89, 91, 114, 130, 147, 173, 199, 202, 210, 211, 212, 214, 215, 218, 224, 228, 238, 240, 244, 251, 254, 259, 272, 285, 294, 295, 296, 308, 314, 333, 342, 351, 352, 353, 357, 368, 374, 375, 376, 377, 386, 389, 395, 396, 399, 402, 427, 430, 457 symbolic of atonement, 352 tribute payment, 211, 295, 352, 353 Sahul, 393 salamanders, 348 salivary glands, 107 Salt composition of bodies, 107 preservative, 289, 307, 315 salvation, 22, 24, 26, 30, 93, 114, 117, 165, 193, 211, 216, 258, 262, 272, 283, 292, 293, 295, 308, 314, 320, 345, 351, 352, 397, 403, 408, 409, 439, 441 Samaritan Pentateuch, 454 Same-sex 'love'. 146 couples, 145, 146 relations, 135, 145 sanctuary, 59, 113, 114, 120, 121, 220 Sardinia, 411, 413 SARS, 354 Satan accuser, 151 punishment of, 179 Satanic, 262 satellite images, 120 satellites, GPS, 6, 56, 57 savant, 81, 191 saws, 278 Scandinavia, 39, 91, 340 Scarborough Bluffs, 365 scavenger, 342 scepter, symbolic of permanence, 117 scepticism, 5, 7, 37, 96, 158, 184, 234, 289, 297, 308, 337, 419, 443 science, 16, 29, 73, 74, 75, 92, 112, 113, 198, 310, 311, 318, 324, 349, 359, 392, 435, 521

scientism, 17, 33, 200, 228, 456 scientists, 10, 20, 21, 25, 27, 50, 64, 73, 74, 198, 324, 366, 407, 448 scientists, prejudices, 10 scientists, specialized, 10 Screwtape (from C. S. Lewis' book), 154 scribal schools, 241 Scripture breathed, 26, 407 inerrant, 3, 246, 454 self-authenticating, 25, 521 Scythians, 410 seafaring peoples, 405, 412, 421 seamount, 330 Seasons seasons, 357, 529 solar cycles, 358 solar year, 211, 254, 326 seawater, 311, 312, 317, 321, 329, 350 sebaceous glands, 107 second Adam, Noah, 288, 302, 357, 369, 386, 395, 396, 403 second-born child, 207, 409 sedges, 364 self-control, 394 self-righteous acts, 170 self-sacrifice, difficult to explain, 171 Semites, 239 senescence, 44, 196 sentient, 13, 95, 124 Serengeti, 419 serpents, 140, 150, 151, 152, 153, 154, 159, 174, 175, 176, 178, 179, 180, 188, 193, 203, 205, 219, 220, 224, 289, 347, 525 Se-teh. 250 Sethites, 237 SETI, 62, 75, 193 sex, 82, 83, 84, 107, 123, 140, 141, 143, 144, 146, 166, 240, 261, 264, 269, 275, 292, 382, 455 sexes, 78, 82, 83, 84, 86, 106, 140, 141, 143, 185, 240, 261.523 sexual deviance, 145, 263, 264, 275, 360, 450 sexual immorality, 73, 144, 145, 252, 263, 264, 275, 377, 397, 527 Sevchelles, 351, 393 shale, 45, 339, 359, 370 Shangri-La, 120, 372 sharia, 127, 292 Shemites, 401, 407, 409, 416, 417, 418, 436, 443, 531 Shetland Islands, 393, 419 Shinar, 24, 233, 242, 339, 392, 393, 415, 416, 420, 421, 423, 424, 425, 426, 431, 432, 434, 436, 438, 442, 531 shinbone, 412 Shintoism, 200 Siberia, 360, 361, 364, 365 Sidon, 96, 405, 411, 413

sign for Cain, 227 Sikhism, 200, 238 simian, 209 single-celled organisms, 68, 72, 321 single-mother households, 240 Six-Day Creation 24-hour days, 1, 2, 31, 32, 33, 34, 35, 37, 38, 45, 90, 93, 94, 95, 103, 104, 149, 281 about 6,000 years ago, 1, 2, 3, 4, 9, 16, 17, 18, 28, 29, 33, 38, 46, 49, 52, 53, 54, 55, 56, 57, 58, 79, 90, 131, 149, 152, 157, 189, 198, 239, 247, 248, 260, 281, 304, 323, 359, 365, 446, 455, 456 accumulation rate of salts, 18 'and God said', 18, 24, 114, 178 Biblical timespans, 53 chronological sequence, 35, 37, 101, 104, 149, 189 creation from nothing, 8, 10, 12, 13, 15, 25, 27, 45, 46, 78, 149, 242, 456 creationists, 2 day beyom, 104 yom, 32, 104 daylight, 31, 32, 33 ex nihilo, 12, 13, 199, 521 hovering Spirit, 19, 21, 22, 23, 37, 334 six-day period, 1, 2, 3, 4, 12, 32, 33, 34, 35, 37, 49, 59, 69, 299, 334, 455, 456 Ussher's calculation, 4004 BC, 53, 260, 305 very good, 29, 40, 45, 79, 83, 86, 88, 89, 90, 91, 95, 97, 106, 135, 142, 148, 153, 160, 186, 187, 196, 289 waw-consecutive, 34, 35, 106, 161 skepticism, 457 skin, 108, 198, 420, 526 skins, symbolizing atonement, 182 slander, 178, 216 slave-master, 224 slavery, 77, 98, 152, 169, 174, 185, 218, 224, 266, 331, 395, 398, 401, 406, 413, 419, 434 sloths, 215, 216, 351, 360, 365 smelting, 210, 421, 438 snakes, 150, 151, 178, 179, 180, 181, 351 socialism, 373 socio-biology, 73 Sodom, 96, 263, 315, 403, 405, 413, 424, 450, 453 sodomy, 148, 379, 396, 397 Solar system created, 18 detritus, 19 geocentric view, 2 heliocentric view, 2 Ptolemaic model, 2 solar plane, 59 solar system, 2, 3, 31, 48, 51, 52, 59, 60, 65, 96, 192, 193, 310, 359 solvent, 49 space contains particles and waves, 13

space-time, 6, 7, 15, 22, 26, 27, 46, 56, 57, 63, 92, 256, 257, 360 space-time-energy-matter, 12, 13, 15, 27, 46, 63, 64, 79, 149, 522 space-velocity, 57 Spain, expulsion of Jews, 1492, 47 Species extinction, 149, 327, 370 species, 72, 76, 196, 308 subspecies, 70 sperm, 146, 147, 243, 262, 345, 448 spirit-body, 111, 113 Spirit-filled, 441 Spirit-led, 441 spirit-mind, 111 spiritually alive, 206 spiritually blind, 93 spiritually dead, 206, 454 squirrels, 373 stalactites, 338 stalagmites, 338 Star Trek, 85, 112 Starlight Anisotropic Synchrony, 56 necessity, 57 'problem', 28, 40, 52, 55, 56, 57, 58, 522 Relativistic Time Dilation, 57, 64, 522 Stars 6,000 light years distance, 55, 56 Alpha Centauri, 55 Betelgeuse, 52 binary star, 42, 52 clusters, 47 constellations constellations, 46, 47, 387 Ursa, 47 formation, 19, 45, 50 Ganymede, 52 gas giants, 48 giant, 49, 52 giant, red, 52 heavenly bodies, 250 heavenly movement, 2 heavenly objects, 11 heavenly phenomena, 47 heavenly spheres, 2 neutron, 18 number in universe, 55 quasi-stellar, 52 Sirius B, 52 SS 433, 52 stars, 3, 10, 15, 18, 27, 28, 32, 35, 38, 39, 40, 45, 46, 48, 49, 50, 52, 54, 55, 56, 57, 59, 63, 74, 89, 90, 93, 105, 136, 188, 189, 192, 223, 259, 311, 359, 426 supernovas, 55, 57, 323 statism, 369, 428, 436, 437

statistical probability, 16 stewardship, 24 Stone Age, 425, 438, 444 Stonehenge, 421, 425 strontium, 248 subatomic particles, 6 Sub-Sahara, 369 subterranean, 311 Subur, 433 Sudan, 404, 405, 412 sugar, 43, 72 suicide, 44, 47, 151, 163, 183, 368 sulfide, 65 sulphur, 329 Sumatra, 393 Sumer, 12, 39, 46, 77, 91, 92, 96, 138, 268, 406, 415, 427, 433, 449, 451 Sumerians, 21, 39, 46, 96, 102, 138, 141, 242, 246, 249, 260, 262, 263, 266, 268, 280, 304, 331, 355, 406, 415, 423, 427, 433, 436, 453 Sundaland, 393 sunlight, 67, 148, 186, 311, 329, 362, 364, 420, 435 superheroes, 333 superstitions, 39, 46, 47, 81, 91, 96, 191, 201, 353, 370, 394, 427, 443, 451 Surangama Sutras, 333 surrogate motherhood, 146, 147, 209, 452 Susa, 416 Sutras (Surangama), 333 suzerainty, 114, 286 symbiosis, 11, 56, 65, 72, 89, 93 Syria, 304, 417 —т— Tabernacle symbolic of God's presence, 211 tabernacle, 114, 199, 202, 203, 211, 291 tablets, clay or stone, 117, 126, 128, 241, 242, 292, 437, 457 tabula rasa, 137 Talmud, 4, 97, 414 Tamil, 432 tar, 426 tar sands, 359 Tarshish, 170, 405, 411 Tasmanian animal, 72 taxonomic classification, 65, 66, 288, 322, 346 Tayma, 437 tectonic equilibrium, 335, 336 tectonics, 1, 248, 279, 286, 299, 309, 311, 312, 317, 318, 319, 320, 324, 325, 335, 336, 337, 338, 339, 341, 364 teeth, 62, 76, 303, 348, 360, 365, 371 teleology, 5, 24, 48 teleportation, 112 temples, 25, 34, 53, 114, 202, 213, 237, 309, 322, 344, 348, 389, 412, 422, 423, 425, 426, 435, 440, 454

temporal, 11, 14, 15, 24, 27, 34, 35, 47, 64, 77, 89, 91, 98, 106, 134, 179, 186, 191, 195, 202, 204, 224, 225, 258, 260, 275, 284, 293, 301, 308, 313, 315, 325, 332, 358, 369, 384, 385, 388, 400, 401, 416, 428, 441 temporal-physical, 202 temporal-spatial, 11, 14, 15, 24, 27, 64, 89, 91, 134, 179, 186, 195, 204, 401 temptation, 130, 131, 146, 150, 151, 152, 153, 154, 155, 158, 159, 160, 161, 162, 175, 178, 179, 180, 181, 204, 206, 207, 208, 217, 219, 235, 237, 259, 261, 262, 263, 273, 295, 305, 313, 356, 394, 396, 525 tempter, 151, 155, 180, 182, 194, 197, 264 tents, 232, 239, 396, 401, 438, 456 Terra, 445 territorial, 399, 408 terrorism, 169, 217, 378, 385, 430 testicular tissue, 83 testosterone, 264 test-tube baby, 146 Teutonic, 445 Tezcatlipoca, 430 Thanksgiving Day, 352, 353, 399, 529 theft, 126, 128, 130, 160, 162, 163, 164, 204, 216, 219, 221.229Theia, 59 theocide, 133 theophanies, 167, 168 thermal conductivity, 49 thermal equilibrium, 50, 335, 336 thermodynamics, 7, 12, 55, 189, 359 thistles, 188, 194 Thor, 75, 333, 445 thorns, 186, 188, 194 Thrace, 411 three-dimensional space, 6, 20 three-dimensional universe, 310 Thunderbird, 347 thymus, 107 thyroid, 107 Tiamat, 19 tides, 48, 60, 317, 318, 320, 325, 327 Tierra del Fuego, 281, 331 tigers, 288 Tigras, 119 Tigris, 113, 119, 238, 413, 415, 416, 417, 424 Timaeus, 341 Time 30-day month, 326, 337 clocks, 6, 56, 57, 139 measured by Sun, moon, stars, 59 nanoseconds, 6, 56 time-bound, 6, 23, 24, 145, 159, 182 timeless existence, 6, 7, 109 time-measurement, 57 titanium, 60 tithes, 155, 211, 215, 352, 353

toledoths, 4, 99, 100, 104, 258, 442 Toltec legend, 422 tools, 76, 195, 209, 234, 278, 391, 392 topography, 1, 44, 120, 285, 319, 320, 325, 327, 336, 338, 529 tornados, 188, 258 tortoises, 448 totalitarianism, 261, 359, 383 trade winds, 335 trading, 209, 210, 232, 277, 403, 405, 431 trading posts, 412 Transcendence, movie, 112, 113 transcendental, 5, 6, 77 transfiguration, 256 transgenderism, 83, 84, 85 transhumanists, 110 transmutation, 310 trauma, 168, 169 treaties, 94, 117, 286, 287, 386, 389 Treaty of Tordesillas, 420 Tree of life more than symbolic, 201 Tree of Life, 115, 200, 526 tree of the knowledge of good and evil, 88, 113, 123, 125, 131, 132, 153, 154, 155, 163, 171, 174, 201, 206, 270, 294.395 tree ring samples, 330 Tribal allocations, 420 customs, 127 leader, 277 wars, 406, 440 tribes, 138, 242, 394, 398, 410, 411, 413, 416, 417, 430, 433, 438 Tripoli, 411 Trojan War, 446 tropical plants, 44, 350 tropical sunlight, 420, 435 tropical timber, 370 tropical zones, 306 Troy, 445 tsunami-force waves, 45 tsunamis, 279, 300, 309, 312, 313, 337 Tuisto, 445 tundra, 350, 360, 364, 366 tungsten, 60 Turkey, 118, 286, 340, 351, 410, 416, 417, 436 Tuscarora, 366 Tutsis, 381 Tvastar. 445 twins, suggested for Cain and Able, 207 typology, 48, 249, 325 tyranny, 124, 189, 194, 197, 233, 240, 247, 262, 271, 275, 367, 385, 408, 409, 414, 416 tyrants, 4, 200, 240, 262, 266, 267, 356, 384, 406, 409, 413, 414, 415, 417

Tyre, 96, 398, 405, 411 Tytea, 445 -U-Ugarit, 304 Ukraine, 410 unbelievers, 4, 23, 96, 109, 150, 186, 209, 219, 233, 234, 238, 263, 306, 315, 316 Unclean animals, 214, 288, 289, 295, 342 birds, 342 kinds, 302 persons, 202 uniformitarian geological model, 16, 34, 35, 234, 276, 285, 309, 311, 320, 328, 347, 358, 366 Unitarianism, 12 universals, 13, 36 Universe myth, eternal, 7, 8, 12, 15, 33, 90, 135, 435 myth, self-created, 11, 12, 13, 15, 46, 228, 435 origin question, 7, 13, 14, 110, 310 origin question, not force, 7 origin question, singularity, 19, 27, 28 universe, 11, 13, 15, 49, 50, 51, 172, 521, 522 unmarried, 144, 145, 405 unrepentant, 153, 175, 204, 271, 301, 357, 373 unrighteous, 217, 264, 283, 285, 293 unwed motherhood, 146 Ur, 375, 405, 424, 437, 439, 442, 449, 450, 451, 453, 457 Ur, population, 453 uranium, 17, 247, 248 urban settlements, 260, 370 Uri. 433 urinary system, 107, 187 Uruk, 415, 423 **USSR**, 428 utilitarian, 41, 122 utopia, 275 Utu, 46, 266 -vvacuum, 11, 13, 27, 29, 48, 74, 277 vault, 38 Vedas, 333 Vedic, 432, 445 veganism, 88, 373, 455 vegetable diet, 88, 210, 212, 214, 261, 269, 372, 374, 424 vegetarianism, 88, 89, 188, 289, 371, 374, 376 vegetative state, 110 veins, 107, 108 vendetta, 227, 380 Venus de Milo, 30 vertebra, 321 vesicles, 68 vestigial memory, 413, 437 vigilantism, 227, 271, 381 Vikings, 266, 413 vineyard, 210, 394, 395, 398

virtues, 344 viruses, 64, 65, 68, 69, 72, 110, 188, 189, 195, 323, 386, 406 vocal sounds, 36, 61, 423 vocalization and thought, 24 vocation, 394 Volcanoes ash, 328 caldera, 312, 330 dust, 361, 362, 363, 366 eruptions, 17, 321, 323, 324, 336, 339, 351, 361, 362 extinct, 311, 324 heating, 364 Hualalai, 17 Kaupelehu Flow, 17 Krakatoa, 351 magma, 311, 332, 335, 339, 341 Mount Pinatubo, 328 Mount St. Helens, 1980, 17, 330 Mt. Rangitoto, 17 Novarupta-Katmai, 17 ring of fire, 341 Tambora, 362 volcanoes, 17, 188, 189, 209, 258, 279, 284, 286, 299, 309, 311, 319, 324, 329, 330, 332, 335, 336, 337, 338, 339, 341, 361, 362, 364, 366, 412 volition, 6, 42, 111, 132, 160, 183, 223, 267, 270, 315, 335, 384, 435 vows, 389, 390 Vulpini, 70 -wwadis. 119 Wakinyan, 347 Waldensians, 383 Wallum-Olum, 331 war, justified, 267, 378, 382, 383, 384 warlords, 96 Week five-day, 96 seven-day, 95, 96, 97, 523 ten-day, 96 Welsh, 281, 331, 410, 412 Welshman, 410 Westminster Shorter Catechism, 14, 221, 234, 283, 353 whales, 62, 63, 72, 288, 322 White Rock Canyon, 347 wickedness, 29, 189, 206, 207, 216, 218, 220, 226, 229, 230, 235, 237, 250, 253, 254, 262, 264, 265, 267, 268, 269, 270, 272, 273, 274, 275, 276, 282, 283, 284, 288, 289, 290, 291, 293, 294, 297, 298, 313, 322, 337, 349, 356, 357, 368, 374, 381, 382, 386, 402, 431, 435, 444, 453 widows, 154 wind electrical generation, 359 wine, 56, 95, 103, 198, 268, 374, 375, 387, 388, 389, 394, 396, 397, 398

Wintu, 432 wives, 136, 185, 231, 232, 235, 240, 245, 251, 261, 262, 263, 264, 265, 266, 279, 287, 306, 314, 407, 432, 445, 449 wolves, 70, 81, 303, 346, 354, 365, 372 woman, 84, 129, 140, 143, 161, 179, 209, 382, 524 wombs, 136, 147, 208, 209, 242, 292, 378, 382, 402, 435, 452 works-based religions, 134 worldviews, 3, 5, 8, 12, 17, 29, 36, 39, 49, 55, 62, 63, 64, 66, 79, 233, 239, 358 wormhole, 256 Worship acceptable, 211, 526 Apostolic form, 213 false, 177 false tribute, 212, 224, 353 fruit of lips, 238 in Christ, 215 invocation, 211, 400 praise, 94, 159, 204, 334, 399, 400, 428 prayer, 135, 210, 211, 226, 238, 254, 255, 307, 316, 353, 381, 388, 399, 400, 457 prayer, vocalization false, 226 public, 237, 399, 526 regulated by God, 213, 214, 526 reverence, 9, 210, 212, 214, 215, 229, 267, 282, 302, 372, 384, 400, 446 thanksgiving, 94, 114, 120, 123, 165, 238, 240, 295, 308, 316, 342, 343, 352, 353, 373, 399, 400 unauthorized, 213, 220, 238 unauthorized individual, 213 worship of God, 44, 97, 121, 182, 201, 202, 206, 207, 210, 400, 417, 440, 526 worshipers, 212, 214, 267, 399, 450 Writing alphabet, 42, 241, 417, 423 cuneiform, 241, 242, 411, 423, 451 ideographic, 241 oral representation, 241 phonemes, 42, 241 phonetic, 241 pictograms, 42, 241 proto-writing, 241 re-created post Babel, 242 scripts, 241, 242, 345, 412, 417, 423 symbols, 25, 241 -Xxenophobic, 434 Xia, 437 —Y— Yahweh vahweh. 102 Yahweh, 102, 103, 104, 155, 237, 238, 293, 315, 399, 400, 524 **YHWH**, 102

Yangtze River, 331 Ymir, 266, 445 Yonaguni, 422 -Z-Zacualli, 433 Zargos Mountains, 339, 424 ziggurats, 423, 425, 426, 439, 453 Zika, 354 zodiac, 47, 426, 427 Zoroastrianism, 238 zygote, 10, 56, 242, 243

Passage Index

1-11	Literary Structures in Genesis 1-11 [March 19]
1-11	<u>A Proper Understanding of Genesis 1-11</u> is Important [December
	30]
1-11	The First Bible [December 31]
1.1	God Exists [January 1]
1.1	When Time Began [January 2]
1.1	<u>"God Created"</u> [January 3]
1.1	God, The Creator [January 4]
1.1	Wonders of Creation [January 5]
1.1	Creation Ex Nihilo? [January 7]
1.1	Tough Questions Answered [January 9]
1.1	Biblical Science vs Pseudo-Science [January 10]
1.1	Young Earth [January 11]
1.1	When Was the World Created? [February 9]
1.2	Primordial State of the Earth [January 12]
1.2	The Nature of Matter [January 13]
1.2	God is Spirit [January 14]
1.2	The Spirit of God and Hints of the Trinity [January 15]
1.2	God's Eternal Plan [January 16]
1.3	<u>"And God Said"</u> [January 17]
1.1-31	God Created the Universe [January 6]
1.1-31	Why God Created the Universe [January 8]
1.1-31	The Creation Account Referenced in the Rest of the Bible [January
	27]
1.1-31	The Wonder of the God of Creation [March 12]
1.1-31	"Worthy Are You, Our Lord and God" [March 13]
1.1-2.25	A Creation Manifesto [April 26]
1.3	God's Self-Authenticating Word [January 18]
1.3	Creation of Light [January 19]
1.3	Variable Speed Light [January 20]
1.4	The Good Creation [January 21]
1.4-5	Separation of Light from Darkness [January 22]
1.5	24-hour Creation Days [January 23]
1.5	Non-Historical Views of the Six Days of Creation [January 24]
1.5	<u>"For Six Days God Created"</u> [January 25]
1.5	<u>Counting and Mathematics</u> – From the Mind of God [January
1.0.0	26]
1.6-8	The Creation of the Atmosphere [January 28]
1.8	Non-Historical Views of the Six Days of Creation [January 24]
1.8	<u>"For Six Days God Created"</u> [January 25]
1.8	<u>Counting and Mathematics</u> – From the Mind of God [January
	26]

1.9-10	The Creation of the Land [January 29]
1.10	The Good Creation [January 21]
1.11-12	In the Beginning was Information [January 31]
1.11-12	DNA: Complex, Specified Information [February 1]
1.11-12	The Creation of Plants [January 30]
1.11-13	The Verdant Earth [February 2]
1.11-13	The Good Creation [January 2]
1.12	Non-Historical Views of the Six Days of Creation [January 24]
1.13	<u>"For Six Days God Created"</u> [January 25]
1.13	<u>Counting and Mathematics</u> – From the Mind of God [January
1.15	26]
1.14	Heavenly Signs [February 4]
1.14-18	God's Orderliness [February 13]
1.14-19	Measures of Time [February 3]
1.14-19	The Anthropic Principle [February 5]
1.14-19	The Young Universe (part 1 of 3) [February 6]
1.14-19	The Young Universe (part 2 of 3) [February 7]
1.14-19	The Young Universe (part 2 of 3) [February 7] The Young Universe (part 3 of 3) [February 8]
1.14-19	When Was the World Created? [February 9]
1.14-19	The Age of Earth and the Introduction of Death [February 10]
1.14-19	The 'Starlight Problem' [February 11]
1.14-19	Relativistic Time Dilation [February 12]
1.16	The Moon [February 14]
1.18	The Good Creation [January 21]
1.18	Laws of Nature Defined in Mathematics [February 15]
1.19	Non-Historical Views of the Six Days of Creation [January 24]
1.19	"For Six Days God Created" [January 25]
1.19	<u>Counting and Mathematics</u> – From the Mind of God [January
1.15	26]
1.20	STEM is Dead! [February 17]
1.20	Abiogenesis Mythology [February 18]
1.20-21	Genetic Code Complexity [February 20]
1.20-21	<u>Cellular 'Machines'</u> [February 21]
1.20-21	The Epigenetic Conundrum [February 23]
1.20-21	Evolution's Myths [February 24]
1.20-21	Evolution is Supported by Consensus, Not Evidence [February
	25]
1.20-23	The Creation of Sea and Air Animals [February 16]
1.20-25	Created Kinds [February 22]
1.21	The Good Creation [January 21]
1.23	Non-Historical Views of the Six Days of Creation [January 24]
1.23	"For Six Days God Created" [January 25]
1.23	Counting and Mathematics – From the Mind of God [January
	26]

1.24-25	The Creation of Land Animals [February 19]
1.24-25	Genetic Code Complexity [February 20]
1.24-25	Cellular 'Machines' [February 21]
1.24-25	The Epigenetic Conundrum [February 23]
1.24-25	Evolution's Myths [February 24]
1.24-25	Evolution is Supported by Consensus, Not Evidence [February
1.24 25	25]
1.25	The Good Creation [January 21]
1.26	The Spirit of God and Hints of the Trinity [January 15]
1.26	"And God Said" [January 17]
1.26	Genetic Code Complexity [February 20]
1.26	Cellular 'Machines' [February 21]
1.26	The Epigenetic Conundrum [February 23]
1.26	Evolution's Myths [February 24]
1.26	Evolution is Supported by Consensus, Not Evidence [February
1.26	Man's Dominion [March 7]
1.26-27	The Creation of Man [February 26]
1.26-27	Non-Ape Man [February 27]
1.26-27	The Image-Bearer of God [February 28]
1.26-27	Homo Faber [March 1]
1.26-27	Induction and Image [March 2]
1.26-27	How Smart was Adam? [March 3]
1.26-27	Mankind's Two Sexes [March 4]
1.26-27	Gender Roles [March 5]
1.26-27	Gender-Inclusive Pronouns [March 6]
1.27	The Spirit of God and Hints of the Trinity [January 15]
1.28	<u>"And God Said"</u> [January 17]
1.28	Man's Dominion [March 7]
1.28	Population Multiplication [March 8]
1.29-30	God's Provision of Food [March 9]
1.31	The Good Creation [January 21]
1.31	Non-Historical Views of the Six Days of Creation [January 24]
1.31	<u>"For Six Days God Created"</u> [January 25]
1.31	<u>Counting and Mathematics</u> – From the Mind of God [January
1.24	26]
1.31	Everything God Created Was Very Good [March 10]
1.31	God's Goodness Manifested in Creation [March 11]
2.1-2	The Seven-Day Week [March 15]
2.1-3	God Rested [March 14]
2.2	<u>Counting and Mathematics</u> – From the Mind of God [January
222	26] The Sabbath Instituted [Marsh 16]
2.2-3	The Sabbath Instituted [March 16]
2.3	Holiness [March 17]

2.4	Assembled Accounts [March 18]
2.4	The LORD God [March 20]
2.4	When Yahweh God Created [March 21]
2.5-6	Flashback – Preparing the World for Man in the Garden [March
2.5 0	22]
2.7	The Creation of Man [February 26]
2.7	Non-Ape Man [February 27]
2.7	Man is a Living Being [March 23]
2.7	Body of Wonder [March 24]
2.7	Immortality [March 25]
2.7	The Breath of Life [March 26]
2.7	Mind and Brain (part 1 of 2) [March 27]
2.7	Mind and Brain (part 2 of 2) [March 28]
2.8-9	The Garden of Eden [March 29]
2.9	The Covenant of Creation [March 30]
2.9	The Covenant of Creation is Founded on Grace [March 31]
2.9	Why God Uses Covenants [April 1]
2.10-14	Where was the Garden of Eden? [April 2]
2.10-14	<u>A River Flowed Out of Eden [April 3]</u>
2.15	Man was Created to Work [April 4]
2.16	God Provides Food for Mankind [April 5]
2.16-17	The Covenant of Creation [March 30]
2.16-17	The Covenant of Creation is Founded on Grace [March 31]
2.16-17	Why God Uses Covenants [April 1]
2.16-17	God, the Lawgiver [April 6]
2.16-17	The Universal Applicability of God's Law [April 7]
2.16-17	Implications of the Universal Applicability of God's Law [April 8]
2.16-17	Universal, Innate Knowledge of God's Moral Law [April 9]
2.16-17	Negative-Action Commands [April 10]
2.16-17	Obedience Test [April 11]
2.16-17	Man's Moral Responsibility [April 12]
2.17	The Threat of Death [April 13]
2.17	Causal Conditionals [April 14]
2.18	Man is Relational [April 15]
2.18-20	Man and Woman – Fit Helpers [April 19]
2.19-20a	Language Processing – a Precursor of Naming [April 17]
2.19-20a	Good Civil Government [April 18]
2.19-20	Naming the Animals [April 16]
2.21-22	Non-Ape Man [February 27]
2.21-22	The Creation of Man's Partner [April 20]
2.22b, 24	The Institution of Marriage [April 22]
2.23	Naming the Sex of Man's Partner [April 21]
2.24	God's Definition of Marriage [April 23]God's Definition of
	Marriage [April 23]

2.24	Reproductive Technologies [April 24]
2.25	The State of Innocence [April 25]
3	Judicial Procedure [June 10]
3	The Four States of Man [June 11]
3.1	Satan and the Serpent [April 27]
3.1	Satan [April 28]
3.1	The Origin of Evil [April 29]
3.1-5	Satan Tempts Eve [April 30]
3.1-5	Satan's Temptation Tactics [May 1]
3.1-5	God's Authoritative Word [May 2]
3.1-5	Empiricism vs Presuppositionalism [May 3]
3.1-5	Is vs Ought [May 4]
3.5-6	Desires of the Eyes [May 6]
3.6	Mankind's First Formal Sin [May 5]
3.6	Interconnected Sins [May 7]
3.6	Original Sin [May 8]
3.6	Why Did God Permit Man to Sin? [May 9]
3.7	Experiencing Guilt [May 10]
3.8	God Walked in His Garden [May 11]
3.8	Guilt Leads to Fear [May 12]
3.9	God Seeks for Man [May 13]
3.9	God Is Love [May 14]
3.10	Guilt Leads to Fear [May 12]
3.11	Innocent Until Proven Guilty [May 15]
3.11-13	Before God's Tribunal [May 16]
3.12-13	Blame Game [May 17]
3.12-13	The Cult of Irresponsibility [May 18]
3.12-13	The Cult of Irresponsibility – Its Consequences and Cure [May 19]
3.14-15	The Serpent's Punishment
3.14-15	Satan's Punishment [May 21]
3.14-19	Curses Replace Blessings [June 1]
3.15	Messianic Promise [May 22]
3.15	<u>"I Will"</u> [May 23]
3.15	Is the Bible True? [May 24]
3.16	Eve's Punishment [May 25]
3.16-17	The Problem of Pain [May 26]
3.17-19	Adam's Punishment [May 27]
3.17-19	Cursed Creation [May 28]
3.17-19	Genomic Decay [May 29]
3.17-19	Cursed by Limitations [May 30]
3.17-19	Is There Intelligent Alien Life? [May 31]
3.17-19	Countering the Curse on Creation [June 2]
3.19	Why Man Dies [June 3]
3.20	Eve, the Mother of All Living [June 4]

3.21	Garments of Skin [June 5]
3.22	Idolatry [June 6]
3.22	The Tree of Life [June 7]
3.23-24	Blessings of the Expulsion [June 8]
3.24	Angels [June 9]
4	God's Revelation to the Antediluvian World [July 8]
4.1	Conception is from the LORD [June 13]
4.1-2	Children Representing the Two Lines are Born [June 12]
4.2	Work Specialization and Development of an Economy [June 14]
4.3-4a	The Worship of God [June 15]
4.3-5a	Acceptable Worship [June 16]
4.3-5a	God Regulates Worship [June 17]
4.4	Fat from the Flock's Firstborn [June 18]
4.4-8	Envy and Its Children [June 19]
4.5-6	Anger [June 20]
4.5b-7	God Confronts Cain about his Sin [June 21]
4.8	Cain, the Murderer [June 22]
4.9-10a	Cain Denies Responsibility for His Brother [June 23]
4.10	God's Knowledge [June 25]
4.10-11	Blood's Cry [June 24]
4.11-12	The Unhappy Wanderer [June 26]
4.13-14	Cain's Protest [June 27]
4.15	Cain's Sign [June 28]
4.16	Cain Went to the Land of Nod [June 29]
4.17	Cain Built a City [July 1]
4.17-22	Cain's Family [June 30]
4.19	Polygamy Introduced [July 2]
4.20-22	Homo Faber [March 1]
4.20-22	Development of an Industrial Economy [July 3]
4.20-22	Human Creativity [July 4]
4.23-24	Lamech's Boast [July 5]
4.25-26	Establishing the Line of the Seed of Promise [July 6]
4.26	The Public Worship of God [July 7]
5	Lessons from the Genesis Genealogies [July 25]
5	The Dating Game [July 15]
5	God's Chronometer [July 16]
5	Extra-Biblical Support for the Genesis Genealogies [July 17]
5.1	The Creation of Man [February 26]
5.1	Non-Ape Man [February 27]
5.1	The Image-Bearer of God [February 28]
5.1	Homo Faber [March 1]
5.1	The Origin of Writing [July 10]
5.1-2	Gender-Inclusive Pronouns [March 6]
5.1-3	Reflection on the Creation of Mankind [July 9]

5.3	Transmission of God's Image [July 11]
5.3	Reproductive Biotechnologies [July 12]
5.3-32	From Adam to Noah's Sons [July 13]
5.3-32	Long-Lived Patriarchs [July 14]
5.3-32	Gospel Names [July 19]
5.5-27	Death Begins to Consume the Human Race [July 18]
5.22-24	Enoch, Contrasted with His Generation [July 21]
5.22-24	Enoch Walked with God [July 20]
5.24	Enoch's Translation, a Resurrection Promise [July 22]
5.28-29	Noah and His Sons [July 24]
5.29	Lamech's Prophecy [July 23]
5.32	Noah and His Sons [July 24]
6.1	Population Multiplication [July 26]
6.2	The Sons of God Took Wives [July 27]
6.2	Sexual Sins [July 28]
6.3	Bounded Patience [July 29]
6.4	The Tyrannical Nephilim [July 30]
6.5	Pervasive Perversion [July 31]
6.5	Gourmands Abounded [August 1]
6.6-7	God's Regret [August 2]
6.7	God's Determination to Judge the Earth [August 3]
6.8-9	Noah Found Favour with the LORD [August 4]
6.9-10	Noah's Generations [August 5]
6.11-12	Corruption Filled the Earth [August 6]
6.13	Pending Punishment Announced [August 7]
6.14-16	Noah's Ark – Specifications [August 9]
6.14-16	Noah's Ark – Suitableness [August 10]
6.14-16	Noah's Ark – Substantiality [August 11]
6.14-17	Noah's Ark – Symbolism [August 13]
6.14-17	Noah's Ark – Sign [August 12]
6.15	Measurement Standards [August 8]
6.17	Universal Judgement by Flood [August 15]
6.17-18	Noah's Ark – Safety [August 14]
6.18-19	God Announces the Covenant with Noah [August 16]
6.19-20	Two of Each Kind [August 17]
6.21	Provisioning Food for Consumption During the Flood [August 18]
6.22	Noah's Ark – Sign [August 12]
6.22	Noah's Obedience [August 19]
6.22	Noah's Radical Obedience [August 20]
6.22	Noah's Total Obedience [August 28]
7-8	Flood Chronology [September 17]
7-8	The Flood Fits the Facts – Geology [September 18]
7-8	Refuting 'Evidence' Presented Against the Flood (part 1 of 2)
	[September 19]

7-8	Refuting 'Evidence' Presented Against the Flood (part 2 of 2)
	[September 20]
7-8	The Flood Fits the Facts – Extra-Biblical Narrative Evidence
	[September 21]
7.1	<u>"Go into the Ark</u> " [August 21]
7.1-3	Reasons for Obedience [August 22]
7.2-3	Pairs of Clean Animals [August 23]
7.4	<u>A Week of</u> Grace [August 24]
7.4	Justice [August 25]
7.4	<u>A Worldwide Flood [</u> August 26]
7.4	<u>"Come Hell</u> or High Water" [August 27]
7.5	Noah's Total Obedience [August 28]
7.6	The Year of the Flood [August 30]
7.6	Noah was Six Hundred Years Old When the Flood Began [August
	31]
7.7	Noah Entered the Ark [September 1]
7.8-9	The Animals Went In, Two by Two [August 29]
7.9	Noah's Total Obedience [August 28]
7.10	<u>A Week of</u> Grace [August 24]
7.10	Justice [August 25]
7.10	<u>A Worldwide Flood [</u> August 26]
7.10	<u>"Come Hell</u> or High Water" [August 27]
7.10-11	World's End [September 3]
7.11	The Year of the Flood [August 30]
7.11	Noah was Six Hundred Years Old When the Flood Began [August 31]
7.11	<u>"On That Day"</u> [September 2]
7.11	<u>'God of the Gaps</u> ' [September 4]
7.11	Catastrophic Tectonic Failure [September 5]
7.12	Forty Days of Rain [September 6]
7.13	Noah Entered the Ark [September 1]
7.13	<u>"On That Day"</u> [September 2]
7.13	World's End [September 3]
7.13-16	Safely Stowed [September 7]
7.16	Noah's Total Obedience [August 28]
7.16	The LORD Shut Noah In [September 8]
7.17	Forty Days of Rain [September 6]
7.17	The Ark Floated [September 9]
7.17	Dinosaur Footprints [September 10]
7.17	Dinosaur Remains [September 11]
7.18-20	The Waters Prevailed Over the Earth [September 12]
7.18-22	The 'Cambrian Explosion' [September 13]
7.21-23	Total Obliteration
7.22	A Worldwide Flood [August 26]

7.22	<u>"Come Hell</u> or High Water" [August 27]
7.22-23	Dinosaur Extinction [September 15]
7.24	Flood-Maximum [September 16]
8.1	God Remembered Noah [September 22]
8.1	High Quality Literature [September 23]
8.1	Drying Wind [September 24]
8.2-3	When the Rains Stopped [September 25]
8.3	Earth's Topography was Shaped by Flood Events [September 27]
8.3-5	Milestones Marking the Flood's Retreat [September 26]
8.4	The Ark Rested on the Mountains of Ararat [September 28]
8.5	Earth's Topography was Shaped by Flood Events [September 27]
8.5	Continental Breakup [September 29]
8.6-12	Bird Tests [September 30]
8.13-14	Drained and Dry Earth [October 1]
8.15-19	God's Command to Exit the Ark [October 2]
8.17	Swarming and Multiplying on the Earth [October 3]
8.17	Men and Dinosaurs (part 1 of 2) [October 4]
8.17	Men and Dinosaurs (part 2 of 2) [October 5]
8.18	<u>A 'New' Humanity</u> [October 6]
8.19	Swarming and Multiplying on the Earth [October 3]
8.19	Men and Dinosaurs (part 1 of 2) [October 4]
8.19	Men and Dinosaurs (part 2 of 2) [October 5]
8.19	Post-Flood Animal Dispersion [October 7]
8.20	The First Thanksgiving [October 9]
8.20-21	<u>A Pleasing Sacrifice</u> [October 8]
8.21-22	God's Word is Reliable [October 10]
8.21-22	Why God Cannot Lie [October 11]
8.21-22	Limiting the Curse [October 12]
8.22	Enduring Seasons [October 13]
8.22	The End is Near [October 14]
8.22	The Ice Age [October 15]
8.22	Commencement of the Ice Age [October 16]
8.22	Progression of the Ice Age – Cool Summers, Heavy
	Precipitation [October 17]
8.22	A Mammoth Die-off [October 18]
8.22	A Single Ice Age [October 19]
8.22	Global Warming [October 20]
9.1-7	A New World Constitution [October 21]
9.1	Fruitful Multiplication – A Commanded Blessing [October 22]
9.1	The Mythical Population Bomb [October 23]
9.2	Diminished Dominion [October 24]
9.2-3	Why God Allowed Man to Eat Meat (part 1 of 2) [October 26]

9.2-3	Why God Allowed Man to Eat Meat (part 2 of 2) [October 27]
9.3	Providential Provisions [October 25]
9.4-5	Blood, the Life-Tribute Owed to God [October 28]
9.5-6	Capital Punishment – Required for Murder [October 29]
9.5-6	Capital Punishment – A Standing Requirement [October 30]
9.5-6	Capital Punishment – Its Agents of Application [October 31]
9.5-6	Abortion is Murder [November 1]
9.5-6	Justified War [November 2]
9.7	Fruitful Multiplication – A Commanded Blessing [October 22]
9.7	The Mythical Population Bomb [October 23]
9.7	New World Covenant – A Covenant of Life [November 3]
9.8-17	New World Covenant – Universal Applicability [November 4]
9.11	God's Word is Reliable [October 10]
9.11	Limiting the Curse [October 12]
9.11	<u>New World Covenant – Promised Continuity</u> [November 5]
9.12-17	New World Covenant – Rainbow Sign [November 6]
9.12-17	Covenant Signs and Seals [November 7]
9.14-15	New World Covenant – Promised Continuity [November 5]
9.18-19	Noah's Descendants [November 8]
9.18-19	Neanderthals – Noah's Descendants [November 9]
9.19	Human Population Dispersion [November 10]
9.20-21	Noah's Sin
9.20-21	Adam, the Second Adam, and the Last Adam [November 12]
9.22-24	Ham's Sin [November 13]
9.24-27	Canaan is Cursed [November 14]
9.24-27	Celebrating God's Retributive Justice [November 17]
9.26	Noah Blessed God [November 15]
9.26-27	Shem and Japheth are Blessed [November 16]
9.28-29	All the Days of Noah [November 18]
10	Lessons from the Genesis Genealogies [July 25]
10	Table of the Nations – An Historical Record [November 19]
10	Table of the Nations – An Ancient Record [November 20]
10	Table of the Nations – The Babel Effect [November 21]
10	Table of the Nations – A Theological Treatise (part 1 of 2)
10	[November 22] Table of the Nations – A Theological Treatise (part 2 of 2)
10	[November 23]
10	
10.5	
10.5	
10.6-20	
10.8-12	
10.5 10.6-20	The Age of the Demigods [December 22]Sons of Japheth [November 24]Coastland Peoples [November 25]Lands, Languages, Clans, and Nations [December 1]Dispersion Over the Face of the Earth [December 16]Sons of Ham [November 26]Nimrod (part 1 of 2) [November 27]

10.8-12	Nimrod (part 2 of 2) [November 28]
10.19	Coastland Peoples [November 25]
10.20	Lands, Languages, Clans, and Nations [December 1]
10.20	Dispersion Over the Face of the Earth [December 16]
10.21-30	Sons of Shem [November 29]
10.21-30	The True Shemites [November 30]
10.24	Cainan, the Son of Arphaxad [December 23]
10.25	Earth's Division in the Days of Peleg [December 2]
10.31-32	Lands, Languages, Clans, and Nations [December 1]
10.31-32	Dispersion Over the Face of the Earth [December 16]
10.32	Human Population Dispersion [November 10]
10.32	<u>Ice Age</u> Civilizations [December 3]
11.1	One Language [December 4]
11.1	Language Confusion [December 10]
11.1	The Origin of Languages [December 11]
11.1	Extra-Biblical Evidence of Language Disruption [December 12]
11.1-9	Towers of Babel [December 14]
11.2	Settling on the Plain of Shinar [December 5]
11.3	Brick Making Techniques [December 6]
11.4	Towering Aspirations – False Religion [December 7]
11.4	Towering Aspirations – Faithless Rebellion [December 8]
11.4-9	The Origin of Prejudices [December 13]
11.5-6	God's Observation [December 9]
11.7-9	Language Confusion [December 10]
11.7-9	The Origin of Languages [December 11]
11.7-9	Extra-Biblical Evidence of Language Disruption [December 12]
11.8-9	Human Population Dispersion [November 10]
11.8-9	What Happened to Nimrod's Empire? [December 15]
11.8-9	Dispersion Over the Face of the Earth [December 16]
11.8-9	Countering the Babel Effect [December 18]
11.9	Earth's Division in the Days of Peleg [December 2]
11.9	God's General Grace [December 17]
11.10-32	Extra-Biblical Support for the Genesis Genealogies [July 17]
11.10-32	God's Chronometer [July 16]
11.10-32	Lessons from the Genesis Genealogies [July 25]
11.10-32	The Dating Game [July 15]
11.10b-26	Historical Chronology [December 21]
11.10b-26	The Age of the Demigods [December 22]
11.10b-27a	<u>Genealogy</u> of the Covenant Line (part 1 of 2) [December 19]
11.10b-27a	Genealogy of the Covenant Line (part 2 of 2) [December 20]
11.11-24	A Limit Placed on Man's Life Expectancy [December 24]
11.12-13	<u>Cainan</u> , the Son of Arphaxad [December 23]
11.26	Abram's Age at the Death of Terah [December 29]
11.26-31	Abram [December 26]

11.27b-32	Terah and His Family [December 25]
11.30	Sarai's Barrenness [December 27]
11.31	The Call of Abram [December 28]
11.32	A Limit Placed on Man's Life Expectancy [December 24]
11.32	Abram's Age at the Death of Terah [December 29]