"IN THE BEGINNING"

CONTENTS

ART 1 - PREAMBLE	2
Section 1A - The Ancients Ontological Orders	2
Section 1B - The Elements of Any Creation	3
Section 1C - The Biblical Creator	3
Section 1D- The Biblical Story	3
Section 1E - The Biblical Genre	3
Section 1F - The Biblical Plot	3
ART 2 - CREATION WEEK	4
Section 2A - The Divisions of Genesis	4
Section 2B - The Genesis Chronicle	4
Section 2C - Genesis 1:1 - God's Summary	4
Section 2D - Unmentioned Phase of Creation	5
Section 2E - Genesis 1:2 - Day 1	5
Section 2F - Genesis 1:3-5 - Day 1 Continued	6
Section 2G - Genesis 1:6-8 - Day 2	6
Section 2H - Genesis 1:9-13 - Day 3	7
Section 2I - Genesis 1:14-19 - Day 4	9
Section 2J - Genesis 1:20-23 - Day 5	9
Section 2K - Genesis 1:24-31 - Day 6	10
Section 2L - Genesis 3:1-3 - Day 7	10
ART 3 - APPENDICES	11
Appendix 3A - The Ancients' Ontological Orders (text)	11
Domain 1 - The Elemental World	11
Domain 2 - The Natural World	12
Domain 3 – The Supernatural World	13
Appendix 3B - The Ancients' Ontological Orders (table)	14
Appendix 3C - The Divisions of Genesis	15
Appendix 3D - Commentary on Genesis 1:1	18
Appendix 3E - The Bible's Spatial Orders	22

PART 1 - PREAMBLE

Section 1A - The Ancients Ontological Orders

For the wrath of God is revealed from heaven against all ungodliness and unrighteousness of men, who hold the truth in unrighteousness; Because that which may be known of God is manifest in them; for God hath shewed it unto them. For the invisible things of him from the creation of the world are clearly seen, being understood by the things that are made, even his eternal power and Godhead; so that they are without excuse: Because that, when they knew God, they glorified him not as God, neither were thankful; but became vain in their imaginations, and their foolish heart was darkened. Professing themselves to be wise, they became fools, And changed the glory of the uncorruptible God into an image made like to corruptible man, and to birds, and four-footed beasts, and creeping things. (KJV Rom 1:18-23).

Most members of the Academy, both scientists and scholars, believe that reality consists solely of the physical realm - i.e. matter in all its forms: solids, liquids, gases, and plasma. Alas, as the above passage indicates, everything they see should indicate to them that there is a metaphysical realm as well, which overlaps with the physical realm and is inhabited by an omnicompetent, omnipotent, omnipotent, omniscient God. Although God is invisible, his handiwork is visible and clearly testifies to his presence and attributes, so that the materialists are without excuse.

Many of the Ancients recognized the above, and they spent much time discussing and refining a division of total reality into what they called ontological orders, of which, in my opinion, there are six (I designate "nihilo" or "nothing" with a zero because the word "nothing" does not refer to anything; it lacks a referent.). They can be summarized as follows:

THE ANCIENTS' ONTOLOGICAL ORDERS

- 0-Nihilo (=Nothing; God the Son created the materials of Universe with the sheer power of His Word)
- 1-The primordial realm
- 2-The possible realm.
- 3-The probable realm.
- 4-The actual realm, which is subdivided as follows:
 - 4A-The mineral kingdom.
 - 4B-The plant kingdom.
 - 4C-The animal kingdom.
 - 4D-The human kingdom.
- 5-The celestial realm.
- 6-The divine realm.

For a more extensive discussion of this subject, see *Appendix 3A - The Ancients' Ontological Orders (text)* and *Appendix 3B - The Ancients' Ontological Orders (table)*.

Section 1B - The Elements of Any Creation

Every creation is tripartite, consisting of three main elements: (1) its abstract <u>concept</u>, which involves designing and scripting it; (2) its physical <u>embodiment</u>, which involves constructing and managing it in accordance with its concept; and (3) its physical <u>quickening</u>, which involves energizing and animating it in accordance with its concept. In other words, (1) someone must design, and script it, (2) someone must make and manage it in accordance with its concept, and (3) someone must energize its inorganic parts and breathe life into it its organic parts in accordance with their concepts.

Section 1C - The Biblical Creator

The Biblical Creator (or Godhead) is triune, consisting of three divine persons: (1) <u>God-the-Father</u>, (2) <u>God-the-Son</u>, and (3) <u>God-the-Holy Spirit</u>. The Father is primarily the mind of God who conceives God's creation, designing and scripting it. The Son is primarily the body of God who (a) *always* does the will of the Father and (b) embodies God's creation, making and managing it in strict accordance with the Father's design and script. The Holy Spirit is primarily the spirit of God who (a) *always* does the will of the Father and the Son and (b) quickens God's creation, energizing its inorganic parts and giving life to its flora and fauna in strict accordance with the Father's design and script.

Section 1D- The Biblical Story

The Biblical Story is tripartite, consisting of three main parts: (1) the <u>Creation of Universe</u>, which occurred during Creation Week, (2) the <u>Drama of Universe</u>, in which we are participating, and (3) the <u>Culmination of Universe</u>, of which we get a glimpse through biblical prophecies concerning the End Times,

Section 1E - The Biblical Genre

The Biblical Genre is a drama, involving three main characters: (1) a <u>protagonist</u> who is the Son of God and the Messiah of Israel; (2) an <u>antagonist</u> who is Satan and the most intelligent and powerful of God's creatures; and (3) the future <u>Bride of Messiah</u>, who will consist of all the men, women, and children that accept and follow the Messiah as their Lord and Savior.

Section 1F - The Biblical Plot

The Drama's Plot is describing how the Father is preparing a bride for his Son to present to Him at the *Wedding of the Lamb* that will occur immediately following the end of this age. Because she will be His helpmete for all eternity, she must be perfect, without blemish. Meanwhile Satan is trying to ruin her with all manner of temptations. For anyone whose parents read fairy tales to him or her, the essence of the plot is a familiar one: a good prince (of light) and a malevolent prince (of darkness) are vying for a beautiful princess, and the question which keeps everyone in the audience on the edge of his or her seat is, "Will the good guy get the girl?"

PART 2 - CREATION WEEK

Section 2A - The Divisions of Genesis

The Book of Genesis divides readily into what I call chronicles, of which there are twelve.

Chronicle 0 - The Creation Week (Genesis 1:1-2:3), which is the subject of this essay. Chronicle 1 - The generations of the heavens and earth (Genesis 2:-4:26). Chronicle 2 - The generations of Adam (Genesis 5:1-6:8). Chronicle 3 - The generations of Noah (Genesis 6:9-9:29). Chronicle 4 - The generations of the Sons of Noah (Genesis 10:1-11:9). Chronicle 5 - The generations of Shem (Genesis 11:10-26). Chronicle 6 - The generations of Terah (Genesis 11:27-25:11). Chronicle 7 - The generations of Ishmael (Genesis 25:12-18). Chronicle 8 - The generations of Isaac (Genesis 25:19-35:29). Chronicle 9 - The generations of Esau - "who is Edom (Genesis 36:1-8). Chronicle 10 - The generations of Jacob (Genesis 37:2-50:26).

See Appendix 3C - The Divisions of Genesis below for a more extensive discussion of it.

Section 2B - The Genesis Chronicle

The Creation of Universe is described in Genesis 1:1-2:3. This passage indicates that God spent (a) six days creating Universe and (b) one day (the 1st Sabbath) resting from his labors. We know that the author means seven normal days, each lasting 24 hours that extended from 6:00 pm on one day until 6:00 PM on the next day, because he uses the phrase "And the evening and the morning were the [number of] day" (KJV) to end his description of the first six days. Notice that he is following the order of creation, in which darkness preceded light.

Section 2C - Genesis 1:1 - God's Summary

1 In the beginning God created the heaven and the earth. (KJV Genesis 1:1)

This verse does two things:

• First, the verse reveals the nature of God - By using the Hebrew name for God, "Elohim," which is plural, the verse makes clear that the Creator is a Godhead consisting of more than one persons. Later, the plurality of persons in the Godhead is confirmed when ESV Genesis 1:26a says, "Let us make man in our image, after our likeness."

 Second, the verse also reveals the scope of Creation - By describing Creation as "the heavens and the earth," it makes clear that Creation consists of everything - i.e. Universe.

Thus, this verse is a perfect summary of the entire Creation Week. (Much more could be said about this verse, but I am keeping this description as terse as I can make it. (See *Appendix 3B - Commentary on Genesis 1:1* below for a more extensive discussion of it.)

Section 2D - Unmentioned Phase of Creation

As I have pointed out above, every creation consists of three elements: (1) concept, (2) construction, and (c) vitalization. There is no reference here to concept, which is performed by God-the-Father. Thus, the Scriptures do not tell us whether God-the-Father conceived of Universe before or after the beginning of Creation Week. I tend to lean toward the latter, because God stresses all the way through the Bible that he created everything in Creation Week. Thus, I believe that God-the-Father produced his design and script for Universe at the start of Day 1 - perhaps in an instant.

Section 2E - Genesis 1:2 - Day 1

2 And the earth was without form, and void; and darkness was upon the face of the deep. And the Spirit of God moved upon the face of the waters. (KJV Genesis 1:2)

This verse introduces both God-the-Son and God-the Holy Spirit into the picture.

- Genesis 1:2a This portion of the verse is focused on the appearance of God-the-Son, who brought the formless and undifferentiated material of Universe into existence, which He accomplished with the power of His word. He spoke it into existence. We know that God-the-Son is meant here, because the Scriptures make clear in many places that He is the maker of all things, such as John 1:3, which says, "All things were made by him, and without him was not anything made that was made" (KJV). Then, He transformed these formless and undifferentiated materials into a globe of water.
- Genesis 1:2b This portion of the verse is focused on the appearance of God-the-Holy Spirit. The English Standard Version of the Bible actually provides a better translation of it than the King James Version. It says, "And the Spirit of God was hovering over the face of the waters" (ESV). All four Gospels liken the Holy Spirit to a dove (see Matthew 3:16, Mark 1:10, Luke 3:22, and John 1:32), which is in harmony with the Holy Spirit's "hovering." Notice, however, that while God-the-Holy Spirit was present and hovering over the globe of water, he did not commence his work in Creation yet, and it was still lacking in energy or life.

Section 2F - Genesis 1:3-5 - Day 1 Continued

3 And God said, Let there be light: and there was light. 4 And God saw the light, that it was good: and God divided the light from the darkness. 5 And God called the light Day, and the darkness he called Night. And the evening and the morning were the first day.

- ESV Genesis 1:3 says, "And God said, "Let there be light, and there was light." Now God-the-Holy Spirit imbued the globe of water with energy, of which light is one form. So, by the ends of Genesis 1:5 and Day 1, we have been introduced to the contributions of all three members of the Godhead.
- Thus, at the end of Day 1, Universe consisted of a sphere with two parts: Part A Matter a giant globe of water at Universe's center, illuminated on one side, and Part B Space a spherical shell of unknown composition and thickness, above and surrounding the matter (see the 2nd heaven below for more information).

Section 2G - Genesis 1:6-8 - Day 2

6 And God said, Let there be a firmament in the midst of the waters, and let it divide the waters from the waters. 7 And God made the firmament, and divided the waters which were under the firmament from the waters which were above the firmament: and it was so. 8 And God called the firmament Heaven. And the evening and the morning were the second day. (KJV Genesis 1:6-8)

- Genesis 1:7 says, "And God said, Let there be an expanse in the midst of the waters, and let it separate the waters from the waters" (ESV) i.e. "...the waters that were under the expanse from the waters that were above the expanse." In other words, on Day 2, God divided the single globe of water i.e. all matter into three parts:
 - o Part A1 A small globe of water, a watery earth, at Universe's center;
 - o Part A2 an intermediate spherical shell of water above and surrounding the small globe of water. It is identified by different translations as "heaven," the "expanse," or the "firmament." I prefer the last because it is unique and cannot be confused with something else. Some commentators identify the firmament as Earth's atmosphere. If one calls Earth's atmosphere "heaven," however, what does one call interstellar space, where reside the sun, moon, and stars? Moreover, verses 1:14 and 1:16 make clear that the sun, moon, and stars lie in the firmament. "And God said, let there be lights in the firmament of the heaven.... And God

¹ Here I commence using a somewhat cumbersome system of notation to make clear where each piece of creation originated.

² "Firmament" in the King James Version (KJV), the Revised Standard Version, and the American Standard Version (ASV); "expanse" in the English Standard Version (ESV), New International Version (NIV), the New American Standard Bible (NASB), and Young's Literal Translation; "space" in the New Living Translation.

made two great lights; the greater light to rule the day, and the lesser light to rule the night: he made the stars also." Thus, firmament would provide the material for interstellar space - i.e. the 1^{st} heaven.

- o <u>Part A-3 An outer spherical shell of water</u> of unknown thickness,³ above and surrounding the firmament. It is identified as "the waters which were above the firmament" (Genesis 1:7). I call it the *upper waters*.
- Thus, at the end of Day 2, Universe consisted of four parts or spatial segments:⁴
 - \circ Part A1 a small globe of water at Universe's center i.e. a watery earth;
 - Part A2 a spherical shell of water above and surrounding the small globe of water – i.e. the *firmament*;
 - Part A3 a spherical shell of water above and surrounding the firmament i.e. the *upper waters*; and
 - o Part B a spherical shell of unknown composition and thickness above and surrounding the upper waters i.e. the 2nd heaven (referenced above). Its outer edge is the border of Universe. Although its existence has not been detected, (a) it is indicated by Genesis 1:2b, which describes the Holy Spirit hovering in a space above the waters and (b) it implied by the Bible's references to a 1st heaven (Revelation 21:1) and a 3rd heaven (2 Corinthians 12:2), in between which there must be a 2nd heaven.⁵

Section 2H - Genesis 1:9-13 - Day 3

9 And God said, Let the waters under the heaven be gathered together unto one place, and let the dry land appear: and it was so. 10 And God called the dry land Earth; and the gathering together of the waters called he Seas: and God saw that it was good. 11 And God said, Let the earth bring forth grass, the herb yielding seed, and the fruit tree yielding fruit after his kind, whose seed is in itself, upon the earth: and it was so. 12 And the earth brought forth grass, and herb yielding seed after his kind, and the tree yielding fruit, whose seed was in itself, after his kind: and God saw that it was good. 13 And the evening and the morning were the third day. (KJV Genesis 1:9-13)

• Genesis 1:9-10 says, "And God said, 'Let the waters under the heavens be gathered together unto one place, and let the dry land appear.' and it was so. 10 God called the dry land Earth, and the waters that were gathered together he called Seas..." (ESV).

³ "Praise him, ye heavens of heavens, and ye waters that be above the heaven" (KJV Psalm 148:4).

⁴ For a gravitational cosmological theory which accounts for these spatial orders, see D. Russell Humphreys' <u>Starlight and Time</u>, Master Books, Colorado Springs CO, 1994.

⁵ Outside Universe is the Third Heaven. Its content and extent are unknown. It has not been detected; its existence is established by the biblical account (2 Colossians 12:2).

- Initially on Day 3, God divided Part A1 into three sub-parts or spatial segments:
 - O Part A1-A the land a solid globe of minerals at its center, which is sub-divided into three main parts or spatial segments: Part A1-A1 the core, which consists of iron & nickel and the radius of which is 2,142 miles. Part A1-A2 the mantle, which consists of spherical shell of silicates above and surrounding the core and is 1,789-1,810 miles thick; and Part A1-A3 the lithosphere, which initially consisted of a spherical shell of rocks above and surrounding the mantle
 - Part A1-B the sea a spherical shell of water (the hydrosphere) above and surrounding the lithosphere, but then after God elevated a portion of the lithosphere above sea- level, it became 0-6.8 miles deep.
 - O Part A1-C the air or atmosphere a spherical shell of gases (78% nitrogen, 21% oxygen, 0.09% argon, 0.03% carbon dioxide, and traces of several others) above and surrounding the globe. Its inner edge borders on the globe's surface; its outer edge, on the 1st heaven. It extends approximately 435 miles above the earth's surface and is divided into five main parts or layers by temperature: Part A1-C1 the troposphere (0-7 miles thick); Part A1-C2 the stratosphere (7-31 miles thick); Part A1-C3 the mesosphere (31-50 miles thick; Part A1-C4 the thermosphere (50-440 miles thick, and Part A1-C5 the exosphere (440-6,200 miles thick).
- In the middle of Day 3 God adjusted the relationship between the land and the sea by elevating a portion of the land probably using tectonic upheavals within the lithosphere so that Earth's surface was divided into two segments: (1) a single continent of dry land, which consisted of the lithosphere with a bottom section 59-38 miles thick and a top section (the crust) 4-25 miles thick, and (2) a single sea which surrounded the land and was 0-6.8 miles deep.
- Thus, by the middle of Day 3, God had arranged reality as follows from the top down (see Appendix 3E for a fuller explanation):

OUTLINE OF SPATIAL ORDERS

The 3rd heaven - Its shape is unknown, it lies above Universe's boundary or edge, and its content and extent are unknown.

The 2^{nd} heaven - Its shape is a spherical shell, it lies below Universe's boundary and above the upper waters, and its content & extent are unknown.

The upper waters - Its shape is a spherical shell, it lies below the 2nd heaven and above the 1st heaven; its content is water, and its extent is unknown.

The 1st **heaven** - i.e. interstellar space - Its shape is spherical shell, it lies below the upper waters and above the earth, and its content is primarily plasma (96%) and secondarily heavenly bodies (4%) made up of solids, liquids, and gases.

The earth - Its shape is a sphere, it lies below the 1st heaven, and its content is the following:

The Atmosphere - Its shape is a spherical shell, it lies below the 1st heaven and above the hydrosphere, its content is a mixture of nitrogen, oxygen, argon, and dioxide gases, and its extent is roughly 6,200 miles in height.

The Hydrosphere - Its shape is a rough spherical shell, it lies below the atmosphere and above the lithosphere, its content is water, and its extent varies in depth from 0-6 miles.

The Lithosphere - Its shape is a spherical shell, it lies below the earth's surface, its content is rock, and its extent in depth is roughly 63 miles.

The Mantle - Its shape of a spherical shell, it lies below the lithosphere and above the core, its content of silicates, and its extent in depth is 1,789-1,800 miles.

The Core - Its shape is a sphere, it lies at the center of the earth, it consists of iron and nickel, and its radius is 2,142 miles.

• Genesis 1:11-12 says, "And God said, Let the earth bring forth grass, the herb yielding seed, and the fruit tree yielding fruit after his kind, whose seed is in itself, upon the earth: and it was so. 12 And the earth brought forth grass, and herb yielding seed after his kind, and the tree yielding fruit, whose seed was in itself, after his kind..." (KJV). Finally on Day 3, God then created flora both on the land and in the sea.

Section 2I - Genesis 1:14-19 - Day 4

14 And God said, Let there be lights in the firmament of the heaven to divide the day from the night; and let them be for signs, and for seasons, and for days, and years: 15 And let them be for lights in the firmament of the heaven to give light upon the earth: and it was so. 16 And God made two great lights; the greater light to rule the day, and the lesser light to rule the night: he made the stars also. 17 And God set them in the firmament of the heaven to give light upon the earth, 18 And to rule over the day and over the night, and to divide the light from the darkness: and God saw that it was good. 19 And the evening and the morning were the fourth day. (KJV Genesis 1:14-19)

On the fourth day, God transformed the *firmament* into interstellar space - i.e. *the first heaven*. Its content by mass is primarily electromagnetic plasma (est. 96%) and secondarily *astronomical bodies* (est. 4%), such as stars, planets, moons, asteroids, and comets which occur within *astronomical objects* such as galaxies, nebulae, star clusters, and planetary systems - starting with the earth's sun and moon. Its extent is unknown.

God refers to the astronomical bodies and objects as lights, and he explains that he intends the sun to rule the day, the moon to rule the night, and the other lights in the firmament to mark (a) the signs and (b) the years, seasons, and days.

Section 2J - Genesis 1:20-23 - Day 5

20 And God said, Let the waters bring forth abundantly the moving creature that hath life, and fowl that may fly above the earth in the open firmament of heaven. 21 And God created great whales, and every living creature that moveth, which the waters brought forth abundantly, after their kind, and every winged fowl after his kind: and God saw that it was good. 22 And God blessed them, saying, Be fruitful, and multiply, and fill the waters in the seas, and let fowl multiply in the earth. 23 And the evening and the morning were the fifth day. (KJV Genesis 1:20-23)

On the fifth day, God created the fish and the fowl - first the fish to populate the sea and then the fowl to populate the air.

Section 2K - Genesis 1:24-31 - Day 6

24 And God said, Let the earth bring forth the living creature after his kind, cattle, and creeping thing, and beast of the earth after his kind: and it was so. 25 And God made the beast of the earth after his kind, and cattle after their kind, and everything that creepeth upon the earth after his kind: and God saw that it was good. 26 And God said, Let us make man in our image, after our likeness: and let them have dominion over the fish of the sea, and over the fowl of the air, and over the cattle, and over all the earth, and over every creeping thing that creepeth upon the earth. 27 So God created man in his own image, in the image of God created he him; male and female created he them. 28 And God blessed them, and God said unto them, Be fruitful, and multiply, and replenish the earth, and subdue it: and have dominion over the fish of the sea, and over the fowl of the air, and over every living thing that moveth upon the earth. 29 And God said, Behold, I have given you every herb bearing seed, which is upon the face of all the earth, and every tree, in the which is the fruit of a tree yielding seed; to you it shall be for meat. 30 And to every beast of the earth, and to every fowl of the air, and to everything that creepeth upon the earth, wherein there is life, I have given every green herb for meat: and it was so. 31 And God saw everything that he had made, and behold, it was very good. And the evening and the morning were the sixth day. (KJV Genesis 1:24-31)

On the sixth day, God created animals and humans – first the beasts, insects, etc. to populate the land and then humans to populate and subdue (cultivate) the entire earth and to exercise dominion over all other living creatures. In other words, God made humans to be the stewards of the earth.

Section 2L - Genesis 3:1-3 - Day 7

1 Thus the heavens and the earth were finished, and all the host of them. 2 And on the seventh day God ended his work which he had made; and he rested on the seventh day from all his work which he had made. 3 And God blessed the seventh day, and sanctified it: because that in it he had rested from all his work which God created and made. (KJV Genesis 2:1-3)

On the seventh day, after finishing Universe, which consisted of the earth, the first heaven, the upper waters, and the second heaven. God rested from his work of creating and sanctified the seventh day as a day of rest.

PART 3 - APPENDICES

Appendix 3A - The Ancients' Ontological Orders (text)

Based on a careful reading of Genesis 1-3, the Ancients discerned a series of ontological orders that together provide a comprehensive view of reality. This view can be found in the work of Aristotle and Saint Thomas Aquinas. It has been resurrected by Wolfgang Smith,⁶ with whom I disagree slightly, but to whom I owe much. Here is what I imagine Creation looks like from God's perspective. It is divided into three domains containing seven orders, as follows:

<u>Domain 1 - The Elemental World</u>

Domain 1 - The Elemental World - is the most fundamental world. It consists of the three orders which we perceive with our minds – not with our unaided senses - (1) the Primordial Realm, (2) the Possible Realm, and (3) the Probable Realm.

- Order 1 The Primordial Realm is the Ancients' *materia prima*. It is the most fundamental realm and corresponds to the primordial chaos in Genesis 1:2a, which is *tohu-wa-bohu* i.e. "without form and void." It is the "face of the deep" in the same verse and "the face of the depth" in Proverbs 8:27, upon which God would subsequently set his compass. The primordial is the realm of undifferentiated "stuff."
- Order 2 The Possible Realm is the Ancients' *materia secunda*. It is the next order and corresponds to the realm of potency or potential, on which God has set his compass. It is imbued with mathematical, geometric, logical, informational, and statistical structure that is the subject of investigation by the abstract sciences. It is sometimes called the *signata quantitate*. Its structure determines what can happen, not what will happen. It is analogically equivalent to the Euclidean plane before the geometer constructs anything (a point, a line, a circle, a square, etc.). Order 2 is the realm of possibilities (i.e. it determines what structures and processes are possible).
- Order 3 The Probable Realm is the physicists' *quantum world* (unknown to the Ancients) and what I call the *materia tertia*. It is the next order and corresponds to the realm of intellectual constructs, such as waves, atoms, sub-atomic particles, etc. It is the analogical equivalent of the Euclidean forms, such as the circle, the ellipse, the parabola, etc., which lack any essence, any corporal content. An operator (using instruments, if he is a man) acts on these constructs and thereby transforms something that is potential and imperceptible in the sub-corporal domain into something actual and perceptible in the

⁶ My acceptance of the ontological orders of the ancients owes much to three books by Wolfgang Smith: <u>Cosmos & Transcendence – Breaking Through the Barrier of Scientific Belief</u>, Sophia Perennis, San Rafael CA, 2008; <u>Quantum Enigma – Finding the Hidden Key, The</u> (1995), Sophia Perennis, Hillsdale NY, 3rd edition 2005; and <u>Wisdom of Ancient Cosmology – Contemporary Science if the Light of Tradition, The</u>, Foundation for Traditional Studies, Oakton VA, 2003.For help in understanding these orders, see my "E02-V3 Table 6A – The Ancient's Ontological Orders."

⁷ "...I was there: when he set a compass upon the face of the depth..." (KJV Proverbs 8:27).

corporal domain. Examples of such constructs are mass, energy, particles, waves, space, time, etc. These constructs cannot be reified; they are products of the operator's models and measurements conducted with instruments. They are not something which moves from potency to actuality. <u>Order 3 is the realm of probabilities</u> (i.e. it determines what structures and processes are probable).

Domain 2 - The Natural World

Domain 2 - The Natural World is the actual, physical world in which we live. It is a world of unique forms and substances – i.e. no two objects in it are completely alike. It consists of the two orders which we perceive with our unaided senses (although the process by which this perception occurs is a mystery) – (4) the Inorganic Realm and (5) the Organic Realm.

- Order 4 The Inorganic Realm consists of the <u>inorganic compounds</u> that make up the Mineral Kingdom. This order exhibits a spatial hierarchy geometric in nature.
 - o **Earth** the terrestrial sphere (the residue of *the waters below the firmament*) which is probably located at the order's center.
 - *1st Heaven* the *firmament*, the *expanse*, or interstellar space, in which the sun, moon, and stars are located, which is above and surrounds the earth. It is a plenum consisting almost entirely of plasma.
 - o *Upper Waters* the *waters above the firmament*, which consist of a sphere of water above and surrounding the first heaven.
 - \circ **2**nd **Heaven** a sphere of unknown nature above and surrounding the "waters above the earth." Its outer edge is the boundary of Universe.
- Order 5 The Organic Realm consists of the <u>organic compounds</u> which make up the three kingdoms of life. It is physically located within Order 4 (in the biosphere at the surface of the earth), but it is an ontological level higher than Order 4. Its prime characteristic is the presence of coded information (DNA), which could not have arisen from the inorganic Order 4 but required an intellect to design it let alone the myriad of living forms which it describes. It too possesses a hierarchical order: plants exhibit less complexity and abilities than animals, and animals exhibit less complexity and abilities than humans. ⁸
 - o *5a The Vegetable Kingdom* is embodied in plants or fauna, which are living, but apparently inanimate. Alfred Korzybski calls them the energy-

⁸ Here I make use of the classes of life suggested by Alfred Korzybski in his <u>Manhood of Humanity</u>, (1921), International Non-Aristotelian Library Publishing Company, Lakeville CT, 1950.

⁹ I say apparently because not everyone agrees. Peter Tompkins & Christopher Bird argue in The <u>Secret Life of</u> Plants, Harper & Row, New York, NY, 1973, that plants are animate and aware.

binding form of life, because they bind up the energy of the sun in their structure and thereby provide sustenance to the higher forms of life.

- 5b The Animal Kingdom is embodied in animals, birds, fish, insects, and creeping things which are living and animate, excepting humans. Korzybski calls them the space-binding form of life, because they can move across the terrestrial surface in search of food, shelter, etc.
- o *5c The Human Kingdom* contains humans who are living, animate, and reflective. Korzybski calls them the time-binding form of life, because, through scientific investigation (research), applied science (technology), record keeping (libraries), etc., they can progress through time, creating ever more sophisticated art, artifacts, social structures, etc.

Domain 3 – The Supernatural World

Domain 3 - The Supernatural World - is the world outside Universe which we perceive with our minds and our spirits after God reveals to us that the Bible is his Word Written and Jesus of Nazareth is his Word Incarnate. I surmise that it is the 3rd heaven to which Paul referred in 2 Corinthians 12:2. It contains two spiritual orders: (6) the Celestial Realm and (7) the Divine Realm.

- Order 6 The Celestial Realm is embodied in angels and demons.
- Order 7 The Divine Realm is embodied in the Godhead.

Appendix 3B - The Ancients' Ontological Orders (table) Adapted by JH

Strata	0	1	2	3		•	4			5	6		
			i		4a	4b	4	c	4d	1			
	- nothing	- materia prima - undifferentiated something - chaos	- materia secunda - possibilities	- materia tertium - quantum stratum - probabilities	- elements & compounds	- energy-binding, unconscious life	fish & birds - energy-and-space-binding, conscious life	- animals - energy-and-space-binding, conscious life	- energy-and-space-and-time-binding, self-conscious life	- Angels, demons	- The Godhead		
Days of Creation	Nihilo	Primordial realm	Possible realm	Probable realm	Inorg. Realm	Plant king dom	{ - 	Antmat Kingaom	Human kingdom	Celestial realm	Divine realm		
						•					natural		
		Hen	nental W		Actual or Natural World					World			
			Inanima	te (unco	nscious								
	n/a	n/a Creat							1	Uncr.			
7								<u>: </u>					
6								i .					
5							•	i					
4						•		i					
3				•				i					
2			•										
		•								•			
1													
0	•				§			i			•		

¹⁰ My acceptance of the Ancients' ontological orders owes much to Wolfgang Smith's three books: The Quantum Enigma (1995, 3rd ed. rev. 2005), Sophia Perennis, Hillsdale NY; Cosmos and Transcendence (1984), Sherwood Sugden and Company, Peru IL; and The Wisdom of Ancient Cosmology (2003), The Foundation for Traditional Studies, Oakton VA.

Appendix 3C - The Divisions of Genesis

Genesis is the first book of the Bible. It is an historical account of the first two and a half millennia of world and human history, commencing with Creation in 0 AM = 3977 BC and ending with the Exodus of the Jews from Egypt in 2513 AM = 1464 BC.

Genesis is divided into twelve segments, which I call chronicles because of their historical nature, by eleven *toledoths*, which are verses that contain the phrase "...the generations of...."

For many years, I regarded and taught that *toledoths* mark the ends of the chronicles - that they are like signatures. In this I was following the arguments of Henry Morris in his commentary on Genesis, ¹¹ as well as the arguments of many others. I surmise that this view arose naturally because the first *toledoth* – "these are the generations of the heavens and the earth when they were created, in the day that the Lord God made the earth and the heavens" (Genesis 2:4) - so neatly summarizes the chronicle that precedes it (Genesis 1:1-2:3), which I call the Creation Chronicle.

Despite the foregoing, I was never entirely comfortable with the idea that *toledoths* are signatures. First, viewing Genesis 2:4 as a signature makes no sense to me. The Creation Chronicle should be signed by God because he is the only person who knows what happened before the first human was created. Second, in a number of cases, the so-called signature falls in the chapter following the chronicle and the final signature even falls in the next book (Exodus). Third, this last case does not use the phrase "...the generations of...." Fourth, regarding *toledoths* as signatures results in attributing lengthy and important chronicles to minor figures – e.g. attributing Genesis 11:27-25:11 to Ishmael rather than to Terah - which makes little sense to me.

Recently I encountered the idea that *toledoths* mark the beginnings of chronicles - that they are like titles. It was proposed by Jonathan D. Sarfati in his commentary on Genesis. ¹² That makes sense to me. Moreover Sarfati persuaded me to follow him in giving the number zero to the Creation Chronicle because it lacks a *toledoth*. In its place is Genesis 1:1, which let us know that God created everything – seen and unseen.

Here are the twelve chronicles with my comments on them:

- *Chronicle 0 The Creation Chronicle -* It starts in Genesis 1:1 and ends in Genesis 2:3. It describes the entire Creation Week (0 AM = 3977 BC). It must have been dictated to Adam by God.
- Chronicle 1 The generations of the heavens and the earth It starts with the toledoth in Genesis 2:4 and ends in Genesis 4:26. It describes (a) the entire Edenic Era in 0 AM = 3977 BC and (b) the Antediluvian Era from its beginning in AM 0 = 3977 BC to Enos's

¹¹ Morris, Henry, <u>The Genesis Record</u>, Baker Book House, Grand Rapids MI, 1976.

¹² Sarfati, Jonathan D., <u>The Genesis Account</u>, Creation Book Publishers, Powder Springs GA.

birth in 235 AM = 3742 BC. It was probably written by Adam (0-930 AM = 3977-3047 BC).

- *Chronicle 2 The generations of Adam* It starts with the *toledoth* in Genesis 5:1 and ends in Genesis 6:8 It describes the period from Enos's birth in 235 AM = 3742 BC to Noah at age 500 in 1556 AM = 2421 BC. It was probably written by Adam (0-930 AM = 3977-3047 BC).
- Chronicle 3 The generations of Noah It starts with the toledoth in Genesis 6:9 and ends in Genesis 9:29 It describes the period from Noah at age 500 in 1556 AM = 2421 BC to the ark's landfall in 1657 AM = 2320 BC, when (a) Noah offered a sacrifice to the Lord, (b) the Lord issued the Noahic Covenant, and (c) Noah prophesied concerning his sons and their descendents. It was probably written by Noah (1056-2006 AM = 2921-1971 BC).
- Chronicle 4 The generations of the Sons of Noah It starts with the toledoth in Genesis 10:1 and ends in Genesis 11:9. It describes the period from the ark's landfall in 1657 AM = 2320 BC to the destruction of Babel and its tower c.1907 AM = 2070 BC. It was probably written by Noah (1056-2006 AM = 2921-1971 BC) or Shem (1558-2158 AM = 2419-1819 BC).¹³
- *Chronicle 5 The generations of Shem* It starts with the *toledoth* in Genesis 11:10 and ends in Genesis 11:26 It describes Shem's descendents from Arphaxad's birth in 1658 AM = 2319 BC to Terah at age 70 in 1948 AM = 2029 BC. It was probably written by Noah (1056-2006 AM = 2921-1971 BC) or Shem (1558-2058 AM = 2419-1819 BC).
- *Chronicle 6 The generations of Terah* It starts with the *toledoth* in Genesis 11:27 and ends in Genesis 25:11. It describes the period from Terah at age 70 in 1948 AM = 2029 BC to Abraham's death in 2183 AM = 1794 BC. It was probably written by Isaac (2048-2288 AM = 1929-1689 BC). ¹⁴
- Chronicle 7 The generations of Ishmael It starts with the toledoth in Genesis 25:12 and ends in Genesis 25:18. It describes Ishmael's descendents from Ishmael's birth in 2094 AM = 1883 BC to Ishmael's death in 2231 AM = 1746 BC. It was probably written by one of Ishmael's sons.
- Chronicle 8 The generations of Isaac - It starts with the toledoth in Genesis 25:19 and ends in Genesis 35:29. It describes the period from Isaac's birth in 2048 AM = 1929 BC to Jacob's death in 2315 AM = 1662 BC. It was probably written by Jacob (2168-2315 AM = 1809-1662 BC) or Joseph (2259-2369 AM = 1718-1608 BC).

 $^{^{13}}$ The period described by this chronicle contains an importance event, the Division of the Land into continents, which probably occurred in 1756 AM = 2221 BC, when Peleg was in his mother's womb.

 $^{^{14}}$ The period described by this chronicle contains an important event, the Destruction of Sodom and Gomorrah, which probably occurred in 2107 AM = 1870 BC.

- Chronicle 9 The generations of Esau "who is Edom" It starts with the toledoth in Genesis 36:1 and ends in Genesis 36:8. It describes the period during which Esau moved his tribe from Canaan to Mount Seir in Edom sometime after Isaac's death in 2288 AM = 1689 BC. It was probably written by Esau (b. 2168 AM = 1809 BC) or one of his descendents.
- *Chronicle 10 The generations of Esau* as "the father of the Edomites" It starts with the *toledoth* in Genesis 36:9 and ends in Genesis 37:1. It describes Esau's descendents for several generations c. 2200-2300 AM = 1777-1677 BC. It was probably written by Esau (b. 2168 AM = 1809 BC) or one of his descendents.
- *Chronicle 11 The generations of Jacob* It starts with the *toledoth* in Genesis 37:2 and ends in Genesis 50:26. It describes the period from Joseph at age 17 in 2276 AM = 1701 BC to Joseph's death in 2369 AM = 1608 BC. It was probably written by Joseph (2259-2369 AM = 1718-1608 BC) or one of his descendents.¹⁵

 $^{^{15}}$ The period described by this chronicle contains an important event, the First Trial of Job, which probably occurred in 2310 AM = 1667 BC.

Appendix 3D - Commentary on Genesis 1:1

In the beginning God created the Heaven[s] and the earth. ¹⁶

The first verse of both the Bible in general and the Creation Chronicle in particular appears to be a summary statement. First, God did not gather the materials with which he formed the earth until the second day of creation week, and he did not form the earth as we know it until the third day. Second, the verse refers to heavens (plural), ¹⁷ but God made only one heaven ¹⁸ on the first day. Third, providing a summary of creation in verse 1:1 before providing a more detailed account in verses 1:2-2:4 is similar to providing a summary of man's creation in verses 1:26-27 before providing a more detailed account in Genesis 2.

Although the first verse deals ostensibly with creation, its implications go far beyond creation and give us an inkling of the depths which lie below the surface of this account and of the entire Bible.

- Consider what this verse says: "In the beginning God created the Heaven and the earth" (verse 1). Henry Morris¹⁹ observes the following:
 - "God" The word in Hebrew is Elohim. It is plural with a singular meaning. It conveys the nature of the Divine Trinity, in which three persons (God-the-Father, God-the-Son, and God-the-Spirit) make up the Godhead, which is a unity.
 - "created" Only God can create something out of nothing; man can make or reform things using something, but he cannot create something out of nothing.²⁰
 - "the heaven[s]" The word conveys space.
 - "the earth"— The word conveys matter.

¹⁶ KJV Genesis 1:1.

¹⁷ Although it is singular in the King James Version (KJV), it is plural in the Revised Standard Version (RSV), the American Standard Version (ASV), the New King James Version NKJV), the New International Version (NIV), and the New American Standard Bible (NASB).

¹⁸ As will become apparent, there are at least three heavens: (a) the first heaven is above and surrounding the earth – i.e. interstellar space - in which the sun, moon, and stars are located, (b) the second heaven lies above the spherical shell of water which is above and surrounding the first heaven, and (c) the third heaven lies beyond the second heaven, to which Paul referred in 2 Corinthians 12:2. God may have created all three during creation week. ¹⁹ Henry Morris, The Genesis Record, Baker Book House, Grand Rapids MI, 1976, pages 39-41.

²⁰ Clarification - To create anything, mankind must reform something that already exists. A potter can only make a pottery vase by reforming a lump of clay and then baking it. God, on the other hand, does not need preexisting material. He can create something using only his mind and his power, both of which are unlimited. In the past, people have described God as creating Universe ex nihilo (out of nothing in English), but that is only true if it is clear that ex nihilo refers only to something (some physical material), but not to someone (an omniscient, omnipotent, omnicompetent being such as God). Man needs some physical material (something) with which to create, God needs only someone - Himself - with whom to create. Nor can Universe spring into existence ex nihilo - i.e. out of nothing. The word "nothing" has no objective referent. There is no such thing as "nothing" - anywhere.

- o "in the beginning" The phrase conveys time.
- o A legitimate *paraphrase* of Genesis 1:1 would be, "The transcendent, omnipotent Godhead called into existence the space-mass-time Universe."
- Consider **what this verses implies:** Henry Morris²¹ points out that all of man's false philosophies concerning the origin and meaning of the world are wrong:
 - o *Atheism* the belief that there is no God because this verse indicates that God created Universe.
 - o *Dualism* the belief that there are two principles or gods, one good and one evil because this verse indicates that God alone created Universe.
 - Evolutionism the belief that simple particles evolved into ever more complex
 particles and eventually developed into everything that we see today through eons
 of time because this verse indicates that God created all things.
 - Humanism the belief that man is the pinnacle and arbiter of Universe through
 his ability to reason because this verse indicates that God, not man, is the
 ultimate reality.
 - Materialism the belief that matter is the only reality and has been in existences forever - because this verse indicates that a spiritual being created matter; matter had a beginning.
 - o **Pantheism** the belief that Universe is god (i.e. Universe's forces and laws are the equivalent of god) because this verse indicates that God is transcendent (i.e. above or outside Universe).
 - o **Polytheism** the belief that there are many gods because this verse indicates that the Godhead is a unity.
- Consider **what this verse omits**. This verse makes no attempt to prove or even to persuade the reader of its truth. Likewise, it makes no attempt to refute the philosophies which contradict it. It merely presents this account of God's creation as truth. It must be accepted as truth by faith. In doing so, it exhibits a principle which runs throughout the Bible. God *never* explains himself. Think of how he answered Job when Job asked him to explain the things that were troubling Job, "Where were you when I laid the foundation of the world?" God has set things up in such a way that accepting his word by faith is a precondition to learning the truth about anything, "For without faith, it is impossible to

²¹ Ibid, p. 38.

²² Job 38:4.

please him: for he that cometh to God must believe that he is, and that he is a rewarder of them that diligently seek him" (Hebrews 11:6).

- Consider **what this verse conceals:** An intricate numerical pattern is buried in this verse. In the original Hebrew, this verse consists of seven words made up of twenty-eight letters. Since each letter of the Hebrew alphabet represents a number (aleph = 1, beth = 2, gimmel = 3, etc.) each word and the entire sentence carry numerical values. Ivan Panin²³ points out that this verse contains at least
 - o fourteen features of seven (the number of spiritual perfection) chance, 1 in 6.67 $\times 10^{11}$,
 - o sixteen features of four (the number of creation) chance, 1 in 3.6 x 10^9 ,
 - o *fourteen features of thirty-seven* (the common denominator of most references to God in the New Testament) chance, 1 in 3.33×10^{23} , and
 - o seven features of seventy-three (the reverse of thirty-seven) chance, 1 in 1.06 x 10^{13} .

The odds of this composition occurring by chance are infinitesimal, and it is too complex to have been devised by a man, even in a lifetime of work. (Even more astonishing, the works of Panin, Max Luna,²⁴ Del Washburn,²⁵ Michael Leonard,²⁶ and others indicate that a highly complex pattern of numerical systems is evident in and running between the Old and New Testaments - but not the Apocrypha..

• When confronted with all of the above, reason demands that we face the fact that this verse and the entire "book of books" was inspired by God, as it itself claims: "Thy Word is true from the beginning..." "Forever, O Lord, thy Word is settled in Heaven." "The grass withers, the flower fades: but the Word of our God will stand forever." "The unfolding of thy words gives light; it imparts understanding to the simple." "Seek ye out the Book of the Lord, and read: no one of these shall fail." "31

²³ Ivan Panin, <u>An Introduction to the Principle of Bible Numerics</u> (c. 1945), privately printed, p. 8 and following; see also Ivan Panin, <u>Bible Numerics</u> (1934), The Covenant Publishing Company, Ltd., London, Ivan Panin ed., <u>The Numeric English New Testament</u> (1934), The Book Society of Canada, Ltd., Agincourt, Ontario, and the pamphlets, *Genesis 1:1, Verbal Inspiration Proved, Bible Numerics, The Inspiration of the Scriptures Scientifically Demonstrated, The Last Twelve Verses of Mark, Bible Inspiration*, all undated and privately printed.

²⁴ Max Luna, <u>The Number 7 in the Bible</u> (1979), Bryan Press, City of Industry, California.

²⁵ Jerry Lucas and Del Washburn, <u>Theomatics</u> (1979), Stein & Day, New York. See also Del Washburn, <u>Theomatics</u> <u>II</u> (1994), Scarborough House, Lanham MD and <u>The Original Code of the Bible</u> (1998), Lanham MD.

²⁶ Michael E. Leonard, <u>Bible Numbers</u> (2002), Windham Hall Press, Lima OH.

²⁷ KJV Psalm 119:160.

²⁸ KJV Psalm 119:89.

²⁹ RSV Isaiah 40:8.

³⁰ RSV Psalm 119:130.

³¹ KJV Isaiah 34:16.

"Every word of God is pure." All Scripture is given by inspiration of God...." "O earth, earth, earth, hear the Word of the Lord."

• One last thought about this verse: Henry Morris³⁵ points out that if a person accepts Genesis 1:1 by faith, he will not find it difficult to believe anything else recorded in the Bible.

In addition to being a summary, this verse serves as the introduction to Day 1. God is saying, "In the beginning, on the first day, I created everything (space, time, energy, mass, etc.) with the power of my word alone - not out of any preexisting material."

³² Proverbs 30:5.

³³ 2 Timothy 3:16.

³⁴ Jeremiah 22:29.

³⁵ Henry Morris, <u>The Genesis Record</u>, Baker Book House, Grand Rapids MI, 1976, p. 37.

Appendix 3E - The Bible's Spatial Orders³⁶

3rd Heav		Supernatural Domain. It lies outside universe. Its content and extent are unknown. It has not been detected; its existence is established by the biblical account (2 Cor. 12:2).
	2nd Heaven	The space above the upper waters. It consists of a spherical shell above and surrounding the upper waters. Most probably Its inner edge borders the upper waters and its outer edge is the boundary of universe. Its content and extent are unknown. It has not been detected; its existence is implied by the Bible's references to a 1st heaven (Revelation 21:1) and a 3rd heaven (2 Corinthians 12:2), in between which there must be a 2nd heaven.
	Upper Waters	The waters above the firmament. It consists of a spherical shell above and surrounding the 1st heaven. Its inner edge borders the 1st heaven; its outer edge, the 2nd heaven. Its content is water, but its extent is unknown. It has not been detected; its existence is inferred from the Bible's reference to the firmament being between the lower waters and the upper waters (Genesis 1:7).
Keality Universe	1st Heaven	The firmament or the expanse or interstellar space. It consists of a spherical shell above and surrounding the earth. Its inner edge borders on the earth's atmosphere; its outer edge, the upper waters. Its content by mass is primarily electromagnetic plasma (est. 96%) and secondarily astronomical bodies (est. 4%), such as stars, planets, moons, asteroids, and comets which occur within astronomical objects such as galaxies, nebulae, star clusters, and planetary systems - starting with the earth's sun and moon. Its extent is unknown.
	Earth	Atmosphere. It consists of a spherical shell above and surrounding the globe. Its inner edge borders on the globe's surface; its outer edge, the 1st heaven. Its content is air (78% nitrogen, 21% oxygen, 0.09% argon, 0.03% carbon dioxide, and traces of other gases). It extends approximately 6,200 miles above the earth's surface. It is divided into five main layers by temperature: the troposphere (0-7 miles), the stratosphere (7-31 miles), the mesosphere (31-50 miles), the thermosphere (50-440 miles), and the exosphere (440-6,200 miles) Hydrosphere. It consists of water. It is 0-6.8 miles deep. Lithosphere. It consists of rocks. It is 63 miles thick, which includes the crust (4-25 miles thick) and the top portion of the upper mantle. Mantle, It consists of silicates. It is 1,789-1,810 miles thick.

³⁶ For a cosmological theory that relies on gravitational forces to account for these spatial orders, see D. Russell Humphreys' Starlight and Time (1994), Master Books, Colorado Springs CO. Because I believe electromagnetic forces drive Universe, however, I look forward to a cosmological theory that relies on plasma physics to account for these spatial orders.