

1. Genesis Chapter 1:1-5: Creation of Space, Time and Matter



Today we understand, we live in a universe bigger and more complex then we could ever imagine. There are billions of stars in billions of galaxies, how many and how large is still the subject of study. Yet the earth on the scale of the universe is less then a speck of sand in the ocean. The more we understand this vast universe the more we can comprehend either the incredible luck or the incredible creation we are part of.

There are only two roads when all is said and done; we are either here by

intentional cause or accidental cause. The Book of Genesis declares to be the revelation of the Intentional Cause of the universe. This is in stark contrast to the atheistic position, that the universe "always existed" or that the universe appeared out of "nothing".

Genesis declares God is the source of matter, order and life in the universe. The first chapter of Genesis establishes through supernatural revelation, the order of creation. Today we can observe the Universe and make scientific inquiry and postulate how the universe came about. As we shall see the Bible has already revealed what science is just finding out. In fact the very first verses of Genesis refute seven of false philosophies of humanity;

- 1. It refutes atheism, because the universe was created by God.
- 2. It refutes pantheism, because God is transcendent to that which He created.
- 3. It refutes polytheism, for one God created all things.
- 4. it refutes materialism, for matter had a beginning.
- 5. It refutes *dualism*, because God was alone when he created.
- 6. It refutes *humanism*, because God, not man is the ultimate reality.
- 7. It refutes evolutionism, because God created all things.

Genesis 1

1 In the **beginning God** created the **heavens** and the **earth**.

God: This is use of the first use of the name of God in scripture. The Hebrew word used here is 'elohiym' and can actually mean "gods". The ending im is the plural form in the Hebrew. The form is plural with a singular meaning. This is indicative of the uni-plurality of the God is one, yet three persons.

In verse 1:26, God said, "Let us" make man in "our" image. God is revealing His nature in the very first verse.

We can also observe that God was already existing in the beginning, the beginning of our universe is its creation.

Created: Hebrew word used here is always used with God as the subject אים Bara'. Only God

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can call into existence that which does not exist. To create something out of nothing, as opposed to forming from materials that already exist. This is a unique characteristic of God to create out of nothing; the Latin term *ex nihilo* is often associated with this aspect of creation, *out of nothing*.

It is at this point, time began and the "physical universe" was called into existence out of nothing. Its interesting to note, evidence now points to a finite universe, which is expanding outward, thus demanding a point of cause. Atheists now claim the universe exploded into existence out of nothing, rather then identify the cause as God. Matter coming into existence out of nothing on its own volition is impossibility, but Atheists are will to suspend logic for faith.

There three possibilities when examine the universe; the third point is only to demonstrate how ridiculous the option is.

- Either matter always existed
- Matter was created
- Matter came into existence from nothing

Verse one tells us God brought matter into existence from a state of nothing. God is the cause of creation.

Heavens: This word is associated with the broad expanse of the Heavens. The Hebrew word here is מֹמִים *Shamayim*, which is also plural having the *im* ending, therefore the word could say "Heavens" or "Heaven" in the singular sense. Since this refers to the primordial universe this is a direct reference to the space that would contain the "Earth", even before the objects which illuminate the universe would placed. Here God creates area matter would occupy. The universe we are in has three components, Space-Matter-Time. This is one of the three.

Earth: The Hebrew word for land is γτικ 'erets, In this case the word means matter, the physical substance which would latter be formed into the "Earth", stars and other objects which would fill the "Heavens" or space created. God literally called "Earth" or matter into existence out of nothing. Verse 2 tells us the matter was not shaped at this point; it was only called into existence.

Beginning: The third aspect of this three part universe is time. Our universe is composed of three parts, Space-Matter and time. Time began at the creation of space and matter. God not only called space and matter into existence, He called time into existence. The Hebrew word for beginning is Re'shiyth, which means first or beginning.

The idea of a point in time when matter and space did not exist is only now surfacing, yet the Genesis refers to this point even before it was a thought in the mind of secular world.

The Big Bang theory developed from observations of the structure of the universe and from theoretical considerations. In 1912 Vesto Slipher measured the first Doppler shift of a "spiral nebula" (spiral nebula is the obsolete term for spiral galaxies), and soon discovered that almost all such nebulae were receding from Earth. He did not grasp the cosmological implications of this fact, and indeed at the time it was highly controversial whether or not these nebulae were "island universes" outside our Milky Way. [51,61] Ten years later, Alexander Friedmann, a Russian cosmologist and mathematician, derived the Friedmann equations from Albert Einstein's equations of general relativity, showing that the universe might be expanding in contrast to the static universe model advocated by Einstein. In 1924, Edwin Hubble's measurement of the great distance to the nearest spiral nebulae showed that these systems were indeed other galaxies. Independently deriving Friedmann's equations in 1927, Georges Lemaître, a Belgian physicist and Roman Catholic priest, predicted that the recession of the nebulae was due to the expansion of the universe. In 1931 Lemaître went further and suggested that the evident expansion in forward time required that the universe contracted backwards in time, and would continue to do so until it could contract no further, bringing all the mass of the universe into a single point, a "primeval atom", at a point in time before which time and space did not exist. As such, at this point, the fabric of time and space had not yet come into existence.

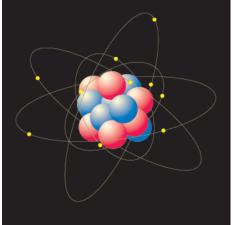
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¹ http://en.wikipedia.org/wiki/Big_Bang

Before the theory of the Big Bang, science postulated an eternal static universe. Evidence from our observations contradicted that view. Einstein, according to witnesses understood that a universe which had a beginning, had a cause. He understood the theological implications of a finite universe.

Around this time, signs of irritation began to appear among the scientists. Einstein was the first to complain. He was disturbed by the idea of a Universe that blows up, because it implied that the world had a beginning. In a letter to de Sitter—discovered in a box of old records in Leiden some years ago—Einstein wrote, "This circumstance (of the expanding Universe irritates me," and in another letter about he expanding Universe, he said: To admit such possibilities seems senseless."....I suppose that beginning in time annoyed Einstein because of its theological implications.²



This is an important point when we compare the Word of God, the Bible to the claims of modern science. Science has recently arrived at what the Bible already taught that our universe had a starting point.

Verse 2 (The state of matter)

2 <u>The earth was without form, and void</u>; and <u>darkness was on the face of the deep.</u> And <u>the Spirit of God</u> was hovering over the <u>face of the waters</u>.

The second verse describes the state of this space-matter-time continuum. Matter, space and time were created out of nothing, *ex nihilo*. God called forth what did not exist, into existence. The second verse describes the state of universe after it was called into existence.

Today, we can know the nature of matter to a degree, yet even our understanding of matter and energy is very limited. We know that our universe is composed of matter and energy, and this matter and energy is made up of atoms, which are themselves made up of components. These components are protons, neutrons and electrons. Yet even, these components are composed of components, known as *quarks*. We are still trying to discover the very nature of matter.

(2) The earth was: Each verse in the first chapter of Genesis, after verse 1, begins with the Hebrew word *waw*, translated "And". Each statement is sequentially and chronologically linked to the previous statement preceding it.

The idea of their being a gap in time, between verse one and verse two, known as the *Gap theory* cannot be justified in the text. Some have tried to make the word "Was" and change its meaning to became, to fit a period of time before the world as we see it today. A pre-Adamic creation, with dinosaurs and geologic ages as supported by the current science, God then judged this period, with the resulting judgment being revealed in geology. The creation of Adam and the earth as we know it today followed these events. This view was brought forward to reconcile science with scripture and was popularized by the *Scofield Reference Bible*.

Verse two is reveals the state of matter, with earth being the elements of creation. The exact nature of these elements we are only beginning to understand today. The fact is matter (earth) existed at this point in its elemental form. The Hebrew word used here *eretz* means earth, land or soil, God called matter into existence.

Without form, and void; As discussed earlier the physical universe is made up of atoms, which are made up of protons, neutrons and electrons. These particles are also made of particles known as quarks. How many layers of particles exist? We don't know, it's still a field of study. With the use of *atom-smashers*, also known as *particle accelerator*, the goal is to discover the most elemental forms of matter.

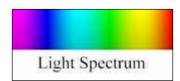
When God brought matter into existence, it was still not formed. Here scripture is revealing the nature of matter after it was called into existence. Whether at this point, matter was only in subatomic form or assembled into atoms we don't know.

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² Robert Jastrow, God and the Astronomers (New York: W.W. Norton & Co. 1992)

The Hebrew word for formless is not Tohuw, has several shades of meaning in scripture, it occurs twenty times in the Old Testament and is translated ten different ways (vain, confusion, empty place, nothing, waste and wilderness). The purpose of this progression is to tell us how God brought matter into an inhabitable planet, planet filled with life.

The second word here describing the state of matter is void, from the Hebrew word בהו Bohuw, translated as void or emptiness. Matter was not yet formed in an empty universe at the beginning of time. At this point in time, in the beginning the elemental matter of the universe existed, in an empty, dark universe.



Darkness was on the face of the deep: Darkness is the absence of light. When God first formed the matter in the universe the presence of light had not yet been called into existence. Light is a form of energy, energized matter, transmitted in electro-magnetic light waves. Our eyes are designed to see a portion of this spectrum of light. Infrared and ultraviolet are a part

the two ends of this spectrum we cannot see. The presence of this darkness was pervasive throughout the universe.

The extent of this darkness is described as the *face of the deep*. The word face comes from the Hebrew word פנים *Paniym* translated *face* here, but also is translated as *presence*. This is probably the meaning here, the existence of darkness on the totality of the vast universe. The word used to signify deep is *Tehowm* translates to the depths of the oceans or seas. The picture conveyed is the endless reaches of the waters. Here that picture is transferred to the primordial universe before order and light came into existence.

The Spirit of God: With this vast array of orderless and formless matter stretching beyond our imagination into the depths of space, God's Spirit was present. In Genesis 1:1, God is identified as *Elohiym*, the plural form of God, indicating the plurality of the Godhead, later identified as God the Father, Son and Holy Spirit. Here is the first revelation of the Spirit of God in scripture and the role the Spirit played in the creation of the universe.

The word for Spirit in Hebrew is The Ruwach the word is also translated as breath and wind in scripture, revealing the nature of God's spirit, unseen but present. Jesus relates the presence of God's spirit to Nicodemus and how wind's nature is an illustration of this aspect of the Spirit.

"The wind blows where it wishes, and you hear the sound of it, but cannot tell where it comes from and where it goes. So is everyone who is born of the Spirit." John 3:8

The picture of the Spirit in relation to dark nature of the universe is that of a hovering bird. The word used for moved in the Hebrew, *rachaph* is only used three times in the Old Testament and is translated *shake* and *flutter*. The picture is God's Spirit, like a mother hen hovering over her chicks.

Henry Morris relates this to the modern scientific understanding how energy was transferred to the dark, lifeless universe.

In modern scientific terminology, the best translation would probably be "vibrated". If the universe is to be energized, there must be and Energizer. If it is to be set in motion, there must be a Prime Mover. It is significant that the transmission of energy in the operations of the cosmos is in the form of waves—light waves,, heat waves, sound waves, and so forth. In fact (except for the nuclear forces which are involved in the structure of matter itself), there are only two fundamental types of forces that operate on matter—the gravitational forces and the forces of the electromagnetic spectrum. All are associated with "fields" of activity and with transmission by wave motion.

Waves are typically rapid back and forth movements and they are normally produced by the vibratory motion of a wave generator of some kind. Energy cannot create itself. It is most appropriate that the first impartation of energy to the universe is described as the "vibrating" movement of the Spirit of God Himself.³

The face of the waters: Upon this vast sea matter, the Spirit of God began to energize the particles. God called it into existence out of nothing. Now God was bringing about the forming and activation of matter. The word face is better translated "presence", as the Spirit of God was there at presence of the

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³ The Genesis Record, Henry Morris pg. 52, Baker Books, 1976

deep of matter.

The imagery of a vast endless ocean is put in terms for the reader to understand, but since no formed sphere existed, we need to understand it from the context of the creation of the universe. However between this point and the first day, the earth was formed since the revolution of the earth completes the first day.

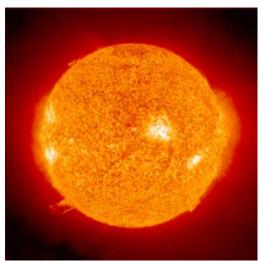
Literal days or periods of time

One of the major problems facing any reading or interpretation of Genesis is how to understand the days of Creation. Should we understand these as *literal days* or *periods of time*? This can be a contentious issue with passion on both sides. We must acknowledge there are very sincere and competent Bible teachers on both sides of this argument. However logic dictates both sides cannot be right, since they are two different views. The easiest thing to do would be to just argue that both have equally valid points, and conclude we cannot determine a position, but that would involve ducking the issue. There are serious issues which need to be dealt with on both sides. For example, when did death enter humanity? Was it after Adam and Eve sinned or before? How does the Garden of Eden fit into this view? Did the fall of creation take place before the fall of man?

One side sees scripture from a *literal perspective* while the other looks at these verses from a *symbolic perspective*. The symbolic version links the symbolic days with the current scientific understanding of an "Old" earth. While the literal understanding views sees scripture as the primary revealer of creation. Earth is viewed as "Young" with an appearance of age. The reader of Genesis many times approaches the book with their presuppositions of age, if they feel the earth is Old then to take Genesis literally would go against their foundational view. On the other hand, the "Literalist" would have no problem understanding Genesis from a literal view, their view however is in conflict with accepted science. This creates a dilemma either way for the reader of Genesis. How do we reconcile our view with Genesis?

Here is a case in point; do we accept what science has declared to be "fact" that life came into existence

millions of years ago? Do we try to reconcile science to the Biblical world view? For the most part this study will attempt to reconcile science with the Biblical view, as opposed to reconciling the Bible to science.



Reconciling science to the Bible

Contrary to the claims of some, reconciling the science to the Bible does not mean checking out your brains at the door, by rejecting science. Science is a valid exploration of knowledge, providing a fantastic understanding of God's creation. First we must understand the Bible is book based on super-natural revelation. We could not know what happened on the first day of creation unless God choose to reveal the events. Any such revelation by its very nature is super-natural. Therefore, when science declares the bones of Lucy is our ancient ancestor, we do not blindly accept this as fact because the scientific community has declared it so. We examine the evidence, from a biblical

perspective and understand the claims.

Many times these claims are not based on science but on a presumption of evidence. *Piltdown Man* was declared as evidence of evolution, only later to be exposed as man-made forgery to advance an evolutionary position (See attached). For example is their proof of Noah's flood? Do we look for the proof or just reject it as myth because "current" science declares?⁴

Literal days

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⁴ When Science is referred to here, it is understood that secular science is being referred to. There are many scientists with a biblical world view who do not reject scripture. This however is not accepted science by the vanguard of the scientific community in research and universities.

Reading scripture from a literal perspective forces us to accept the Genesis account from a "Literal day" reading. First the Hebrew word for day is יוֹם 'Yowm' can at times mean an indefinite period of time. Most times this word applies to a literal "Day". The fact that creation took place over a six-day period is later reiterated in other parts of scripture. In the book of Exodus, God declares to Moses that the heavens and earth were created in six-days, when God commanded man to ret on the seventh day.

8 "Remember the Sabbath day, to keep it holy.

9 Six days you shall labor and do all your work,

10 but the seventh day is the Sabbath of the Lord your God. In it you shall do no work: you, nor your son, nor your daughter, nor your male servant, nor your female servant, nor your cattle, nor your stranger who is within your gates.

11 For in six days the Lord made the heavens and the earth, the sea, and all that is in them, and rested the seventh day. Therefore the Lord blessed the Sabbath day and hallowed it. **Exodus 20:8-9**

So we need to ask ourselves, if God did not create the world in a literal 6-day period why would he tell us this not only in Genesis but later in Exodus?

The First Day: Creation of light

3 Then 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 God called the light Day, and the darkness He called Night. So the evening and the morning were the first day. **Genesis 1:3-5**

God Said: The WORD of God commanded the creation of light in the dark universe. In the first verses of Genesis we see the revelation of the Trinity. In verse 1, we see God the Father as the source of all things, the Spirit of God as the energizer of all things (verse 2), and the Word as the revealer of all things (verse 3).

What is the source of being? God alone is the cause of being. His Word framed the universe and life. By trying to understand the infinite nature of God's being can we faintly understand the awesome nature of who God is. The Psalmist writes,

6 By the word of the Lord the heavens were made, And all the host of them by the breath of His mouth.

7 He gathers the waters of the sea together as a heap; He lays up the deep in storehouses.

8 Let all the earth fear the Lord; Let all the inhabitants of the world stand in awe of Him.

9 For He spoke, and it was done; He commanded, and it stood fast. Psalm 33:6-9

For the secularist this is hard concept to understand, but they have an equally daunting task, they are required to believe that the universe caused its own existence out of nothing. Both positions require faith, we are either forced to put our faith that everything came out of nothing, or that God was the cause.

Let there be light: One of the complaints critics have with Genesis is the revelation the Sun, moon and stars were created on the fourth day, while God created light on the first day. They surmise the writer of Genesis had his timing off, because without the Sun and stars there would be no light.

Before you have a light source as the sun, moon and stars, you need to have existence of light. Light is a source of electro-magnetic energy, God's word energized the principals of light which operate in the universe. Our eyes are designed to see a portion of the electromagnetic spectrum, our eyes are finally tuned to collect these light waves, and then through intricate wiring these images are transferred to our brain.

Without this unique development, we would not even be aware of the existence of light, light is more then we can see, what we see is a small portion. God's word separates the creation of the physical properties of light, from the light source (the fourth day).

Light from the darkness: There is a distinction between the properties of light and darkness. The rotating earth reveals this distinction. If there was no sun, or moon at this point how could you have morning and evening? The very presence of God was the light on the earth, the Sun and moon were created as light sources for the earth.

Light Day: The Earth was rotating at this point with no sun, moon or stars present. God Himself was the light source for the earth. The presence of Light would later be replaced by the Sun for the day and the moon for the night. The book of Revelation promises a coming day, when the Sun would no longer be

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needed.

The city had no need of the sun or of the moon to shine in it, for the glory of God illuminated it. The Lamb is its light. **Revelation 21;23**

Darkness night: The cycle of day and night had been put in motion.

First day: After the first day, the Earth was no longer void and without form. When the Spirit of God moved upon the waters and God Said let there be light, the physical world which we inhabit came into existence. Its important to note the order of creation. The world was created before the stars, moon and sun, though this contradicts the modern principle of the earth as being one planet in a vast universe with no specific importance, God's Word places great value on the Earth.

Today, we reject the elevation of the earth and mankind as having any special place in the universe. With this presupposition, the idea of our physical earth, preceding the creation of what the greater universe is hard principle to grasp. This is where are called to reconcile science to the Bible.

In <u>cosmology</u>, the **Copernican principle**, named after <u>Nicolaus Copernicus</u>, states the Earth is not in a central, specially favoured position. More recently, the principle is generalised to the <u>relativistic</u> concept that humans are not privileged observers of the universe. In this sense, it is equivalent to the <u>mediocrity principle</u>, with significant implications in the <u>philosophy of science</u>.

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⁵ http://en.wikipedia.org/wiki/Copernican_principle

Piltdown Man⁶



also called Dawson's dawn man (Eoanthropus dawsoni). proposed species of extinct hominid whose fossil remains. discovered in England in1910–12, were later proved to be fraudulent. Piltdown man, whose fossils were sufficiently convincing to generate a scholarly controversy lasting more than 40 years, was one of the most successful hoaxes in the history of science.

skull by J.H. McGregor (1914)

'Reconstruction' of the Piltdown In a series of discoveries in 1910-12, Charles Dawson, an English lawyer and amateur geologist, found what appeared to be the fossilized fragments of a cranium, a jawbone, and

other specimens in a gravel formation at Barkham Manor, on Piltdown Common near Lewes in Sussex. Dawson brought the specimens to Arthur Smith Woodward, keeper of the British Museum's paleontology department, who announced the find at a meeting of the Geological Society of London on Dec. 18, 1912. Woodward claimed that the fossils represented a previously unknown species of extinct hominid (E. dawsoni) that could be the missing evolutionary link between apes and early humans. His claims were eagerly and uncritically endorsed by some prominent English scientists, perhaps because the Piltdown fossils suggested that the British Isles had been an important site of early human evolution.

As long as the remains were accorded a high antiquity, Piltdown man seemed a feasible alternative to Homo erectus (then known from scanty remains as Pithecanthropus) as an ancestor of modern humans. In 1926, however, the Piltdown gravels were found to be much less ancient than supposed, and from 1930, more finds of Pithecanthropus, the discoveries of the more primitive Australopithecus, and further examples of Neanderthal man left Piltdown man completely isolated in the evolutionary sequence. In 1953-54, as an outcome of these discoveries, an intensive scientific reexamination of the Piltdown remains showed them to be the skillfully disguised fragments of a guite modern human cranium (about 600 years old), the jaw and teeth of an orangutan, and the tooth probably of a chimpanzee, all fraudulently introduced into the shallow gravels. Chemical tests revealed that the fragments had been deliberately stained, some with chromium and others with acid iron sulfate solution (neither chromium nor sulfate occurs in the locality) and that, although the associated remains were of genuine extinct animals, they were not of British provenance. The teeth, too, had been subjected to artificial abrasion to simulate the human mode of flat wear.

The first solid evidence regarding the identity of the perpetrator emerged in 1996, two decades after a trunk marked with the initials M.A.C.H. had been discovered in storage at the British Museum in 1975. Upon analyzing bones found in the trunk, the British paleontologists Brian Gardiner and Andrew Currant found that they had been stained in the exact same way as the Piltdown fossils. The trunk apparently had belonged to Martin A.C. Hinton, who became keeper of zoology at the British Museum in 1936. Hinton, who in 1912 was working as a volunteer at the museum, may have treated and planted the Piltdown bones as a hoax in order to ensnare and embarrass A.S. Woodward, who had rebuffed Hinton's request for a weekly wage. Hinton presumably used the bones in the steamer trunk for practice before treating the bones used in the actual hoax.

8 http://www.truthnet.org

⁶ Encyclopedia Britannica, 2004 "Piltdown Man"

