Science and Genesis 1: 1 – 2: 3

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Introduction

We live in an age of scepticism concerning things Christian – the gospel and the fundamentals that underpin it. This scepticism has many facets. Questions arise that are of an historical, moral or philosophical nature. However perhaps the most common doubts with respect to the claims of the Bible, if not downright denials of the claims, in our society, have as their origin matters of a scientific nature.

Today, this type of scepticism is undoubtedly fuelled directly by the writings of such as Richard Dawkins and Stephen Hawking and many like them or indirectly when their views
are given popular expression in the media. In the year 2003, 149 professional evolutionary scientists who had been elected to membership in 28 honorific national academies around the world were asked a number of questions to elicit among other things their belief or otherwise in a personal God not necessarily the God of the Bible. Only 2 out of 149, could be described simply but fundamentally as theists. The rest described themselves in terms beyond and way beyond any simple idea of theism. These results are symptomatic of a world-wide ever increasing academic scepticism of religion generally, let alone Christianity. Of course there has always been some scepticism but the evidence is that such scepticism has been on the rise. In 1914 a survey carried out among those classified as “greater” American scientists found that 32 % believed in a personal God – a God to whom one could pray in the expectation of receiving an answer. The same questionnaire was repeated in 1933. Now, however, belief in a personal God had dropped to 13 %. In both of these polls a belief in God was less common among biologists than among physical scientists. In 1998 another poll found that only 10% of members of the National Academy of Sciences believed in God. What was discovered in all three surveys was that these scientists’ lack of belief in a personal God was accompanied by a similar disbelief in immortality. The 2003 survey simply indicated that matters have become even more serious. Of course such unbelief doesn’t confine itself to the academic world. The increasing scepticism of the western and beyond the western academic world is slowly but steadily filtering from that world into the thinking world at large.

Questions such as the following lie at the back of many people’s minds.

Is the God of the Bible real? Surely Jesus was just a man who was well known as a teacher but could never have performed the miraculous so often attributed to him. His death was a tragedy but presumably his so-called resurrection a hoax or the creation of the self-deluded. What about all those other planets we are recently discovering? Doesn’t their existence strongly suggest that there are other life forms in our universe, life forms of which the Bible knows nothing? Haven’t the well established facts of evolution and our knowledge of how the universe came into being put the lie to God being the creator? We now know that the first humans appeared hundreds of thousands of years ago – that doesn’t seem to fit in with notions of an Adam and Eve just a few thousand years in the past. The universe has been around for a very long time, for 13 or so thousand million years but Christianity is only a recent phenomenon and seems to have only recent events in mind. We now know that our world will continue to exist for millions of years yet to come. The idea that God in the near future would make a new heaven and a new earth seems preposterous. The belief that all of humanity would one day rise from the dead and that the behaviour of all humans would be examined by a cosmic judge, seems like something to frighten little children. Surely the psychologists and sociologists of today give us an understanding of morality and human behaviour that makes the Bible antiquated and positively unhelpful if not dangerous.

One of the most significant areas that we believers need to address is the scepticism that arises because of what is perceived to be the consequences for belief of commitment to certain cosmological, biological evolutionary, anthropological, psychological and sociological theories. This blog series and ones hopefully to follow, will attempt to examine
afresh the early chapters of Genesis to see what implications there are for such theories. Its main emphasis however will be on the text of Scripture itself rather than the theories themselves.

The problem

We will begin with the creation account of Genesis 1:1-2:3. At the outset the main problem, the obvious problem, is to work out what it all means. However, so much has been said and written over the last 2000 years about how to understand this text that it seems both audacious and futile to attempt to say anything more. The difficulty we all face is to choose which understanding is the correct one or even to decide if there is a correct understanding.

From early days an ongoing question was to determine where in the account is there a mention of the creation of angels. This might seem like us today to be an absurd problem but it was not so for many who came before, who thought that the record must refer to the creation of all things. Is the creation caught up simply in the first verse – “In the beginning God created the heavens and the earth” or was the creation of light on the first day a reference to their being brought into existence? Of course there were many other questions, as there continue to be up to this day. Here are some of them.

Did God create all things in a six normal day time period or did he create the world instantaneously? Are the first three days, abnormal days and the last three, ordinary days given that “the greater light to govern the day” is only mentioned on day four? Are the “days” ways of referring to very long periods of time? Is the seventh day the same sort of day as the first six days? And what about “the day” of 2:4? Does it not seem as though the word translated “the day” takes on again a different meaning in 2:4 where it seems to have the sense of “the occasion”? What does the recurring phrase, “there was evening and there was morning” really mean?

Interpreting the days allegorically was not an uncommon approach from the early centuries AD and onwards, seeing in them, for instances, spiritual truths, over and above anything seemingly obvious in the text, or as another possibility, references to historical developments in God’s plan of things. The problem became one of coming up with the correct analogy. There was a time when it was considered that there were different ways to handle the text and that each way was legitimate, though some ways were considered more valuable than others.

Is Genesis 1:1 an introductory statement preparing the reader for what is to follow or is it a reference to what God as a preliminary to his main creation did – creating the stuff that he then worked on during the six days or is it a summary statement of what he basically did during those six days? Does a correct understanding of 1:1 allow for the recognition that there was a gap (perhaps a very long gap) in time between what occurred in 1:1 and what follows? What does “firmament” or “expanse” - two alternative translations of the Hebrew word “raqia” - mentioned in day two actually refer to? Luther thought it referred to a solid sky whereas Calvin believed it referred to the atmosphere. A very useful survey of various understandings is Robert Letham’s article, “‘In the Space of Six days’: the days of Creation

Presumably many of our alternative understandings arise because we already have an idea of what the text ought to say. That is, we approach the text with a particular, already determined, hermeneutic. The text has to be such that everything that God has created is covered by the text (and that includes angels). Or, the text must be in agreement with what we know the world is actually like - the Scriptures cannot contain anything that we know is false, even scientific things - the “raqia” cannot refer to a solid sky because we know the sky is not solid. Or the days must be long days because we know that the world has evolved over a long period of time. Or the days must be ordinary days because that is what the text seems to say and evolutionary theories both cosmological and biological are in opposition to the idea that God is the creator. Or in order to understand the text we need to look at other literature found in cultures nearby to Israel and look at the text in the light of this other literature because it would undoubtedly reflect some thought forms and literary conventions of those cultures.

We might think it possible to simply come to the text with a completely open mind and just treat it for what it is, not reading anything into it in any way. Unfortunately it cannot be done. Whatever our beliefs that we bring to bear upon the passage, we have to work with a language – an ancient language. The meaning of this ancient language does not “sit upon the surface” of the language in some obvious way. Fundamentally its meaning is in some sense found within the language and the culture in which the language operated. And it is not a language or culture with which anyone can say that he or she is completely familiar. And to come to an understanding of that language we have to bring to it, to some extent, certain ideas about “what things are like” – that there is land and sea and light and that we have a reasonably correct idea of the concepts involved and further assume that these concepts apply to some extent to aspects of the text itself. That words which seem to refer to “in the midst of” and “above” and “under” can be conceptualised appropriately. Furthermore, although this is hopefully a minor matter, in the case of the text under discussion, we have to examine what is thought to represent something like the original text.

Well, where and how should we now begin as we try to tackle afresh Genesis 1: 1 – 2: 3? In the light of history, we ought at least to act cautiously and not imagine that we shall get it all right. It is safe to assume that nobody ever has.

Day 2: Genesis 1: 6-8 and the “Raqia”

It may seem a strange place to start but the reason for beginning at Day 2 should soon become clear. Later we shall return to Day 1 and the verses preceding.

Day 2 is interesting for a number of reasons. It is the only day with respect to which there is no reference to “And God saw that it was good”. There is a temptation to believe that one of the two such references in Day 3 has been misplaced and originally was associated with Day 2. However there is no evidence that that has occurred.
The reference in Day 2 to the “raqia” - the “firmament” or “expanse” is a more important matter. We are faced with the problem of what it actually means. According to Dillow, (See Dillow, J.C., The Waters Above, Moody Press, Chicago, 1981), “the expanse of ‘firmament’ was probably just what it means to people today - the atmospheric heavens.” (p. 11). On the other hand, Seely (see Seely, P.H., “The Firmament and the Water above: Part I: The meaning of raqia in Genesis 1: 6-8”, Westminster Theological Journal, 1991, 227-240) believes that it refers to a solid sky.

It seems to be generally accepted that the verbal cognate of “raqia” – “raqa” means something like, “stamp”, “beat” or “spread out”. If one places the emphasis on “spread out”, as does Dillow, then you might conclude that “raqia” refers to something like our understanding of atmosphere, something spread out, but diffuse. One of the problems with this understanding is that it looks like one is reading into the word an understanding of the entity which is associated with what we breathe, what enables flight, what is involved in wind etc. - a modern concept, with little evidence that the ancient Hebrew world had such a concept. One might want to say that the evidence for such is the word “raqia” itself. But that is hardly an argument. The Hebrew of the O.T. in its use of the word “ruach” indicates that concepts of breath and wind were held but there is no clear indication that the concept of “atmosphere” as we understand it, was held by people who spoke wrote in this language. The concept of “space” could have been conveyed by another Hebrew word. In fact the idea that “raqia” could refer to “atmosphere” seems to be only a few centuries old. Furthermore, the idea that something is “stamped”, “beaten” or “spread out” implies that what you have is something that is relatively thin but still held together and not ethereally thin. According to Seely, an examination of Jewish and Christian writings in ancient times clearly indicates that the “sky” was understood to be of a solid nature with no evidence that it was perceived as being something akin to our concept of “atmosphere”. In fact in Seely’s analysis there is no evidence of anyone anywhere in the ancient world believing in other than a solid sky. The first evidence we have to the contrary is a Chinese work in which the suggestion is made that the sky might be limitless in depth, a work written around 200 AD.

In Genesis 1: 8 God calls the “raqia” “the heavens” often translated, “sky”. As a consequence appeal is sometimes made to references to “the heavens” in Scripture for an understanding of “raqia” given that the use of the word “raqia” or its cognates is relatively rare. That Psalm 104: 2 and Isaiah 34: 4, for example, refer to the heavens as being a “curtain” and “scroll” respectively seems to clearly indicate that metaphorical descriptions of the “raqia” or at least “the heavens” are sometimes in mind. While accepting these descriptions as metaphorical, it could be argued that the references to “curtain” and “scroll” in themselves do not refer to something diffuse but something solid, though relatively thin and spread out. Furthermore, while God calls the “raqia” “the heavens”, “raqia” seems to be something which in that text is subsumed within the notion of “the heavens” as a whole. For instance, Genesis 1: 14, 15 and 17 refer to the ‘raqia’ of the heavens” and the reference to “the heavens” in Genesis 1: 1 seems to be a reference to an entity not confined to the “raqia”.

There are 16 references to “raqia” or a cognate in the O.T. Eight are found in Genesis 1, five occur in Ezekiel, two in the Psalms and one in Daniel. Psalm 19: 1; 150: 1 and Daniel 12: 3
refer to something which could legitimately be translated “the firmament” or “expanse”,
depending on your preference. The five references in Ezekiel (1: 22, 23, 25, 26; 10: 1) taken
together are arguably references to a precise entity under which and over which things exist,
described as “sparkling like ice” in Ezekiel 1:22.

Seely’s arguments for why we should understand “raqia” as something solid are substantial.
For instance, he argues that not only did all people in the ancient world think of the sky as
solid, they also did not make a distinction between it having such an appearance and what it
was “really” like. There were widespread ideas of the sky having holes and for some peoples,
it could be touched, some items could be attached to it and it could move up and down. He
claims that in Genesis 1, the birds fly in the heavens upon the face of the “raqia” not within
it, God set the stars and probably the two great lights in the “raqia” (which surely could not
be the atmosphere as we understand it) and while God divided the light from the darkness
(two intangibles) without making anything to enable it, the “raqia” was made to divide the
waters (two tangibles).

What is the problem about concluding that by “raqia” is meant something like a solid sky? I
take it that the difficulty is that we understand that there is no such thing as a solid sky and if
“raqia” means a solid sky then there is something in Genesis 1 that is mistaken. And then the
question is asked, “How can the Bible, if it is indeed God’s word contain something which is
mistaken?”

My conclusion is that “raqia” should be understood as a reference to something like a solid
and strong but relatively thin canopy which the writer of Genesis thought of as real and not a
description of how things simply appeared to be; that to perceive it to mean something akin to
our understanding of “atmosphere” is to write into the text a modern understanding and so
undermine the integrity of the text. From one point of view, it is better to believe that there is
a solid sky above than to treat the text in such a way as to meet one’s own wishes.

In a previous blog series I endeavoured to point out that “leb/lebab”, often translated “heart”,
throughout the O.T. is a reference to an entity, one way or another, from which, among other
things, our thinking and emotions are thought to emanate; that the ancient Hebrew is
generally not thinking metaphorically when referring to “the heart” as we often do; that he
displays no understanding that something we call “the brain” is involved in thinking and
feeling; that he is simply operating with an idea, that apparently everyone else around him
shared, that “the heart” was the thinking and feeling organ which today we regard as a double
pump for the circulation of blood. That he should understand the “raqia” to be a solid sky is
no different.

To come to such a conclusion might mean that some of us need to come to a different
understanding of what it means when we proclaim that the Bible is the word of God.
Although the Timothy text refers to the O.T. scriptures and although it simply occurs as part
of the letter’s reference to Timothy’s upbringing, 2 Timothy 3: 15, 16 is worth pondering on
again. It reads, “… the holy Scriptures which are able to make you wise for salvation through
faith in Christ Jesus. All Scripture is God-breathed and is useful for teaching, rebuking,
correcting and training in righteousness, so that the man of God may be thoroughly equipped for every good work.” (NIV). The scriptures will do all that God intends without their having to conform to the modern thinking about the natural but God created world. The position adopted here is that, in one text or another, there will be indications that Scripture contains understandings of our natural world that were commonly held by others but which we do not agree with today. At the same time it should be said, with emphasis, that the Scriptures, perhaps especially these early chapters of Genesis, contain understandings of God, his created world and his relationship with that world which have no parallel or likeness in the ancient world.

Back to Day 2. The “raqia” had an extraordinary beginning and was intended for an extraordinary purpose. God effortlessly said, “Let there be a ‘raqia’ between the waters in order to separate water from water” and there was. Then he used it to separate water from water with the result that there was water above it and water below it. With it he pushed some water away and created space between that water and the other water. Where was any of this water to begin with? It was there before the first day. We shall return to this matter later when discussing Genesis 1: 1, 2.

Seely in a second paper (See Seely, P.H., "The Firmament and the Water above - Part II: The meaning of 'The Water above the Firmament' in Gen 1: 6-8", Westminster Theological Journal, 54, 1992, 31-46) claims that in the ancient world, it is very uncommon to find any notion that there was water on the other side of the sky. The Babylonians certainly held to such an idea; there is some reference to the notion in some Egyptian literature and occasionally the idea finds expression in some Indian literature, though the claim has been made the Indian material had been borrowed from the Babylonians. The inference from this is that the Hebrews shared a belief in there being water on the other side of “the sky” with the Babylonians. In the early centuries AD the evidence is that while the Christians did not have to argue that the sky was solid because their Greaco-Roman contemporaries already believed that, they did have to argue that there was water on the other side, because that was not a shared belief.

Walton, (See Walton, J.H., Ancient Near Eastern Thought and the Old Testament: Introducing the Conceptual World of the Hebrew Bible, Baker Academic, Grand Rapids, MI, 2006) cites Egyptian and Mesopotamian material that refer to water being held back by the sky (pp. 169, 170). “In Mesopotamia Marduk assigns guards to keep the heavenly waters from flooding the earth. These waters are the remnants of Tiamat’s body which was split to form the waters above and the waters below.” “Egyptian texts refer to the heavenly ocean ... the cool or upper waters of Horus. The sun god’s barque travels from horizon to horizon across this heavenly ocean.” We should notice how free the Genesis text is of any reference to any god intimately associated with the “sky” either with respect to its nature, its origin or any part it regularly plays in connection with a god. The God of Genesis 1: 6 - 8 is not like the gods of the surrounding nations. He is outside of the sky, bringing it into existence effortlessly for a one-off purpose. He is not to be confused with it in any way and it has been brought into existence by his will. What is said about the “raqia” and its purpose and how God determines both, acts as a type of polemic in the Hebrew’s world. Other peoples have
got it wrong. Their understanding of the gods is in error. Their understanding of the relationship the gods have with the world is in error. We shall return to these claims from time to time as we work through the rest of the Days. Walton also refers to beliefs that people has about things like the origin of rain and holes in “the sky”. We might comment on such matters in a later series.

What did God do in Day 2? Following on from Day 1 he continues to bring order into the chaotic world described in verse 2. This is the God who is completely in charge. With respect to the water it was formless but now he gives it form. He sets the scene for Days 3, 4 and 5. More will be said about Day 2 later and also when we examine Day 5.

Before we leave Day 2 let us return to the matter of there being no “And God saw that it was good.” As we shall see when examining the other Days, the entities about which these words are said have a fairly obvious “goodness’ about them. However in the case of “raqia” its “goodness” is in terms of what it enables and what it enables becomes obvious as the following days unfold. Perhaps that is the reason for the absence of “And God saw that it was good”.

In the blogs that follow I will continue to look at the text of the six Days in some detail in an attempt to give it the integrity that it deserves. However, later on, I will ask some more fundamental questions about the text and its overall nature and significance and what to make of it in light of some modern understandings of the origin of the universe, earth and life on the earth.

**Genesis 1: 1, 2 – The Introduction to the Six Days**

The opening words of Genesis could be understood as an introduction to what is to follow or a summary of what is to follow or even an introduction which amounts to a summary of what follows. And with respect to the first 3 verses, they could be translated, “When God began to create the heavens and the earth, the earth being formless and empty, darkness being ... God said, ‘Let there be light ...’”, or “In the beginning God created the heavens and the earth. Now the earth was formless and empty and darkness was ... And God said, “Let there be light ...”’. See Walton, J.H., *Genesis*, The NIV Application Commentary, Zondervan, Grand Rapids, MI, 2001, pp. 69, 70 for another alternative and some discussion on these alternatives.

Again, the temptation is to write into the text, what one wishes it would say. If there is a belief that a long period of time is involved somewhere in creation in order to accommodate a modern perspective that the universe is very old, then one might see the first verse as dealing with an initial creation followed by an indeterminate time period before the creation episodes of Days 1 to 6. If there is a concern for the account to indicate that creation has to begin with God bringing into existence all things when previously there was nothing, perhaps appealing to something akin to Hebrews 11: 3 (the universe being formed so that what is seen was not made out of what was visible), then one might claim the following: the opening verses of Genesis state that first of all God made an earth that was formless and empty, but covered with water and it was in darkness.
Adopting either of these positions is understandable but I will adopt a different position here. But first a few words about “the heavens” and “the earth”. Their mention in 1: 1 seems to be a reference to “everything” since 2: 1 again mentions them in a type of concluding statement - “And the heavens and the earth were completed.” It is a reminder to us of how Hebrew words like “heavens” or “earth” can have a more inclusive or less inclusive reference depending on their context. It could be a mistake to see “the heavens” and “the earth” of 1: 1 as simply referring to the firmament of 1: 8 and the dry land of 1: 10 respectively.

Some of what follows has been gleaned from the two works of Walton (Genesis, pp. 70-78 and Ancient Near Eastern Thought and the Old Testament: Introducing the Conceptual World of the Hebrew Bible, (ANETOT) pp. 179-199), though what is written here cannot do these writings justice. In Egypt and Mesopotamia, the fundamental idea behind creation was not bringing into existence something which had not existed beforehand but bringing into existence function and role where that had not had a previous existence. Walton contends that whereas we moderns are interested in questions such as, where matter came from, the basic concern of the ancient world of our focus was how the world came to have its ordered and functional characteristics. The cosmologies of these ancients had very little to do with the manufacture of a material cosmos and their creation accounts typically begin with a “precosmic, unordered, nonfunctional world”.

Walton argues that “bara”, translated “create” in the Old Testament and only ever used there (about 50 times) of God as subject, is used throughout the Old Testament with a sense consonant with the idea of creation held by the surrounding cultures - that is, having the sense of bringing about ordered functionality but not necessarily materiality. Thus, the suggestion is that God’s creation of the heavens and the earth in 1: 1 is an introductory-summary type of reference to his bringing about primarily, a world that had ordered functionality rather than primarily, materiality. Consequently, 1: 2 can be understood as a description of the “precosmic, unordered, non-functional world” and that what follows is God creating fundamentally order and function but doing this by bringing into existence things that were not. That is, God is not being described as bringing into existence this precosmic, unordered, non-functional world, but that he begins with it. His actual acts of creation are to be found in the descriptions of Days 1 to 6. It is not being implied here that God did not bring all things into existence, surely the rest of Scripture justify the conclusion that he did, but that Genesis 1: 1-2 and following does not fundamentally deal with the creation of something from nothing - it begins with the unordered non-functional.

The writer of Genesis works with a viewpoint and a concern common to his day but with an understanding of God, his relationship with the world and his purposes for his world totally different to those associated with the gods of the surrounding cultures. Indeed I think either translation given above for Genesis 1: 1 probably conveys the correct basic sense. And Genesis 1: 2 tells us what this precosmic condition was like. It had no structure and no well defined elements separate from one another. It was dark - there was no light. There was a “watery deep” but unlike in other cultures, this “watery deep” was not a personification for a god or goddess. It was simply a god-free “watery deep”.
And then there was “the wind of God”. Or should we translate it, “the Spirit of God” moving over the waters – the word, “ruach” being translated either as “wind” or “spirit”? Or should we consider it to be both the wind and the Spirit of God that is hovering or circling over the waters? Quite possibly, since for the Hebrew, God is behind the existence and the functioning of wind. However, perhaps more to the point, not only is God not of this material world, but likewise, probably to the Hebrew mind, neither is the wind. Perhaps the wind is part of the precosmic condition but being termed the wind/the Spirit of God we are alerted to the fact that God is about to work with the precosmic world to bring functional entities into existence. The formless, the void, the darkness and the deep are about to change. The one and only great creator, God, never to be confused with his world, is about to bring about that world and for the reasons he will make clear.

**Genesis 1: 3-5 – Day 1**

“Then God said, ‘Let light be’ and light was. And God saw the light that (it was) good and God made a separation between the light and the darkness and God called the light, “Day”; and he called the darkness, “Night”; and there was evening and there was morning the first day.”

With a majestic command, God brings light into existence where to begin with there was only darkness. With a modern understanding of things in mind we might be tempted to think that the text refers to God bringing into existence photons having frequencies in the region of visible light or even electromagnetic radiation of all frequencies. But this would be a misunderstanding of the text. God is certainly portrayed as bringing “light” into existence but it is light which is marked off from darkness and called “Day”. Darkness, having a contrast with this light that God created is now called “Night”. Whereas, before the act of creating “light”, there was only darkness, now with the light existing and light being separated from the darkness, there is now “Day” and “Night”. One might also be tempted to say that in Day 1, God has created “time”. From our point of view that would seem to be correct. Day progresses to night and so on, indicating that there has been a passage of time. But again, “time” is what we might like to focus on when handling this passage but that does not appear to be the concern of the writer when referring to Day 1. We will deal with something like our notion of time when we get to Day 4.

At this point the reader might think that from a modern perspective there is at least one problem. It is not until Day 4 that God says, “Let light bearers be ... to make a separation between the day and the night.” To deal with this problem some have suggested that in Day 1 the sun and the moon etc. were created but the earth was enshrouded in a vapour which prevented a theoretical observer from observing them. (That is, the description is in terms of what would appear to be the situation if there had have been an observer.) Then, on Day 4, the vapour was dissipated. However, the Hebrew text of 1: 14 that speaks of the separation between the day and the night is very similar to the Hebrew text of 1: 4 that refers to the separation between the light called “Day” and the darkness called “Night”. I think the best approach is to leave the text to say what it seems to say without producing a “scientific”
Prior to Day 1, the reader has been informed that the earth (referring to something more comprehensive than our geographical earth) was “without form and void”. This formlessness and void are regarded as fundamental characteristics of the “earth”. The terms describe what is not there. The “darkness” and the “watery deep” are in a different category being descriptors of what is there. In Days 1 to 6 that formlessness and void on the one hand and darkness and watery mass on the other hand are confronted. The “earth” changes dramatically. In Day 1, a certain aspect of form comes into existence – light is created and separated from the darkness and darkness is now confined. Differentiation has occurred, where there was only formlessness before. In Day 4, with respect to light, the void is partly dealt with. Light bearers come into existence. This idea that formlessness and void are dealt with throughout Days 1 to 6 will be appealed to from time to time, when Days 2 to 6 are discussed later.

That is, in Day 1, light is introduced to bring about some “form” – a differentiation between day and night. In Day 4, light bearers are introduced to bring about some “non-void”. We might like some neat description of creation that satisfies our interest in cause and effect (e.g. that the sun produces light) but the writer of Genesis has a different interest. He wants to tell us how God dealt with “formlessness” and “void”. Others of surrounding cultures had a similar type of problem to address - how “function” and “role” came into existence where they had had no previous existence. However, the way that Genesis deals with this type of issue has no parallel in the ancient world.

It can be argued that the light that God brought into existence on Day 1 is not only that light that is associated with the sun, moon and “stars” but is a reference to “light” whatever its source. This argument could be based on the belief that surely the Hebrew would know that light also came from flames and that he might also be aware of the existence of luminescent objects. However we need to remember that there does appear to be a close connection between Day 4 and Day 1 and that in Day 1 the light is named, “Day”. Perhaps the reference to “light” in Day 1 is simply a reference to “daylight”.

Of course there are questions, other than what is meant by “light” that suggest themselves, when considering Day 1. What does God actually do when he says, “Let light be”? What does it mean that God saw that it was good? What is implied in his naming the light and the darkness? What does the word “day” in the phrase, “the first day” mean? What does “the phrase “the evening and the morning” mean? These questions or similar could be asked again when dealing with subsequent days. With perhaps few exceptions such questions will be considered only here.

How did God create the light? The writer simply says that God said, “Let light be.” We must not look for any scientific reference. The impression that is being conveyed however is that God is extraordinarily powerful. He orders and it is done. No great ruler no matter with what backing he could issue any command, could ever do what God does. No workman no
matter how great his skill no matter how powerful his arm could ever create what God creates. We are being introduced to raw untrammelled power and authority. However there is probably more to what is recorded than this perspective. In the ancient world (and indeed today) some people and certain gods are sometimes portrayed as changing and controlling situations by artful cunning, words of magic and the like, whereby they are able to manipulate their world (see Walton, ANETOT, pp. 264-266, 336, 340). God uses no such means. He does not have to revert to special words of power. His words, simply given are powerful because he is powerful. If additionally we ask what language God spoke, we will have missed the point. Language does not really come into it. It is not that the notion of God and his word is not an important notion taken up from time to time in the rest of Scripture, it is simply that we are asking a question that is misguided in its interest. The words of God express his intention. We are told of his intention by the phrase, “And God said …”

The word, “good” (Hebrew tov) is somewhat like our English word “good” in that it has a wide range of meanings. In Days 1 to 6, tov probably conveys the idea that God is very pleased with his work - it is an extraordinary work - it does whatever he intends, exactly what he intends - it is admirably suited for his purposes. When God, as it were, stands back from the light that he has brought into being and says, “This is good!” He is also saying there is nothing bad, evil or frustrating in any sense in what He has made. He says this where peoples in cultures outside of Israel, seeing the work of their gods and the gods themselves could not possibly say that.

It might be significant that in all of Days 1 to 6 where the expression, “And God saw that (it was) good” occurs, it is only in Day 1, where the entity that has been created is explicitly mentioned after the reference to God. The text reads, “And God saw the light that (it was) good”. Perhaps being the first thing that God created and being of the great significance that it was, leads to the emphasis that seems to be given to “light”.

That God names the light and the darkness could be an indication that he has authority over them dictating to them those purposes for which they have in fact been made. They can function only in accordance with his will. He is in charge of them. They have no authority over him. He has not come from them. He deals with them for his own purposes. Walton has a slightly different perspective (ANETOT, p. 188). He refers to Egyptian and Babylonian literature in which creator gods pronounce the names of entities (even other gods) so bringing them into existence by the actual naming of them.

Having called the light “Day” and the darkness “Night” the reference to the first day that almost immediately follows could simply be a reference to what we might describe as the daylight hours. In the ancient world, when people worked they generally worked during daylight. That God brought light into existence on the first day probably carries with it the imagery of God working “during” a day as mankind worked during a day. Referring to daylight lasting for something like a 12 hour period is a modern way of describing the period of daylight. The text could be referring to God as though he did what he did within such a time period, without of course making any reference to “hours”. Walton (Genesis, p. 81) having a different point of view, argues that “day” in the phrase, “there was evening and there
was morning, the first day” is probably a reference to what we would consider to be a 24 hour period. Certainly, understanding “day” to refer to a very long period of time is difficult to justify, by referring to the text alone.

But what of the meaning of that part of the phrase, “there was evening and there was morning”? This matter has generated considerable debate. And perhaps few of us are much the wiser! The phrase is not consonant with the later Jewish way of reckoning a day which is understood as commencing with the beginning of an evening and ending with the ending of the daylight that comes after that evening. Perhaps the writer by first referring to “evening” is trying to convey the idea that God finished his work before the evening, the working day having come to an end. That he refers to “morning” secondly, however, is a puzzle. Is he saying something like, “the evening came, (the day having begun with the morning), the end of the first working day”? At least this seems to fit in with the notion that the “Day” is the name given to the light in opposition to the “Night”, the name given to the darkness in its now confined state. And of course in order for the writer to refer to the first Day etc. it would be necessary to have some understanding of “day” in the first place. Walton, (Genesis, p. 80) however, argues that on day 1, God sets up alternating periods of day and light with the first “transition” occurring at evening, daylight having just been created, and so evening has to be mentioned first. The next morning marks the next transition. Days 2 to 6 then use the same terminology.

But whatever our explanation, the first day comes and goes yet with lasting effects.

Genesis 1: 6-8 – Day 2 (again)

“And God said let a firmament be in the midst of the waters and let it divide the waters from the waters. 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 and he called the firmament, ‘Heavens’ or ‘Sky’. And there was evening and there was morning the second day.”

Mention has already been made of what was very likely understood by “raqia” - firmament – a solid vault. The waters of course were not made during this Day. They were in existence before the creative Days are mentioned. The waters are simply divided into two portions. A separation is made between some of the waters now beneath and some of the waters now above the firmament. Day 2 shares with Day 1 a process of differentiation. In Day 1, light, having been made, was differentiated from the darkness. In Day 2, the firmament having been made, the waters were separated into those above and those below. In both Days 1 and 2 God introduced “form” where previously there had been “formlessness”. As in Day 1, what God made he also named. The “raqia” he named, “Heavens” or “Sky”.

Genesis 1: 9-13 – Day 3

Twice in Day 3 God speaks – He acts. This will be paralleled in Day 6 where again God speaks – He acts, twice.
In Day 3, as in Days 1 and 2, God brings about differentiation. In his first act, by drawing the waters under the vault into a specific location and causing dry land to appear he differentiates between these waters and the land. The dry land he names “Earth” and the now more localised waters, he names, “Seas”. In Days 1, 2 and 3 God has been concerned with creating basic structures. What was without form to begin with now has quite distinctive features, each separate from the other.

In his second act God says, “Let the land produce vegetation” – two types: “the plant bearing seed according to its kind and on the land the tree yielding fruit with seed in it according to its kind”.

In the first act, God determines that it should be so and it is. Likewise in the second act He determines that the Earth should yield these things upon the earth and it does. This is the God of awesome but uncomplicated power. And with respect to both those situations that he brings about on Day 3 He, as it were, stands back from his creation and sees that it is good. In effect he proclaims that it is good.

But what is meant by, the terms, “Earth”, “Seas”, “the plant bearing seed”, “the tree yielding fruit with seed in it” and “according to its kind”?

The question of what is meant by the first two terms is addressed in some detail by Seely, P.H. in an article entitled, “The Geographical Meaning of ‘Earth’ and ‘Seas’ in Genesis 1: 10” (Westminster Theological Journal, 59, 1997, 231-255). The temptation for many has been to see these terms in the light of the modern understanding of the earth as a spherical globe with isolated continents affixed to a solid crust upon which exist a number of oceans that surround these continents.

Seely provides evidence for the claim that prior to the 5th century B.C. the earth was considered by peoples throughout the world, to be basically a flat single “continent”, usually considered to be disc-like and thereby described as “circular”. He maintains that this was still a view held by most people up until New Testament times. He is convinced that Genesis 1: 1; 1: 2 and 1: 10 refer to the entire earth and that the reference to the firmament in Day 2 indicates that the earth of Day 3 is conceived of as flat disc-like with the firmament coming down over it like a hemispherical upside down bowl - a belief, he claims, that was held by all other peoples.

To further support his understanding of how the ancient Hebrew conceived of the earth, he cites Isaiah 40: 22 which speaks of “the circle of the earth”. It has been common for some to refer to the Isaiah text as supporting the notion of a globe but Seely points out that “circle” does not imply “globe” whereas the Hebrew for “ball” would have conveyed that idea. For additional support he refers to Daniel 4: 10, 11 and 4: 20 where reference is made to a tree of enormous height with its top touching the sky and it being visible to all the earth. Job 37: 3 is cited as implying that God’s lightening can be seen at the very extremities of the earth – the earth being flat. Appeal is also made to the statement, made in a cosmological context, that the dawn grasps the earth by its edges (Job 38: 13).
Seely also provides evidence for the view that in the ancient Far East it was commonly held that the earth was one entity floating on an ocean and that in the ancient Near East it was the belief that a sea surrounded and supported the disc-like earth. Arguing from its use in scripture (citing e.g. Ezekiel 27: 4 and 28: 2 where a reference is made to Tyre being located in the heart of the seas) he also concludes that the Hebrew for “Seas” has the meaning “Sea”. Reference is made to Job 26: 10 and Proverbs 8: 27 to support the idea that in the mind of the writers, when God gathered the Sea into one place, that one place was “circular” in shape. He cites Psalm 72: 9 and Zechariah 9: 10b in support of the idea that the phrase, “from sea to sea” is a reference to two oceans on either side of the earth as though it were an island. He believes that Genesis 49: 25, Deuteronomy 33: 13, Proverbs 3: 20 and Psalm 24: 1, 2 and 136: 6 as well as Genesis 2: 5, 6; 7: 11 and 8: 2 support the idea that the Hebrew believed that water lay beneath the earth.

Thus, he concludes that like their contemporaries, the Hebrews considered that the earth was surrounded by the Sea (with arm-like appendages extending into the rivers and connected seas) and floating on the Sea, from whence came the water of springs, wells and all land locked waters. In summary Seely believes that the understanding of Earth and Seas in Genesis 1, textual material that belongs to the 2nd millennium B.C., is in line with the understanding of ancient peoples of that time. I think Seely is correct but I have not done him justice in this brief survey of his article. We may appeal to the notion that in many if not all of the texts of Scripture that Seely cites, the writer is writing with poetic flair. It would be a little odd however if much of the language that the writer uses, being simply poetic and not to be taken literally, happens to coincide with language used by other cultures, around about the same time and even in nearby localities, language that was meant to be understood literally.

But now, to the terms used of the vegetation. To begin with, I again refer to an article by Seely: “The Meaning of Min, ‘Kind’”, Science and Christian Belief, 9 (1), 1997, 47-56. The article mainly deals with “min” (kind) as it applies to non-plant life and will be considered again when reflecting on Days 5 and 6. Suffice it to say here, that Seely mounts an argument that “kind” cannot neatly be aligned with any one of our modern classificatory terms, such as, “phylum”, “class”, “order”, “family”, “genus” or “species”. It belongs to a world where plants and animals are classified differently to the way we moderns might classify them. Our taxonomic systems have been created only relatively recently and the way the modern biologist determines how different species relate to one another and how the term “species” should be understood has been changing even more recently!

It is difficult to tell exactly what is intended by “the plant bearing seed” and “the tree yielding fruit with seed in it”. “Esev”, “plant” is sometimes translated by the word, “herb”, and it can be found in the phrase, translated, “plant of the field”. Given that in Genesis 1: 29 the “plants bearing seed” and the “trees yielding fruit with seed in it” are described as food for man, the reference in 1: 11, 12 might be meant to be so restricted. “Plants bearing seed” might include, grains of various types and “trees yielding fruit with seed in it” might refer to what we commonly understand by fruit trees as well as plants with berries etc. Does this mean that other types of “plant life” are not referred to? Not necessarily so. In Genesis 1: 30, “green
esev”, perhaps a reference to grasses and other leafy vegetation, not explicitly mentioned in 1: 11, 12 is designated as food for creatures other than man. Perhaps the terms “the plant bearing seed” and “the tree yielding fruit with seed in it”, while being primarily understood as “plant life” suitable for food for man, are also used as a general way of referring to “plant life” although even then the “plant life” might be understood as restricted to that which is edible by either man or other creatures.

However what is the significance of the reference to “seed” and “after its kind”? “Light”, the “Heavens” or “Sky”, “Sea” and “Earth” are permanent. Substantially they do not change. Plants, on the other hand, come from the Earth but later they wither and die. I know the text does not say that, but certainly, later, they are eaten. They are impermanent. Yet God has so made them that after a fashion they also are permanent. They can be depended upon. They reproduce. The plants bearing seed will by their seed produce new plants that will have the same character as the plants that they came from. The trees yielding fruit with seed in it will by their seed produce fruit trees that will have the same character as the fruit trees that they came from. That is, perhaps what is being implied is faithful reproduction of type leading to permanence rather than simple type immutability.

By producing this plant life God has brought about more “form”, more structure, to what was originally the “formless” world. And in all of Days 1 to 3 there are no mythological elements so common in the creation accounts of others. There is God and the creation that he brings about. The creation is not him but it is his handiwork. And now, just before Day 4 begins the world is ready to be filled with entities which “make use of” the form that God has created in those first three days.

**Genesis 1: 14-19 – Day 4**

On the fourth Day God said, “Let lights be in the firmament of the heavens”. One might think it strange to refer to “the firmament of the heavens” when in Day 2, the firmament has been called “heavens” or what we might call, “sky”. Presumably, the phrase has something of the sense of, “the firmament which is the sky”. It is a differentiating structure but more commonly it is conceived of as “the sky”.

These lights, later in the passage, are identified as, two great lights and also the stars. The former we would refer to as the sun and the moon. The stars are most likely to be conceived of as all the “little lights” of the night sky – probably what we would identify as distant stars, galaxies and planets. At this point the modern reader will be tempted to remark, particularly with reference to the sun, that the “light” of Day 1 and there named, “Day”, comes from the sun. He might argue that the writer should have first referred to the Sun, perhaps in Day 1, before referring to “light”, perhaps in Day 4. Again we need to be reminded that the writer is not primarily interested in “cause and effect” matters. In Days 1 to 3 he indicates how God has brought “form” into the world. Differentiation has occurred. Basic structure has been made. Now beginning with Day 4, God begins to fill the “void”. He brings into being items which can “make use of” can “take advantage of”, can “be attached to” the “form” now in existence. As odd as it might seem to the modern reader, the lights are specific objects that
now take their place as functionaries having made themselves available of that light that was brought into existence on Day 1.

But why are the sun and moon not called such? There are Hebrew words for sun and moon but one is described as “the greater light” and the other as, “the lesser light. Perhaps it was to avoid any suggestion that God had made “gods” – the sun god and the moon god. Though other cultures had such gods and in their creation stories one god could make another god, this God is the one and only god. And he is never to be confused with his creation. He is not the sun or the moon as others thought of as some of their gods, even giving them different gender roles. He stands outside of sun and moon and is before sun and moon, but he brings them into existence. The reference to “and also the stars” might be of similar significance. Over and above that phrase conveying the idea that the stars are very minor light sources, the writer may have intended the reader to realise that any belief, such as the Babylonian one, that the stars were of supreme importance, is to be given no credence whatsoever.

Of course, these lights do not simply come into existence. The bringing of anything into existence, as though that were all that could be said, is quite foreign to this document. The lights are created for their God given purposes – declared, to begin with, to be for the separation of the day from the night. Though there seems to be a repetition of the purpose of “Light” created on Day 1, there may be something additional being said here. Broadly speaking, one of the lights brings light to the day, whereas, other lights bring light to the night. Certainly they have been set in the sky to give light on the earth and to govern - to rule over the day and the night. In almost his final word for Day 4, the writer, proclaims afresh that their purpose is to separate light from darkness. They begin to fill the void and to do what “Light” created on Day 1 was created to enable them to do. Day 1 comes to a type of completion on Day 4. That aspect of the “form”- light, finds its fulfilment in the lights of the latter Day.

However they have not been appointed solely to “rule”. They are also there for other purposes. They are to serve as, “signs to mark seasons and days and years”. Walton (Genesis, pp. 122, 123) is of the view that “seasons” is not a reference to “such as summer and winter” but “more specifically the related festivals and religious feast days of the liturgical calendar”. This relates to his understanding that in common with the surrounding cultures the cosmos was regarded as a temple (ANETOT, pp. 123-127; 196-199). When discussing Israel’s view of cosmos in relation to the concept temple he refers to Isaiah 66: 1 – “Heaven is my throne and the earth is my footstool” (ANETOT, p. 127). The signs also mark, “days and years” – a phrase which Walton argues refers to one function - the making of calendrical calculations necessary in the ancient world and for a variety of reasons (Genesis, p. 123). In the same passage, in order to illustrate how the ancient world of the Hebrews thought about such matters, Walton cites the Sumerian belief that “the major gods, (An, Enlil and Enki) put the moon and stars in place to regulate days, months and omens” and refers to the Babylonian view that the role of the sun god Shamash was to regulate the seasons and the calendar in general as well as to be the patron of divination.
Whatever similarities exist between the Genesis document and accounts such as these, we need to remember how differently God himself is portrayed compared to how the gods are portrayed. They are bound up in the cosmos. They are integral to the cosmos. How mankind relates to them is determined by their nature, the nature of the cosmos. On the other hand, God brings the cosmos into being. He is not part of it. How mankind relates to him is in part determined by the world God has created but also in terms of who he is apart from his world.

On this day, as for each day, God said ... . And it came to be. And on this day, as on most, he saw that it was good. And there was evening and there was morning – the fourth day.

**Genesis 1: 20-23 – Day 5**

As Day 1 was “fulfilled” in Day 4 so Day 2 is “fulfilled” in Day 5. In Day 2, the firmament was made to move the water above it away from the water below it. One of the results of this movement was to bring about “space” between the firmament (the *raqia*) and the water below. The space itself is not given a description but arguably its existence is implied. It is that “space” and the water below that is now addressed in Day 4. Birds fly above the earth and across the face of the “*raqia*” (that is within the “space”) and the waters teem with living creatures. The “structures”, the form, brought about by the “*raqia*”, is now utilised and the original void is further diminished as both “structures” are filled.

With respect to Day 5, the word “*bara*” (create) appears for only the second time in Genesis 1: 1 – 2: 3, its first occurrence being in 1: 1 (“In the beginning God created the heavens and the earth.”) and we might well ask why it appears here. It is to be found again in 1: 27, for the third and last time in this opening segment of Genesis, in connection with the coming into being of mankind. It might be that from a literary point of view, the writer has an interest in certain numbers and in this instance displays an interest in the number “three”. While this may be so, perhaps it is more likely that he chooses to use the word, only ever used in the O.T. of the activity of God, in the passages under discussion because of the great significance of the events to which it is attached. As argued previously, 1: 1 is a type of introductory summary. Its use there is understandable. The coming into being of mankind is unquestionably of great significance so its use there is also understandable. But what makes the events of Day 4 so significant? Could it be because of what is signified by the term “living creatures”, that first makes its appearance in Day 5? The term will again appear in Day 6 of animals and later will be used of man in 2: 7. The plants of Day 4 are not termed “living creatures”. It is a term only applied to what we would describe in general terms as the animal world. Compared to plants, animals are “mobile” (the term “moving” is applied to the creatures of the waters in 1: 21) and perhaps it is something of that idea that underlies the difference between “living creatures” and the plant world. It is true that in 1: 20 the term does not appear to be directly associated with the bird life but only the life of the waters. However in 1: 21 it is used to cover both. Living creatures because of their so obvious “life” stand out as being of great significance and so perhaps understandably, “*bara*” is to be used of them to highlight that significance. This matter of the distinction in Genesis between the plant world and the animal world, as we term them, should remind us of the difference
between the way the Genesis document classifies these “worlds” and the way modern man does, ascribing “life” to both animals and plants.

What description over and above “living” is given to the creatures of the waters? They are intended to be prolific – the waters are to swarm with them and some of them are especially designated, “the great ‘tannin’”. Walton (Genesis, p. 127) argues that “tannin” is to be understood as referring to “the chaos monsters that were believed to inhabit the cosmic waters” but in Genesis, contrary to how they were commonly thought of, they are not creatures that are “antagonists that need to be defeated”. They simply fulfil the purposes of their creator. It is quite possible that the term “the great ‘tannin’”, while having a reference to such was also intended to include creatures such as whales, sharks etc.

Both birds and water dwelling creatures are referred to in terms of being created “according to its kind”. As mentioned previously, “kind” (min) is not to be associated with any one of the taxons of a modern taxonomic system. Seely in “The Meaning of Min, ‘Kind’” (see above) argues that an examination of the use of “min” throughout the O.T. and a consideration of certain anthropological data indicates that its application varies greatly depending upon what particular animals or plants (to use our nomenclature) are being referred to. With regards to fish and appealing to modern classificatory terms, he believes that “as a general rule min would land sometimes on the family level and at other times on the genus and even the species level.” In his discussion on birds, he maintains that in their case, “min” may refer “on a rare occasion to the family level and at times to the genus level but the reference will usually be to the species level.”

Seely also believes that underlying “min”, a word never used of what we would term, inanimate objects, is the notion of reproduction. On this basis, though of course there is no mention of seeds in relation to the creatures of Day 5 as there was to the plants of Day 4, the creatures of Day 5 are to be conceived of as able to reproduce. In fact 1: 22 makes it clear that God’s blessing upon them was for them to reproduce, in fact, in large numbers. The waters in the seas are to be filled with the water dwellers and the birds are to multiply on the earth. As with the plants the creatures of Day 5 have a type of permanence. Indeed in their case they not only reproduce, they increase in numbers.

The reference to “earth” in the case of the birds might entail an understanding that birds are in general associated with the earth (they land on the earth, they nest in trees etc.) though they fly across the “raqia”, whereas, the water dwellers are associated with the “seas” and not the earth. That God blesses them but not the plants is a further indication of how special these “living creatures” are that God “created”.

And God said, “Let…” And it came to be. And God saw that it was good. And there was evening and there was morning – the fifth day.

**Genesis 1: 24-31 – Day 6**

On Day 6 God acts, he speaks, twice just as on Day 3. On Day 3, In God’s first act, the waters were drawn together in one place and the dry land appeared. In his second act on that
day vegetation was brought into existence. Now on Day 6, in his first act God makes animals of various kinds. In his second act he makes mankind. These animals and mankind live on the land, and the vegetation of the land is for both animals and mankind to eat. The “structure” of Day 3 is utilised by the “substance” of Day 6 and what was originally empty is now full.

The animals are described as “living creatures” and although the living creatures of Day 5 are “created”, the animals are simply “made”. However, like the water dwellers and the birds of Day 5 they are clearly “living” and so fundamentally to be distinguished from the plants of Day 3 which are not so described. The use of “create” in Day 5 may herald the idea that the animals and mankind of Day 6 are also created (with mankind specifically being referred to as being created in 1: 27).

That the land produces the animals may indicate that they originate from the land but Walton believes that the word “produce” is basically functional in purpose rather than reflective of a biological process (*Genesis*, p. 127) – the animals live on the land. The animals are of three fundamental types. The NIV describes them as, “livestock”, “creatures that move along the ground”, and “wild animals”. Walton understands the second group to be “wild herd animals that often serve as prey” (p. 127), and hereafter they will be referred to as “roaming herds”.

The animals are made each according to its kind. They will reproduce. They will be ongoing. They will be characterised by a type of “permanence”. Seely in “*The Meaning of Min, ‘Kind’*”, with respect to what he refers to as “mammals” argues that “(except in the case of very small or nocturnal animals), min may have reference at times to genera, but usually it is to species”.

On Day 6 considerable focus is given to mankind - his creation, his importance, his nature, his function and his sustenance. He is created in “the image of God”. He is also said to be made in “our image” a term within the clause, “Then God said, “Let us make man in our image, in our likeness.”

Walton refers to three different types of explanation for the use of the plurals, “us” and “our” (*Genesis*, p. 128-130) – theological, grammatical and cultural. He argues that a theological explanation which appeals to notions such as persons of the trinity, falters in that not only would the original hearers/readers not have had such an understanding (see also below) but nowhere in the N.T. is there any claim that the text must be understood in that way. The grammatical explanation, which appeals to something like the use of a royal plural or a rhetorical convention, is dismissed on the grounds that there is no clear evidence elsewhere in Hebrew that such plurals are used in that way. A cultural explanation which rests on the notion that the plurals are a vestige of polytheistic belief is also dismissed partly on the grounds that it is difficult to believe that any writer/editor would have allowed such a vestige to remain in such a monotheistic document.

Walton argues for a cultural perspective in which God is portrayed as having a heavenly court. While recognising that such an idea was current as part of an ancient world view, Walton bases his argument mainly on perspectives to be found within the O.T. itself. In
support of his claim he refers to 1 Kings 22: 19-22, Isaiah 14: 13 and Job 1. Whereas in the ancient Near East, the divine assembly was made up of greater gods, the heavenly court of God consisted of “angels, or more specifically, the ‘sons of God’”. Our understanding of God as portrayed throughout the O.T. would mean that unlike in the surrounding cultures where the assembly as a body made decisions, in God’s court, God alone makes the decision.

The reference to the heavenly court could serve at least two functions. First of all it could indicate to the reader the immense importance of man, the creature yet to be made. God allows the beings of the heavenly assembly to be privy to his intentions. To show the reader/listener how much importance is to be attached to this particular creative act the author portrays God as musing upon it but openly, and he can do this very satisfactorily, if other beings are allowed to witness and be caught up in his reflections.

Secondly, perhaps our understanding of what is meant by, “in the image of God” is meant to be partly assisted by the reference to, “in our image, according to our likeness”. Although Walton in his discussion of “the image of God” (Genesis, pp. 130,131) does not think it necessary to understand that angels have also been created in the image of God, it could be that they are. However this would not mean that we are obliged to consider that the image of God amounts to the same thing for both angels and men. Much has been written about what could be meant by “the image of God” but being in his image could at least contain the notion of the possibility of a two way “personal” relationship between God and angels on the one hand and God and men on the other. If members of the heavenly court are considered to have such a relationship, so could those made in the image of both them and God. Perhaps the additional phrase, “according to our likeness”, a phrase not repeated in 1: 27, where the reference is solely to God himself, puts some emphasis on a similarity between angels and men.

Walton claims that “in the ancient world, an image was believed in some ways to carry the essence of what it represented” though an image of a deity could not do what the deity could do. The deity accomplished his work through the image. Walton quotes from the Egyptian, “The Instruction of Merikare” (a Pharaoh) in which reference is made to the deity making mankind as his images who came from his body, to whom he gave breath and for whom he made plants and cattle and claims that, “Generally Egyptian usage refers to the king as being in the image of deity, not as a physical likeness but related to power and prerogative.” In Mesopotamia, apart from reference to kings setting up images of themselves in places where they wished to assert their authority, it is gods who are made in the image of other gods. Walton appeals to Genesis 5: 1-3 where the image of God in Adam is likened to the image of Adam in Seth. That is, there is some likeness between God and Adam on the one hand, as there is some likeness between Adam and Seth on the other hand, though having the likeness does not mean being the same. In an attempt to take into account ancient Near Eastern thought and Biblical evidence, Walton defines the term, “the image”, as generally used, to be, “a physical manifestation of divine (or royal) essence that bears the function of that which it represents; this gives the image-bearer the capacity to reflect the attributes of the one represented and act on his behalf.”
The idea of man representing God and acting on his behalf is probably reflected in the role given to man in 1: 26 where he is to “rule over the fish of the sea and the birds of the air, over the livestock, over all the earth, and over all roaming herds”. As God is the one who rules over all, so he gives to mankind that kind of function. Mankind is to rule as well, though in quite a diminished way. His rule is probably to be conceived of as his being able to assert control. Note, he is not explicitly given the role of ruling over the wild animals probably because they are wild and beyond his control.

Finally, with reference to the notion, “man being created in the image of God”, the writer states, “in the image of God he created him; male and female he created them”. Some, holding to the idea that the plurals “us” and “our” refer to multiple persons within the trinity, believe that the reference to male and female is a reflection of this multiplicity of persons and so part of the characteristic of being made in God’s image. Indeed it can be argued that it is only as male and female together that mankind is in God’s image. One of the difficulties with this position is that whereas the trinity refers to three persons, male and female refers to only two types of person. It could be argued however that only two persons of the trinity are being referred to – God and his Spirit (see 1: 2). As argued earlier, the reference to “ruach” in 1: 2 is either a reference to the “wind” of God or his Spirit or both. However throughout Days 1 to 6, no reference is made to the work of the Spirit unless one infers, in a circuitous way, that references to the Spirit of God are implied whenever it is said of God that he spoke – using breath (spirit) as it were in order to speak. Another difficulty is that, although it is only of mankind that there is a reference to male and femaleness, the early reader/hearer would be well aware, that there was just as distinctive a type of maleness and femaleness in at least larger animals. This raises the issue of why “male” and “female” is mentioned specifically in relation to mankind but not the animal world. Certainly “male” and “female” is going to feature largely in chapters 2 and 3 that follow. However, independently of that, the very statement that man (not animals) is created in God’s image together with the recognition that mankind is both male and female, each very different from the other, probably necessitates the clear statement that each is in the image of God. One is not allowed to claim that either one or the other has some greater prominence with respect to this characteristic.

As with the water dwellers and the birds, mankind is blessed. The blessing is similar and is in terms of their being fruitful, multiplying and filling. All living creatures are special. Mankind is also given a specific function, probably to be thought of as part of the blessing. He is to subdue the earth, bringing it under his domain. This subduing of the earth is probably then being specifically spoken of as a ruling over the fish of the sea, the birds of the air, the livestock and over all the roaming herds. The absence of a reference to the various categories of animals being blessed is not to be taken as a reference to their being inferior to the water dwellers and birds. Similarly mankind’s rule not referring to his rule over the livestock is not to be taken that he does not have control over them. They are domesticated animals. Of course he has control over them. The writer does not have to cover every possibility.
Finally God decrees what he provides for birds, animals and mankind in order for them to survive. The two types of plant life described in Day 3, is, without restriction, for mankind for food. Green plants, a term probably differentiating them from the vegetation to be eaten by man, are for every wild animal of the earth, for all the birds of the air, and for all roaming herds for food. Again it is probably of little importance that the writer fails to mention domesticated animals, although the inference might be that domesticated animals are cared for in their own way by mankind. It is noteworthy that these three categories are finally referred to as, fundamentally living creatures (NIV: that which has the breath of life). Plants are not living beings, animals and birds are. The picture we are left with is that of living creatures that feed off the “non-living” plant world alone and not off other living creatures. It is a vegetarian existence for all.

So God completes the creation of the world. However, it is a world fundamentally set up for mankind and mankind is “the cream on God’s creation cake”. He is the one and only creature created in God’s image. God alone determines the character of the world including the makeup of mankind. Mankind does not determine what God is like or what he does. Furthermore he does not have to placate God in order to receive God’s blessing. God makes mankind in his own image and provides a world for his blessed existence, all according to his own free determination. This is not the world view of the surrounding cultures. This however is the state of things that the one and only God, the God who revealed himself to Israel, decided upon.

God spoke twice and it was so. In the first instance, God saw that it was good. In the second instance, in a type of summary, even though it is written within the matters of Day 6, God saw that all that he had made was very good.

And there was evening and there was morning – the sixth day.

**Genesis 2: 1-3 – Day 7**

“Thus the heavens and the earth were completed in all their vast array.

By the seventh day God had finished the work he had been doing so on the seventh day he rested from all his work. And God blessed the seventh day and made it holy, because on it he rested from all the work of creating that he had done.”

That the seventh day focuses on God alone and his creative work, reminds us that for all of mankind’s importance God always holds centre stage. God clearly indicates that his creation has mankind as the focus of his attention but mankind is God’s creation and God has brought all of creation into existence for his purposes and not for any designs that mankind might consider or desire.

As with the introduction prior to Day 1, the concluding statement made after Day 6 refers to the heavens and the earth. While “heavens and earth” is probably a short hand way of referring to all of creation, in 2: 1, the phrase, “in all their vast array” or “and all their host” could have been added to draw attention to the many aspects of that creation. Alternatively
the phrase could be a reference to the functionaries of Days 4 to 6 that make use of the basic forms brought into existence on Days 1 to 3.

The word “create” (bara) makes its appearance again in the phrase, “the work of creating” but clearly it is used to apply to all of God’s work accomplished in Days 1 to 6. At the same time the writer links it to the word, “asah”, translated, “make” or “do”, that occurs in vv. 1: 7, 16 (2x), 25, 31 and 2: 2 (2x) as well as 2: 3. This should caution us not to make too sharp a distinction between “create” and “make” as they occur in Genesis 1: 1 – 2: 3.

What of the idea of God resting? Walton (Genesis, pp. 146, 147) argues that “shabath” (rest) is better understood as: “cease”. That is, the emphasis should be placed in 2: 2, 3 on God finishing his work (as 2: 1 makes clear) rather than the notion of God being somewhat wearied and needing time to recover. However Walton also points out that in Exodus 20: 11, in which a recital of the Genesis passage occurs, the word, “nuwach” rather than “shabath” occurs (though “shabath” is found in Exodus 20: 10). “Nuwach” carries with it the idea of “settling down” just as the locusts of Exodus 10: 14 “settled down” (nuwach) in every area of the country. He also points out that in Exodus 31: 17, where there is again a reference to the Genesis text, the word, “naphash”, understood as “refreshed” is used in close association with “shabath”. While Genesis 2: 2, 3 only make a reference to God ceasing from his work, later literature understood God as also “settling down” in some sense and additionally as one who was “refreshed” in one way or another. Walton concludes, “the lexical information suggests that the seventh day is marked by God’s ceasing the work of the previous six days and by his settling into the stability of the cosmos he created, perhaps experiencing refreshment as he did so.”

Walton also points out that in the ancient Near East, the creative activity of the gods was associated with the major objective of obtaining rest (Genesis, pp. 150, 151). In Enuma Elish Apsu complains to Tiamat about his lack of rest and after Tiamat’s defeat by Marduk Babylon is to be built as a shrine in order to provide rest for the gods. Walton concludes, “In the ancient Near East ... temples are for divine ‘rest’ and divine rest is found in sanctuaries or sacred space”.

What of the fact that there is no reference to “so there was evening and there was morning the seventh day”? It has been argued that because there is no such clause the seventh day has no end. God’s seventh day is ongoing. Alternatively, while not dispatching with this idea altogether it could be that it would be very odd to conclude with such a clause since in so doing it might beg the question of what happened on the eight day. Our question with which we began this discussion could be regarded as odd in that what has been depicted in Days 1 to 6 has been God’s creative activity with Day 7 being introduced primarily to indicate that that creativity activity has now been completed and hence God has now ceased from such activity. That creative activity is not ongoing. There is no need to herald a Day 8 by introducing “and there was an evening and a morning ...”. This is not to deny that after a fashion Day 7 is ongoing but it is in the sense that no creative active of the like of that referred to in Days 1 to 6 occurs again. It is also not to deny that much is made theologically of the seventh day in later Biblical material.
Indeed 2: 3 already anticipates some of this theology by stating that “God blessed the seventh day and made it holy”. That something is blessed by God indicates that it is of considerable value. In 1: 22 God blesses the water dwellers and the birds and in 1: 28 God blesses mankind and in both cases this blessing relates to the objects of the blessing being fruitful and multiplying. In the case of the seventh day, God’s blessing would indicate how highly valued it is and in its case the blessing is to be understood in terms of its being made holy. The reason why it is blessed however is clearly stated to be because on the seventh day God ceased from “all the work of creating which he had done”. It is not within the purpose of this work to further elaborate upon the theological significance of the seventh day and its being made holy as that unfolds in later Biblical material.

Is there anything special about the notion of “seven” in the surrounding cultures? Walton (Genesis, pp. 151 – 155) refers to a Sumerian account where the dedication ceremonies associated with the construction of a temple lasted seven days, Ugaritic literature in which it is stated that “Baal takes seven days to construct his sanctuary” and Babylonian literature where reference is made to an annual ceremony in which on the seventh day a god takes his place in his temple. While it may well be that there are overtones of such mythology in the Genesis account, there are substantial differences. In comparison with the first two mythological accounts, God creates in six days. His creative activity is all over by the end of the sixth day. The seventh day is not a day of construction. The Babylonian account is similar to the Genesis account in that it is on the seventh day that the god takes his place in his temple, just as it could be argued that a later understanding of the Genesis account has God settling down in his creation. However even here the significant difference is that God does not reside (in Genesis) in an earthly temple nor does he reside repeatedly. He needs no such temple and if settling down in the cosmos is the appropriate imagery that should come to mind, he has taken his place in the cosmos once and for all time or at least until he folds up the cosmos.

Walton argues strongly for the notion that somewhat similarly to her neighbours, Israel has the notion of God inhabiting and being “enthroned” within the cosmos, later the tabernacle and later still Solomon’s temple, as his “temple”, thereby coming into his rest at the same time as taking charge of his world (see Genesis, 147-154). The Biblical material he refers to includes, Psalm 78: 69; 104: 2-4; 132: 13, 14, Isaiah 66: 1, Ezekiel 47: 1 and texts from Genesis 2 and Exodus 39 and 40. However he admits that with respect to the Genesis passage under discussion “the contextual and lexical data offer no explicit information concerning the concept of God taking up his repose in his cosmic temple.” He builds his case on later Biblical material. My view is that Genesis 1: 1 – 2: 3 is relatively free but not entirely free from such overtones, probably intentionally so.

Walton does make an interesting observation in terms of what the seven day account does for Israel’s life. Towards the end of his discussion on cultural similarities he states, “We can therefore conclude that the seven day cycle gave Israel a foundation for their calendar that operated independently of all the objects and functions of the created world (i.e. the cycles of the moon or sun; seasons) and linked them to a recognition of God and his role” (Genesis, p. 157).
So there we have Days 1 to 7. What are we to make of this Genesis account as a piece of literature albeit that it is found in the Bible? What is it essentially attempting to say? What do we make of it in the light of modern scientific understandings?

**Final Questions**

*What is the literature of Genesis 1: 1 – 2: 3 like?*

Genesis 1: 1 – 2: 3 has a simple straightforward aspect to it. It has an introduction. It then tells the reader how in six days God made the world, what the world is like and what various aspects of the world are for. It then has a conclusion. Yet it doesn’t read like a simple novel with a plot that unwinds, meandering through various descriptions until one gets to the conclusion followed by a short epilogue. It has fairly well defined structure that becomes clearer as day follows upon day. Thus:

<table>
<thead>
<tr>
<th>Day 1</th>
<th>Day 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>God acts:</td>
<td>God acts:</td>
</tr>
<tr>
<td>Light</td>
<td>Lights</td>
</tr>
<tr>
<td><strong>Day 2</strong></td>
<td><strong>Day 5</strong></td>
</tr>
<tr>
<td>God acts:</td>
<td>God acts:</td>
</tr>
<tr>
<td>The Sky that separates the waters</td>
<td>Creatures who live in the Sea below the Sky and creatures who fly beneath the Sky</td>
</tr>
<tr>
<td><strong>Day 3:</strong></td>
<td><strong>Day 6:</strong></td>
</tr>
<tr>
<td>God acts (2x):</td>
<td>God acts (2x):</td>
</tr>
<tr>
<td>Land and</td>
<td>Animals and</td>
</tr>
<tr>
<td>Land Plants</td>
<td>Mankind who live on the land and eat the plants</td>
</tr>
</tbody>
</table>

As impressive as this symmetry appears we should not forget that the division between Days 1 to 3 on the one hand and Days 4 to 6 on the other, together with their parallelism would seem to be largely dictated by the author’s concern with, “formlessness” and “emptiness”. This “formlessness” and “emptiness” are progressively confronted as “structure” and “functionaries” that make use of this structure, are made. It should be noted that the works of separation that occur in Days 1 to 3 are not paralleled in Days 4 to 6, which are characterised as simply making use of the separation brought about on those earlier days.

Of course, “symmetry” is not all pervasive throughout the document. Consider the use of the word, “tov” (good).

<table>
<thead>
<tr>
<th>Day 1:</th>
<th>Day 4:</th>
</tr>
</thead>
<tbody>
<tr>
<td>God saw that it was good</td>
<td>God saw that it was good</td>
</tr>
</tbody>
</table>
Day 2: God saw that it was good
Day 3: God saw that it was good
Day 5: God saw that it was good
Day 6: God saw that all that he had made was very good

There is something close to symmetry here but it is not a strict application of symmetry.

In addition to symmetry, superimposed upon the structure is the mentioning of various matters a certain number of times – three times for example. There is the reference to God creating the heavens and the earth in the introduction in 1: 1, God creating the water dwellers and the birds in 1: 21 and God created mankind in 1: 27. However “bara”, (create) in connection with mankind, occurs twice more in 1: 27 and again in 2: 3 in a concluding summary phrase. Again, the notion of “time” seems to be dealt with in a special way on three occasions - in Days 1, 4 and 7 although that may be reading into the text, too much, the importance we tend to give to time understood in an abstract sense. God blesses on three different occasions – Days 5, 6 and 7. The writer may have considered that the number seven was a “special” number. There are indeed seven days but the phrase, “and there was evening and there was morning” occurs only six times. The word, “tov” (good) occurs seven times, although one instance, as indicated above, is amplified by the use of the word, “very”. The two words translated, “and God saw” occur seven times. It may be true that the use of numbers regarded as special may have a certain attraction for the writer but as with symmetry such an attraction is not always strictly applied.

The text is also characterised by omissions which are probably not always to be understood as either accidental or deliberate omissions. On Day 2, the “raqia” separating the waters, by implication only, creates “space” underneath it. It is this space which is inhabited by the birds that fly under the face of the “raqia”. The waters above the “raqia” receive some prominence on Day 2 but are altogether, even though understandably, ignored on Day 5. The birds of Day 5 are not referred to as living creatures, though all the water dwellers are, yet these together with the birds are created. It is possible that the birds were not considered as living creatures but this is unlikely. The animals are “made”, though the water dwellers and birds are “created”. The water dwellers and birds are blessed but the animals are not. There may be special reasons for these apparent oddities and it could be argued that the author’s attraction for certain words being used a special number of times lies behind some of these reasons.

In summary, my own position is that while the author writes with a certain framework in mind, mainly dictated by the making of structure where there was none and then the use of that structure, he writes with a certain liberty that avoids a slavish conformity to a rigid style.

What aspects of the world does Genesis 1: 1 – 2: 3 cover?
This is a difficult question to answer. One of the problems is being able to correctly identify what was intended by the use of certain words. Furthermore, we will be tempted to approach the question with our modern understandings of the nature of the world in mind but the author, given the language used, works with concepts that belong to his world. None the less in spite of these difficulties some attempt to answer the question will be given.

As argued earlier, the preamble to Day 1 seems like an introductory summary with the creation account working from a “watery mass” already in existence. If this view is correct, then from a modern perspective some aspects of the “stuff” of the cosmos are not taken account of in Days 1 to 6. Is the reference to light in Day 1 meant to cover all frequencies of electromagnetic radiation, dark energy (whatever that might be), and light produced from fire and luminescent objects? Not likely! In Day 2 reference is made to the “raqia” and water on the other side of it, neither of which we now believe exists. In Day 3 dry land makes its appearance but the author probably has a different understanding of how land is distributed around the earth to that of modern man. It is also probable that his understanding of the nature of sea and its association with rivers, lakes and springs is quite different to ours. The reference to vegetation seems to focus on two types of plant life and presumably mosses and liverworts, for example, and not caught up in their description. Day 4 refers to the stars and such a term may have included planets and even comets and meteors. However do we believe that the writer had in mind that the stars could also refer to galactic systems? There is some evidence that in the ancient world, the stars were considered to be very tiny objects. Is there any reference in Day 4 to “dark matter” (whatever that may be) or that the universe appears to be expanding and currently at an increasing rate? Day 5 mentions water dwellers, some of which are described as “great sea animals” and others as “moving living creatures that swarm”. Are sponges, molluscs, echinoderms, jelly fish, amphibians, and water dwelling flatworms, roundworms and arthropods meant to be included? It is difficult to believe so. Reference is also made to winged birds. The Israelites knew about grasshoppers, flies and bees but they along with other flying insects don’t seem to be included here. On Day 6 reference is made to living creatures according to their kind with focus placed upon, what Walton describes (see Genesis, p. 127) as, “domesticated animals ..., wild herd animals that often serve as prey ..., and wild, predatory animals”. These are respectively, “behemah”, “remes” and “chay”, terms difficult to tie down too explicitly. They may take different connotations depending upon their context both in terms of the language used and the subject matter in which they are imbedded. The “remes” is often mentioned in connection with the earth or the ground and carrying with it the basic notion of a “mover” it may sometimes refer to small animals, slithering animals etc. The reference to “all the movers of the ground” and “all the ‘movers’ ‘moving’ on the earth” in 1: 25, 26 may be a reference to more than “wild herd animals” or “roaming herds”. In Leviticus 11: 44, the “swarming ‘mover’ on the earth” probably includes a reference to the locust. Are we meant to see a reference to, for example, spiders and centipedes included in the term, “the movers” in Genesis 1: 25, 26? Whatever the range of living creatures these terms are meant to embrace, it is difficult to believe that the author had in mind the kangaroo, the echidna or the aardvark. And where in the Genesis account are we meant to find the microscopic land based or water borne animals and plants, and the viruses etc.? This catalogue of questions is not meant to poke fun at the Genesis
account. One is simply giving recognition to its cultural and temporal context. It could be argued that God had all these things in mind, though the author might not have. But would we want to argue that God was restricted in his understanding to any taxonomic system or that he had a belief in a solid sky?

One of the many intriguing aspects of the creation account is the absence of any reference to carnivores. There are a number of possible explanations. Some argue that some animals only became carnivores after the disastrous events portrayed in Genesis 3. There is no direct evidence in Genesis that such a situation developed although one might argue that it is implied. As another possibility, the author may have been ignorant of the existence of carnivores though that is highly unlikely. Another alternative is that the author simply chose to exclude any reference to carnivores in his account of what happened on Day 6 though he knew they had been created on that Day. A fourth possibility is one that partly involves the first and third alternatives. The author could have decided to purposefully idealise the situation so that death didn’t make its appearance in any form in the creation account. (Plants, not being considered to be living creatures, didn’t die either as part of their natural existence or upon being consumed by the animals and mankind.) A further possibility, perhaps to be linked to the first is that the author’s belief was that originally there were no carnivores. My own view is that either of the last two suggestions is the most likely.

If we ask the question did the author cover all that he thought was necessary, we probably should reply, “Of course”. He used his categories, his understanding, his language and what he considered important to the reader to convey the general idea that beginning where he began, God made the world and everything in it. Were we to confront our ancient author with, to him imponderables like, “phytoplankton”, “rotifer”, “bacteria”, trilobites, brachiopods, dinosaurs, “neutron stars”, black holes and quasars, provided we could give him some understanding of such, he would undoubtedly say, yes, they are of God’s creation.

The Genesis account contains a number of extremely important truths. For starters it denies much of the belief about the world, mankind and the gods held by others in surrounding cultures, perhaps especially that culture of the Babylonian world, though it may never have been used as a tract to attack those beliefs head on. If it is to be regarded as a polemical document, it is probably more polemical by implication than in more direct ways. It would have served the people of Israel directly in teaching them what was correct about God, the world and mankind, rather than having as its chief focus the teaching of what was false about the beliefs of their neighbours. All up however it would have informed, corrected and warned. In broad terms, the document teaches that whatever one conceives of as being this world and of this world, God has made it all. And all that God has made has its role, its place its function as God has determined. Of all that he has created, mankind, created in his image, is of extreme significance and in God’s kindness the world has the character that it does in order for mankind to live in it in an appropriate way With the creation of mankind God has brought his creation to completion. And now the scene is set for God’s interactions with mankind and for his purposes involving mankind to unfold.

*The questions we want to ask & How to read Genesis 1: 1 – 2: 3*
But what of the questions we want to ask, in spite of the document’s significance that it has in its own right and regardless of its being a document set within the culture of another age? The questions that we are readily tempted to ask can assume such importance as often to minimise, dwarf and almost totally obscure the otherwise extremely instructive material presented to us in Genesis 1: 1 – 2: 3 concerning God, his nature and his creation.

In spite of this we will now turn to the questions that we do indeed like to ask. Perhaps we have to do this, given the age in which we live. How long were the days really? How did God create the world? How long did he take? When did he create the world? How did the author know about these things? How long did he really take? How did he really create the world? When did God really create the world? And what are we to make of modern evolutionary theories, both cosmological and biological?

We might argue that the duration of the days in the Genesis account is undefined or that they represent long periods of time or that at least the first three days were of long duration, because the sun didn’t make its appearance until the fourth day. I think the reference on the first day to darkness being called “night” and the light being called “day” (meaning something like daylight) makes it fairly clear that each day represented either what we would call a 12 hour day with its following or previous night making up 24 hours, or what we refer to as a 24 hour day. Over hundreds of years, if not thousands, if one went to the Genesis record to establish one’s cosmology it would be natural to say that the world was made in six ordinary days, unless one decided to interpret the text allegorically or in some other way symbolically. For me the meaning is reasonably plain. Days 1 to 6 and probably Day 7 as well, were six or seven ordinary days. Basically, this is the view that Walton (Genesis, p. 156) takes.

How did God create the world? The text simply says he spoke and it was so. How long did he take? Certainly he took no longer than six days. The text seems to imply that he worked during the daylight hours (if that makes sense for Days 1 to 3 as well as for Days 4 to 6), though there is little to prevent one from concluding that each creative act was but a moment long. When did he create the world? If we follow the rest of Genesis and among other things, take into account the ages given for certain people referred to there, and allow for incomplete but continuously successive genealogical material, we could conclude that the world was created about 6 to 10,000 years ago.

It may be judged that in coming to these conclusions I have simply adopted a literalistic understanding of the text. However, I have attempted to understand the literary nature of the text by teasing out what it said and how it said it along with viewing both of these matters in the light of other related literature of its day. Indeed if, as I have outlined it, that is the way one is meant to read the text then it can be maintained that the understanding is a literal one rather than literalistic. The understanding is a literal one, not only in the sense that what it seems to say on the surface is the way that it should be understood, but also in the sense that understanding the nature of the literature has been paramount, from my point of view, in determining how the text should be understood. However, I acknowledge that my understanding of the text is likely to be judged literalistic by the person who believes that the
text should be understood differently to how I have outlined. I suspect an appeal to “literal” and “literalistic” in this case is not helpful.

*How did the author know what to write?*

How did the author know about these things? It might be helpful in answering this question, if we knew for sure who the author was. We don’t. But Moses wouldn’t be a bad guess even if he were only responsible for collecting earlier material, written or oral and had then acted as the final editor. How would the author have acquired this information or how could he have known how to correctly edit any earlier material he worked from? One possibility is that he could have received some direct revelation as Moses did on Mount Sinai.

Alternatively having learnt from God, by whatever means, what God was really like, working under the hand of God, he could have taken from the cultures, even his own culture, certain cosmological, geographical, biological and other understandings and moulded them into a correct account of God and his creation of the world. Those “other understandings” might have included ideas concerning six or seven day events associated with the enthronement of the pagan gods, including the idea of the “rest” with which such matters were concluded. This is not to deny that he would have been careful to dissociate himself from beliefs about those gods. Another of his perspectives could have been the idea that the world was basically a functional entity. Consequently functional characteristics, rather than causal explanations could have dominated his thinking on the issue of creation. His cosmological concepts could have included the view that in the beginning there was nothing of any consequence, simply a watery mass enshrouded in darkness and that the sky when it was created was solid with some water having been removed to the other side. His geographical considerations could have entailed a view that the land formed a single continent and that all water ways were connected by some means or another. His biological perspectives could have been shaped by those ones dominant in his world and perhaps in other creation accounts. Furthermore he may have thought it helpful to idealise the account so that at the beginning of things death appeared to be absent or he may have simply believed this to be the case. The suggestion here is that the author/editor, making himself available of whatever cosmological, geographical, biological etc. material he had at hand, shaped it, added to it and purified it with a correct understanding of the nature of God, his relationship with the world and mankind in particular.

Of course, this is only a hypothesis, but I think it is not an unlikely scenario given how much of the Genesis account seems to reflect what can be found in nearby cultures, perhaps particularly the Babylonian culture. What is not to be found in the literature of these other cultures is what the writer seems most intent upon portraying, matters such as: that the one and only God has created all things; that he has done so simply but with awesome power; that he has not created any other gods; that he has not had to overcome any gods or do battle with any powerful creatures; that he is completely distinct from creation though it is his creation; that of all of his creation, mankind is the most significant having been made in his image; that creation has been set up in accordance with his kindness in a way that cares for mankind but ultimately in order for God to work out his purposes through mankind.
What is being suggested here is that by the power of God, in a manner that was disciplined by the author’s/editor’s correct understanding of God and God’s relationship with his world and mankind in particular, the author/editor working with raw material distilled from other cultures, constructed the creation account and connected it temporally with what he understood as the beginnings of mankind. Furthermore, the position assumed here is that he knew what he was doing and that others at the time knew what he was doing. No one was deceived. And everyone who read or heard and understood it was beneficially informed. Furthermore, at the time, the account was understood as a completely acceptable account. The work having been inspired by God, it is proper to conclude that any ramifications or implications, for example, of the significance of the Sabbath day and the notion of “the word of God” flowing from the account into later theology, would be valid. It could be argued that only later, with a loss of understanding of how the text came to be, and with a move that drifted from the importance of function and functionaries to an assumed importance of more relatively abstract notions, readers/hearers of the account assumed that explicit “how long”, “when”, and “how” matters were the main matters being affirmed.

What does Genesis 1: 1 – 2:3 endorse or deny?

Well then: How long did God really take to create the world? How did he really create it? When did he really create it? These are questions which now fascinate us but the answers given to them at any time are not crucial for our salvation, our being forgiven and our justification. Nor does having incorrect answers to these questions prevent one’s redemption, being made God’s children and being sealed with the Holy Spirit. However, my own view is that if we are interested in such questions, and the spirit of our age probably makes this a necessity, we are in a better position today to answer these questions than we have ever been in the past. But you the reader will need to make up your own mind on such as various modern portrayals of biological evolutionary theory and cosmological claims and postulates. For myself, I don’t think the Genesis account has anything to do with these types of theories. In my view it doesn’t endorse them (how could it?) or deny them. However, many Christians today, not only recognise that the Genesis account does not endorse, for example, biological evolutionary theory; they will not ally themselves with it in any way. Walton, for example, strongly asserts that the Bible is opposed to biological evolutionary theory, claiming that, “the theology of the Bible leaves no room at all for such belief” (Genesis, p. 156). Christians and even non-Christians disagree and often strongly disagree over such matters.

Let us now briefly examine some of the issues that underlie these disagreements. Undoubtedly, there are different viewpoints among Christians on notions such as “inerrancy”, “infallibility”, “inspiration” and what is understood by the phrase, “the word of God”. Unfortunately, as pertinent as they are these matters are, they are too weighty to be dealt with in this blog series. Matters such as “peer pressure” or the tendency we sometimes have to “oppose those who oppose us”, as significant as they can be in determining what Christians and non-Christians believe, will also be ignored. Attention will simply be focussed upon two areas of modern scientific thought over which there is much contention especially between Christians and non-Christians: biological evolutionary theory and cosmological theory.
Genesis 1: 1 – 2: 3 and Biological Evolutionary Theory

The evidence claimed for biological evolutionary theory is substantial, whether or not one is committed to it. Appeal is made to the fossil record in combination with various types of radio-isotropic and bio-chemical data. Certain changes in species and the distribution of species throughout the world, readily observed in modern times, are matters also considered relevant, along with a mechanism considered plausible as to how evolutionary changes might occur. This is not to say that there are not many aspects of the theory still being worked on or that there are not numerous “puzzles” still to be solved. The theory is such that it is difficult to see how it could be conclusively “falsified” but that is also true of “well adhered to” scientific theories in general. Some scientific theories simply “fade away” as the puzzles remaining to be solved become too numerous or remain unsolved for too long a time, when alternative theories become available that seem more attractive or as adherents to the original theory reduce in number!

One of the objections that some Christians have to biological evolutionary theory is the role that chance or randomness seems to play in that theory. Another is that it seems improper that man is a descendant of earlier non-human life forms. Again another is that it would seem improbable that God would set something in motion that would operate for such a long time before mankind appeared. Yet another is that the theory envisages evolutionary development to be ongoing today.

According to biological evolutionary theory variation in the genetic species is due in part to seemingly random processes including, mutations (changes to the chemical makeup of genes), genes being repositioned within the chromosomes, genes of one species being taken over by another species, and all of the DNA or RNA of one species being incorporated into the genetic makeup of another. (The evolutionary relationship between species is in part determined by the extent and nature of the similarity in genetic makeup.) Other seemingly random events affecting the evolution of species include changes to the environment with which the species is interacting. Such changes can be subtle, gradual whether subtle or not, or dramatic. Much of the mechanism of evolutionary development is put down to “natural selection” by which survival and reproduction of an organism, generally considered as part of a population, is either assisted or hindered, given the nature of the environment. Speciation can also be assisted by a process termed “genetic drift”, often important in small isolated populations, in which the frequency of traits passed on from one generation to another changes, seemingly randomly. In reality it needs to be noted, that there is not one simple absolutely cohesive biological evolutionary theory agreed by all evolutionary biologists. There are a number of competing theories that deal with various aspects of the main theory though in the course of time their number might diminish considerably.

I refer to “seemingly random” partly because a strict determinist, relying on something like the immutability of natural laws, would probably claim that all such changes conform to a rigid cause and effect regime. Events are referred to as “random” when the processes are too complicated to tease out all the relevant cause and effect relationships involved or when for other reasons the relevant information required to make judgements on what exactly caused
what and when is simply not available and in some cases, perhaps cannot ever be available. None the less, there is a deep down commitment by scientists to strict cause and effect associations that are in conformity to what may be described as “natural law”. Furthermore, given that “law” is involved, it is assumed that these cause and effect relationships are always inevitable. While such a commitment seems a necessary one for the scientific enterprise to proceed there are some difficulties associated with this assumption.

First of all we cannot ever be absolutely sure that what we have decided is a law actually holds up in all instances or in fact is even a reasonably good description of what the universe is like and that indeed it will not be replaced by a “better” law. Furthermore at the level of the very small, our observations cannot but affect what we hope to observe so that it is no longer what we intended to observe. This problem is encapsulated in what is known as “Heisenberg’s Uncertainty Principle”. (It could even be that there is “uncertainty”, seen as such from our perspective, built into the very fabric of the universe.) Furthermore in our consideration of the very small we come across odd phenomena that are very difficult to conceptualise, for example, the phenomenon of “entanglement” in which measuring the property of one “object” seems to “immediately” bring about the determination of another “object” some distance away. It is indeed, from our point of view, a strange universe. None the less, given a commitment to the idea of scientific law, and while recognising the limitations we have in observing the phenomena of our world one might question whether random processes really are random.

Whether one wants to view biological evolutionary theory as a theory entailing randomness or of strict but unobservable causality, the question remains, “What is the relevance of this theory for the notion of God as creator?” If Genesis 1: 1 – 2: 3 is correct and if biological evolutionary theory is a really good theory then the theory could be a reasonably good description of how God brought living forms, including plant life, into existence. That he used chance, deterministic means or any other processes to bring about his intended end, is not inconceivable though ultimately what might be chance to us might not be considered chance to him. Or at least it would not in any way be considered by him to be outside of his sovereign control.

In recent times, a theory referred to as “Intelligent Design” has been proposed by some who point to, what they claim to be significant, the difficulties in adequately explaining the origins of various biological systems, for example, the human eye. The theory appeals to what is known as “Information Theory” and the idea of “irreducible complexity”. Without elaboration and perhaps without due respect for the theory, my own view is that the theory is not likely to be very productive, that it probably relies too heavily and inappropriately on “Information Theory” and that the existence of these types of complex systems referred to is in principle capable of an explanation - different explanations for different systems - without recourse to the Intelligent Design approach.

A final word about scientific law. The laws are manmade. We create them. We modify them or even abandon them as we try to better understand our world. They are based on the assumption that the world is characterised by regularity. The biblical picture of the world and
God who made it, is that God has created it to be such - a world that has a stable regularity about it and hence in principle predictable. The extraordinary events, sometimes referred to as “miracles”, of the Bible, no matter how they might be explained, are exceedingly rare. They are mainly found associated with the exodus of Israel from Egypt and her settling into the land of Canaan, the lives of two prophets, Elijah and Elisha and the last few years of the life of Jesus and the era of the Apostles immediately following. There is little point in appealing to Scientific Law to proclaim that such extraordinary events cannot occur. We are not entitled to tell the world what can or cannot happen. We assume that certain things will not happen but that is just an assumption, as justifiable in ordinary circumstances as that might be. The claim that Jesus rose again from the dead, appearing in our world in a genuine “physical form” but never to die again is a claim that on a scientific basis one might object to but one is not entitled to claim that it could not have happened. If this is indeed God’s world, he can do with it whatever he chooses and whenever he chooses. If at any time he chooses to do something extraordinary it will be for a purpose determined by him and it will be its extraordinary nature that will bring attention to itself and ultimately, in principle, to him. Ordinary events do not attract such attention.

Let us now return to biological evolutionary theory. S.C. Morris, Professor of Evolutionary Palaeobiology in the Department of Earth Sciences at the University of Cambridge, has expressed the view (in an address, “Darwin’s Compass: How evolution discovers the song of creation”, an ISCAST- CEN – CPX lecture delivered 21 Sept. 2009, Sydney), which he acknowledges is not a common one, that biological evolutionary processes are not thoroughly random. If evolutionary development were allowed to start all over again and under the same conditions, in the course of time one would end up with a very similar history, with the life forms produced bearing some similarity to those that in fact were produced. The evolutionary “pressures” would be similar. That is, those factors responsible for evolutionary development would always hold. Consequently, the directions which evolutionary development would take, given the same initial conditions, would be much the same, no matter when occurring. Given these evolutionary “pressures” it perhaps should not strike us as remarkable that various and very different life forms develop similar mechanisms for living in this the world. For example, eyes of one form or another, including a box camera like apparatus in some jelly fish have developed in a range of organisms. Wings of various types have developed in fish, reptiles, insects, birds and mammals. That is, one could argue that even if God were “playing” with creation, any creation set up by God in our universe, would produce life forms, similar to what we observe to have been in existence, where there were suitable conditions for life forms to evolve in the first place.

That man should bear a biological relationship with other life forms should not be seen to be a diminution of the significance of mankind. Insects might be more numerous and extraordinary in the effect they have on their environment but we are the creatures that through our mental and physical capabilities exercise considerable control over our environment for better or for worse. Though other creatures can communicate with each other and some communicate and develop relationships with mankind our mental “where with all” and our ability to create language of considerable complexity make us stand apart in our
relationship with each other and with God. Our biological heritage is what it is but if it is of an evolutionary nature, that in itself has no bearing on our relationship with God and his fulfilling his purposes through us.

Palaeontologists provide the following estimates for the appearance of various life forms: Simple cells (prokaryotes) - 3.8 billion years ago. Complex cells (eukaryotes) - 2.0 billion years ago. Land plants - 475 million years ago. Mammals - 200 million years ago. Modern humans - 200,000 years ago. These dates have been supported by appeal to a large variety of dating methods including a number of different radio isotopic procedures. Without dealing with the age of modern human beings in this blog series, we humans conceptualise time in certain ways. Gold fish, with their very short memories, would have a completely different view, whatever that view might be! What “time” means to God, if it is appropriate to even pose the matter that way, is unfathomable. The question then of why would God take such a long time to bring human beings into existence becomes an odd one to ask and we cannot be confident that it makes much sense. The reality is that we are here now and God has done things in our recent history with the people of Israel and through Jesus of Nazareth and what he has done has been documented. It might seem odd to us that God should, from our point of view, bring about momentous events associated with the people of Israel and through this Jesus, only in the last few years of his great creation, but from God’s point of view, well, who knows?

One of the offshoots from biological evolutionary theory has been evolutionary proposals of a social and psychological nature, some of which impinge on matters of culture, morality and religious belief. We have many developmental theories that relate to our world - mountain building, river formation, etc. with respect to the “natural” world - ways of conceptualising our world, and ways of thinking morally as we change from infants to young adults, etc. with respect to our “human” world. And as we continue to work with these developmental theories we refine them and sometimes replace them. Consequently we should be wary of using aspects of biological evolutionary theory, without reflection, in attempting to explain the existence of certain cultural characteristics, religious beliefs and moral attitudes in societies. There might be some value in such a strategy but even if we were to adopt an atheistic position, presumably we would not wish to deny the complexity of human interactions one with the other, the complexity of the way human beings interact with their environment in general and the relative autonomy that characterises much of humanity compared to that of the animal and plant world. Furthermore, sole appeal to evolutionary processes in such matters is to confine oneself to only one type of explanation and to be blind to the possibilities of other explanations. Besides, at this stage the evidence claimed for the validity of such evolutionary understandings is quite limited and open to dispute.

Is biological evolutionary development going on today? If it is a good theory, one would expect that to be the case. However, given that significant evolutionary developments, according to the theory, occur over long periods of time we would not expect to see enormous changes occurring over a short period of time. Understandably then, given the short span of time in which human beings have existed, the living world would and does appear to have been relatively stable during that time. Whether new species have developed
or not, there have not been any great changes in the biological world of modern man. The point of view that Genesis adopts is that of God who created but who now has ceased his work. For all intents and purposes the state of the world today is as portrayed in the Genesis account. However contrary to an evolutionary prediction that living creatures will continue to evolve and in remarkable ways, the Biblical account of the future is very different. God will wind up his universe at an appointed time. There will be a resurrection of all mankind from the dead. Judgement of all will occur and God’s Son, Jesus, the man in heaven, the Saviour of some, will be acknowledged by all to be the Lord.

**Genesis 1: 1 – 2: 3 and Cosmological Theory**

Modern scientific cosmological theories, there isn’t one simple cohesive theory, put the age of the universe at around 13.7 thousand million years old with our galaxy coming into existence a few hundred million years later. A date of this magnitude for the origin of the universe has been arrived at via three different independent methods. Our solar system is considered to be about 4.6 thousand million years old. Within a very small fraction of a second from the “beginning” of space and time, a very small excess of particles over antiparticles, of the order of one in 30 million, lead to the basically “particle” and energy ridden universe as we know it. What are termed the four fundamental interactive forces or fields – gravitational, strong nuclear, weak nuclear and electromagnetic also came into existence well within that first second. The galaxies and systems within the galaxies began to form later from “chance” aggregations of matter.

Attempts are being made to develop a theory known as the “Grand Unified Theory” (GUT), a theory that “unites” the last three of the four fundamental interactive forces. So far the attempts have met with some, though limited, success. There have been further attempts to develop a theory known as a “Theory of Everything” (TOE), a theory that “unites” all four fundamental interactive forces. The attempts have not really met with any success. One of the problems at the heart of TOE is how general relativity theory, which relates to the gravitational force, is to be associated with quantum mechanical theory which relates to the other three forces. The existence of the theoretical particles, the Higgs boson and the Graviton are generally thought to be intrinsic to their being a satisfactory TOE. The Higgs boson is considered to be responsible for the property of “mass” while the graviton is considered to be the mediator of the gravitational field associated with “mass”. If these theories and ideas or subsequent ones have substance, what looks like exceeding complexity to most of us, certainly to me, might demonstrate simplicity in the universe. This may be considered to have a certain appeal to those of us who are confident of God being the creator of the universe. However a connection between simplicity in the universe and the nature of God himself does not automatically follow.

One of the issues flowing from cosmological theory that concerns some Christians is, again the long period of time that would have elapsed before the appearance of man. Another is the role that chance seems to play in the nature and development of our universe, including the formation of galaxies and our earth in particular. Ways of responding to these sorts of issues have already been indicated above when considering the implications of biological
evolutionary theory. A more recent development, likely to give some Christians concern has been the discovery of nearby planets. So far none of these planets is considered likely to have produced life forms or at least life forms with which we are familiar or that are highly developed.

While there is a high expectancy in some scientific circles of finding life on other planets it may be that the conditions for life to develop, given some notion of biological evolution, are so stringent that the probability of having these expectations fulfilled is remote. Certainly, given the exceedingly great distances between stars and whatever planets there are that are associated with some of these stars, the universe is such that two-way communication between life forms on different planets is likely to be very difficult if not, in practice, impossible.

It seems that information cannot be conveyed at any speed greater than the speed of light and two-way communication between living creatures doubles the minimum time required for the communication to occur. Such communication would require that there be two types of sentient beings, each living on different planets at “around the same time”, having relevant “scientific” perspectives, with access to appropriate “technologies” and having an interest in bringing about such communication. It is the low probability of such a situation occurring together with the large space between such planets that makes existence on any planet to be a relatively lonely one. If sentient beings do exist in other parts of the universe, the Genesis account and the overall Biblical perspective would still imply that all life forms, no matter of what type or wherever found are still the creator’s handiwork.

One of the interesting features of our universe is the set of special conditions which appear to exist without which life as we know it would not have come into being. One of these special conditions is related to the expansion of the universe. It appears that if it had expanded too slowly or too rapidly “developed” life forms would not have appeared. There seems to be a large number of these special conditions. One of them relates to the energy associated with a particular excited state of a specific isotope of the carbon nucleus. If the energy were slightly greater than what it is then the universe would consist almost entirely of only hydrogen and helium and presumably no life forms would have come into existence. Relationships between various initial conditions might be such that the number of independent special conditions is much smaller than otherwise would be the case.

Perhaps to avoid the notion that the universe is special, with whatever implications might be considered to follow from such speciality, the idea of a multiplicity, perhaps an infinite number, of universes has been proposed. Arguably, because of the nature of universes, if considered to be closed systems, hard evidence for such a multiplicity of universes may never be possible to come by. There may be an appeal for such an idea arising from some mathematical elegance but that or something similar might constitute the limit to whatever evidence could be claimed. A multiplicity of universes or not, again, the Genesis account and the overall Biblical perspective is that all that is, is of God’s making.
From one point of view the Genesis account is quite limited when considered in the light of modern scientific understandings. It is limited in terms of the entities to which it refers. To some extent it reflects viewpoints belonging to an ancient world. In terms of scientific cause and effect associations within our world it could be judged to say nothing. With respect to what it doesn’t say, my own view is that it neither rejects nor affirms any evolutionary, cosmological or probably any other “decent” scientific theory. Neither does it make any appeal to anything magical, anything incomprehensibly mystical or any complex world of independently existing demons or gods. It denies the existence of such. In its extraordinary simplicity it maintains both directly and implicitly that there is one God only and that all of creation, whatever that might amount to, and never to be confused with him in any way, has come into being by his will. It points its finger however at mankind as being of supreme importance, with the Biblical account ultimately focussing on that one man Jesus Christ, the Son of the Father, whom the Father raised from the dead, thereby “creating a crack” in the universe and spelling its ultimate demise, and to whom the Father has given his own name, “Lord”.