An Evolutionary Creationist Process for the Origin of Humanity

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Abstract

This journal article considers an evolutionary creationist process for the origin of humanity. In doing so, the essay explores a number of broadly interrelated issues in an integrated and synthesized manner. The key supposition is that a fundamental congruity exists between what God has revealed in nature and in scripture. Accordingly, the endeavour involves taking seriously the scientific data, as well as engaging scripture in its historical, cultural, and sociological contexts. The resulting outcome is a theologically informed harmonization of evolutionary theory with creationist teachings found in the Judeo-Christian scriptures about the genesis of Homo sapiens.

1. Introduction

The intent of this journal article is to consider an evolutionary creationist process for the origin of humanity. In doing so, the essay explores a number of broadly interrelated issues in an integrated, synthesized manner. A major premise is that a fundamental congruity

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exists between what God has revealed in nature and in scripture (cf. Ciobotea 2008:7; Driscoll and Breshears 2010:80, 103; Polkinghorne 2009:173). A corollary supposition is that 'faith in God as Creator can be consistent with an evolutionary understanding of the history of the universe and particularly life on Earth' (Baker and Miller 2006:169). The preceding postulates are the basis for considering an evolutionary creationist process for the origin of humanity that is in agreement with both the biblical and scientific data (cf. Day 2009:118-120; Rana and Ross 2005:43-51, 247-250). Concededly, this is being done from the perspective of a specialist in theological studies, whose treatment of the subject will tend to be exploratory and provisional in nature. That said, it is possible for even a non-scientist to make a useful and pertinent contribution to the present topic, especially since it is heatedly debated within both Christian and scientific circles (cf. Collins 2006b:4-5; Delio 2009:1-2; Falk 2004:23-26; Fisher 1997:41, 104; Lamoureux 2008:2-4; Pigliucci 2002:27-32).

Moreover, this essay affirms 'evolutionary biology' as a 'cornerstone of modern science' (Ayala 2008:xi) and a theoretical model that is 'supported by abundant evidence from many different fields of scientific investigation' (47). This paper also maintains that God sovereignly controls the 'origin of species by evolutionary processes' (Waltke and Yu 2007:173). It bears mentioning that this view is wholly compatible with Augustinian and Reformed confessional orthodoxy (cf. Duncan 2007:2302, 2313, 2361; Martin 2010:10, 12, 51, 111, 144; Spencer and Alexander 2009:25-26). Furthermore, this view is supported by conservative evangelicals who affirm the divine inspiration, inerrancy, infallibility, and authority of scripture (cf. Blocher 1997:39; Driscoll and Breshears 2010:93-94; Falk and Gilberson 2009:1-7). That being the case, it is erroneous to insist that one must choose between either a 'Judeo-Christian concept of creation

by God from nothing' (Ruse 2005:4) or the theory of evolution. As the forthcoming discussion explicates, the latter contention represents a false dichotomy (cf. Edwards 1999:12-13; Finlay 2006:237; Lamoureux 2008:33-34).

These assertions having been made, it is beyond the scope of this journal article to explore, debate, and resolve the issues connected with the philosophy and social movement known as Intelligent Design (ID). For a critique and analysis of ID and other like-minded creationist views, cf. Alexander 2001:289-310; Alexander 2008:293-331; Ayala 2008:37-45; Baker and Miller 2006:153-172; Lamoureux 2008:21-52; Lett and Vardy 2007:7-15; Moreland and Reynolds 1999; Pennock 2001; Pigliucci 2002; Ruse 2005:147-167, 242-261; Scott 2009:53-164; Snow 1990:166-202; and Youngblood 1999.

The preceding disclaimer notwithstanding, one objective of this position paper is to take seriously the scientific data (including evidence from fields as varied as molecular biology, genetics, anthropology, palaeontology, comparative anatomy, and astronomy). A second objective is to engage scripture in its historical, cultural, and sociological contexts (cf. Dickson 2008:2; Hill 2007:129; Thompson 2005:4). The underlying approach is one of 'discerning openness' in which the canon of scripture functions as a 'filter'. Numerous scientific 'concepts' are accepted, while others are set aside; also, as the situation necessitates, 'alternatives' are proposed (Trader 2010:27). The intended outcome is to 'constructively relate' (Baker and Miller 2006:154) the biblical data about human origins with the 'science of evolution'. Put another way, it is a preliminary attempt to 'accommodate or integrate' evolutionary theory with creationist teachings found in the Judeo-Christian scriptures about the genesis of humanity (15). Doing so affirms (rather than denies) the literal, historic, and theological value of God's Word (cf. Bishop 2011:9; Van Till 1999:172-173).

2. The Interplay between Science and Religion

At the outset, some key definitions are in order. Theology may be defined as the study of the metaphysical—including the nature of God, the content of religious belief, and the character / conduct of religious practice—done through an examination of revelation, scripture, personal experience, and culture (cf. Drees 2008:2-3; Erickson 1998:22-23; Grudem 1995:21). Philosophy refers to the study of the fundamental nature of knowledge, reality, and existence, done primarily through speculative means (rather than empirical methods; cf. Boersema 2005; Leslie 1998; Preston 2006). Science may be defined as the investigation of physical reality, done through a complex interplay of theory, observation, and experimentation (cf. Ayala 2008:10; Baker and Miller 2006:98-99, 163; Day 2009:62-63). Evolutionary creation refers to the triune God bringing the 'universe and life' into existence by using an 'ordained, sustained, and design-reflecting evolutionary process' (Lamoureux 2008:29). Furthermore, theistic evolution is the 'scripturally derived belief that God normally acts' via 'processes' that can be studied 'scientifically' (Berry 2001:4; cf. Alexander 2008:33, 181; Collins 2003:496-497; Collins 2006b:200; Haarsma and Haarsma 2007:21, 172-173, 252; Newman 2003:119-120; Russell 2003:339; Van Till 1995).

In a manner of speaking, science 'moves along a horizontal plane', is concerned with 'immediate causes', and searches for 'naturalistic explanations for phenomena'. In contrast, religion travels 'along a vertical plane', criss-crosses the 'horizontal plane from beginning to end', and adds a 'supranatural dimension' to its outlook (Hyers 1984:33). Stenmark (2004:267-268) advances the discussion by offering a helpful four-tiered prototype to link the disciplines of science and religion. The following are the levels he advocates taking into

account. The first is the 'social dimension'. This calls attention to 'science and religion as social practices', in which specialists work together 'within a particular historical and cultural setting'. The second level is the 'teleological dimension', which concerns the 'goals of scientific and religious practice'. The third level is the 'epistemological or methodological dimension'. This refers to the 'means developed and used to achieve the goals of science and religion'. The fourth level is the 'theoretical dimension'. Of concern here are the 'beliefs, stories, theories, and the like that the practice of science and religion generates'.

While the issues at the centre of science and religion are intricate, each discipline informs the other in mutually meaningful and constructive ways. Ward (2008:4-5) considers the 'beginning and end of the universe', the 'origins and nature of consciousness', and the 'human religious experience' to be just a few of the relevant 'contact points for discussion between scientific and religious perspectives'. Moreover, Russell (2000) favours using 'critical realism' as a 'bridge between theology and science, making possible real dialogue and growing interaction'. This 'philosophical view of science and/or theology' maintains that what is known about the world corresponds to the 'way things really are'. Concededly, this understanding is 'partial' and open to revision, especially as new 'knowledge develops' (cf. Alexander 2001:242; Finlay 2008:108; Louis 2010:3).

3. The Biblical Account of Creation

Concerning the two-fold objective mentioned in the introduction, the starting point is the creation account recorded in the opening chapters of Genesis (specifically, 1:1–2:3). This theocentric, cosmological manifesto uses an 'exalted prose narrative' (Collins 2006a:44) to describe six acts of creation, with each one occurring on separate days,

followed by God's rest on the seventh day. What Moses set forth is God's 'systematic differentiation of the cosmos' so that carbon-based life could begin and flourish on earth (Brown 2010:38). God has 'equipped' the universe with 'all the necessary capabilities' to be transformed over time from 'elementary forms of matter into the full array of physical structures and life-forms that have existed' (Van Till 1999:185-186). This 'physical reality'—by some estimates consisting of 300 billion stars and 50 billion planets in the Milky Way galaxy (out of an estimated 100 billion galaxies in the entire universe)—is characterized by 'dynamism, openness, contingency, self-organization, and freedom', in which the 'whole is greater than the sum of the parts' (Peters and Hewlett 2006:78-79).

The biblical narrative should be seen as a highly stylized literary depiction that is figurative and symbolic in content (cf. Blocher 1984:37; Keller 2009:4; Lucas 2004:12; Waltke and Fredricks 2001:56). Above all, the rendition is theological and 'nonscientific' (Hyers 2003:32). It arises from an 'ancient phenomenological perspective of the physical world' (Lamoureux 2008:151) that would have been familiar to Moses (cf. Moberly 2009b:47-48). Walton (2009:12-13) explains that when Moses lived, people visualized the earth as being a 'flat, disk-shaped' landmass that was completely surrounded by water. The ground was 'upheld by pillars', while the sky was 'supported by mountains' located on the distant horizon. The sky itself was thought to be a 'solid' dome or tent-like structure on which the 'celestial bodies' (namely, the sun, moon, and stars) were 'engraved' and 'moved in tracks'. In this ancient three-tiered 'view of the cosmos', rain, hail, and snow from an immense body of water located above the overarching sky 'fell to earth through openings'. God's temple was located in the upper heavens, which in turn rested atop the sky (or lower heavens). The shrine in Jerusalem was the

earthbound counterpart to the divine abode. A series of 'graves led to the netherworld' (Sheol), which was located beneath the earth, while 'mighty Leviathan' skulked in the 'depths' of the seas (cf. Gen 7:11; 8:2; Deut 10:14; 2 Sam 22:8; 1 Kings 8:27; 2 Kings 19:15; 2 Chron 2:6; Neh 9:6; Job 26:11; 38:4-6; Pss 24:1-2; 75:3; 78:23; 104:2-13, 22; 148:4; Prov 30:4; Isa 11:12; 40:22; Jer 10:12; 31:37; 2 Cor 12:2-4; Eph 4:9-10; Phil 2:10; Rev 5:3, 13).

With respect to Genesis 1:1–2:3, a literary analysis of the biblical text indicates that the material can be divided into three separate, interconnected portions (cf. Lioy 2005:25-28):

I. The primordial earth (1:1-2)
II. The ordering of creation (1:3-31)
III. The perfect result (2:1-3)

Genesis 1:1 reveals that it was a direct act of God that brought about the absolute beginning of the cosmos (cf. Ps 19:1; Wis of Sol 13:1-9; John 1:1-3; Rom 1:20; Col 1:16; Heb 1:3). Genesis 1:2 indicates that before God began issuing his royal creation decrees, the primordial earth was 'formless and empty'. The implication is that God simply chose to create by beginning with formless matter and then giving it form. From a structural perspective, Day 1 seems to correspond to Day 4, Day 2 to Day 5, and Day 3 to Day 6. As the following chart shows, the first triad of days was devoted to God's forming the earth. In contrast, the second triad of days was given over to God's filling what he had formed (cf. Alexander 2008:155; Cassuto 1961:16-17; Brown 2010:39; Hyers 2003:30-31; Kidner 1967:46; Lamoureux 2008:193; Lucas 1989:90; Ross 1988:103-104).

Forming the Creation	**Filling the Creation**
Day 1 – Light (1:3-5)	Day 4 – Luminaries (1:14-19)
Day 2 – Sky (1:6-8)	Day 5 – Fish and Birds (1:20-23)
Day 3 – Land, Sea, and Vegetation (1:9-13)	Day 6 – Land Animals and Humans (1:24-31)

Moreover, in each triad of days, the creation narrative moves from the sky to the earth. During the first triad, God demarcated three sets of earthly realms: day and night, sky and sea, and land and plants. Then, during the second triad, God populated these realms with stars and planets, birds and sea creatures, and land animals and humans. Thus, in the first three sets of days, the various domains of the cosmos are demarcated, while in the second set of three days, the rulers of these domains are delineated. Additionally, in both triads, a single creative decree (Day 1 and Day 4, respectively) is followed by one creative act with two aspects (Day 2 and Day 5, respectively). In turn, this gives way to two separate creative acts that result in the earth being characterized by yielding, producing, or bringing forth (Day 3 and Day 6, respectively). Day 3 serves as the climax for the first triad, while Day 6 serves as the climax for the second triad.

Further observations can be made about the passage's highly symmetrical, densely structured, and fixed (perhaps liturgical) arrangement. By way of example, each day of creation follows a recurring pattern. There is an announcement: 'God said'. This is followed by a command: 'Let there be'; a report: 'And it was so'; an evaluation: 'good'; the exercise of sovereignty: 'God called'; and a chronological marker: e.g. 'first day', and so on. In this arrangement, only the seventh day has no counterpart. God, while reposed in imperial

splendour in his heavenly temple, blessed and set apart the seventh day as holy. Throughout biblical literature, the number seven symbolizes fullness and completeness. Accordingly, God's hallowing the seventh day suggests that it was at this moment that his creation activity came to a fitting and satisfying conclusion. Be that as it may, there is a sense in which the seventh day is 'suspended above temporal regularities' (Brown 2010:39). This gives it a 'timeless character', in which the final day anticipates the ever-present, creative potential found throughout the cosmos.

In short, God created everything—spiritual beings, physical beings, matter, energy, time, and space (cf. Eccles 11:5; Prov 3:19-20; 8:22-31; Isa 44:24; 45:18; Jer 10:16; John 1:3; Col. 1:16; Heb 1:2; Kline 1996; Waltke and Fredricks 2001:59; Woloschak 1996:91). On the one hand, the main focus of the biblical text is pre-history (or protohistory; cf. Brueggemann 1982:11), which means that what scripture reveals 'lies beyond the reach of either written records or eyewitness' (Thompson 2005:18). On the other hand, God's Word points to historical and theological truths. More specifically, Genesis uses a temple-creation motif to describe the formation of the universe (cf. Brown 2010:40-41; Lioy 2010:14-15). In this regard, the 'seven days' of creation are 'comparable to seven-day temple dedications at the end of which' almighty God 'takes up his rest in the temple' (Walton 2009:23; cf. Exod 20:8-11; Deut 5:12-15). Furthermore, the original universe that God brought into existence serves as the prototype that looks ahead to future venues in which the Lord and the covenant community would enjoy fellowship together. These include the garden in Eden, the Israelite tabernacle in the wilderness, the temple in Jerusalem, and the new heavens and the new earth. Excluding the last-named item, perhaps the rest could be understood as smaller representations of what the

original universe signified and prefigured (cf. Lam 2010:3; Lioy 2010:6).

Admittedly, there are differing views regarding how literally or figuratively the creation days should be understood (cf. Hamilton 1990:53; Lewis 1989:455; Waltke and Fredricks 2001:61). From a literary perspective, the 'seven days are seven components' of the 'single, unified, complex event of God's creation' (Samuelson 1994:159-160). The broader theological point is that of 'God's sovereignty over time' (Saebø 1990:27), as well as 'day and night' being 'totally subordinated' to the Creator (Verhoef 1997:420; cf. Ps 74:16). On a more specific, semantic level, some think the individual creation days should be taken as literal, sequential, 24-hour time periods. Allegedly, when God issued his royal decrees, he instantaneously brought complex physical entities into existence. This gives rise to the notion that the earth is relatively young (for example, around 10,000 years or less). Support is claimed by the appearance of the recurring phrase 'there was evening, and there was morning' and by the ordering of the week in Exodus 20:8-11 (cf. Kaiser 2008:39; Lioy 2005:40; McGrath 2010b:39-40).

Despite the popularity of the preceding view among some evangelicals, the overwhelming evidence from a wide range of scientific disciplines points to the cosmos and earth being billions of years old. In this regard, the usage of the Hebrew term *yôm* (typically rendered 'day') in the opening chapters of Genesis is somewhat varied. For instance, the word can refer to the light portion of a 24-hour period (cf. Gen 1:5, 14; Exod 20:9-11; Deut 5:13-14) and also to an unspecified period of time (cf. Gen 2:4; Ps 20:1; Prov 11:4; 21:31; 24:10; 25:13; Eccl 7:4; Isa 61:2; Jenni 1997:529, 537; Moberly 2009a:5). Based on the latter observation, the 'day-age' theory has been proposed, namely, that the 'days' of creation refer to prolonged epochs or ages of time.

Admittedly, while the universe gives the appearance of considerable antiquity, the presence of the phrase 'morning and evening' in the opening chapters of Genesis seems in conflict with the 'day-age' theory. Also, the idea of intervening ages between isolated 24-hour days is not evident from the biblical text (cf. Berry 2007:3; Fisher 1997:44-45; Futato 1998:16-17; Haarsma and Haarsma 2007:91-93; Kline 1958:155-156; Lioy 2005:40).

In light of the deficiencies associated with the above two (concordist) views, the framework hypothesis (a non-concordist interpretation) has considerable exegetical merit. Based on the preceding literary analysis of the biblical text, the creation 'days' form a rhythmical structure around which the prose-narrative is topically (or non-sequentially) arranged (in contrast to a strict chronological order; cf. Blocher 1984:50; Duncan 2007:2342-2347; Keller 2009:5; Kline 1996; Lamoureux 2008:196-197; Waltke 2009:6). Thus, the so-called 'days' of creation are seen as literary constructs to make known enduring historical and theological truths. Ultimately, of course, what the infinite creator did at the dawn of time remains shrouded in mystery and exceeds the ability of human language to convey (cf. Job 38). Thus, God graciously accommodated his finite and frail human creatures by presenting the primeval account in literary terms and constructs they could understand. In a manner of speaking, the phenomena associated with the creation 'week' are supra-historical, taking place above and beyond normal temporal and spatial constructs. Moses neither described all that happened nor explained how it happened. Instead, he unambiguously stated what happened, and he did so with a consideration for its broader theological implications (cf. Driscoll and Breshears 2010:81; Lioy 2004:41; McGrath 2010b:84; Spanner 1987:35; Woloschak 1996:107).

The point, then, of the Genesis narrative is not to delineate a precise chronology, especially since primordial events did not occur on the plane of ordinary human history. Instead, the creation account is an introductory part of Genesis in which the historical narrative reports a series of past events for the purpose of instructing the covenant community (cf. Duncan 2007:2342; Lucas 2007:3; Ross 1988:59; Sailhamer 1990:13-14; Spanner 1987:29; Stek 1990:230, 237, 249; Waltke and Yu 2007:98). Here, one finds that God is the focal point of the account, with man and woman serving as his vice-regents over the world. Such things as the luminaries of the cosmos, the material objects of the earth and the planet's creaturely inhabitants (namely, fish, birds, and land animals) do not occupy a central spot in the narrative, even though they are discussed. Their place in the ancient story helps set the stage for God's creation of humankind. In this case, man and woman exist as stewards over the planet that God created and prepared for them (Gen 1:26-30); and because God is the sovereign of the universe, he has the right to give the world to whomever he desires (Jer 27:5). Furthermore, Moses depicted the creation of the heavens and earth as occurring in six literary (not literal) 'days'. This, in turn, served as a primary reason for the people of the covenant to imitate their Creator in their weekly pattern of work and rest (Exod 20:11; 31:13, 17; cf. Hyers 2003:25-26; Lioy 2005:41).

On one level, the biblical narrative bears similarities to other ancient Near Eastern creation stories (or cosmogonies, especially Egyptian, Canaanite, and Babylonian ones; cf. Enns 2010:6; Fretheim 1994:323; Godawa 2010:1; Lam 2010:1; Parker 1994:234-235). On another level, the Genesis account is sufficiently distinctive to set itself apart from these violent and polytheistic myths (cf. Brueggemann 1982:24; Cassuto 1961:7; Collins 2006a:240-241; Ross 1988:52-53; Sailhamer 1990:20). Accordingly, one historical truth arising from the creation

account would be that the universe had a specific starting point in space-time history. In the aftermath of an inaugural event occurring around 13.7 billion years ago (that is popularly referred to as the 'Big Bang'; cf. Brown 2010:56; Colling 2004:31; Collins 2006b:64; McGrath 2009:114; McGrath 2010b:15, 152), a 'rich diversity of ordered structures', such as 'galaxies and stars', has gradually emerged throughout the cosmos (Van Till 1990:111). A corresponding theological truth would be that almighty God brought all things into existence, with the result that what he created is 'intrinsically good' (Lam 2010:2; cf. Gen 1:4, 10, 12, 18, 21, 25, 31; Sir 39:16; 1 Tim 4:4). This does not mean, as Spanner has noted (1987:53), that the primal creation was an 'idyllic paradise' characterized by static perfection and quintessential 'bliss'. Instead, the implication is that what the Lord brought into existence was superbly suited for its God-ordained function and purpose (cf. Walton 2009:11), as seen in 'creation's beauty' and 'appropriateness' (Southgate 2008:15). Furthermore, through the unfolding drama of the sacred text, one learns that the cosmos is God's magnificent 'work of art' (Dickson 2008:8).

The latter set of theological observations intentionally allows the revelation of scripture to take precedence over what some in the scientific community might otherwise declare about the origin of the cosmos (e.g. that it is self-generating and self-explanatory). From the standpoint of scripture, this faith-based stance can be understood as having four recognizable elements (cf. Heb 11:1). First is cognition, an awareness of the facts; second is comprehension, an understanding of the facts; third is conviction, an acceptance of the facts; and fourth is commitment, trust in a trustworthy object. Popular opinion sees faith as irrational. It is supposedly believing in something even when one's mind tells one not to. In contrast, the biblical concept of faith includes both reason and experience. Such faith, however, is not limited to what

can be seen. It makes unseen spiritual realities perceivable, not by willing them into existence, but by a settled conviction that what God has said in scripture about them is true (cf. Alexander 2008:15; Colling 2004:106; Collins 2003:36; Fisher 1997:108-109, 112-113; Lioy 2007:44-45; Lioy 2008:43-44; Lucas 1989:36-37; Ysteboe 2009:88, 99).

Additional inferences can be drawn from the highly stylized exposition of the Genesis creation account. One implication is that this material either contradicts or contrasts sharply with other ancient Near Eastern creation stories. For instance, while the latter end with the building of a sanctuary for the creation deity, these are counterfeit parodies of the truth, as represented in the opening chapters of Genesis. Furthermore, pagan notions of how the world began are characterized by the presence of antagonists and protagonists, evocative descriptions, and high drama. The Genesis creation account replaces this abundance of sensory detail with language that is reserved, measured, and reverential. One is left with the impression that God, in bringing everything into existence out of nothing (cf. Gen 1:1; 2:3; Ps 102:25; 2 Macc 7:28; John 1:2; Acts 4:24; 17:24; Rom 4:17; Col 1:16; Heb 1:2; 11:3; Rev 4:11), is all-powerful. Also, by imposing his design on the shapeless and empty planet, he demonstrates the inviolability of his will. God alone, as the sovereign Lord of the cosmos, is regal in splendour and wise in his decisions, for only he can bring longed-for order and restraint to an otherwise chaotic universe. As the one and only true God, the Lord alone deserves to be worshiped by humankind (cf. Alexander 2001:323-324; Alexander 2008:161; Blocher 1984:60; Brown 2010:46-47; Godawa 2010:5, 7; Lam 2010:2; Lioy 2005:27-28; Lucas 2004:15; Stek 1990:222-223; Waltke and Yu 2007:200-201).

Numerous critical scholars allege that it is implausible to view as historical the creation account recorded in Genesis 1:1–2:3. Instead, it is

maintained that Genesis is filled with mythic (i.e. fictional) narratives (cf. Brueggemann 1982:4, 16; Delio 2009:20; Fretheim 1994:324, 327; von Rad 1972:31-32, 40-41). So, in terms of the creation account, it would be a cosmogenic myth, namely, a philosophical and theological reworking of an earlier ancient Near Eastern tale of creation. In contrast, the view of this essay is that, to a large degree, the opening chapters of Genesis point to events that actually happened (cf. Blocher 1984:155-156; Collins 2003:65; Collins 2006a:13; Fischer 2008:xi; Hill 2007:130; Spanner 1987:28, 61). This remains the case, even though the literary form of the narrative is highly stylized, the presentation is selective, the sequencing of information is topical, and the data is filtered through a theocentric grid. In contrast to the pagan myths written throughout the ancient Near East about how the world began, the simplicity and monotheism of the Genesis description are unmatched. Also, there is no conclusive evidence to show that the account recorded in the opening chapters of Genesis is actually a later plagiarized story, instead of being the original account from which these others (though possibly recorded earlier) may have come (cf. Lioy 2005:28-29, 39-40; Rüst 2007:185; Spanner 1987:30-31).

This perspective is borne out by the ordering of creation. It is disclosed that competing forces or gods did not engage in a primordial struggle of titanic proportions. Instead, each time God effortlessly dispatched his royal decree, he summoned all things into existence and conformed them to his plan (cf. Pss 33:6, 9; 148:5). By highlighting these truths, Moses emphasized the sharp difference between the biblical account of creation and concurrent pagan myths. In sum, the Genesis narrative is a 'theological polemic', that is, a 'resolutely monotheistic' repudiation of rival 'ancient Near Eastern polytheistic culture' (Spencer and Alexander 2009:49). The power and effectiveness of the divine word resonates throughout the Genesis account as well as the rest of the Pentateuch.

Ultimately, it is by faith that people believe both in the existence of God (Heb 11:6) and his setting in order by his command the temporal ages as well as all that exists within them (vs. 3; cf. Alexander 2001:321-322; Brown 2010:32-33; Cassuto 1961:8; Haarsma and Haarsma 2007:115-116; Hamilton 1990:55; Hyers 1984:53; Lioy 2005:40; Lucas 2007:3-4; Moberly 2009b:52).

As noted earlier, the Genesis rendition of how the primordial earth began is not portrayed as occurring within the normal course of human events. Because of this, some have tended to misunderstand the original intent Moses had in writing the creation account. He did not spell out with scientific precision the process by which the cosmos came into existence, but rather, crafted an aesthetically pleasing, literary mosaic of God's creation of the universe. Furthermore, instead of recording every event that transpired over billions of years, the human author chose incidents that effectively recounted what occurred, along with conveying the theological implications of those events. Moses' intent was to spotlight the divine agent behind the natural and supernatural processes at work in the evolutionary formation of the cosmos and development of carbon-based life on earth (cf. Brown 2010:60; Godawa 2010:4; Lioy 2005:31-32).

4. The View of Materialistic Naturalism

In contrast to the theocentric outlook of scripture, a view prevalent in the West is that 'matter is the foundation of everything that exists', and science provides the 'best window onto the world' (Smith 2001:64; cf. Alexander 2001:273; Hyers 1984:13). This mind-set is the backbone of evolutionism, which refers to an atheistic dogma that affirms an entirely naturalistic process for cosmological and biological change (cf. Falk 2004:9, 40; Fisher 1997:67-68, 92, 94-95; Haarsma and Haarsma

2007:149; Hewlett and Peters 2006:178-179; Lamoureux 2008:5-6, 38; Van Till 1990:120-121). Moreover, it is claimed that a unified theory (i.e. a postulate using one set of ideas and principles) can be found using only empirical methods to describe all of the forces of nature (cf. Haught 2010:18, 43; McGrath 2009:52). In turn, this mathematical 'formula for the world' will be able to 'solve the deepest riddles of our cosmos' (Küng 2007:1). When this happens, the notion of a transcendent Creator-God becomes irrelevant, and the claim of theistic metaphysics to possess distinctive ontological truths is invalidated (16).

Despite the efforts of specialists and experts to fathom the created world's puzzling questions, they continue to fail. This even includes the quest for a 'single grand theory' (Küng 2007:16) that can combine the laws of physics at the micro and macro levels, and thereby, reveal nature's perfect unity, orderliness, and harmony (cf. Day 2009:95). According to Polkinghorne (2005), 'science describes only one dimension of the many-layered reality' of the cosmos. Also, it confines itself to the 'impersonal and general' and fences off the 'personal and unique' (ix). Consequently, science is only able to observe a 'fragmented picture.' At best, it is a 'patchwork of areas of insight only loosely, if at all, connected to each other' (7).

Even in the face of the preceding limitations, some (though not all) scientists still regard the material universe as a purposeless entity in which life and mind (the faculty of thought, volition, and self-awareness) spontaneously arose over billions of years by a remarkable combination of seemingly improbable circumstances and arbitrarily juxtaposed events. Likewise, they assert that a completely different universe could have arisen, one that is absolutely sterile, inhospitable, and lifeless. Moreover, they claim that the human race evolved by the bloody, directionless, and unguided processes of chance. As well, people exist all alone in an immense, unfeeling cosmos. It is alleged

that in the absence of empirical evidence, one must resort to sentimental wishful thinking to arrive at a different conclusion (e.g. the existence of an intelligent and purposeful supreme being who created a universe fine-tuned for biological complexity; cf. Alexander 2008:321; Haught 2010:57-58; Haarsma and Haarsma 2007:153; Lioy 2008:31; Spencer and Alexander 2009:38; Van Till 1999:190).

For a discussion of the overall failure of science, as a discipline, to recognize God as the primary agent or cause behind the ordering and coherence of the universe, cf. Pretorius 2007. The author notes that science is able to 'argue what reality is from as many realms and ideas' as it chooses; yet this hypothesising is based on a 'limited understanding of how the cosmos was formed'. In contrast, the Judeo-Christian scripture 'widens the picture'. Specifically, the Bible 'gives deeper meaning to the purpose for creation and causes one to search for answers to greater truths than science can produce' (41). In the final analysis, the 'theistic world-view' is the 'most biblically viable' paradigm 'within which reality can be understood' (10). More generally, even the 'most major alternate world-views are self-defeating and inadequate' in making sense of existence (both physical and metaphysical). None of these constructs (whether philosophical or empirical in character) are able to 'answer questions surrounding humanity's journey of life and their final destination, life after death' (26).

Despite the sombre nature of the preceding observations, Pretorius rightly affirms that 'both science and theology involve themselves in a journey of discovery, both seek answers, and both concern themselves with truth' (12). Furthermore, he maintains that it is possible for 'science and theology' to 'comfortably work to further each ones' understanding of reality' (23). Based on the preceding supposition, it seems reasonable to consider 'science and religion' as separate and

complementary disciplines that 'address aspects of human understanding in different ways'. Moreover, 'attempts to pit science and religion against each other create controversy where none needs to exist' (Ayala 2008:12; cf. Day 2009:83-83, 130; Gould 1997).

5. The Origin of Human Life on Earth

The point of concern at this juncture is the origin and actualization of carbon-based life on earth, including Homo sapiens (modern humans). As stated in the introduction, the best persuasive scientific explanation is offered by biological evolution (based on an analysis of the fossil record, genome evidence, morphological data, and so forth; cf. Ayala 2008:17-35; Baker and Miller 2006:52-70; Day 2009:115-116; Hewlett and Peters 2006:173-176). The focus here is on mutations that are caused by genetic differences appearing in the offspring of mating organisms. This phenomenon (also known as descent with modification) is the basis for simpler life forms being incrementally transformed into more complex ones over vast eons of time (by some estimates, spanning nearly 4 billion years). A case in point would be the earliest hominid predecessors to anatomically modern humans evolving from a common ancestral species of bipedal (upright walking) primates that are now extinct. This outcome resulted from a process of natural selection extending over millions of years (cf. Berry 2007:4; Colling 2004:103-104; Finlay 2007:1-2; Kidner 1967:26; Miller 2003:152).

Just as God presided over the creation of the entire cosmos, so too he superintended the biological evolutionary process of all forms of carbon-based life on earth, so that they developed according to his perfect will and for his everlasting glory (cf. McGrath 2010a:10). This includes his providential involvement in the planet's history (through both natural and supernatural means) to foster the emergent complexity

of life found across the globe (cf. Brown 2010:62; Jackelén 2006:623; O'Connor and Wong 2006; van Huyssteen 2006:662-663). To permit the advent of Homo sapiens at a precise moment in time, God brought about an optimal set of conditions on earth, in the solar system and Milky Way galaxy, and throughout the entire universe (a phenomenon known as the anthropic principle; cf. Collins 2006b:74; Edwards 1999:48; McGrath 2009:xii, 85, 180; McGrath 2010b:154-155). This has led to 'creation's functional integrity'. This means that while the universe is completely dependent on God for its existence, he has 'endowed' it with the 'ability to accomplish' its purpose without necessitating supernatural 'corrections' or 'interventions' (Murphy 2001). Furthermore, God presided over earth's climatic and geologic formation to make it ideally suited for human habitation, including the ability of people to survive and thrive (cf. Isa 45:18; Holder 2007:2-3; Polkinghorne 2007a:4; Sharpe and Walgate 2002:938; Waltke and Yu 2007:175, 203).

Concerning Homo sapiens, they had a relatively recent origin (by some estimates, between 100,000 and 200,000 years ago) from a single location (most likely, east-central Africa; cf. Fischer 1993; Korsmeyer 1998:118-119; Wilcox 2003:236-237, 242). Beginning around 40,000 years ago, during the Upper Paleolithic period (or Late Stone Age), a 'dramatic behavioural shift' among humanlike hominids is observed in the archaeological record (Kline 1992:5). A gradualist, evolutionary scenario claims that the 'image of God and human sinfulness' progressively developed in some mysterious way through 'many generations' of 'pre-human ancestors' (Lamoureux 2008:29-30, 290-291; cf. Brown 2010:111; Enns 2010:2; Falk 2004:225). In contrast, Genesis 2:7 and 21-22 reveal that at one precise moment, the original human pair were the direct product of divine activity from a distinct Homo species of ancient, pre-Adamite creatures. Put another way, it

was from an initially small population (possibly numbering no more than several thousand; cf. Alexander 2008:224; Collins 2006b:207; Wilcox 2003:240, 245) that God brought the first humans into existence by special, instantaneous, and separate creation (cf. Gen 1:27; Deut 4:32; Isa 45:12; Acts 17:26; Haarsma and Haarsma 2007:222-223, 228).

The above incident is called evolutionary monogenism (a term that literally means 'one beginning') and necessitated God interrupting the normal course of biological development (including its apparent ontological indeterminacy). It involved him freshly creating Adam and Eve with apparent age (that is, as adults rather than as children) and giving them a genetic history that reflected their common ancestry with all other life forms (cf. Bonnette 2007:147, 150, 153, 172). Additionally, the 'original state' of the primeval pair was characterized by 'moral perfection in knowledge, righteousness, and holiness' (Strimple 2005). The episode also included God supernaturally forming the material (i.e. physical) and immaterial (i.e. spiritual) aspects of their being. The latter refers to God's infusion of a soul in the primeval pair, as well as in the embryos of all subsequent humans (cf. Job 10:8-12; 31:15; 33:4; Pss 119:73; 139:13; Prov 22:2; Isa 43:7; Mal 2:10; Wis of Sol 15:11; Eph 2:10; 1 Pet 4:19; Bonnette 2007:110, 169; Brown 2003:502; Gray 2003:287; Held and Rüst 1999:232, 236; Korsmeyer 1998:20-21).

The soul has been traditionally understood as the 'immaterial essence' (Lake 2009:585) or 'animating principle' (Robeck 1988:587) of Homo sapiens. Be that as it may, in 'Hebrew thought, a person is a body-soul' (Wilson 1989:175). Expressed differently, everyone is 'viewed as a unity, a single entity, an indivisible whole'. This implies that a 'person is not a soul or spirit' who 'now inhabits and will at death' abandon his or her 'body'. Instead, 'soul' or 'spirit' denotes the 'whole person or individual as a living being'. The implication is that people are

'physical beings' (Brown 2003:503) who have 'mental functions and spiritual capacities' (a view known as ontological holism; cf. Anderson 1998:182-183; Collins 2003:122; Driscoll and Breshears 2010:129; Green 1998:173).

In short, Adam and Eve were the sole historic, genetic primogenitors of all humanity (cf. Kaiser 2008:40; Keller 2009:10-11; Kidner 1967:28, 30). It seems that under the inspiration of the Holy Spirit, Moses artistically reframed the opening chapters of Genesis to reflect the 'ecological and cultural environment' (Hurd 2003:228) of the ancient Near East during the Neolithic period (or New Stone Age, which began about 9,500 B.C.). If this supposition is true, Moses was accommodating God's truth to the pre-existing worldview of the covenant community (cf. Blocher 1997:40; Fischer 2008:6; Moberly 2009a:9-10; Turnbaugh 2002:317-319; Young 1995). Expressed differently, Moses was describing an 'event in terms familiar to [his] audience' (Collins 2006a:253).

To be sure, there is still the matter of accounting for Cain's wife, as well as the individuals whom Cain feared would murder him (cf. Gen 4:13-17; Fischer 2008:51). One possibility (albeit somewhat speculative) is that the immediate offspring of Adam and Eve interbred for a relatively brief period and to a minor 'extent with the local archaic populations' (Wilcox 2003:246). This would lead to some absorption, or assimilation, of other humanlike hominids into the gene pool of Homo sapiens (cf. Gen 6:1-4; Fischer 1994; Haarsma and Haarsma 2007:219; Harrison 1979:1; Kidner 1967:28-29; Spanner 1987:79, 109, 11-112). The subsequent migration of the first couple's descendants (known as the 'Out of Africa' theory), and the concurrent rise of civilizations across the globe, were due to God's intervention. Previously existing hominid species were either displaced, or became extinct as a result of a pronounced increase in human population and

expansion of human activity (cf. Edwards 1999:59-60; Fischer 1993; Kidner 1967:29; Klein 1992:5).

As with statements made earlier, some might regard aspects of the preceding theological observations to be merely faith-based assertions or ad hoc explanations that are 'outdated in the light of the findings of modern science' (Day 2005:4). Admittedly, this is a situation in which the genesis of the first human couple can be explained without reference to the supernatural intervention of God (cf. Wilcox 2003:253). Be that as it may, the infallible, overruling authority of scripture is given precedence (cf. Keller 2009:9). Moreover, when it comes to the virginal conception of the Son of God, one could also say that such a notion has no real scientific support (cf. Matt 1:20-21; Luke 1:35). For that matter, the same holds true for the literal, bodily resurrection of the Messiah from the dead (cf. Matt. 28:1-10; Mark 16:1-8; Luke 24:1-49; John 20–21; Acts 1:3; 2:24, 31-32; 4:2, 33; 17:18, 31-32; 5:30-32; 26:23; Rom 1:4; 6:5; 1 Cor 15:3-7; Phil 3;10; 1 Pet 1:3; 3:21; Bonnette 2007:18, 176; Collins 2003:293; Falk 2004:210; Fisher 1997:31-32; Forysth 2006:10, 13; Haarsma and Haarsma 2007:118; Holder 2007:4; Hill 2007:130; Sloane 2005:3, 6). In both cases, the biblical depiction is that almighty God directly intervened to bring about a set of time-bound, historical circumstances and outcomes that are beyond scientific verification.

The same observation could be made about the miracles recorded in the four Gospels that Jesus performed during his earthly ministry. His miracles were extraordinary expressions of God's power. When the Son performed a miracle, the Father directly altered, superseded, or counteracted some established pattern in the natural order (cf. Collins 2006b:48; Driscoll and Breshears 2010:88; Haarsma 2003:74, 83; Haarsma and Haarsma 2007:41; Humphreys 2004:2-3; Louis 2010:8; Newman 2003:123; Polkinghorne 2007b:4; Worthing 2009:2, 5). The

miracles of Jesus served several purposes. First, they confirmed his claim to be the Messiah. Second, they validated the Son's assertion that he was sent by the Father and represented him. Third, they substantiated the credibility of the truths Jesus declared to the people of Israel. Fourth, they encouraged the doubtful to put their trust in the Son. Fifth, they demonstrated that the one who is love was willing to reach out to people with compassion and grace (cf. Matt 11:2-5; Luke 7:20-22; John 20:30-31; Acts 2:22; 4:30; Heb 2:4; Alexander 2001:451-452; Alexander 2008:38-39; Falk 2004:206-207; Fisher 1997:77-78; Lamoureux 2008:55; Van Till 1999:187-188).

In a similar vein, God's special, instantaneous, and separate creation of a first pair of Homo sapiens was a supernatural manifestation of his power. Furthermore, the literary context and thrust of the Genesis account is universal in scope, and deals with absolute human origins. The implication is that, despite assertions to the contrary (cf. Collins 2003:481-482, 486; Enns 2010:2; Lamoureux 2008:165, 178, 201, 274, 319-320; Polkinghorne 2009:166-167), Adam and Eve are not fictional, generic characters appearing in an ancient Hebrew myth. Rather, they are a literal, historical couple who initially existed in a genetically pristine state as persons having moral integrity (that is, before original sin and the ensuing Fall; cf. Kidner 1967:27; Thompson 2005:23), and with whom God entered into a covenant relationship (cf. Blocher 1984:111-112, 160; Kline 1996; Lioy 2006b:85-87). These observations are reinforced by the specific, matter-of-fact reference to Adam in the following Old Testament passages: Genesis 4:25; 5:1, 3-5; 1 Chronicles 1:1; Job 15:7; 31:33; and Hosea 6:7 (cf. Bouteneff 2008:12-13; Waltke and Fredricks 2001:80; Waltke and Yu 2007:249-250).

The above inference remains true, even though Adam and Eve are paradigmatic of every human being who has ever lived. Also, the aforementioned deduction continues to be valid even though Adam

functions as the representative (or federal) head for the entire human race. In point of fact, everyone is organically connected, or ontologically united, to him (that is, biologically, spiritually, morally, and legally; cf. Gen 2:24; 3:16-19; Ps 51:5; Rom 5:12-14; 1 Cor 15:21-22; Ramm 1985:72, 116; Westermann 1997:33-34, 42). Furthermore, affirming Adam's historical existence does not invalidate the fact that he was a primeval archetype of national Israel and its people. Expressed in a different way, circumstances and events in the life of Adam foreshadowed and paralleled what later occurred among God's covenant people. For instance, both proto-Israel (Adam) and national Israel were created by God, placed in a fertile environment, given clear stipulations, disobeyed God, and were exiled (cf. Blocher 1997:55-56; Bouteneff 2008:10, 38-39; Waltke and Yu 2007:150).

Moreover, the New Testament regards Adam and Eve as the literal, historical first pair of Homo sapiens (cf. Blocher 1984:163-164; Blocher 1997:46-48; Duncan 2007:2380-2382; Lucas 1989:107; Ross 1988:54; Rüst 2007:185; Spanner 1987:74). For instance, in Matthew 19:4-6 and Mark 10:6-7, Jesus quoted from Genesis 1:27 and 2:24 to emphasize the sanctity and inviolability of marriage. His argument is premised on the fact that Adam and Eve was a real couple who lived at a distinct point in space-time history. In Luke's version of the Messiah's genealogy, it is revealed that Jesus ultimately traced his physical lineage back to a real, personal Adam, who as the 'son of God' (3:37), was directly formed by the hand of the creator (cf. Job 10:8-12; Pss 119:73; 139:14). Paul concurred with this viewpoint when, at Athens, he declared that God 'from one man made all the nations' (Acts 17:26). Here the apostle was referring specifically to Adam as the progenitor of the human race (cf. Gen 3:20; Sir 40:1; Wis of Sol 7:1; 10:1-2; Tobit 8:6).

In Romans 5:12-21 (especially verses 12 and 14), the comparison and contrast that Paul made between Adam and Jesus has the most theological potency when both individuals are understood to be actual human beings. Oppositely, the persuasiveness of the apostle's argument is substantially weakened when it is maintained that Adam was just a make-believe, generic character, who has no tangible, historical connection with the saviour. Moreover, it is impossible for the Fall to be real if Paul had in mind a non-existent person named Adam who committed an imaginary sin in a mythical locale. Otherwise, his transgression becomes nothing more than a phenomenological notion or experiential axiom. In truth, the apostle did not present the dire consequences of the first man's act of disobedience (e.g. the presence of guilt, condemnation, and alienation from God; enslavement to sin; and being condemned to die) as mere metaphors, but as objective, historical facts of human existence. Therefore, just because the biblical account of Adam and Eve's creation and fall is extraordinary, does not mean it should be outrightly dismissed as a folk tale.

In 1 Corinthians 15:22 and 45, Paul's reference to Adam presupposes that he actually existed in space-time history. Also, in verse 45 (which quotes Gen 2:7), the apostle made a distinction between the 'first Adam' becoming a 'living being' and the 'last Adam' becoming a 'life-giving spirit'. If the first male *Homo sapien* was just a microcosm story for ancient Israel, or a metaphorical prototype for all humanity, the forcefulness of Paul's contrast is enormously diminished. Also, his contention in 1 Corinthians 15 for the reality of the future resurrection of all believers is undermined. Succinctly put, the efficacy of the apostle juxtaposing the first Adam with the last Adam hinges on Genesis 2 being an account that reflects an underlying historical reality (the 'parabolic dress of the literary' form, notwithstanding; Blocher 1997:50).

In 2 Corinthians 11:3, Paul referred to Eve as a literal, historical person whom the serpent deceived in the Garden of Eden. To regard her as a literary fiction subverts the apostle's case against the false teachers who were plaguing the believers at Corinth. In 1 Timothy 2:13-14, Paul's line of reasoning is premised on the historicity of Adam and Eve. The apostle was quite specific in noting that God first formed Adam and then Eve. Likewise, Paul explained that Eve, not Adam, was first completely deceived by the serpent and transgressed God's command. These distinctions and the apostle's purpose in making them are far less compelling if Adam and Eve were not the literal, historical first pair of Homo sapiens. Finally, Jude 1:14 treats Adam as an actual individual who existed in space-time history. In particular, the writer included a brief genealogy in which he counted Adam as the progenitor of other descendants extending to Enoch and beyond.

It is scientifically accurate to maintain that Adam and Eve shared physical characteristics with other creatures (including common anatomical, physiological, biochemical, and genetic traits; cf. Finlay 2003:2-4). That said, it also remains true that the first human couple (along with all their physical descendants) differed radically from animals (including primates) both in degree and kind as self-aware, sophisticated individuals. A corollary is that people, far from being an accident of nature or quirk of fate, have intrinsic value and purpose. Put another way, because humans are made in the image of God (both ontologically and functionally), they are the pinnacle of his creation, having innate worth and significance (cf. Gen 1:26-27; 5:1-3; 9:6; 1 Cor 11:7; Jas 3:9). The latter is seen in humanity's unique mental powers, intellectual capabilities, moral sensibilities, religious inclinations, cultural attainments, artistic productions, and technological achievements. In all these ways, God's image-bearers serve as his vice-regents over the earth and its creatures (cf. Lam 2010:5; Collins

2006a:66-67; Collins 2006b:23, 200; Lamoureux 2008:283, 286; Lioy 2010:14; Maass 1974:84; Sailhamer 1992:94-95; Smith 1993:184, 238; Waltke and Fredricks 2001:46, 71).

While it seems valid to assert that God created the universe primarily for humankind, scripture indicates there is more to it than that (cf. Collins 2003:499; Korsmeyer 1998:85-86; Munday 2003:465-466; Southgate 2008:37-38). Succinctly put, God's purposes in creation, while including humankind, are not limited to the latter (cf. Rom 8:18ff). For instance, one meta-objective includes the creator-king bringing glory to himself in and through his creation. As a result, believers should avoid adopting a compartmentalized, either-or mentality when it comes to the temporal and eternal, the material and the immaterial, the physical and spiritual aspects of reality. In God's sovereignty, every aspect of his creation has value, meaning, and purpose, at least from a theological point of view. Still, from the limited horizon of human existence, reality can, at times, seem to be filled with paradox, enigma, randomness, and so on. A candid study of Ecclesiastes, the Psalms, Job, and so on, bears this point out. The latter observation notwithstanding, Hebrews 1:3 states that the Son is 'sustaining all things by his powerful word', including every aspect of the material universe in which we live. Moreover, Colossians 1:17 notes that in the Son 'all things hold together'.

6. The Reality of Physical Death Predating God's Creation of Adam and Eve

The findings of science indicate that physical death (including the mass extinction of countless, previously-thriving species) predated God's special creation of Adam and Eve (cf. Alexander 2008:104-106, 244-245; Falk 2004:130, 199; Forysth 2006:17-18; Lamoureux 2008:34,

225, 276, 305; McGrath 2009:90). Additionally, this evolutionary mechanism of creative destruction (along with nonhuman natural disasters, such as earthquakes, volcanoes, tornadoes, hurricanes, and so on) has existed since God brought about the first forms of life on earth (cf. Braaten 2003433; Day 2009:103, 113; Greenberg 2003403; Polkinghorne 2009:165-166; Snoke 2004:119-120). Alexander (2001:352-353) explains that with the inception of 'multicellular carbon-based life forms' on earth, the 'inevitable consequence' was a 'dynamic natural order in which life and death' were 'integral parts'. In fact, all living organisms on the planet survive by 'feeding on carbon-based molecules derived from other plants and animals'.

God providentially uses this activity to bring about the 'sort of beauty, diversity, sentience, and sophistication of creatures' found throughout the globe (Southgate 2008:16). Because the termination of life is an inherent component of the biological evolutionary process, it is 'not intrinsically immoral' (Munday 2003:459; cf. Brown 2010:106-107). Beyond any doubt, humanity lives in a universe brimming with 'potentiality' (Polkinghorne 2007b:3), which includes the 'cosmic evolution of stars and galaxies' and the 'developing complexity of terrestrial life'; but the 'shadow side of evolving fruitfulness' is the presence of 'evil and suffering'. (This complex existential issue is a branch of philosophical theology known as theodicy.) From a theological perspective, the existence of 'darkness and chaos' (Waltke and Fredricks 2001:68-69) in the 'precreated earth' implies that 'everything hostile to life is not the result of sin'. In truth, even the 'malevolent forces of creation operate only within [God's] constraints' (cf. Job 38:39, 41; 39:3, 16-17, 20, 25, 30; 41:14; Pss 104:19-21; 147:9; Isa 45:6-7).

Just the same, the primeval account in Genesis points to a deplorable incident that occurred sometime after God created the first pair of

Homo sapiens to be autonomous (or free) and responsible moral agents (cf. Ramm 1985:8-9, 76, 91). Specifically, when Adam and Eve sinned in the Garden of Eden (by disobeying a direct command from God), the form of death they experienced was first of all spiritual (cf. Rom 5:21; 6:23; 7:10-11; 8:6). By that is meant their relationship with their creator-king was immediately estranged (cf. Collins 2003:142-143; Collins 2006a:180-181) (in scripture, death is presented as a complex, multi-layered concept). Whereas before, the couple had been 'God-oriented', now, they were 'self-oriented' (Paul 1997:360). More specifically, the research done by Peacock (1995:2-3) indicates that the Eden narrative of Genesis 2:4–3:24 depicts 'three realms of relationship' that were 'broken as a direct consequence of sin': 1) between God and humanity; 2) between individuals; and 3) between humanity and the creation (cf. Alexander 2008:250-251, 255, 261; Berry 2007:4; Bouteneff 2008:42-43; Fretheim 1994:352, 369; Keller 2009:11-12; Lucas 2007:4; Merrill 1991:18; von Rad 1972:101; Waltke and Yu 2007:263).

The gradual and long-term effect of Adam and Eve's plight is seen in their physical demise (cf. Driscoll and Breshears 2010:154; Lioy 2006a:86-87). Prior to the Fall, they were 'naturally mortal', but as a result of their sin, they lost their 'potential for immortality' (Haarsma and Haarsma 2007:217). Furthermore, Adam and Eve languished in a metaphysically 'wretched existence' (Spanner 1987:142) due to the 'guilt' (Strimple 2005) associated with their transgression and the 'corrupted, depraved nature' it spawned. Tragically, this dire circumstance became the fate of all their descendants, each of whom share their spiritual and genetic fingerprint (cf. Gen 3:19, 22-24). The implication is that, except for the Son of God (cf. Isa 53:9; Luke 23:41; John 8:46; 2 Cor 5:21; Heb 4:15; 7:26; 1 Pet1:19; 2:22-24; 1 John 3:5), everyone is born in a state of sin and guilt, has an inner tendency or

disposition toward sinning, and are powerless to rescue themselves from their predicament (cf. Eccles 7:29; Jer 17:9; 2 Bar 4:3; 17:2-4; 23:4; 43:2; 48:46; 54:15, 19; 56:5-6; 2 Esdras 3:7, 21-22, 26-27; 4:30; 7:118; Sir 14:17; 15:14; 25:24; Wis 2:23-24; Rom 3:23; 6:23; 7:5, 13; Eph 2:1-3).

Moreover, the Fall has ecological ramifications (cf. Rom 8:20-22; Berry 2008:122-123; Edwards 1999:67; Greenberg 2003:398-399; Southgate 2008:15; Spanner 1987:73). For instance, God has linked the on-going fertility of creation to the fate of Homo sapiens. To be explicit, it was due to the Fall that the Lord held back nature's full potential to flourish and achieve its divinely intended goal. This constriction of earth's fecundity is seen in the curse that God placed on the ground (cf. Gen 3:17-18; 2 Esdras 7:11, 116-126; 4 Ezra 7:11-12). In a personified sense, all nonhuman creation presently groans under the burden of its intensified affliction. Furthermore, nature's liberation from the menace of its vexing situation is linked to the destiny of redeemed humanity. Specifically, it is only when the Father resurrects his spiritual children at the second advent of his Son, that the cosmos will be renewed and ushered into the glorious freedom of eternal perfection (cf. Isa 65:17; 66:22; Jer 31:12-14; 33; 2 Apoc Bar 15:8; 1 Enoch 51:4-5; Matt 19:28; 2 Pet 3:10-13; Rev 21:1).

Down through the centuries, believers have wondered why God allows human evil in the world (cf. Hab 1:13). Whether one is considering evil attitudes, actions, or aims, this wickedness results from the absence of the moral perfection that God originally intended to exist among people. Ultimately, only God knows why he has allowed human evil to exist in the world. Nevertheless, it remains true that the Lord may use ungodliness to bring home to people the distressing fact of their mortality, to warn them of greater evils, to bring about a greater good, or to help defeat wickedness. The last two reasons are especially

evident in the cross of the Messiah. Despite the tragedy of his suffering at Calvary, his atoning sacrifice resulted in a greater good (i.e. the salvation of the lost) and the defeat of evil (e.g. sin and death; cf. Braaten 2003:433; Falk 2004:53; Macdonald 2009:818-182; Spencer and Alexander 2009:68-69; Southgate 2008:16). When all is said and done, it is only at the consummation of the age that the inherent 'good' of God's creation will be 'fully realized' (Russell 2003:368).

7. Conclusion

This journal article has considered an evolutionary creationist process for the origin of humanity. Throughout the analysis, a number of broadly interrelated issues are explored in an integrated, synthesized manner. The key supposition is that a fundamental congruity exists between what God has revealed in nature and in scripture. Accordingly, the endeavour involved taking seriously the scientific data, as well as engaging scripture in its historical, cultural, and sociological contexts. The resulting outcome is a theologically informed harmonization of evolutionary theory with creationist teachings found in the Judeo-Christian scriptures about the genesis of Homo sapiens.

In order to accomplish this task, the interplay between science and religion was considered. Some (but not all) relevant contact points between these two distinct disciplines include the origin of the cosmos, the inception and development of carbon-based life on earth, and the shared quest for greater understanding about the world in which people live. It was proposed that critical realism be the theoretical bridge linking the dialogue between specialists in science, and those in religious studies. This irenic mind-set stands in sharp contrast to the view of materialistic naturalism, in which the physical substance of the universe is said to be all there is, and atheistic scientists, who are

depicted as the grand interpreters and gatekeepers of the hidden mysteries of the cosmos.

The essay next took up the biblical account of creation, specifically, Genesis 1:1–2:3. This passage is seen as a highly stylized, literary depiction that uses a temple-creation motif to describe the formation of the universe. Moreover, the content is figurative and symbolic in form and set against the backdrop of pre-history (or protohistory). This means that the Genesis rendition of how the primordial earth began is not portrayed as occurring within the normal course of human events. Furthermore, the creation 'days' are best understood, not as literal, sequential, 24-hour time periods, but rather as atemporal markers within an overall literary framework.

In short, the creation 'days' form a rhythmical structure around which the narrative is arranged. Given the latter, it would be misguided to insist upon the Genesis narrative delineating a precise chronology, especially since primordial events did not occur on the plane of ordinary human history. A number of important theological truths arise from this literary and exegetical analysis of the biblical text. The most crucial point is that almighty God, through a series of natural (i.e. evolutionary) and supernatural processes, created everything, including spiritual beings, physical beings, matter, energy, time, and space. This theocentric view contrasts sharply with the claims of materialistic naturalism, which entirely rejects the need for a supernatural agency (such as God) to explain the origin of the cosmos.

In light of the metaphorical nature of the creation account, it is possible for those who hold to the infallibility and inerrancy of scripture to affirm the findings of science for the age of the universe (about 14 billion years old) and earth (around 4.5 billion years old). Moreover, when a framework approach is used to interpret the literary structure of

Genesis 1:1–2:3, those who are committed to the inspiration and authority of scripture can support the postulate that God worked through a biological evolutionary process to bring about carbon-based life on earth. Just as God presided over the creation of the entire cosmos, so too he superintended the incremental transformation of simpler life forms into more complex ones over vast eons of time (nearly 4 billion years).

With respect to the origin of humanity, the findings of science indicate that Homo sapiens had a relatively recent origin (by some estimates, between 100,000 and 200,000 years ago) from a single location (most likely, east-central Africa) and arose from an initially small population of humanlike hominids (possibly numbering no more than several thousand). Furthermore, Genesis 2:7 and 21-22 reveals that God brought Adam and Eve into existence by special, instantaneous, and separate creation. This included God's formation of the material (i.e. physical) and immaterial (i.e. spiritual) aspects of their being. Admittedly, science offers an explanation for the genesis of the first human couple without reference to the supernatural intervention of God. This is a case in which the overruling authority of scripture is given precedence.

The implication is that Adam and Eve are not fictional, generic characters appearing in an ancient Hebrew myth. Instead, they are a literal, historical couple, who initially existed in a genetically pristine state as persons having moral integrity. Moreover, because humans are made in the image of God (Latin, *imago dei*), they are the pinnacle of his creation, having innate worth and significance. Tragically, when Adam and Eve sinned in the Garden of Eden, they experienced spiritual separation from God. Also, as a consequence, all their physical descendants are born into this world as mortal creatures that are separated in their relationship with their creator-king as well as one

another. Thankfully, through the death and resurrection of the Messiah, all who put their faith in him can have eternal life and enjoy eternal fellowship with God in heaven.

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