GENESIS ONE AND THE SPIRIT: A NARRATIVE-RHETORICAL
ANCIENT NEAR EASTERN READING IN LIGHT OF MODERN
SCIENCE*

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ABSTRACT

The creation narrative in Genesis 1 has historically presented a number of interpretive difficulties to Torah and Old Testament scholars. The prospect that this ancient account might ever correlate in a harmonious and meaningful manner with physical reality seemed difficult or remote. Some scholars considered it as polemical with respect to previous creation myths and dismissed it as another poetic myth. Macroevolutionary claims from one sector of the scientific community brought it into disrepute and physical cessationism adopted it to an ideology. But all these interpretive perspectives have proved to be insufficient and premature. When confirmation of a cosmic beginning was found in 1963, Genesis 1.1 and the ensuing account of the Spirit’s role in Earth history became a
topic of serious investigation. With the ongoing discovery of many finely-tuned anthropic-looking aspects of cosmic history, giving the cumulative and substantial impression that the universe had been designed for the eventual introduction of humankind, a divine role in optimizing Earth for life became an attractive consideration. Interestingly, the observable abrupt appearance of diverse life-forms, eventually including humankind, as sequentially described in this particular narrative, now appears to be heuristically compatible and consistent with experimental scientific findings. These findings are increasingly unharmonious with the speculation of the non-existence of God and with the impossibility of divine action, from the cosmic to life’s biochemical realm. The present study argues, against the background of ancient Near Eastern literary texts, that the Genesis creation narrative was specifically designed by the Spirit and composed by a firmly guided littérature so as to be understood from within its contextual literary setting, and that it is a unique written prophecy, originating in a distinctive Sabbath-keeping culture. On this hypothesis the text serves originally to remind attentive like-minded readers of the cultural significance of Sabbath observance, while detailing a series of unobservable creative events. However, the text appears also designed to be read, still within the original cultural perception of literary-minded Sabbath-keepers, from a perspective that is aware of the Spirit's intentional transparent design of the universe for the benefit of humankind. Using the narrative techniques of point of view, resumptive repetition, and rhetorical or communicative intention, techniques found in ancient literature, the present study suggests that previous interpretive difficulties yield to a literary solution, which offers an explanation for the potentially mysterious features of this prophetic composition. In divine foreknowledge the current modern witness of this remarkable narrative to the Spirit’s past creative deeds now becomes more visible as a testimony to the invisible God.

* This investigation is dedicated, with much affection and appreciation, to John Rea, Emeritus Professor of Old Testament, Regent University, on the occasion of his eightieth birthday. In coincidence with our congratulations due this octogenarian achievement, one which marks a lifetime of distinguished Christian service, we may also trust that his wise and perceptive English volume on canonically described activities of the Holy Spirit will find further widespread appreciation in its newly released Spanish edition, *El Espíritu Santo en la Biblia: Un comentario bíblico y exegético* (trans. S. Cudich; Miami: Patmos, 2004).

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INTRODUCTION

The personification of the Holy Spirit is a known feature of the reflection of New Testament writers (ἡθοποιία or προσωποποιία in contemporary rhetorical culture), although this personal characterization of the Spirit is sometimes denied or argued against. However, it is difficult to deny the personification of the pre-existent Jesus in creation as portrayed in Jn 1.1-5, 14, Col 1.16-17, and Heb 1.2b, 10. While interested in personal involvement in past creative deeds, Jesus-tradition shows no interest in temporal pinpointing as to exactly when observable and unobservable things came into being. Similarly, I suggest, tradition probably known to the Genesis narrator in support of keeping the Sabbath day, namely that heaven and earth ([טי]ו [ם]א [ם]ו) were made in six days (Exod 20.8-11) with Yahweh ([י]ו [ה]ו) resting on the Sabbath ([שבת]), also shows no interest whatever in either when these days were or in equating any earthly dimensions of humankind (temporal or physical) with those of the personal God of heaven and earth in the context surrounding this presentation of the Decalogue. Rather, this narrative context accentuates the differences between the creator and humankind. While in Exod 20.11 and 31.17 divine making and resting is presented as a model for imitation in the human sphere, these comparative actions between divine and human are not equated, either in this or any other literary accomplishments of a Sabbath-keeping, Torah-observant people who deeply appreciate that the Spirit of God, while personal, is utterly different from humankind.


It will be my argument here that a similar interest in accurate personal characterization, together with a similar deliberate reluctance to inappropriately venture into any apparent placing of temporal boundaries upon past divine creative works in distant days, before ordinary narrated time (Erzählte Zeit) pertaining to normal human affairs, were also rhetorical interests of the Genesis narrator.

Insofar as such mighty acts are concerned, the personal role that the Spirit of God (Rûah 'elôhîm), introduced in Gen 1.2, can be reasonably understood to play in the immediately ensuing narrative may be better appreciated as well. In the ensuing narrative the Spirit recalls and details his previous creative deeds. This rhetorical perspective of the Spirit of God as a participant within a cohesive narrative structure (the same Spirit being placed on the lips of a Pharaoh [Gen 41.38] as also transcendently and personally active) takes the opening introduction in Gen 1.1 as an independent statement, perhaps one in widespread devotional use in the writer’s culture when worshipping with due contemplation of observable creation. In this way the Spirit of God--beginning from his perspective

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3 I take Rûah 'elôhîm (םֳֻּמָּח הַלֹּּךְ) in Gen 1.2 not as a storm upon the water caused by God (Gottesstrum), as in Gerhard von Rad, Das erste Buch Moses, Genesis: Übersetzt und erklärt (ATD 2/4; Göttingen: Vandenhoeck & Ruprecht, 1967), p. 34, but as the Spirit of God whose personification with respect to selected unobservable creative acts is set out in the immediately following narrative and who is later credited as foreknowing and causing observable events (םֳֻּמָּח הַלֹּּךְ again at Gen 41.38); for הַלֹּּךְ elsewhere, cf. John D. W. Watts, “‘The Spirit’ in the Prophets: Three Brief Studies’, in Mark W. Wilson (ed.), Spirit and Renewal: Essays in Honor of J. Rodman Williams (JPTSup 5; Sheffield: Sheffield Academic Press, 1994), pp. 84-91.

4 Jürgen Moltmann, Gott in der Schöpfung: Ökologische Schöpfungslehre (München: Kaiser, 1985), p. 110, is thinking in the right direction to observe that Gen 1.2 (in part) explains Gen 1.1, in that Gen 1.2 is intended to point out how the divine Spirit (םֳֻּמָּח הַלֹּּךְ) is the creative power and presence of God in the creation to be described. I agree with Moltmann that there is a sublime narrative impression conveyed by Genesis One which might be summed up as follows, ‘The entire creation is a tapestry woven by the Spirit (geistgewirkt), and is therefore a reality to which the Spirit gives form (geistgeformte Realität)’.

5 Gen 1.1 sets an established literary background, drawing upon readers’ familiarity with this belief, pursuant to the main events narrated from the perspective shared by the main character, beginning in Gen 1.2. Gen 1.1 is then best understood as an independent main clause, expressing a past completed action whose time and duration are unknown. ‘In a
within the narrative upon the surface of the waters under a darkened planetary atmosphere--
may be understood to continue to fulfill a connected narrative function by relating his
previous personal participation in this and ensuing stages of past creative deeds, employing
the first metaphor in the Hebrew Bible ‘and God said’. In Gen 1.2 we see the previously
created Earth through the Spirit’s eyes or from his point of view as he hovers over water in
d darkness, and in Gen 1.3 he is the source of the words used in the narration.6 The Spirit
speaks from beyond the narrative world of the writer and from beyond ordinary narrative

beginning God had created the heavens and the earth’, reviews and reinforces what was
already a well-known devotional concept within a Sabbath-keeping readership, having been
previously expressed within the Decalogue and in oral tradition appended thereto.

Hence, I take Gen 1.1 as antecedent information which foregrounds and anchors the
ensuing account (similar to Alviero Niccacci, ‘Basic Facts and Theory of the Biblical
Hebrew Verb System in Prose’, in Ellen van Wolde (ed.), Narrative Syntax & the Hebrew
Bible: Papers of the Tilburg Conference 1996 [Biblical Interpretation 29; Leiden: Brill;
1997], pp. 168-202 [172]), a narrative which initially unfolds from the point of view
expressed in Gen 1.2. This is syntactically and contextually sound, although taking Gen 1.1
as an independent temporal clause, ‘When God began creating heaven and earth’, is

Here it is essential that the initial viewpoint or perspective of the Spirit (Gen 1.2), from
which ensuing creative action and description initially unfolds, along with the changing of
his perspective or point of view that necessarily accompanies the new physical
circumstances which he creates, should all be kept in mind if we are to interpret this account
with narrative coherence. On this procedure, cf. Adele Berlin, ‘Point of View in Biblical
Literature (Jewish Quarterly Review Sup; Winona Lake: Eisenbrauns, 1982), pp. 71-113;
Meir Sternberg, The Poetics of Biblical Narrative: Ideological Literature and the Drama of
Reading (Bloomington: Indiana University Press, 1985), pp. 129-31; Michael J. Toolan,
(London: Longman, 1996), pp. 115-28; and François Tolmie, Narratology and Biblical

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time,

7 giving a brief prophetic account of creative highlights leading to the first divine Sabbath,

8 the ‘day’ in which Ruah ‘elohim rests from his creative acts.

DISCUSSION

I) AN ANCIENT NEAR EASTERN PERSPECTIVE

I attempt to consider this creation narrative within its ancient Near Eastern literary context and as a contiguous introduction to the literary unity of the Pentateuch

9 where its creation Sabbath theme illustrates an ongoing interest in the cultural importance of the Sabbath,

10 which has to be viewed as a very distinctive and culturally unique practice.

I understand the writer to be a Sabbath-keeper within a culture regulated by the ethical principles of the Decalogue and the detailed laws in Exodus, Leviticus and Deuteronomy. Sabbath observance applied to every person in the Israelite population and could be observed without expense or travel or special equipment. It was understood as a significant

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9 This literary unity is illustrated by contributions to David J. A. Clines, David M. Gunn and Alan J. Hauser (eds.), *Art and Meaning: Rhetoric in Biblical Literature* (Sheffield: Sheffield Academic Press, 1982).


part of the covenant with all of Israel as rehearsed in Deut 5.12-15. To transgress was to invite the death penalty (Exod 31.14; Num 15.32); to openly violate this serious observance was not to merely ‘commit a misdemeanor, but to break the very fibre of which the divine-human relation consists’.12 This cultural perspective, and the repeated experience that Sabbath observance provided, framed the deeply ingrained worldview of the Genesis narrator, who believed his immediate like-minded readership would read his narrative front to back with expectations of connectivity and conceptual unity within the Torah.

As I shall argue, this bold writer was not afraid to do the unexpected, nor was he worried about introducing some striking elements, such as the sun and moon apparently being reintroduced into the narrative on the fourth ‘day’, which perhaps might (or might not) have challenged some of his initial literary-minded readership. The fact that this text, on my narrative-rhetorical ancient Near Eastern interpretation, as I suggest below, can be found harmonious, perhaps amazingly so, with recent experimental scientific discoveries, implies that it originally had a prophetic destiny. Evidence mounts from the several potentially mysterious, culturally striking, and perhaps initially challenging elements of this text suggesting that no ancient Hebrew narrator could have, or, more obviously, would have, conceived such an account entirely on his own.

First, why would the narrator introduce the Spirit’s initial point of view as being in darkness? Why does the creation story at some past moment in Earth’s history begin with this darkness that later is turned into light, with the two heavenly givers of light mentioned at an even later time after the creation of plant life? Perhaps this was not too understandable to some ancient non-Hebrew readers, but the bold narrator, probably aware of this, proceeds apace anyway.13 Linguistic research indicates that the phrase to describe the initial state of

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12 Brevard S. Childs, *The Book of Exodus* (OTL; Philadelphia: Westminster, 1974), p. 398. Rickie D. Moore, ‘Deuteronomy and the Fire of God: A Critical Charismatic Interpretation’, *JPT* 7 (1995), pp. 11-33 (28), argues that the Deuteronomist’s concern is to call Israel back to the overwhelming experience of fire at Mount Horeb so that ‘fear as well as obedience make up the proper response to torah.’ Moore sees the ‘encounter with divine fire’ as the ‘commanding theme of ch. 5, insofar as references to the fire of God and the people’s response of fear frame the presentation of the Decalogue (5.4-5, 22-29)’.

13 This assumes that the narrative process may be credited as capably rendered with coherence and the expectation of connectedness, one of the several reasonable hermeneutical principles articulated by Adele Berlin, ‘A Search for a New Biblical
the earth as seen in darkness by the Spirit hovering upon the face or surface of waters in Gen 1.2, whbw wht, means ‘an unproductive and uninhabited place’. But readers taking this meaning for ṭōhû wâbôhû would not readily grasp why the Spirit’s perspective in this place is so mysteriously portrayed. I will defer the solution to this problem until later when experimental findings are introduced as another valid hermeneutical tool.

Next, I suggest that the narrator’s inventive phrase, ‘and there was evening and there was morning’ (וֹרֶב יָהַוּ בָּרֵי יָהַוּ) employed to repetitively modify a sequence of six creative ‘days,’ would be understood by him and his immediate readers as vivid imagery in stark contrast with the normal Sabbath practice of their culturally distinctive day (Lev 23.3) which was strictly observed from evening to evening (as at Lev 23.32) and deeply


15 This tool complements the valuable hermeneutical principles enunciated by Berlin, ‘Search’ (n. 13). Nathan Aviezer, *In the Beginning: Biblical Creation and Science* (Hoboken: KTAV, 1990), pp. 1-3, argues that ‘Far from being the antagonist of the Book of Genesis, science has become an important tool for its understanding’. Aviezer, a Fellow of the American Physical Society and an Orthodox Jew, correctly advocates that the assured, repeatable experimental findings of modern science (not theories) may assist new and illuminating interpretive explanations that are hermeneutically valid; he puts several of these forward with great clarity in exploration. What may also be of interest to biblical scholars is Aviezer’s insight that ‘There is a tendency these days to disparage science by emphasizing the transitory nature of scientific theory. However, every competent scientist can distinguish between the more speculative theories and those that are firmly established. It is the former that are short-lived and whose demise is regularly reported in the popular press, whereas the latter have an excellent record of longevity. For example, the theory of relativity and the quantum theory have had unqualified success since their inception in explaining hundreds of different phenomena. Such fundamental theories are constantly being refined and extended, but they do not undergo fundamental revision. . . . The chance that a well-established theory will eventually be overthrown is extremely slight’.

16 My understanding of the term תָּבָזוּ, derived from the verbal idea of ‘to pause’, is that at Lev 23.3 it refers to the Sabbath day, the seventh day of the week. The sabbath command in Lev 23.3 appears identical to that expressed at Exod 31.15; 35.2 (on this point, with Karl
rooted in tradition.\(^{17}\) Knowledge of this Sabbath observance, as detailed in Leviticus, may be assumed to be known to original readers of Genesis, since that narrative appears to have

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William Weyde, *The Appointed Festivals of YHWH: The Festival Calendar in Leviticus 23 and the Sukkōt Festival in Other Biblical Texts* [Forschungen zum Alten Testament 2.4; Tübingen: Mohr Siebeck, 2004], p. 18. An experiential tradition of previous Sabbath-keeping may be reasonably assumed for this readership.

\(^{17}\) I agree with Israel Knohl, *The Sanctuary of Silence: The Priestly Torah and the Holiness School* (Minneapolis: Fortress, 1995), p. 20, that the timing of the Sabbath day here, from evening to evening, is “intended to guard the proper observance of the holy day by specifying the time of its onset” and the time of its completion. Any current Sabbath-keeping and Feast-keeping reader of Leviticus, and of Deuteronomy where the time for the passover offering begins at twilight or evening (Deut 16.6), would have no difficulty with the clarity of expression at Lev 23.32, expression which apparently elevates the already known importance of the Sabbath day, equating it with the Day of Atonement (so too, Weyde, *Appointed Festivals*, p. 18).

Since God ceased working on the *evening* of the sixth ‘day,’ the beginning of the seventh ‘day,’ taken as the model for Sabbath-keeping, would be reasonably fixed on the *evening*, at sunset or twilight. This understanding of the Sabbath day has deep traditional and historical roots. The seventh day, the Sabbath day, a day without work, dates back to Mosaic times (e.g., Andreasen, *Old Testament Sabbath*, p. 8). Gen 2.1-4a; Exod 16.22-30; 20.11; 31.16, 17 connect ‘e{lōhîm’s} resting on the seventh ‘day’ from his creative works to the Sabbath he commands to his people. All of this would seem evident in the thought of the Genesis narrator and is certainly consistent with Sabbath-keeping familiarity and/or experience on his part. Gerhard von Rad, in his discussion of the concept of day, *TWNT*, II, p. 945, also concludes that the ancient Hebrew day, the day of special religious significance in the culture, began at evening (*althebräische Tag . . .--wenigstens offiziell kultisch--abends [begann]).

In the New Testament, at Mk 16.1, 2, women bring spices immediately after the Sabbath was past and after that, very early in the morning on the first day of the week, when it was yet dark (Jn 20.1), they hope to enter the sepulchre. Their spices have apparently been brought in the *evening* immediately after the Sabbath. They apparently knew and respected the traditional or ‘official’ interpretation. As to Mt 28.1, it seems apparent that the Sabbath ended with the evening of the seventh day; similarly as to Lk 23.54. H. R. Stroes, ‘Does the Day Begin in the Evening or Morning?’, *VT* 16 (1966), pp. 460-75 (462), concludes that these two texts (Mt 28.1 and Lk 23.54) indicate that the first century Jews ‘knew the new day to begin with the *evening*’. In particular, they knew that the Sabbath day began in the evening and ended the following evening. While the Exile may have caused some interruption in Sabbath-keeping, the Torah does not reflect this. Specifically, Lev 7.15; 22.30 and Num 9.11, 12; 33.3, in my judgment, do not at all lend support to speculation that the cultic and regulated Sabbath day did not begin in the evening during the times being portrayed by Deuteronomistic history, keeping in mind that since throughout the ancient Near East people worked during the day and slept at night, they could be expected to speak in these terms as well.
been composed in light of the Torah and other information known to readers that is found in their books of Exodus and Leviticus. In this cultural setting the outward system of covenantal Sabbath-keeping practice, observed by all, would deeply affect religious, spiritual, and intellectual life. The Sabbath, beginning at sunset and ending at the sunset of the following night, would inform a culturally conditioned thought-life. For the Genesis writer to indicate an easily understandable temporal period beginning at evening and extending to the next evening, appropriating the ingrained cultural practice of a venerated and unique day (yôm), and, at the same time, showing that Rûah 'elôhîm imitated the reader’s lives in his creative works, the narrator could have modified each creative day (yôm) in his narrative with ‘and there was evening and there was evening’ (yôm yôm yôm yôm). But instead he informs each day with something entirely different, yôm yôm yôm yôm bâqêl (‘and there was evening and there was morning’). The Genesis narrator’s choice to stay away from the culturally obvious and experientially harmonious phrase ‘and there was evening and there was evening’ in order to modify ‘day’ would, I suggest, be particularly startling to a Sabbath and Festival-keeping readership, immediately raising the issue of why

Also, in Jewish tradition, this system of time counted days as beginning at sunset (m.Hull. 5.5). For example, a vow made for a day is valid until dark (m.Ned. 8.1). Darkness defines the start of the Sabbath (m.Shab. 1.3, 10, 11; 2.7; 15.3; 23.3, 4; 24.1; cf. also m.Shab. 1.8 and Synesius, Epist. 4). Thus the eve of the Sabbath was the time of preparation for the following day. If there was uncertainty as to whether it was dark, then these preparations, purification of vessels, tithing of food, etcetera, were to be left undone (m.Shab. 2.7).

Levitical concepts found in Genesis include the following: Significance of the Sabbath (Gen 2.2; Exod 16.23-30; 20.8-11; 23.12; 31.12-15; Lev 23.3, 32); Significance of the name Yahweh (Gen 2.4b; 4.26; 15.7, 18 22.14; Exod 3.13-16; 6.2-80); Yahweh 'elôhîm pictured as walking among his people (Gen 3.8; Lev 26.12; cf. Deut 23.14); Clean and unclean animals (Gen 7.2; 8.20; Lev 11.1-47); Lamb and/or ram are acceptable sacrifices for a burnt offering (Gen 22.7, 13; Exod 29.1f, 38-42; Lev 1.10-13); Fat portions for Yahweh (Gen 4.4; Lev 3.3, 4, 9, 10); Prohibition to eat blood which is/represents the animal’s life (Gen 9.4; Lev 17.10-16); Death penalty for murder (Gen 9.6; Lev 24.17; cf. Exod 21.12; Num 35.33); Purpose of burnt offerings (Gen 8.20; 22.2 [cf. Exod 10.25]; Lev 1.3-17; 6.9-13); Rights of a slave/servant born in one’s household (Gen 14.14; 15.3; 17.13; Lev 22.11); Offering only of an animal, not of a human (Gen 22.7; Lev 1.2; 18.21; 20.2-5; 22.18f); Position of an alien or sojourner (Gen 23.4; Lev 25.23, 45f); Incest with daughter-in-law worthy of death (Gen 38.24; Lev 18.15; 20.12); Joseph believes that lying with Potiphar’s wife would be a sin against ‘elôhîm, as well as his master (Gen 39.9; Lev 18.20 with 18.1-5; 20.10; Exod 20.14).
their special day of rest and worship has been avoided, avoided in a narrative structure given its literary frame by their own Sabbath model! This deliberate strangeness, I suggest, indicates that the Genesis narrator has a non-normative ‘day’ in mind.

Although their reasoning is not identical to mine, Rashban, for example, an eleventh-century Jewish sage and commentator on the Talmud and Hebrew Bible, noted that the phrase ‘and there was evening and there was morning’ spoke of a twelve-hour ‘day’, suggesting a deliberate contrast with a normal human day. Previous to prominent Torah scholars such as Rashban, who wondered how a twelve-hour ‘day’ can possibly be like a human day, an examination of early Christian leaders indicates that some of them also did not affix human hours to the six creation ‘days,’ but that they thought of these ‘days’ as deliberately ambiguous temporal phases. Similarly, the critical commentary tradition of Old Testament scholarship is well represented by the same conclusion. One of these Christian scholars, Franz Delitzsch, unbiased by recent experimental findings now available to us, who states both his cognizance of Darwin’s theory that new animal species will appear entirely naturalistically over long time periods and his lack of subscription to that thesis, agrees with previous Old Testament scholars that the Genesis narrator speaks ‘not of days of four-and-twenty hours, but aeons’. He goes on to observe politely that ‘It is childish, or to speak plainly, a foolish notion, arbitrarily forced upon the narrative without compulsory

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19 For contemporary discussion among Hebrew scholars and thinkers, which takes account of respected Jewish commentators such as Malbin, Onkelos, Radak, Ramban, Rashi, Saadiah Gaon, and Sforno on the chronology of the Genesis narrative, cf. Eli Munk, The Seven Days of the Beginning (Jerusalem: Feldheim, 1974); Aryeh Carmell and Cyril Domb (eds.), Challenge: Torah Views on Science and Its Problems (Jerusalem: Feldheim; New York: Association of Orthodox Jewish Scientists, 1978). The majority of Torah scholars, both before and after the accumulation of scientific evidence indicating an ancient cosmos, understand the ‘day’ in the first creation narrative in Genesis as a temporally indefinite and deliberately ambiguous period, but there is not unanimity on this point.


21 Franz Delitzsch (University of Leipzig), A New Commentary on Genesis (trans. S. Taylor; Edinburg: T. & T. Clark, 1888) I, p. 84.
reasons, to make it measure the lapse of time from morning to evening and to morning again by a clock of human manufacture’.  

Be that as it may, for an original Sabbath-keeping readership, or a reader familiar with the unique details of Sabbath-keeping within ancient Near Eastern religious life, the inventive phrase ‘and there was evening and there was morning’ would probably invoke an experiential counter-resonance. This culturally opposing phrase would probably stimulate in such readership the recognition of an intentional non-normative ‘day’, a recognition contributed to by the annually observed Feast of Unleavened Bread combined with the Passover which specifically began at evening and ended in the morning, recalling the night of the Exodus.  

Culturally attuned Sabbath and Festival-keeping readers, especially those in the priestly tradition, not only would understand this Feast experientially but would also recall the commemorative practice of lamps burning from evening until morning, in the tent of meeting, through the night.  

Such an annual festive period, from evening until morning, poetically expressible with a phrase ‘and there was evening and there was morning’, would not be appreciated or understandable as representing a normal day or as an appropriate modifier of a normative day. The usage of this phrase by the Genesis narrator to qualify a ‘day’ must signal some other intended rhetorical significance.

Therefore, taking all of the above into consideration, along with ancient Near Eastern literary life where each new day began in the morning at sunrise, a doubtful importation for this unique context, suggests, I submit, that such a culturally arresting and repetitive phrase by the Genesis narrator, used in place of the culturally expected ‘and there was evening and there was evening’, is really quite befitting the very widespread contemporary literary affinity for metaphorical and figurative language throughout the ancient Near East.

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22 Delitzsch, Genesis, p. 85.


25 See the exploration of this subject by M. Mindlin, M. J. Geller, and J. E. Wansbrough (eds.), Figurative Language in the Ancient Near East (London: University of London, School of Oriental and African Studies, 1987), along with the observations of Kittay and
Irrespective of when the Genesis narrative or the Pentateuch was composed in a final draft, the text reflects a time when writing was an intellectual and cultural accomplishment, when authors from different lands and various times were drawing on a longstanding and widespread literary tradition of metaphorical and figurative expression that had deep roots.

Published translations of ancient Near Eastern literary texts reveal a surprisingly rich and varied use of metaphorical expression. It is appropriate to note that some metaphors are culturally independent and travel well, so ‘Child . . . You are as a fish out of water’, or


In adopting this view of the ancient world, I must assess as uncontextual and unacceptable the previous influential assumption by Hermann Gunkel, Genesis: übersetz und erklärt (HandkAT 1.1; Göttingen: Vandenhoeck & Ruprecht, 1910), pp. i, xxi, 40, namely, that the Genesis narrator was not engaged in history writing (Geschichtsschreibung) since he was a member of an uncultured people (Die uncultivierten Völker) who were not capable of producing genuine literature. Gunkel assumed (see too his Schöpfung und Chaos in Urzeit und Endzeit [Göttingen: Vandenhoeck & Ruprecht, 1895]), without convincing evidence, that the prehistory of Genesis was driven by an exclusively folkloristic orality. He claimed that popular storytellers were produced by communities who generated legendary sagas (Sage) via freely reformulating oral memory. Mature authors being able to set forth complex works of art were unfortunately erased by this assumption.

As to one of the earliest expressions of these literary roots, cf. Herman L. J. Vanstiphout, Epics of Sumerian Kings: The Matter of Aratta (SBLWAW 20; Atlanta: Society of Biblical Literature; Leiden: Brill, 2003), passim.

'Like a clod [which has been thrown into the water] he will be destroyed in his splash',\(^{29}\) or 'The mortal soul is great. And what road does it travel? It travels the invisible road'.\(^{30}\) Such figurative expressions vary in sophistication, but are easily understandable by everyone; there is no significant culturally specific aspect to them.

Others are culturally conditional, requiring some acquaintance with the practices and/or thought-life of the inventors to recognize their intention; they can often be partially unfathomable without some living cultural competence, so ‘For him who is the honey of my eye, the lettuce of my heart’.\(^{31}\) Perhaps lettuce indicates freshness?

I would put the Genesis narrator’s inventive and distinctive metaphorical phrase, ‘and there was evening and there was morning’ when employed to modify the flexible Hebrew concept of יָמִּים (yôm) within a narrative structure paralleling the Sabbath week, in this latter category. The writer of this six-day work and seventh-day rest creation narrative knows there are adequate cultural clues to signal the existence of his intention. His phrase functions nicely in repetition, not too subtly, to evoke a startling concept of ‘day’ that is infused with dynamic literary significance insofar as his God is concerned. The literary significance is that ' Elohim in Gen 1-2 is not fashioned in the narrator’s own image, is not portrayed anywhere as imitating or acting within or on human days, and, instead, in Gen 1.1-2.4a Rûah ' Elohim creates on very odd ‘days,’ literally half-days and at night at that! Such ‘days’ can be inferred easily enough by literary contemporaries to be deliberately ambiguous temporal stages, unlike the many definite periods of time that can be observed in nature by readers, like contiguous settings of the sun to regulate Sabbath-observance. The narrator startles his original readers with the opposite of what they would probably expect


from their culture, namely he shakes their expectation of a poetically obvious ‘and there was evening and there was evening,’ a fact that he probably realizes quite well.

Complementing the narrator’s inventive culturally conditioned metaphor ‘and there was evening and there was morning’, which I suggest would be deemed as a plausible, recognizable, and rhetorically pleasing way of signaling the non-normative nature of the creative ‘days’ to a distinctive Sabbath/Feast-keeping readership, is other inventive figurative language found in Genesis. Vine branches and baskets of bread symbolize human days (Gen 40.12, 18). Death is portrayed optimistically as a gathering unto previously deceased family members (Gen 25.8; 49.29, 33; Num 27.13), or as a journey (Gen 15.15a; 2 Sam 12.23c). Others too saw the afterlife as a place of compassion as in the dialogue: ‘Did you see my little stillborn children who never knew existence?’ ‘I saw’. ‘How do they fare?’ ‘They play at a table of gold and silver, [laden with] ghee and honey’.32 Dying is expressed elsewhere less hopefully as reaching ‘death’s door’33 or as entering the ‘land of no return’.34 The numerically ambiguous use of ‘sand’ representing future people (Gen 22.17) finds similar expression in Ugaritic literature where such metaphorical descriptions employ numerically ambiguous crumbs or gravel.35

My study of Akkadian, Assyrian, Babylonian, Egyptian, Canaanite, Hittite, Ugaritic, and Sumerian literary texts in published translations continues to provide a valuable contrast and comparison with the contemporary context of Genesis.36 I am convinced that the phrase

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‘and there was evening and there was morning’ or ‘it became evening and it became morning’ is not to be found in this literature as a modifier of or a substitute for the concept of ‘day.’ Rather, upon more than a decade of searching such texts my impression is that this usage is very distinctive indeed and will be found only in Genesis. Of course new texts are always being published, one of which could overturn this impression, and a great many have been lost, but the most probable reason for this apparent uniqueness is, in my opinion, that a phrase which on its literal surface does not represent a normal human day, but its strange night-time half, is unlikely to be chosen to inform or to describe ‘day’ in any other ancient Near Eastern culture. I suggest that only in an ancient literary culture with the expected cognition or conditioning to recognize this phrase as a culturally-opposing metaphorical modifier of ‘day’ would it ever be so employed.

In our text, the necessary six-fold emphatic repetition of the narrator’s very distinctive phrase (as both the connected repetition of words [Leitworte] and the stylistic employment of metaphorical phrases demonstrates) appears designed to convey to the attentive Hebrew reader a special layer of literary meaning underlying the text, which is

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38 Eva F. Kittay, *Metaphor: Its Cognitive and Linguistic Structure* (Oxford: Oxford University Press, 1987), pp. 139, 317, observes that imagery, ambiguity and repetition are poetic characteristics of metaphorical language in narrative structure. When a term or a phrase is used metaphorically, a ‘new’ sense is generated; incongruity serves the interpretation where metaphor can ‘rearrange the furniture of the mind’.

Similarly, in the narrative literature of the ancient Near East, they are ‘figures of thought’, that is, words and expressions used in different senses from those which are thought to properly belong to them (Joan G. Westenholz, ‘Symbolic Language in Akkadian Narrative Poetry: The Metaphorical Relationship Between Poetical Image and the Real World’, in M. E. Vogelzand and H. L. J. Vanstiphout (eds.), *Mesopotamian Poetic Language: Sumerian and Akkadian* [Groningen: Styx, 1996], p. 183).
what, I suggest, our writer clearly intends. We may note the similar use of metaphorical phrases in contemporary literature; for example to reinforce various commanding words of a chief god, whose quoted utterances are not to be missed in their appointed time, a scribe repetitively underscores each individual utterance by identifying it as a ‘writing on the celestial firmament’.  

Further, the figurative concept of ‘day’ (מִיָּם, יָם) engendered here would be reinforced when front to back readers of the original text without chapter divisions find the first creation narrative concluded by the summary ‘These are the generations or history (תֹלְדוֹת) of the heaven and the earth in the day (בָּיֹם, בָּיָם) of their being created’ (Gen 2.4a). At this juncture the narrator refers, I think clearly enough, to the

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40 Summarizing the entire previously narrated picture of a sequence of past creative deeds and God’s rest with this historical thought at Gen 2.4a provides the Hebrew reader with a narratively coherent and thoughtful ‘chapterization’.

Ellen van Wolde, Stories of the Beginning: Genesis 1-11 and Other Creation Stories (trans. J. Bowden; London: SCM, 1996), p. 15, observes a significant narrative-rhetorical fact, namely that ‘The creation story of Gen. 1.1-2.4a has an opening verse and a closing verse which clearly correspond. They indicate that three components are central to this story: God’s creating; the time which extends from bereshit to toledot, from beginning to history; and the heavens and the earth’. Amit, Reading, p. 18, detects here a structural principle of symmetry pertaining to past events that happened in one period of time, ‘The concentric quality is too obvious; the unit opens and closes with similar statements: “When God began to create heaven and earth” (Gen 1:1) and “Such is the story of heaven and earth when they were created” (Gen 2:4a)”.

On my argument, this entire temporally indefinite creative period extends from תֹלְדוֹת, ‘in beginning’ or ‘in a beginning’ (Gen 1.1), to the cumulative ‘history’ or ‘generations’ (תֹלְדוֹת) of this entire cosmic and earthly scene (2.4a). This draws attention to what has been accomplished ‘in the day’ (בָּיֹם) wherein the various components of this history were created (2.4a). The fact that the component ‘heaven and earth’ is placed at the start (1.1, בָּיֹם וּבָּרְשִׁית וּבָּרְשִׁית) and at the conclusion (2.4a, תֹלְדוֹת וּבָּרְשִׁית וּבָּרְשִׁית) of this Sabbath-day creation presentation seems, to me (with van Wolde and Amit), clearly indicative of an intentionally cohesive narrative unit, from Gen 1.1 to 2.4a.

Given these rhetorical reasons it seems a rigid and artificial imposition to theorize that just because the writer introduces other sections, for example on Adam (Gen 5.1-6.8), with a תֹלְדוֹת phrase indicating a following summary of history, the narrator therefore must likewise inflexibly introduce every section of his narrative in like manner. One also notes here the literary shift in divine names, after the concluding תֹלְדוֹת phrase (2.4a), to בָּיֹם.
aforementioned six ‘days’ of creation as an indefinite time, just as he referred immediately before (Gen 2.2) to both the completion of ‘elōhîm’s work and to the entering of his rest with the word bĕ'yôm, meaning ‘in/on the day of’. The very common preposition bĕ placed before the noun in these two sentences (2.2, 4a) shows that the narrator, when appropriate, has a flexible concept of ‘day’, the flexible concept of יָיִם (yôm) itself being very well known to Hebrew readers. This is certainly not surprising in ancient Near Eastern cultures. Similar as to how people in the literary environment could have understood ‘day’ flexibly in their literature, the Genesis writer knows full well that ‘day’ was already itself the kind of flexible concept whose meaning could be artfully clarified by a metaphorical phrase.41 Here, the

41 In Egyptian literature, for example, ‘day’ may mean the unspecified period between birth and death called ‘his day’, or may refer to deeds ‘in his time’ (so, Egyptologist Edouard
narrator’s yôm can mean an ambiguous period of time, a ‘day,’ and it can also mean an indefinite period of time inclusive of all six-fold periods. In his summary (Gen 2.4a), the plural term ‘generations’ speaks of the previously described creative epochs as if they themselves are a single ‘day’ (Mwy), suggesting he thinks of them as non-normative ‘days’.

The experimental findings of modern science now show that these particular ‘days’ each prescribe periods of millions of human years and that the ‘generations’ of the first six days together prescribe around three and a half billion human years, starting at Gen 1.2 at an early time in Earth history after initial bombardment from interplanetary debris and water-rich comets during planetary formation from the solar nebula had ceased, and a thick cloudy atmosphere laden with dust, water vapor and other gases had rained out. The same tôl’dôt - bə’yôm expression at Gen 2.4a is found later in the Pentateuch at Num 3.1, where ‘in the day

Naville, Archaeology of the Old Testament [New York: Revell, 1913], p. 68), or it may figuratively mark the time of death as in ‘Until the coming of the day of mooring at the land that loves silence’ (W. W. Hallo [ed.]; K. L. Younger [assoc. ed.], The Context of Scripture, II: Monumental Inscriptions from the Biblical World [Leiden: Brill, 2000], p. 65).

It may also mean a temporally ambiguous period as in ‘you still have time . . . there is a “day” before you’ (Anthony Loprieno, Ancient Egyptian: A Linguistic Introduction [Cambridge: Cambridge University Press, 1996] 139), or ‘the “day” of the Feast of the Two Lords’ describes a lunar-based dating that lasted for two days (Anthony Spalinger, ‘The Lunar System in Festival Calendars: From the New Kingdom Onwards’, Bulletin. Société d’Égyptologie Genève 19 [1995], pp. 25-40 [27]).

Further, and not to be overlooked, is the fact that in biblical Hebrew Mwy (yôm) is seldom syntactically independent, so it would not be unusual that a metaphorical phrase could be employed to illuminate its meaning as I am suggesting was done with deliberate literary skill in the introductory section (Gen 1.1-2.4a) of the narrative. Aside from the usage of Mwy for temporally indefinite periods at Ps 51:15 (Mwyb, bə’yôm); 90.4 (Mwyb); 118.24 (Mwyh); Isa 11.10 (Mwyh), usage rooted in the flexible Hebrew concept of ‘day’, the Genesis narrator also knew that Mwy was used in multiple compound ways with other words to indicate a temporally indefinite time, like ‘some time later’ (Gen 38.12).

At 1 Sam 7.2 a period as long as 20 years is described this way, and the length of such a time may vary up to centuries as in Num 20.15a. See too, ‘a short while, not very long’ (Gen 27.44; 29.20). Also, in this vein, a long or extended time will pass (Deut 11.21), or ‘after a while’ (Josh 23.1), or ‘during the period’ (Judg 18.31). So, the literary modification of the simple noun Mwy with a culturally conditioned and thereby perturbing phrase which is inventively striking, so as to draw out its already potentially indefinite nature, provides attentive Sabbath-keeping readers with a good example of narrative art.
of’ (בֵּימָה, b’yôm) is again combined with ‘generations’ (תֵּלְדֵי, tōl’ēdōt). Here the ‘day’ (יָמָה, yôm) represents the historical period or ‘generation’ of forty days and forty nights.\(^{43}\)

These two disparate temporal periods seem vastly different to humankind, but to the Hebrew mindset accompanied by narrative inspiration,\(^{44}\) the two periods are described identically. Given that the Pentateuch is a coherently conceived work of literature, a consecutive narrative, the identical description of a temporally ambiguous period at Gen 2.4a and Num 3.1 is significant. Perhaps this reflects an accepted and understood necessity to describe the dimensions of humankind with language that must also be used to render the mysterious and unobserved creative actions of the Spirit. This mindset is well expressed in Ps 90.4, ‘For a thousand years in your eyes (are) as the day (בֵּימָה, b’yôm) yesterday’.\(^{45}\) One may conclude then that on these two occasions (Gen 2.4a and Num 3.1) the writer(s) think flexibly in terms of יָמָה (‘day’) as referring to periods temporally different than their normal human day (יָמָה, yôm) when it serves their narratively connected interests. Original Torah readers were evidently expected to understand this as, on my argument, they were also expected to grasp

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\(^{44}\) Han Young Lee, From History to Narrative Hermeneutics (Studies in Biblical Literature 64; Frankfurt: Lang, 2004), p. 201, concludes ‘The narrative in the Old Testament presents an intrinsic divine emplotment’, which is ‘self-attested . . . by the text’s realistic interpretation of supernatural phenomena’ (emphasis his, p. 218). Lee argues (pp. 223-35) that this transition from early historical criticism represents a radical new paradigm shift embracing a new biblical hermeneutics of narrative that is ‘unequivocally a scientific activity’ (p. 227).

\(^{45}\) Rashi reflects upon this personification of God as beyond normal human time by citing an example from God’s own speech, namely, that although at Gen 2.17b Adam is told by God, ‘For in the day (בֵּימָה, b’yôm) of your eating from it you shall surely die’, he did not die for 930 years (Gen 5.5), cf. Mayer I. Gruber, Rashi’s Commentary on Psalms (Brill Reference Library on Judaism 18; Leiden: Brill, 2004), p. 575.
the figurative and metaphorical significance of a strange distinctive half-day night-time period, repetitively employed, to modify the six creative ‘days.’

On my argument of rhetorical continuity, Gen 1.1-2.4a is an account of the origin of creation and 2.4b-3.24 is a coherent clarification and exposition, or as in Westerman’s adroit assessment, ‘The narrative of Gen 1 is characterized by its onward, irresistible and majestic flow that distinguishes it so clearly from the drama narrated in Gen 2-3. No tension is built up in Gen 1, and the steady, onward movement is effected by constantly recurring sentences which begin in 1.3 and end in 2.4a’.46 This flow is not interrupted when details are expanded in an adjoining narrative unit. There is then an expected synchronous overlap in narrative time with respect to the creation of humankind on the sixth ‘day’ (1.26-27) and the expanded and repeated account of that event in 2.7-25. In particular, in concert with known instances of Weideraufnahme (resumptive repetition), using an appropriate bracket-notation for this literary phenomenon as discussed below, I note a similar narrative technique of repetition to that of [1.26; 2.7], where further detail to 1.26 is added in the repetition at 2.7, in instances concerning the human birth of Seth [4.25; 5.3] and of Arphaxad [10.22; 11.10].

Reading the narrative as a connected story, a literary-minded ancient Near Eastern reader would assume that Gen 5.1-3 recalls the day (בֵּיתֵיָם, b’yôm) in which Adam was created in the likeness (בָּרֹחֶם) of God. The time in view here clearly relates back to the sixth ‘day’ where Adam was created in this likeness (1.26). The description of Adam in 2.4b-25 connects smoothly to 5.1-3 and to 1.26-28.47 I press this point because the narrator appears thereby to consistently portray a real person. Readers relate to real persons. When the narrator points out that Rachel’s gravestone remains until this day (Gen 35:20b), readers who imagine the pillar over her tomb recall a real person whose life is known, in part, because of the story at hand. So too, when the narrator records (Gen 2.8-14) that God placed Adam in a garden in the east, in Eden, where there were many lovely trees, precious minerals, a source of four great rivers with names perhaps known to readers involved in trade and travel (15.18), a garden for Adam to cultivate and care for (2.15), readers have a


picture of a real person in a great garden. Some might guess from their knowledge of geography that this place was possibly located in southeast Mesopotamia, but it was a substantial place, being the source of the four rivers. A natural reading would be that Adam oversaw the garden.

Having formed the animals ( Heb רֹכֶב, which I would render here as ‘now he had formed’, Gen 2.19a),\(^{48}\) In a large scene God brings every beast and every bird to Adam so that he may supervise their naming, allowing Adam to give them more than a visual identity in his worldview (2.19b). Since Adam was tending the garden, his choice of a name for the animals that lived there seems appropriate. Readers would relate to such a reality of examining and naming animals. Obviously this task, which would take some time to do properly, would require due consideration and could not be hurried. One reasonable guesstimate is that several thousand mammal and bird species probably inhabited the environs of Eden.\(^{49}\) In any case, readers would assume a large number based on their experience for a garden as described here. Adam then sleeps during this ‘day’, woman is created, Adam names her, and then, becoming acquainted with the woman and getting a bit ahead of narrative events not yet realized, speaks of man leaving his father and mother to cleave to his wife,\(^{50}\) again a known reality to readers.

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\(^{48}\) It is beyond the present scope to enter into a full discussion about what this past tense indicates here, but in a contiguous reading of Hebrew narrative (my assumption of the narrator’s intent), I see little difficulty with previously portrayed plants and animals being understood as already in existence when God brought Adam into the garden. Creating man and animals from the dust of the ground (Gen 2.7, 19a) may be repetitive expansion with Gen 1.20b, 21b, 24-27 in mind.


One must conclude then that a front to back reading of Gen 1-5, a connected narrative-rhetorical reading, places a series of repeated and additional activities into the sixth ‘day’ of Gen 1. The events of Gen 2.4b-25 proceed in an unhurried realistic pace which relates to readers’ own experience with animals. There is no suggestion that the Genesis narrator expects readers to think that all of the events of Adam’s life described in 2.7-25, a part of the ‘day’ (מִיּוֹם, b’yôm) of Adam (5.1), occur between a single sunrise and sunset. Instead, the narrator’s performance here is quite consistent with my argument that he is thinking of the ‘days’ of Gen 1 as temporally ambiguous periods, quite distinct from normal human days, and expects his Sabbath/Feast-keeping and metaphorically attuned readership to be thinking along with him in this regard.\(^{51}\)

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\(^{51}\) Some, however, would transform Adam from a realistic person to a mythological person who supposedly flits about the garden at superhuman velocities, as if he were a Homeric god coming and going from Mount Olympus, so that he can accomplish his taxonomic tasks before sundown. \textit{This leaves all semblance of coherent contextual interpretation behind.} Such an assertion is not about the Genesis narrator’s personification or about an attempt to discern his interconnected thought, rather it is about shredding \textit{his} story in order to make it appear to conform to the \textit{reader’s} desired story, to twist the text by willful interpretation. (Ross, \textit{Genesis Question}, p. 75, interacting with such proponents, is of course correct to find ‘no hint’ of this assertion in the text).

The bigger picture, which need not go unnoticed, is that this particular textually disconnected assertion about Adam (repeatedly manifested in physical cessationism, n. 55 below) reflects a rationalistic style of ‘make it fit’ interpretation that does not always need hints from biblical texts for motivation in order to construct narrative discontinuity and incoherence. Pious reinterpretation can be acceptable to adjust the past so as to make it conform to a desired present. Ideological and philosophical exigencies can dominate how a biblical text is treated. Authorial intent and original meaning can be erased with all due piety. As to a prominent historical example of this proof-texting procedure, Calvin overrode his own exegesis at Acts 2.38c, 39 (John Calvin, \textit{The Acts of the Apostles 1-13} [trans. J. W. Fraser and W. G. McDonald; Grand Rapids: Eerdmans, 1965], pp. 81-82) on just these exigencies. The Geneva divine resisted the text and knowingly changed it to ‘make it fit’ his current ecclesiastical situation.

This tactic of reinterpretation via pious subterfuge or stratagem is of course disrespectful of an ancient author and does not allow the text to speak on its own terms, cf. my critique, ‘Calvin and the Spiritual Gifts’, in Richard C. Gamble (ed.), \textit{An Elaboration of the Theology of Calvin} (Articles on Calvin and Calvinism 8; New York: Garland, 1992), pp. 303-31. Such pious tactics have nevertheless accrued traditional acceptance among some (contra, Ted M. Dorman, ‘The Case Against Calvinistic Hermeneutics’, \textit{Philosophia Christi} 19 [1996], 39-55), but nonetheless reflect a willful style of interpretation that rests upon ultra-rationalistic roots that have remained uncorrected by literary, intellectual, and scientific
To sum up some of the main points so far, in this ‘Ancient Near Eastern Perspective’ I have argued that the Genesis narrator composes in a penetrating, culturally conditioned manner so as to indicate to his particular literary-minded readers, who, in their life-setting are certainly aware and fully appreciative of figurative and metaphorical language, that לְאָדָם (Rûah 'elôhîm) in narrative continuity with the same spiritual Person יְהֹוָה (Yahweh 'elôhîm), has created the known world and humanity in temporally ambiguous stages. Avoiding an expected and culturally pleasing phrase to enhance each creative ‘day’, he invents instead a metaphorical phrase (וַיִּירָבָּהוּ יֹוהֵי לְאָדָם, ‘and there was evening and there was morning’) which would poetically apply to the nightlong practice of a well-known annual Feast, employing it repetitively to modify the flexible Hebrew concept of day (בָּיָמִים, yôm). His narrative portrait of Adam as a real person evidently extends Adam’s activities over a temporal period consistent with that flexible concept of ‘day’. The tôl’dôt - b’syôm combination at Num 3.1, to indicate an indefinite period, is illustrative of the very same literary usage (for ‘generations’ - ‘in the day of’) employed by our writer at Gen 2.4a. Altogether, the temporally ambiguous stages represented by the narrator’s ‘days’ are arguably not the human days of the original and culturally distinctive ancient Near Eastern readers. In order to appraise the substantial prophetic import of this literary achievement, the narrative point of view of Rûah 'elôhîm during each of the creative ‘days’, beginning with his initial perspective in darkness on the Earth’s surface, now merits further consideration.

methods which have been achieved since the sixteenth century. Kenneth J. Archer, ‘Critique of the Evangelical Historical Critical Method’, in his A Pentecostal Hermenutic for the Twenty-First Century: Spirit, Scripture and Community (JPTSup 28; London: T & T Clark, 2004), pp. 148-54 (150), insightfully notes that this tactic often yields a disembodied and extracted principle which then eventually becomes accepted as an authoritative word. However, of positive value to biblical studies is that this ‘make it fit’ style of interpretation illustrates quite well what Berlin, ‘Search’ (n. 13), means when she says that interpretation must be willing to afford an author the benefit of understandability by a connective reading. Since a competent author, in his literary portrayal of Adam here, clearly puts at risk the quick and dogmatic imposition of human days upon the ‘days’ of the first Genesis creation narrative, his own narrative personification of Adam is, in this willful style, unashamedly, but acceptably, mythologized.
II) A HARMONIOUS NARRATIVE AND NATURAL PERSPECTIVE WITH HIDDEN DIVINE ACTION

Let us focus attention on an explanation based upon ongoing experimental scientific investigation of the formation history of our solar system, as we consider the reason for the Genesis narrator’s adoption of a potentially mysterious point of view (n. 6) from darkness for Rûah ‘ĕlōhîm in Gen 1.2 and the potentially mysterious delayed appearance of the Sun and the Moon on the fourth ‘day’ after having already created the heavens and the Earth. Consideration of the narrator’s adoption of such a point of view in Gen 1.2, from which the Spirit’s creative work begins, may be assisted by relevant scientific discoveries so as to utilize our theology of nature based upon experimental findings. This is certainly a wise and valid hermeneutical approach. In a discussion of how theologians and scientists may share a common path toward divine wisdom (Theologen und Naturwissenschaftler auf dem Wege zur Weisheit), one path which is revelatory and leads to salvation from God the Redeemer (durch die Erkenntnis der Offenbarung Gottes des Erlösers) and another through which humankind may become wise in relating to nature (durch natürliche Theologie werden Menschen weise im Umgang mit der Schöpfung), Moltmann stresses the necessity of collaboration between faith and science. Because they both partake of divine wisdom, a potential harmony should be expected to be realized.

However, to regard the written revelation from God as absolutely exclusive, and to either deny or distort other forms of revelation (perhaps through the ultra-rationalism of ‘word only’ doctrine, as if biblical texts were a ‘rational rock’ allied to the rejection of charismatic revelatory experience, or, God forbid, through the influence of physical cessationism,55)


53 Moltmann, Wissenschaft und Weisheit, pp. 40-41.

54 The personification of Rûah ‘ĕlōhîm by the Genesis narrator suggests that he is quite unfamiliar with the philosophical outlook of ‘rational rockism’. It is also evidently

Indeed, such ultra-rationalism might be corrected by the insight that ‘Because the Holy Spirit inspired the authors of Scripture, the church, which lives from and in the Spirit through Christ to whom all the Scriptures testify, must depend upon the illumination, guidance, conviction and transformation in all operations… if the goal of the Spirit and thus of Scripture is to be realized’ (Steven J. Land, ‘A Passion for the Kingdom: Revisioning Pentecostal Spirituality,’ JPT 1 [1992], pp. 19-46 [39], emphasis his). As equally envisioned in the New Testament by Pauline and Lukian expectation, this ongoing collaboration with the Holy Spirit can be at odds with Spirit-quenching assertions emanating from the ‘word only’ or ‘rational rock’ genre. Typical of these is the claim that ‘experience cannot form a separate sense’ of knowing (so asserted by Stanley Grentz, Revisioning Evangelical Theology: A Fresh Agenda for the 21st Century [Downers Grove: Inter-Varsity, 1993], p. 92).

Grentz’s anti-experiential tactic simply imitates previous Protestant ideological speculation that personal revelation by the Holy Spirit ceased after enscripturation, coupled to the reading the NT through the temporal chasm of ‘apostolic-age’ glasses. So, while natural revelation is not swept completely off the table, it may nevertheless, like personal revelation, remain under a cloud of suspicion. It may then be subject to willful manipulation or simply ignored. However, since experience is well recognized as a significant factor in why New Testament writers created descriptive language in the first place (cf. James W. Voelz, ‘The Language of the New Testament,’ ANRW 2.25.5 [1988], pp. 893-997 [928-30]), personal revelatory experience often prophetically projected in their writings beyond narrative and discursive time, the New Testament documents do not serve as any guide whatever to Grentz’s philosophical construct about extra-biblical knowledge and experience.

Johnson, in addressing the dimension of Christian experience in the New Testament, suggests that previous study and perception has ‘been subtly influenced by the distinctly Protestant conviction’ as to what ‘authentic Christianity’ is. This perspective is fixated on ‘theological principles and actions based on them’, the ‘theologically correct’, and ‘the textually defined’ so that ‘much of what the earliest Christian texts talked about is simply ignored’ (so, Luke Timothy Johnson, Religious Experience in Earliest Christianity: A Missing Dimension in New Testament Studies [Minneapolis: Fortress, 1998], p. 3). Accompanying factors in this fixation on the exclusively rational, to the neglect of experience with spiritual powers, is the philosophical and interpretive blunder demanding that all revelatory experience cease after enscripturation, together with the pursuit of ‘apostolic age’ hermeneutics. Such Protestant theology, as detected by Johnson, is not interchangeable with that of the New Testament authors. However, given this background and its influence among some, wherein the non-rational and non-cognitive may be erased, extracted, marginalized, reinterpreted, or redefined within NT texts in order to meet the
could result in humankind being unwilling and unable to duly respect the natural knowledge of God which he has provided. Humankind might then be saved but not wise (zwar selig, aber nicht weise).\textsuperscript{56} Although written revelation has a very special place, deserving hermeneutical acumen and undeserving ideological imposition, Moltmann is correct that the theologian also needs pertinent scientific experiments and observations in order to learn from the wisdom God has placed within nature (Wir brauchen naturwissenschaftliche beobachtungen und Experimente, nicht nur um Informationen zu sammeln, sondern auch um von der Weisheit zu lernen, die der Natur inhärent ist).\textsuperscript{57} Since a pneumatological history of aforementioned traditional emphases, perhaps extra-biblical knowledge afforded by the experience of natural inquiry might be similarly dismissed.

\textsuperscript{55} For those who may be interested, physical cessationism or young-Earthism is a dangerous sectarian misrepresentation of all of physical reality and of prophetic biblical history. An attempt at an evaluation and understanding of physical cessationism is reserved for an Appendix to this study.

\textsuperscript{56} Moltmann, \textit{Wissenschaft und Weisheit}, p. 41(emphases his). For example, in the 1500s and 1600s, Copernicus, Galileo, Brahe, Kepler, and Newton showed by detailed observations with analytical confirmation that the Earth is just one of several planets orbiting one of many stars, destroying the Medieval notion of a closed and tiny cosmos and challenging the accepted ‘biblical’ theology of a stationary-Earth. The stationary-Earth model of some (based on Josh. 10.13b; Ps. 93.1c; 104.5) was unwise because it was not based on sound hermeneutical principles, as those put forward by Berlin, ‘Search’ (n. 13). Neither would stationary-Earth adherents employ experimental scientific findings as a hermeneutical tool, as suggested to biblical interpreters by Aviezer (n. 15). An identical evaluation applies for the methodology employed by former devotees of the flat-Earth model (supported by Rev. 7.1a) and is apropos for those currently mesmerized by the young-Earth (or physical cessationism) model. All three of these false and unbiblical models of physical reality may serve to illustrate both the lack of faith-based wisdom, so as to ineptly mishandle written revelation, and the lack of wisdom in relating to creation, so as to deny and distort natural revelation.

\textsuperscript{57} Moltmann, \textit{Wissenschaft und Weisheit}, pp. 41-42. The emergent pneumatological theology of creation as advocated by Moltmann, and developed in this present study with respect to a culturally-distinctive ancient Near Eastern presentation of creation that is demonstrably coherent with modern experimental observations, properly demands a rigorous scientific dimension that can gradually and believably shape a holistic, predictive, and testable model of mature. This ongoing project affords an opportunity for theologians to participate productively in dialogue with all modern experimental science rather than to ignore it when it opposes the development of pet philosophical theories, like that of the world being immune from the interference of God (see n. 61), or like the equally spurious
creation, as espoused by the Genesis narrator, explicitly grants to the book of nature (and hence to all of experimental science) its own authentic voice, perspective, and contribution, the voices of the experimental sciences need to be heard on their own terms (and not just on the terms of the theologians, who, with rare exceptions, have not seen an acquaintance or interaction with nature’s book as professionally relevant). In this collaborative manner, faith and experimental science may properly be expected to share a common and prophetic dwelling place of divine wisdom as God intended, or as Land phrases it:

‘The Spirit is not limited to the inspiration of Scripture and the illumination and empowerment of the believer. The Spirit is also creator, and intimately involved in all things through a providential sustaining and directing of all things toward their goal in God. . . . By the Spirit the creative intention of the Father and the redeeming misrepresentation and denial of reality guided by the ghost of Archbishop Ussher in physical cessationism.

A new theological paradigm could critically value, rather than disparage or ignore, the contributions of all experimental science, while at the same time gradually enlarging the framework for pneumatological understanding to include the entirety of creation. Hearing the voices of all the experimental sciences (not just one biological voice, a voice often wedded to doctrinal evolutionism and traditionally hostile to divine action and creative participation because its working theory--mandating increasing genetic complexity--has been pushed to unphysical extremes [see nn. 96, 101]), would require a new effort within theological education to place a balanced emphasis upon some familiarization with the natural world. After all, the Spirit has and does act within the natural world as well as within believers.

Perhaps theologians have not sufficiently considered the relevance of experimental findings of modern science to their academic domain because, traditionally, ‘much twentieth-century theology has been either fideistic (Barth) or existential (Bultmann) in tone, conducted from within ghettos walled off from scientific culture’ (John Polkinghorne, Belief in God in an Age of Science [New Haven: Yale University Press, 1998], p.80). By way of contrast, Polkinghorne suggests that theologians might consider an alternative epistemology: ‘Rather than supposing that we know beforehand what reasonable belief is going to look like, scientists are content to be open to new possibilities, provided only that novel ideas are grounded in, and motivated by, new experiences of a kind that requires such an expansion of our intellectual horizons. We look to evidence for what we are asked to believe. Bottom-up thinkers proceed from the basement of phenomena to the superstructure of theory. Top-down thinkers somehow seem to start at the tenth floor and to know from the start what are the general principles that should control the answers to the enquiry. Many theologians appear to the scientists to be of the top-down variety’ (Belief, p. 84).
passion of the Son are communicated to all creation in a prevenient grace which is
the source of all that is good and true and beautiful'.

Since scientific observations, which impact our understanding and explanation of narrative-
rhetorical point of view at Gen 1.2, involve inferences from recent experimental findings, it
is appropriate to begin with comment in that regard upon the independent and devotionally
familiar clause at Gen 1.1, which I am taking as antecedent information with respect to the
main narration of the Spirit’s creative deeds.

The origin of the universe, namely that the universe had a beginning and that it was
‘made by God’, as claimed at the onset of the first Genesis creation account ’ἐν ἀρχῇ
ἐποίησεν ὁ Θεὸς τὸν οὐρανὸν καὶ τὴν γῆν, LXX Gen 1.1), a beginning directly
unobservable until little less than a half-century ago, is now known to be well verified by
widely publicized results of international scientific collaborations, experimental findings
which began to blossom with the entrance of humankind into the new ‘Era of the Glimpse of
God’ in 1963. I can recall vividly, when the Nobel Prize in physics was awarded in 1978
for the discovery of this cosmic beginning, how the status of the Genesis creation account
went up significantly among my agnostic physics colleagues at the University of California
at Irvine.

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58 Land, ‘Passion’, p. 32.

59 For introductory discussion on humankind’s entrance into the new era, cf. Paul Elbert
97). For history of the extraordinary experimental finding of a cosmic beginning, meriting
the Nobel Prize in Physics in 1978, cf. John F. Hawley and Katherine A. Holcomb,
Foundations of Modern Cosmology (New York: Oxford University Press, 1998), pp. 321-
22; Hugh Ross, The Creator and the Cosmos (Colorado Springs: NavPress, 3
2001), pp. 23-26, with the assistance of John Rea.

60 The Swedish Academy noted that ‘The discovery by Penzias and Wilson was a
fundamental one: It has made it possible to obtain information about cosmic processes that
took place a very long time ago at the time of the creation of the universe’ (Physics Today
[December 1978], p. 18). Illustrating the influence of the discovery of a cosmic beginning,
in the very same year in which the Nobel Prize was given, one agnostic astrophysicist,
Robert Jastrow, former director of the National Aeronautic and Space Administration,
poetically pictured some atheists confronted with a universe that now certainly had a
beginning and thus, probably a Beginner: ‘For the scientist who has lived by his faith in the
power of reason, the story ends like a bad dream. He has scaled the mountains of ignorance;
he is about to conquer the highest peak; as he pulls himself over the final rock, he is greeted
The discovery of the cosmic microwave radiation in 1963, which provided the final experimental confirmation of the beginning of the universe, ushered humankind into a new era. This new era affords theists, agnostics, and non-theists alike a reasonable implication of an invisible and purposeful Beginner, making the existence of God and the activities of God an attractive field for theological reflection. The cosmic beginning was detected when scientists were able to measure, for this first time, the very low energy heat radiation left over from the origin of space, time, matter, and energy 13.73 billion years ago in a very intricate and very high energy event (a hot big bang). As the universe expanded over time, accompanied by the cosmic fine-tuning that was intricately built into its construction and ongoing management, this background radiation cooled, but left its faint imprint throughout the universe and was finally found in 1963. Gen 1.1 can now be considered to match a well-known physical event, raising the credibility of the Genesis narrator and removing some long-established pre-understanding (Vorverständnis) against his potential veracity and eventual understandability.\(^{61}\)

The Genesis narrator’s ensuing introduction of the creation of life-forms, previously dismissed by some as myth, also gained attention when Barrow and Tipler concluded that ‘The evidence is very strong that intelligent life is restricted to a single planet, which is but one of nine circling a star which itself is only one of about one hundred billion stars in the galaxy and our galaxy is but one of some one hundred billion galaxies in the visible


In the new era there is a renewed philosophical interest in the significance of the design hypothesis, given the growing number of detectable ‘coincidences’ being found in physical parameters governing the nature of the cosmos which are necessary for life.


63 John J. Davis, ‘The Design Argument, Cosmic “Fine Tuning”, and the Anthropic Principle’, *Philosophy of Religion* 22 (1987), pp. 139-50 (148), concludes that ‘The perennial fascination of design hypotheses is but one expression of an instinct common to Western philosophy and science as well, to see rationality rather than ‘brute fact’ at the very heart of the cosmos. The design argument has the further merit of providing linkage between the worlds of natural science and religious experience, two realms of discourse that in the modern world have all too often gone their separate ways. Finally, the design argument, while not in itself capable of reaching fully theistic conclusions, does articulate the merits of a worldview which sees intelligence and purpose at the heart of things, vis-à-vis various naturalistic alternatives’; see too, George N. Schlesinger, ‘The Anthropic Principle’, *Tradition* 23 (1988), pp. 1-8; John Polkinghorne, *Faith, Science & Understanding* (New Haven: Yale University Press, 2000), p. 187 (with references to his previous work on this hypothesis).

John Leslie, ‘How to Draw Conclusions from a Fine-Tuned Universe’, in R. J. Russell, W. R. Stöger, Jr., and G. V. Coyne (eds.), *Physics, Philosophy and Theology: A Quest for Understanding* (Vatican City: Vatican Observatory, 1988), pp. 299-311 (309), argues philosophically that an argument for design is sound and that fine tuning can be reasonably ascribed to a divine selection of the four basic forces of nature. Even though an extremely obvious God-made world, with ‘made by God’ stamped upon rocks, would tend to be one of puppetry, not freedom, it is equally clear that the present creation certainly does not have ‘not made by God’ stamped upon it either. Leslie concludes that ‘The question of whether our universe is God-created is indeed no ordinary question, but that cannot in itself provide any strong excuse for abandoning ordinary ways of thinking. Theology is not a call to reject common sense’.

Ross (*Creator and Cosmos*, pp. 154-57) cites the existence of 35 parameters with narrowly defined ranges as evidence for a fine-tuned universe; he calls attention to 64 other fine-tuned characteristics (pp. 188-93) which suggest further that our own galaxy-sun-Earth-moon system was ‘made by God’. This fine-tuning contributes significantly to the case for the Spirit’s creative purpose. Several of the more prominent instances are well-critiqued theologically by Robin Collins, ‘Evidence for Fine-Tuning’, in Neil A. Manson (ed.), *God and Design: The Teleological Argument and Modern Science* (London: Routledge, 2003), pp. 178-99.

64 This recognition, for example, by John A. Wheeler (Center for Theoretical Physics, University of Texas, Austin): ‘The universe is adapted to man. Imagine a universe in which one or another of the fundamental dimensionless constants of physics is altered by a few percent one way or the other. Man could never come into being in such a universe. That is
This fine-tuning appears quite pervasive and suggests that the cosmological and microphysical constants do fall within an anthropic domain. The question is, why is this so? Given the possible superintelligent design of the natural constants of physics and the physical features of the universe for the benefit of life, heuristic and promising discussion and dialogue between science and theology has ensued.\textsuperscript{65} In this endeavor the well-verified experimental findings of modern science can have a valid interpretive impact as part of the hermeneutical toolbox available to biblical scholarship.\textsuperscript{66}

Following the experimental confirmation of Gen 1.1, today 153 extra-solar planets in 134 planetary systems have been discovered orbiting nearby stars of the same mass and age as the sun in our galaxy.\textsuperscript{67} A belt of comets and asteroids, but much more massive than those same features of our solar system, has been found orbiting one old solar-type star and potentially planet-forming debris is observed about another star. One of these extra-solar planets, for the first time, has just been photographed; water vapor is also detected in its atmosphere.\textsuperscript{68} But the physical characteristics of these planetary systems are substantially

\textsuperscript{65} In a chapter entitled ‘Motivations for Belief’ in his Understanding, pp. 27-51 (27), Polkinghorne shares an increasingly held viewpoint: ‘I believe that theology is of continuing significance in a scientific age and that its pursuit is an indispensable part of the activity of a complete university’.

\textsuperscript{66} These experimental findings can assist credible biblical hermeneutics in the process of verification and relative probability, factors germane to the desirable criterion of the legitimacy of an interpretation, cf. E. D. Hirsch, Jr., Validity in Interpretation (New Haven: Yale University Press, 1967), p. 236.

\textsuperscript{67} Extrasolar Planets Encyclopaedia (Paris Observatory); Nuno C. Santos \textit{et al}, “Extrasolar Planets: Constraints for Planet Formation Models,” Science 310 (2005), pp. 251-55, concludes that planet formation is not an uncommon process among bachelor stars (stars that are not part of a system of two or more stars).

different in many significant ways from our solar system with its small inner rocky planets protected by outer gas giants.⁶⁹

In the case of our solar system, the formation of the Earth (4.57 billion years ago) initially left the Earth’s surface in a hot, molten, and steamy state.⁷⁰ Outgassing from the Earth’s interior, the formation of Earth’s moon a few years later,⁷¹ and delivery of more

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⁶⁹ While planetary systems around metal-rich stars are probably common, precise planetary orbits within such systems capable of supporting life together with a “just right” impact-generated atmosphere from comets with water delivery affording that capability are probably not so common. An inner water-rich planet (Earth) and outer gas giants (Jupiter, Saturn, Uranus, Neptune) requires precise initial conditions which appear to have been missing in nearby stars formed from water-poor nebulae, cf. Eric J. Gaidos, ‘A Cosmochemical Determinism in the Formation of Earth-like Planets’, *Icarus: International Journal of Solar System Studies* 145 (2000), pp. 637-40. Planets are more likely to from around iron-rich stars (around 2% of stars), as an analysis of 155 solar-type stars, 96 of which are known planet hosts, indicates, cf. A. Ecuvillon et al, ‘Oxygen Abundances in Planet-Harbouring Stars’, *Astronomy and Astrophysics* 445 (2006), pp. 633-45.

In addition to a water-rich solar nebula and a metal-enriched star, a rocky planet like Earth also needs large abundances of radioactive elements to heat the interior and drive tectonic activity. These observations add 2 more physical parameters to the 128 already cited by Ross (*Creator and Cosmos*, pp. 195-98) that must necessarily be finely tuned together to support life on a planet. Statistically, the odds that another planet would occur naturalistically anywhere in the universe (even in a universe with over 100 billion galaxies and 100 billion stars per galaxy) having all the precisely adjusted parameters for life-support appear extremely small.

⁷⁰ The geochronology yielding the 4.57 billion years is made possible by natural zircon crystals containing chemical elements that undergo a well-understood nuclear decay sequence from which a lifetime can be measured. These zircon crystals can survive temperatures at least as high as 900 degrees Centigrade or higher and thus were able to survive the initial hellish or ‘Hadean’ conditions of the primitive Earth. (The scene portrayed in Gen 1.2 occurs at a later time in Earth’s formation.) Accordingly, after a water-rich solar nebula was condensed to form the sun, rocky inner planets and outer gas giant planets, plus millions of water-laden comets, zircon crystals that eventually wound up in later-forming rocks afford us a good view of their age and thermal history, thereby yielding a reliable dating for the initial formation of the planet. For an introduction, cf. Fazale Rana and Hugh Ross, *Origins of Life: Biblical and Evolutionary Models Face Off* (Colorado Springs: NavPress, 2004), pp. 85-88.

⁷¹ The formation of the Earth’s moon 4.527 billion years ago, some 40 million years after the formation of the solar system, resulting from a giant impact on Earth from a nearby protoplanet the size of Mars which itself may have also had an atmosphere and oceans, can be dated via chronology provided by the metals hafnium and tungsten taken from the
water by impaction from the large number of comets resident in our solar system left the Earth’s atmosphere filled with particles attached to cloud-forming water vapor and light-scattering inter-planetary dust particles, ash, and debris, yielding dense clouds, dust opacity, an extreme Venusian-like scene. Beneath these thick clouds the Earth eventually cooled, resulting in rain over the entire planet. The scene portrayed in Gen 1.2 occurs after these events.

An important theological consideration can be drawn from ongoing investigations of the history of the early Earth’s atmosphere. At some selected geological moment in Earth history it is very reasonable to believe that interplanetary debris between the Earth and the sun, plus both the optically impervious nature of the Earth’s atmosphere and its chemical composition, would render the point of view of an observer on our planet’s watery surface as a perspective enveloped in darkness. Sunlight, moonlight, and starlight would not be solidified magma ocean on the newly formed moon (cf. T. Kleine et al, ‘Hf-W Chronometry of Lunar Metals and the Age and Early Differentiation of the Moon’, Science 310 [2005], pp. 1671-74; K. Wada et al, ‘High-Resolution Simulations of a Moon-Forming Impact and Post Impact Evolution’, Astrophysical Journal 638 [2006], pp. 1180-86). Similar heat-generating collisions between planetary embryos is also evidenced by the composition of resulting meteorites. The surface of Mercury, Mars, and of the Earth’s moon today, for example, show the lasting effects of this continuing collision and bombardment within the inner solar system, the extra-terrestrial impacts substantially diminishing around 3.8 billion years ago. Moons of Pluto and of Kuiper belt objects in the outer solar system may also have been formed by collision, but a single large moon serving to stabilize planetary rotation is unique to Earth within the solar system (as is Earth’s long-standing stable water cycle).

On Venus today only 20% of sunlight reaches the surface, but on Earth, where the atmosphere at one point in time shrouded an observer on its surface in darkness (Gen 1.2), there were a series of creative acts involving atmosphere chemistry and the introduction of life-forms, which absorbed carbon dioxide and produced oxygen, leading to a much different result.

visible from the Spirit’s perspective of what was then an ‘unproductive and uninhabited place’ (תֹּהוּ וָבֹהוּ, Gen 1.2).

When this fact is considered from a literary perspective it is utterly amazing. No one in the ancient Near Eastern world could have imagined, much less known, this physical circumstance as an aftermath of planetary creation. When, at some moment in Earth’s creative history, the Spirit decided to manifest his presence on the surface of his newly created planet, his point of view would have been exactly as the Genesis narrator has portrayed it! Further, the Spirit’s perception of his environment in Gen 1.2 is strikingly different from anything that ancient Near Eastern readers would expect regarding a creative divinity who actually participated in the accomplished creation described in Gen 1.1. The reason why this creative story was presented with its main character originally in darkness after Gen 1.1 would have been inscrutable indeed. But now, in the new era, the prophetic character of this remarkable narrative again comes to the fore. The reason for such a mysterious, but not mythological, setting for the onset of the Spirit’s ensuing creative deeds


74 Berlin, ‘Point’ (n. 6), noting in general that Hebrew narrative is scenic, the action being broken into a series of scenes describing the happenings of a particular time, deduces from this literary art how the term ‘point of view’ is appropriate to describe the perspective from which a story is told or through which the events of the narrative are perceived (pp. 74-75, 90-91, 112). In the Genesis creation narrative the Spirit’s initial point of view is conveyed both through the unexpected description given of the Spirit’s initial perception of his environment at Gen 1.2 and by the Spirit’s own words. Then, of course, the Spirit’s point of view changes from within his newly created scenes.
is that the narrator’s seemingly odd portrayal describes an actual temporal stage in Earth history.\textsuperscript{75}

Gen 1.2 accurately describes such a physically probable historical scene, one that is extremely likely to have occurred. As the Genesis narrator’s story begins at an appropriate interval in the creative process, the previously created sun, moon, and planets in our solar system and stars in our galaxy (Gen 1.1) would not be visible from the Spirit’s position. The Spirit’s first creative work at Gen 1.3 is then, over time, to interact with the inter-planetary debris in the inner solar system and with the Earth’s atmosphere. This interaction removes inter-planetary debris and provides a stage of atmospheric fine-tuning ensuring that light reaches Earth’s surface. Looking at this prophetic narrative through the eyes of modern experimental science we can see the onset of a protracted multistage history of atmospheric chemistry. A divine plan begins to emerge, which we have no assurance would emerge naturally to develop the Earth’s atmosphere or that of any solar or extra-solar planet.\textsuperscript{76}

Harmonious with the Genesis narrator’s account, the atmosphere is adjusted, particularly in its oxygen content, to prepare for the introduction of plant life.\textsuperscript{77} Conditions upon Earth’s surface are divinely adjusted on the third ‘day’ and plants are made to sprout forth.\textsuperscript{78}

\textsuperscript{75} I can only repeat with continuing astonishment that ‘An ancient text, then, unfolds in literal meaning so as to demonstrate consistency with a reasonable assessment of modern scientific knowledge supported by experimental findings. This result will be both amazing to the open-minded unbeliever and fruitful for the believer’ (Paul Elbert, ‘Biblical Creation and Science; A Review Article’, \textit{JETS} 39 [1996], pp. 285-89 [289]).

\textsuperscript{76} That naturalism or evolutionism would serve to accomplish all the atmospheric fine-tuning being discovered as necessary for plant and animal life seems highly unlikely (nn. 69, 73).

\textsuperscript{77} The oxygenation of the atmosphere, which was ongoing (n. 73), had already, prior to the introduction of plants, been assisted--within the Genesis narrator’s second ‘day’--by the abrupt appearance, 3.8-3.43 billion years ago (see too n. 96), of Earth’s first complex metabolic life-forms, now visible through their microfossils, cf. Rana and Ross, \textit{Origins} (n. 70), pp. 75-78; J. William Schopf \textit{et al}, ‘Raman Imagery; A New Approach to Assess the Geochemical Maturity and Biogenicty of Premineralized Precambrian Fossils’, \textit{Astrobiology} 5 (2005), pp. 333-71; Abigail C. Allwood \textit{et al}, ‘Stromatolite reef from the Early Archaean era of Australia,’ \textit{Nature} 441 (2006), pp. 714-18.

\textsuperscript{78} A similar scenario of adjustment, attributed to deeds of the Spirit of God that are both physically and textually harmonious in fine-tuning the optical and chemical properties of the Earth’s atmosphere in stages, has also been posited by Robert C. Newman and Herman J.
Sunlight reaches the plants through a now translucent fine-tuned atmosphere in the processes of settling down. Over time plants release more oxygen, which accumulates in the atmosphere, assisting the building of an ozone layer to protect life from harmful solar radiation, while at the same time removing levels of carbon dioxide and water vapor from the atmosphere. This stage or third ‘day’ serves a necessary task in the divine plan, in preparation for the forthcoming creative origin of animals on the fifth ‘day’ (animals requiring more oxygen than plants), and eventually of humankind on the sixth ‘day’.

Now we come to another potentially mysterious kernel of the narrator’s portrayal, the fourth ‘day.’ This is another important ‘day’, or temporally ambiguous interval following a preliminary period of plant life, that needed to be fully accomplished in the creative process before the Spirit introduces animals on the fifth ‘day’. Like Ramban (n. 19), other Torah and Talmudic scholars always wondered how one can have a day if the sun and the moon are not in the sky. Why create plants before the sun and the moon? This alone motivated them to conclude that the narrator’s ‘days’ were not intended to be understood as normative human days. Another significant twelfth century scholar, Clarenbaldus von Arras, also reached this conclusion, but was understandably unable to take the narrator’s potentially confusing presentation any further. Similarly, five centuries later, Isaac Newton wrestles: ‘Now for ye number & length of ye six days . . . You may make ye first day as long as ye please, and ye second day to: if there was no diurnal motion till there was a terraqueous globe, that is till towards ye end of that day’s work’. All the aforementioned interpreters had the impression that the first ‘day’ appeared to be more God-divided than sun-divided and were accordingly reluctant to impose a human day onto the narrative. Three centuries later in the first volume of the International Critical Commentary


series, Skinner is unable to crack the fourth day problem, but he is perceptive regarding a portion of its solution, being on the right track regarding the odd phrase ‘and there was evening and there was morning’ used to modify ‘day.’ He notes ‘And it became evening, etc. . . . Simple as these words are, the sentence presents some difficulty, which is not removed by the supposition that the writer follows the Jewish custom of reckoning the day from sunset to sunset. . . . The Jewish day may have begun at sunset, but it did not end at sunrise’.\(^{81}\) He is also insightful in realizing that ‘The writer’s idea of the Sabbath and its sanctity is almost too realistic for the modern mind to grasp’.\(^{82}\)

With regard to the fourth ‘day’, LaSor is right that ‘The Bible does not say that God created the sun and the moon on the “fourth day”, but rather he simply said, “Let there be lightmakers in the sky”’.\(^{83}\) With this divine interaction the previously created sun and moon could now effectively serve to divide light from darkness, suggesting that they now were to become quite visible for that purpose from the surface of the Earth. There can be little doubt that the verbs בָּרָא and אָסָא (bārā‘ and āšā) as employed in this fourth ‘day’ context are well chosen by the writer as an obvious part of his literary style to exploit various shades of creative meaning and we should not attempt to press dramatic distinctions between these terms here.\(^{84}\) So, on the fourth ‘day’, ‘elōhîm says, ‘Let there be luminaries’ (Gen 1.14), again with the shortened imperative form יָהֲדוּ (yḥî) as at 1.3 where the first atmospheric fine-tuning occurs, changing there, during the first ‘day’, the Spirit’s point of view upon the Earth’s surface from being in an atmosphere of darkness to one that is opaque and, eventually, translucent in preparation for the introduction of plant life.

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82 Skinner, *Genesis*, p. 35.


84 So too, LaSor, ‘Biblical’, pp. 10, 11. The contextual wisdom of this observation with respect to these verbs is borne out by noticing that their verbal ideas are interwoven in this context into a lovely tapestry of description, cf. ‘bring forth’ (1.12, 20, 24), ‘made’ or ‘make’ (1.7, 16, 25, 26), ‘become’ (1.3, 6, 14), and ‘create’ (1.1, 21, 27).
Now, further along in the narrative, with Gen 1.14, 16 expressing a new delineation of purpose, the Genesis narrator affords readers an example of a rhetorical art, common in biblical Hebrew, that of retelling the same information from the Spirit’s new perspective or point of view on the fourth ‘day’. The narrator has provided us with the antecedent information in 1.1 of the previous creation of heaven and Earth. With each physically connected creative deed on each ensuing ‘day’ the Spirit’s point of view changes (the Spirit’s point of view as originally established in 1.2 is entirely different than it is now on the fourth ‘day’). Here, on the fourth ‘day’, ‘elôhîm has divinely interacted again--over time--with atmospheric chemistry so that now the atmosphere becomes optically transparent to sun, moon, and stars to an observer on the earth’s surface. A new perspective arises from beneath a translucent atmosphere and the sun and the moon become clearly visible. This second atmospheric fine-tuning on the fourth ‘day’, from previously translucent on the third ‘day’ to now transparent, and now accompanied by a timely and necessary increase in atmospheric oxygen, was essential for an emerging site of complex animal life upon

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85 Retellings (Nacherzählungen) of the same information are often associated with a character’s changing point of view (Berlin, ‘Point’, p. 112).


I say a timely oxygen increase because, geologically speaking, this increase is consistent with creative purpose and wisdom, necessarily occurring shortly before the initial creation of animals in the Ediacaran period around 600 million years ago that marks the onset of the Genesis narrator’s fifth ‘day’ (n. 99). Geochemical analysis of marine sediments indicates that the Earth’s oceans were well oxygenated in preparation for this ‘day.’

Also, towards the end of the fifth ‘day’, namely over the past 45 million years (after the extinction of the dinosaurs in the late Cretaceous and early Tertiary periods 65 million years ago [n. 106]), further atmospheric change is again found to have occurred. Recent studies show that carbon dioxide abundance declined by a factor of four or five over that 45
Earth’s surface and in its oceans, with night and day now much more clearly marked than in the previous first ‘day’ period described at 1.5.

The aforementioned rhetorical feature of retelling Gen 1.1 from a different point of view may be profitably addressed a bit further, again with respect to the Spirit’s new point of view during the fourth ‘day.’ To review, at Gen 1:16, ‘And ʾelōhîm made the two luminaries’, one for ruling the day and one for ruling the night, where now light from the Sun and the moon can be quite visible to an observer on the Earth’s surface in an atmosphere changed from translucent to transparent. How do we relate this to context and to the antecedent information of 1:1 and to 1:14? Is it a new creation? As LaSor has suggested, it is not. Instead, as I have suggested it is a narrative retelling of information already presented, but from a different point of view (Gesichtspunkt) of the main participant, the Spirit of God. His perspective, from the Earth’s surface, changes from Gen 1.2, to 1.3-5 (‘day’ one), to 1.14-19 (‘day’ four) as he makes progressive and necessary changes in inner-planetary space and in the Earth’s atmosphere.

What we have here is, I believe, the first instance in the Hebrew Bible of resumptive repetition (Wiederaufnahme), where previous antecedent information that has been placed in the immediate foreground or not too far away is intended to be recognized by the reader

million years to the present level, in concert with the doubling of ambient oxygen levels from 10 to 21 percent by volume over the past 205 million years (the last third of the Genesis narrator’s fifth ‘day’), cf. Mark Pagani et al and Paul G. Falkowski et al, Science 309 (2005), pp. 600-03 and 2202-04, respectively. This continued careful fine-tuning of the Earth’s atmosphere is again consistent with a theistic perspective, namely that the Spirit provided a climate and sea level of carbon dioxide and oxygen suitable for the creation of hominids toward the close of the fifth ‘day’ (n. 102) and for the creation of humankind on the sixth ‘day’, the latter period perhaps beginning as recently as 50-100 thousand years ago.

Taking the Genesis narrator’s account as a temporal template for the detection of purpose behind experimental findings, I suggest that ʿRūah ʾelōhîm timed the chemical preparation of the Earth’s atmosphere, soil, and seas from the first ‘day’ until the sixth ‘day’, when he created humankind from that prepared soil.

This narrative technique appears in various states of elaboration in Hebrew texts. In Genesis itself, my preceding discussion has called attention to Gen [1.26; 2.7] and Gen [4.25; 5.3]; [10:22; 11:10], where the text cited in second place in the brackets is the resumptive repetition. The phenomenon has also been detected at Gen [6.22; 7.5]; [21.27b, 32a]; [32.14a, 22b]; [37.36; 39.1]; [45.2, 16]. Perhaps then it is no surprise to add Gen [1.1, 14, and 16] to this list. In this case, at 1.16 the repetition, in addition to describing the continuation of the past creative process, also achieves a useful practical effect, namely to show how the readers’ own observable reality about the function of the sun and the moon originated in Earth’s history from the Spirit’s

88 This phenomenon does not appear to be accidental, but intentional, serving a narrative purpose (with Kuhl, who argued that these repetitions are due to a determined authorial intention and have importance insofar as the narrator is concerned [“Wiederaufnahme,” 2]).


Vogelzang finds that ‘Extensive use of repetition in Akkadian narrative--in all its various manifestations--shows it to be a favorite storytelling device. It adds body to the narrative, heights tension, allows the development of details . . . It may bring two (or more) events together through which the second becomes more significant by means of its associations with the first; and it may in a very specific and poetical way work towards a climax through cumulations of identical expectations, only realized at the end, but already predicted at the beginning’ (p. 168, emphasis mine). Vogelzang’s narrative findings could apply equally well to the Genesis narrator’s introduction of the sun and the moon on his fourth ‘day’, expecting readers to bring this together cumulatively with the extant creation already described in Gen 1.1. The complete visibility of the sun and the moon on the fourth ‘day’ from the Spirit’s perspective, within this ancient Near Eastern narrative style, may thus serve rhetorically ‘to provide a kind of encore of an action or a scene performed earlier’ (p. 170, emphasis his).

90 Other examples in biblical Hebrew that may be advanced as illustrating this narrative technique include Exod [6.10-12, 29-30]; [20.18, 21]; Lev [26.46; 27.34]; Num [22.21b, 35b]; Josh [4.19b; 5.10a]; [10.14b-15, 42b-43]; [13.14, 33]; Judg [9.16, 19]; [15.20; 16:31b]; Ruth [4.9a, 10b]; 1 Sam [18.20a, 28b]; 2 Sam [3.1, 6a]; [13.34a, 37a]; [14.24b, 28b]; [25.1; 28.3]; 1 Kgs [1.1 and 3-4, 15b]; [20.12a, 16]; 2 Kgs [4.12b, 15]; [17.6b, 23b]; [17.34a, 40b]; 1 Chron [16.7, 37]; 2 Chron [2.1-2, 17-18]; [12.2, 9a]; [17.5b; 18.1a]; Ezra [4.5c, 24b]; Isa [2.8, 17]; Jer [16.4b, 6b]; [34.20a, 21b]; [37.21b; 38:13b, 28a]; and Ezek [20.33a, 34b].
creative point of view. Like a digression in ancient Greek narrative, where, too, the subtlety and sophistication of authors cannot be underestimated, this technique stresses details that support narrative purpose(s).\textsuperscript{91} As is the case here, exact repetition of wording is not required, just the repetition of a theme with added details that enhance the clarification and understandability of the theme.\textsuperscript{92} Long concludes that one way this technique is used is to narrate synchronous events.\textsuperscript{93} Here, insofar as the sun and the moon themselves are concerned, 1.1 and 14 (antecedent) and 1.16 (repetition) are all geosynchronous events, with 1.1 and 1.16 framing 1.14. Taken then as an instance of a narrative-rhetorical explanatory repetition, 1.16 supports and fits cohesively within the overall literary structure.

Before concluding, I would like to make a few pertinent observations concerning the apparent veracity of some other parts of this narrative and review some scientific progress that may be of interest to theological and biblical scholars. Within the biological-related sector of the scientific community and sometimes in the theological community, one may encounter, respectively, either the unarticulated presuppositions of atheistic naturalism, evolutionism, or exclusive naturalism, or, on the part of some theists, the assumption of theistic evolution, the latter notion usually proposing God’s existence while attributing the appearance of modern humankind to a random, but providential, ‘natural’ or chance selection from some non-living molecule(s). Some theists adopted an entirely mythological view of Genesis One and/or accepted macro-evolution as an assured scientific result. This now appears to be premature based on two counts.

First, further research into ancient Near Eastern literary texts, as in this study, suggests that supposed ‘parallels’ between Genesis and other creation scenarios were


\textsuperscript{93} Long, ‘Framing Repetitions’, p. 399.
overdrawn. While the Genesis narrator was no doubt participating in a contemporary international literary enterprise in which his culture was known, he did not, for example, simply apply the Babylonian story of creation, *Enūma Eliš*, to his own unique composition, which as argued here is both culturally distinctive and culturally striking at the same time. And second, an examination of the available empirical evidence to date as to whether or not the tacit assumption of evolutionary biology, namely that the repeatable chance-driven phenomenon of macro-evolution leading to increasing complexity actually exists within physical reality, is, in fact, a likely assumption, now suggests, in my opinion, that it probably is not. Barr suggests then, reasonably so, that it is the non-existence of God and the

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95 It is obvious that *Enūma Eliš* and other such mythical inventions offer no sure specific ‘parallels’ to the Genesis narrative (so too, Victor Hurowitz, ‘The Genesis of Genesis: Is the Creation Story Babylonian?’, *BRev* 21 [2005], pp. 37-48, 52-54 [52]).

96 For an introduction to the scientific difficulties of these chance-driven theories being physically probable (macroevolution or theistic macroevolution) insofar as actual experimental findings are concerned, cf. Rana and Ross, *Origins*, passim. On the other hand, Andrew H. Knoll, *Life on a Young Planet: The First Three Billion Years of Evolution on Earth* (Princeton: Princeton University Press, 2004), perhaps exemplifies a biological interpretation that oversteps its physical boundaries. I offer the following brief comments upon Knoll’s work as germane to my ancient rhetorical reading of Genesis as prophetically predictive.

Knoll sets out a theory of life’s appearance and diversity over the past three billion years employing description suited to his theory, like ‘appear to have evolved’ (p. 83) and ‘rootstock of primordial evolution’ (p. 88). However, since the phenomenon Knoll invokes is neither definable nor physically imaginable at present beyond some general descriptive terminology, that is, not based upon any known biophysics or biochemistry, it would be more accurate to posit its existence as a presupposition. Totally unknown naturalistic events are assumed to account for the ‘tremendously sophisticated molecular machines’ (Knoll, *Life*, p. 76) which we observe today. To account for such intricate designs, unquestionably present at the cellular and biomolecular levels, requires something in the microcosm that seems suspiciously unphysical because it is against known physical principles. It is then scientifically reasonable to suggest that the biophysical and biochemical phenomenon that Knoll requires is unlikely to ever have existed in the first place.

Knoll does not acknowledge this phenomenological weakness, but assumes the existence of what he requires as if were a fait accompli. This is far too ambitious and is
misleading. Modesty at least requires an admission that ‘the mechanism is obscure.’ For example, unconfirmed assertions that a change in ocean chemistry or a biological interaction of animals with their environment causes macro-evolution are but simplistic descriptive phrases that are far from explanatory and based on no known science. Neither do they build any confidence in the incredibly complex and highly unusual chance-driven phenomenon that, according to neo-Darwinian speculation, repeatedly expresses itself. Knoll’s lack of caution in assuming what he has not actually seen might be less acceptable in other sectors of science. If he is not more careful, his zeal may be consistent with the observation that, going beyond actual scientific methodology, a secular religion of evolutionism has emerged (so, Michael Russ, The Evolution - Creation Struggle [Cambridge: Harvard University Press, 2005]). In any case, representing unconfirmed assertions as if they were assured experimental results is completely unnecessary and cannot be scientifically sustained.

However, given the attractive speculation of the possible existence of God in the new era inaugurated in 1963 with the discovery of a cosmic beginning, the hypothesis of divine interaction, equally unobserved and, like macro-evolution, requiring an unknown physical interaction, could just as easily account for the origin and design of biochemical and biomechanical life. Physical sense suggests that elegant and intricate design requires a designer. And common sense suggests that the inference of design and a designer is an inference that applies to the entire framework of physical reality. Since the origin of animals (n. 99) repeated outcomes are commonplace and disparate organisms do exhibit similar features, which is consistent with divine action by a designer who uses the same good designs repeatedly over time in disparate organisms.

With chance as its underlying mechanism the supposed macro-evolutionary phenomenon should not produce the same outcome (or convergence of traits) repeatedly. The observation of repeated biological traits is consistent with an overall theory of design, of cosmic ‘made by God’ reality. The presupposition of divine interaction is one of reasonable scientific inference, inference in accord with dispassionate observation. Also, in a theory of divine interaction that is consistent with quantum uncertainty, rigorous invisibility, and undetectability the known fundamental laws of physics and chemistry are not ignored. This is a phenomenological strength of such a theory.

Knoll advocates macro-evolution as necessarily the right theory, even when the phenomenon supposedly underpinning it is both unknown and improbable (see too the many issues raised by Rana and Ross, Origins, pp. 81-168). Knoll would be better served by first reviewing the historical nature of the quest to discover the macro-evolutionary phenomenon, setting out the speculation why unobserved time-based genetic processes supposedly create new species. Knoll needs to clarify his presuppositions and their limitations and then describe his experimental findings. This is a correct scientific procedure, one not overly indebted to presuppositional excess. Descriptive assumptions should not be mistaken for nor offered as explanations unless they are so articulated. Otherwise they must be assessed as another failed attempt to supplement or replace neo-Darwinian evolutionary biology.

The mysterious and experimental invisibility of God may indicate that God thinks the present creation is such that everything in it cannot be naturalistically explained. Perhaps the cosmic beginning and the origin of life’s diversity cannot be naturalistically explained. These spectacular features of creation may well be basically incompatible with the eventual hope of a physical explanation. And, these spectacular events are so counterintuitive to physical reality that the probabilities shift away from forced naturalistic
impossibility of his interaction with creation that has become the unattractive intellectual speculation.  

Indeed, in the new era, the possible existence of the invisible God may be signaled to humankind by recent discoveries of spectacular events that are harmonious with the prophetic vision of the Genesis narrator. To humankind paying attention, as with the introduction of the new era itself, such events may be understood as a magnificent revealing of the power and purpose of the Creator within his chosen constraint of invisibility. By a spectacular event I mean something that can be perceived by those with the opportunity of access to the elucidation of experimental scientific findings. The amazing correlation between Earth history and the opening scene portrayed in Gen 1.2 cited above is unlikely to hypotheses. This shift appears to be taking place at the present time, cf. J. T. Trevors and D. L. Abel, ‘Chance and Necessity Do Not Explain the Origin of Life’, Cell Biology International 28 (2004), pp. 729-39.

It is clear as well that the earliest life-forms found on Earth 3.86 billion years ago, single-celled microbes, are already biochemically complex organisms with a minimum genome size of between 1000 to 2000 genes, cf. Zemer Gitai, ‘The New Bacterial Cell Biology’, Cell 120 (2005), pp. 577-86; Christos A. Ouzounis et al, ‘A Minimum Estimate for the Gene Content of the Last Universal Common Ancestor – Exobiology from a Terrestrial Perspective’, Research in Microbiology 157 (2006), pp. 57-68. This raises the penetrating question (so too, Rana and Ross, Origins, pp. 78, 166), how did they attain this remarkable metabolic complexity by chance against all known physics (n. 101) and therefore via highly improbable and heretofore unobserved biochemistry?

Knoll observes that ‘Scripture insists that God made man in his image, not the reverse’ (Life, p. 245). Yes, but insistence that a questionable phenomenon repeatedly did what God may have himself done could not be honoring to God. What if God’s decision to be invisible incorporates a prophetic foresight and plan, namely that humankind will eventually be able to detect convincing probable evidence (but not proof) of his existence with respect to his most spectacular creative deeds? After all, invisibility does not guarantee absolute hiddenness. Humankind might be well advised here to vigorously investigate but to proceed with humility. Knoll’s claim of a repetitive, chance-driven process to account for complex diverse organisms under diverse conditions and for similar features in disparate organisms can be superficially imposed on the data, but does it actually fit the data? It certainly demands a phenomenon that is totally unknown and that strains physical reality due to the requirement of increasing complexity. Neither is it compatible with narrative intentions as advocated in the reading of Scripture offered here. The Genesis narrator is guided away from imposing the days of his own cultural and temporal boundaries upon God. Perhaps there is a lesson in this.

be detailed by world media, but my point is well illustrated by the discovery in 1964 of a cosmic beginning and its dramatic reinforcement in 1992 when the seeds of galactic structure were finally found by even more precise experimental measurements, a discovery which the agnostic Stephen Hawking described as ‘the discovery of the century, if not of all time’.  

Discovery confirming this prophetic vision may be further illustrated by the geologically abrupt worldwide origin of animals in the Ediacaran period, the creative introduction of animals around 600 million years ago being preceded by a series of necessarily fine-tuned atmospheric and oceanic processes. The ‘spectacular events’ category is also illustrated by a similar creative ‘pulse’ of new and different animals in the later Cambrian period, and by the much later abrupt appearance of hominids (n. 102). The

98 For the exciting history of this experimental finding, publicly described as ‘Like looking at God’ and finding ‘The Holy Grail of cosmology’, cf. George Smoot and Keay Davidson, *Wrinkles in Time* (New York: Avon, 1998). This spectacular discovery in 1992 revealed the seeds of galaxy formation, temperature fluctuation of less than a millionth of a degree in the cosmic background radiation discovered in 1964 by Arno Penzias and Robert Wilson. A decade later, ongoing measurements of this relic radiation from the beginning of the universe, now cooled by cosmic expansion, measurements with better spatial resolution and sensitivity, provided more detail of these quantum fluctuations or primordial ripples that formed early in the universe. These discoveries, combined with other observations now allow humankind to perceive a universe whose expansion is now accelerating, with 74% dark energy, 22% dark matter (spectacular cosmological evidence of this dark matter has now been found), and 4% ordinary matter. After receiving the Nobel Prize and lecturing on the details at the Centre for European Nuclear Research, Smoot was interviewed about his quest to explore the early universe. ‘What is the most exciting for him, is that in his opinion we now have one clear picture for the origin of the universe, which transcends cultures, religions and other differences the world over’ (Arnaud Marsollier, ‘George Smoot: the Indiana Jones of the Universe’, *Cern Courier: International Journal of High Energy Physics* 47/3 [April 2007], 26-27 [26]).

99 Perhaps coming to the fore in the category of spectacular discoveries are the Ediacaran fossils (named after the Ediacaran Hills of Australia), reasonably correlated with the beginning of the Genesis narrator’s fifth ‘day.’ Following them in Earth history is the more widely known, spectacular and naturalistically enigmatic Cambrian worldwide ‘pulse’, ‘explosion’, ‘radiation’, or ‘burst of innovation’ of multi-cellular organisms with its complex, expansive and highly integrated ecosystems, displaying several new body plans of animals capable of exploiting a wide range of ecological niches (the onset of the Cambrian period is set at 543 million years ago by international agreement based on dating volcanic ash common to various stratigraphic sites with fossil signatures). This geologically abrupt increase of animal phyla within the Cambrian period (perhaps even less than 5 million years
Ediacaran origin of sophisticated animals, the explosive diversity of Cambrian creatures, and the much later history of bipedal animals, are all a challenge to the naturalistic macro-evolutionary paradigm, but can be interpreted coherently as a fingerprint of Ṭūah ʾelōhîm’s creative intervention in life’s history.

In the new era, a theory of macroevolution is, for some, less commonly adhered to as necessarily being absolute in contemporary scientific and theological academies, although it is routinely employed to facilitate discussion. (Within modern science today, only in biological-related disciplines is there an operational, but now not necessarily a personal, ‘commitment’ to a descriptive tradition that presupposes the existence of the macroevolutionary phenomenon [heretofore undetected in the framework of known physics] as the only possible way of describing a series of abrupt origins of complex life-forms. However, the origin of biochemically intricate life-forms [as young as 3.8 billion years ago] and their ensuing spectacular appearances, complexity, extravagant diversity, and geologically brief recoveries after mass extinctions, pose details that remain a scientific mystery. Therefore, what is really of practical importance to investigators in the field are

in duration) is not consistent with explanations via theoretical molecular clock calculations by evolutionary biologists, who have suggested--in disagreement with paleontological evidence--that the divergence of animal phyla had to occur gradually over a period stretching hundreds of millions of years back into the Precambrian. The global fossil evidence for Cambrian life-forms and for the closely spaced diversification in the preceding Ediacacarn period are also difficult to explain via phylogentic relationships from extant body plans projected back into deep time, cf. Antonis Rokas et al, ‘Animal Evolution and the Molecular Signature of Radiations Compressed in Time’, Science 310 (2005), pp. 133-38.

Preceding the Cambrian radiation was the equally spectacular appearance of the aforementioned Ediacaran animals, representing another surge of rapid speciation (I would suggest a creative ‘pulse’) with diversification of new and different soft-bodied creatures that are now coming into better view, again showing sophisticated design. The origin of animals is signaled by the global appearance of animal fossils and microfossils in the Precambrian Ediacaran period (at various sites and times, like near Russia’s White Sea at 555.3 million years ago). The Ediacaran evidence shows no appearance of substantial macroevolutionary change and current interest brings an Ediacaran fossil to the front cover of Science (20 August 2004). Ediacaran fossils exhibit features which, by contrast, mark Cambrian animals as ‘modern’ (Knoll, Life, p. 173), but perhaps it is more accurate to argue, with other paleontologists, that ‘Ediacaran creatures were not ancestral to Cambrian life at all’ (so, Martin Brasier and Jonathan Antcliffe, ‘Decoding the Ediacaran Enigma’, Science 305 [2004], pp. 1115-17 [1115]).
the vigorous experimental programs at the heart of these various paleontological and paleobiological based disciplines, and not unswerving personal allegiance to any overly ambitious descriptive theory of macro-evolution with intellectual roots only in observable adaptive change within species [micro-evolution].)

While both long-standing theories, exclusive naturalism and theistic macroevolution, may continue unless they eventually falter and lose their appeal on the dearth of evidence for the macro-evolutionary phenomenon of naturalistic complexification and/or the discovery of new physics supporting increasing complexity, there is little to be gained from over-focusing on theory that provides no real or practical guidance to current experimental investigation. It is quite evident that ‘the physical concepts of self-organization and increasing order are very difficult to relate to the morphological complexity of organisms’, suggesting that perhaps a higher level of critical physical realism and a dose of modesty might be in order on the part of those paleobiologists (see n. 96) and also on the part of many theologians who simply express their regard, in one way or another, for the ‘vast evolutionary power’ of macro-evolutionary theory. It is important to fairly observe

100 However, fresh overviews are to be expected, cf. Barr, *Modern*, pp. 65-137.


102 Many theologians have accepted macro-evolution as a fact, as does Frank D. Macchia, ‘Editorial: Intelligent Design: Bad Science?’, *Pneuma: Journal of the Society for Pentecostal Studies* 28/1 (2006), pp. 1-3 (2). However, I demur, cf. my reply to Macchia, ‘Letter to the Editor’, *Pneuma* 29/1 (2007), forthcoming. I think part of the problem today is the wariness of being identified with physical cessationism (n. 55 above), plus the confusion of micro-evolutionary adaptation due to inherent genetic traits, like molecular signaling, with the vague process of ‘natural selection’ that is touted as leading to complexification. The assumption that the exclusive naturalistic paradigm of macro-evolution is or must be the only viable theory of life-origins or the only model from which experimentally testable predictions can be made needs to be reconsidered among theologians. One heuristic alternative is posed by Hugh Ross, *Creation as Science: A Testable Model Approach to End the Creation/Evolution Wars* (Colorado Springs: NavPress, 2006). Personally, I see no reason why a progressive creation model, consistent with the present study, cannot make testable predictions just like Fred Hoyle’s prediction of a nuclear resonance in carbon at a certain energy followed from the Anthropic Principle and was experimentally confirmed.
that although both philosophical speculation and scientific research as to the required complexification of natural processes will, validly, continue, there has so far been no discovery of a new law of physics to indicate a principle of self-organizing or increasing complexity at work in the universe.\textsuperscript{103}

Also, while I agree that it is not some scientific theories alone that enforce a materialistic worldview (like that of macro-evolution), but also atheists who co-opt some parts of scientific theory for their own purposes (like that of evolutionism), nevertheless it is unnecessarily speculative for theologians, based on unknown physics and biochemistry, and on the abrupt appearance of diverse and genetically distinctive life-forms, to advocate the ‘celebration of evolution by the Church through a truly Christian interpretation of God acting in and with the processes of evolution’ (so, Robert John Russell, ‘A Critical Response to Cardinal Schönborn’s Concern over Evolution’, \textit{Theology and Science} 4 [2006], pp. 193-98.

In defense of Christoph Schönborn, Cardinal of Vienna, I wonder if he really deserves to be theologically corrected by Russell for expressing his concern as to the adverse moral implications of macro-evolution and pointing out that neo-Darwinism denies God a role in the development of life. I agree with Russell that Schönborn deviates from the patterns of previous religion-science dialogue by not accepting macro-evolution, but there might be a difference for Schönborn between a Holy Spirit-science dialogue and a religion-science dialogue. Schönborn legitimately calls attention to an unguided, unplanned process of random variation and natural selection as being a process of doubtful physical validity (196). Russell’s argument that God acts in these processes of evolution (no mention of God possibly acting in creation), so that evolutionary biology is God in disguise, reflects an opinion, not established experimental science. One might ask too, how the fundamental physical constants become established by randomness? Russell’s claim that a ‘liberation of neo-Darwinian science from its atheistic interpretation’ (197) is the foremost or the real issue also has too narrow a theological focus and may miss Schönborn’s main point.

Theology needs to be more concerned about physical reality and the several serious difficulties with both the macro-evolutionary hypothesis and origin-of-life research. With all due respect, just adding God and then blaming atheists for co-opting out of a theory in which God is so inserted seems an inadequate response. Also, the fashionable wordsmithery of the naturalistic paradigm, with God inserted as a theological enhancement, to ‘emergence’ or to ‘theistic evolution’ does not lessen or alleviate the physical problems of this theory, nor does it sufficiently address potential moral problems, this latter category being of obvious pastoral concern to Schönborn. Until these touted ‘processes of evolution’ (197) Russell refers to--many of the supposed biochemical evolutionary pathways being unverified and perhaps even impossible--and the presumed macro-evolutionary phenomenon or mechanism are clarified, quantitatively measured, and rest on known biochemistry and physics, instead of upon the hope of the discovery of new physics, perhaps the ‘celebration’ called for by Russell could seem somewhat premature.

For example, the theory of self-assembly of cognitive macromolecules required by macroevolution has no experimental confirmation whatever and is incapable of guiding experimentalists in the continued well-documented detection of the genetic independence of hominids from modern humankind. This experimentally verified independence must probably be the result of heretofore undiscovered physical laws is transparently breezy, based on no known physics, and, in fairness and with all due respect, sounds more like accommodating the notions of some regarding divine inaction rather than providing realistic reflection for the philosophical community. Physicists have a responsibility to articulate what physical reality is and what this probably implies, based on well-understood and experimentally verified observations, not what unknown and improbable physics might counter-intuitively imply someday.

To do otherwise in a physically imbalanced fashion is, I suggest, misleading. The self-ordering limits of natural processes (as in snowflakes) are thereby misrepresented as supportive of unobserved laws of complexity. On the contrary, Dyson’s famous suggestion that ‘in some sense the universe must have known we were coming’ (so, Freeman J. Dyson, Disturbing the Universe [New York: Harper & Row, 1979], p. 250) is not misleading, but a realistic expression of what Dyson later understood as the anthropic principle (n. 64), our attempt to formulate a statement of cosmological purpose.

Davies, who philosophically claims that science rejects true miracles and who wants ‘complexity to emerge’ in order to support the macro-evolutionary hypothesis of biogenesis, a supposed process that he admits strikes many as ‘virtually miraculous’ (The Fifth Miracle: The Search for the Origin and Meaning of Life [New York: Simon & Schuster, 1999], p. 81-82), must be careful not to misuse Dyson’s early insight as if it somehow supports his own physically unsupported agenda.

I agree with Davies that the impression of cosmic design is overwhelming, but I disagree that science cannot or should not contemplate events that strongly suggest non-naturalistic origins-- because of their opposition to known physics--as possible evidence of a Designer who interacts with the physical reality of His own making. After all, a Designer could leave unerasable clues of His presence for those who are paying attention. Hence, I would suggest that perhaps Davies might adopt a more modest philosophical worldview.

An attitude of openness to be guided by evidence, instead of the evolutionism of some, may be illustrated in the reporting of recent experimental findings contradicting a long-held macroevolutionary lynchpin. When DNA was first successfully extracted from a Neanderthal fossil and compared to that of living humankind, it was found that modern humans did not descend genetically from that hominid. This experimental result, not particularly favorable to traditional speculation of an evolutionary hominid ancestry for modern humankind, was fairly analyzed and reported by Matthias Krings et al, ‘Neandertal DNA Sequences and the Origin of Modern Humans’, Cell 90 (1997), pp. 19-30. Other physiological and genetic investigation on one of the latest Neanderthal remains (c. 29,000 years old) indicates no evidence for the multi-regional hypothesis of modern human evolution, cf, Igor V. Ovchinnikov et al, ‘Molecular analysis of Neanderthal DNA from the northern Caucasus’, Nature 404 (2000), pp. 490-93. Again, DNA extracted from a femur bone (c. 40,700 years old) shows that it is aligned with Neanderthals and is distinct from
contributes to an altogether different physical theory anyway, namely that the detailed information encoded in DNA requires an encoder who, by a hidden divine interaction, continuously fashioned and created via an interconnected progressive sequence of precisely necessary events from the cosmic to the microcosmic. The newly discovered hominid modern humankind (Cédric Beauval et al, ‘A Late Neandertal Femur from Les Rochers-de-Villeneuve, France’, *Proceedings of the National Academy of Sciences* 102 [2005], pp. 7085-90).


Humankind created in the Genesis account are presented there as Spirit-creatures, distinguishing them from all previously created animals on the fifth ‘day’. Although hominids (as well as insects, for example) are not mentioned by the narrator, I make the genetic inference that hominids are not Spirit-creatures and should not be considered as humankind. Experimental evidence reveals a sequence of abrupt appearances of hominid bipedalism, beginning in central Africa with the earliest known hominin around 7 million years ago, ‘Toumai man’, who made the front cover of *Nature* (7 April 2005), and continuing in a different location 4.51 to 4.31 million years ago (Selishi Selam et al, ‘Early Pliocene Hominids from Gona, Ethiopia’, *Nature* 433 [2005] pp. 301-05). Although a simplistic theory of gradual evolutionary descent from some initial hominin to Homo sapiens or wise man has traditionally been used to discuss findings in this field, it is fair to suggest that a progressive creational time line appears an equally compatible model for the expanding hominid database, given both the sudden geochronological appearance of these upright bipeds and their genetic independence from comparatively recent humankind, humankind not being indebted to hominid animal ancestry.

Hominids, as other animals, plants, and other life-forms, no doubt had their environmentally appropriate place in distant days. Taking the geologically abrupt appearance or origin of animals at the onset of the Ediacaran period as consistent with a creative stage, hominids may accordingly be placed within the Genesis One account toward the close of this ‘day’, the fifth ‘day’. Genetically distinct modern man with substantially different distinctive traits (Aviezer, *In the Beginning*, pp. 95-102, 117-19, 124; Ross, *Genesis Question*, pp. 54-58, 110-15) may be placed in another stage consistent with the sixth Genesis ‘day’.

As for us in the time frame of humankind, a very recently created species, perhaps as young as 50-100 thousand years old, we are not to say to God, ‘Why did you make me like this?’ Similarly, we need to be respectful when we ask, ‘Why did God make hominids like that?’
independence, as well as genetic and anthropological evidence—which indicates that humanity’s original population size was small, tracing back to a single woman called mitochondrial Eve and a single man\textsuperscript{105} called Y-chromosomal Adam, and that humanity expanded from somewhere near the Middle East\textsuperscript{106}--remains harmonious with the Genesis narrator’s account of human origins.

From a theistic perspective, the most attractive and comprehensive fit to the experimental data, accumulating experimental evidence which forms a huge and continually expanding database on many fronts, appears to substantiate the detection of a plan of progressive creation. This detection assumes that the observable appearance of complex events, such as the cosmic beginning and organisms made from inorganic matter, could not have happened without divine interaction. Or to put it another way, the physical microstructure of the present creation requires such divine intervention for these spectacular events to occur. The plan of progressive creation appears thoughtful, mysterious, and consistent with a divine decision to remain invisible, but not necessarily totally hidden. It includes abrupt creative speciation by Rûah ‘ełōhîm and is consistent with a reasonable ancient Near Eastern literary and culturally contextual interpretation of the first and second ‘chapters’ in the Hebrew Scripture as I have offered here. The stages of Earth history outlined there also include, in a progressive model of creation,\textsuperscript{107} mass extinctions at various


\textsuperscript{106} For discussion of this and other genetic findings, cf. Fazale Rana and Hugh Ross, Who is Adam? A Creation Model Approach to the Origin of Man (Colorado Springs: NavPress, 2005).

\textsuperscript{107} Rana and Ross, Origins (n. 70) take a heuristic step toward a comprehensive model of progressive creation which has the making of required predictive dimensions necessary for a testable scientific theory. Their pioneering work, improving in detail upon the model of Aviezer, In the Beginning (nn. 15, 56) serves to further demonstrate with increasing vigor that the experimental findings of modern science are quite harmonious with a plan of progressive creation on the part of Rûah ‘ełōhîm.
geologically selected moments, events unmentioned in an ancient narrative which focuses upon a sequential ‘generation’ of creative acts. It is significant that not since Schaaffs’ pioneering work, arguing that it is unwise as well as biblically inaccurate to limit the Spirit of God’s activity to physics restricted to macroscopic natural laws in the present creation, has the interface between science, theology, and hermeneutics arrived at such a stimulating juncture.

CONCLUSION

An interpretation is advanced here, using reasonable hermeneutical principles and tools, that attempts to account for heretofore rhetorically mysterious features of an ancient


109 Werner Schaaffs, Theologie und Physik vor dem Wunder (Wuppertal: Brockhaus, 1973), pioneered the possibility of divine action within quantum indeterminacy, a subject of continuing interest given that such possible creative action within quantum pneumatology should be sufficient to achieve divine purposes (within invisibility) and also could then give rise to significant macroscopic consequences that would be observable by humankind (see too, John J. Davis, ‘Quantum Indeterminacy and the Omniscience of God’, Science & Christian Belief 9 [1997], pp. 129-44).

Given that physical reality is not causally closed by any means, but wide open to divine action within the unpredictable flexibility of cosmic processes, my interpretation of Rûah ’elôhîm acting creatively in accord with the Genesis narrative builds on the solid argument that God’s providential action, where and when he chooses, cannot be excluded from the physical world (with John Polkinghorne, Science and Providence: God’s Interaction with the World [Philadelphia: Templeton Foundation Press, 2005], pp. 43-52).

I have suggested here that this hidden Spirit-matter interaction is responsible for a sequence of spectacular and naturalistically implausible processes now being detected by humankind. These events suggest creative action by Rûah ’elôhîm, in my opinion, and seem unlikely to be ‘gaps’ that an exclusive naturalistic paradigm will close. The nature of this Spirit-matter interaction is a matter of ongoing discussion, cf. John Polkinghorne, ‘Quantum Theology’, in Ted Peters and Nathan Hallanger (eds.), God’s Action in Nature’s World: Essays in Honor of Robert John Russell (Aldershot, England: Ashgate, 2006), pp. 137-45.
narrative, namely for the claim of a cosmic beginning, for an initial narratologically obscure point of view of the Spirit, for the appearance of light on ‘day’ one and the appearance of luminaries on ‘day’ four. While the analysis of biblical narratives may be served, where possible, by attempting to walk along the roads traveled by the writers and their original readership and to see and appreciate their world as seen through their eyes, instead of through the mindset of a later rationalism which ancient authors did not possess, in the case of this creation account another prophetic and inspiring force looms large. As this narrator relates the Spirit’s otherwise unknown past creative deeds and portrays his voice and point of view, could not Rûah ‘ělōhîm guide and direct?

For example, in the ancient Near East, which is the life setting of the Torah, there was no evidence whatever to indicate that the heavens and the earth had a beginning.110 There was no knowledge whatever of past earth history, like the world wide Ediacaran and Cambrian creative innovations which could initiate the Genesis narrator’s fifth ‘day’. These experimental findings seem as consistent with stages of creation, as in our narrative, as they are with the theoretical paleontological assertions that macroevolution somehow had a ‘pulse’ or a ‘punctuated equilibrium’. And, given the Deuteronomistic warnings not to

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110 This is why, in the earliest speculation about beginnings and endings, the familiar elements of time were woven into mythological hymns and laments concerning gods and their actions, as in ‘In the days of yore, the days when heaven and earth had been [fashioned]’ and ‘To far off days, to other days, to the end of time’ (Thorkild Jacobsen, The Harps That Once . . . Sumerian Poetry in Translation [New Haven: Yale University Press, 1987], pp. 473, 153).

While notions of time and space were no doubt culturally learned (cf. Nicolas Wyatt, Space and Time in the Religious Life of the Near East [Biblical Seminar 85; Sheffield: Sheffield Academic Press, 2001]), I would argue that in the case of the introductory Sabbath-based creation narrative in Genesis, such learning actually informed a rhetorical reluctance to equate God’s creative acts, acts beyond and before the temporal limitations of humanity, with contemporary human dimensions of time and space.

Only now with recent experimental findings, verified scientific discoveries made possible due to the rational transparency of the present transient creation, that now support attractive speculation as to the existence of God and his possible creative interactions, is humankind learning more fully the meaning of time and space within a cosmos of matter and energy. In the fine-tuned physical reality of the cosmos, a universe suggestive of a deep principle of anthropic design yet to be fully discerned by humankind, the physical dimensions of time and space had their origin in an exceedingly intricate cosmic beginning 13.73 billion years ago.
embrace other gods and by implication their literary influence in adjacent cultures, the writer is astute not to modify the creative ‘days’ or stages with a culturally pleasing and Sabbath-resonating poetic phrase like ‘and there was evening and there was evening’ or an equivalent phrase to suggest a day ‘from evening until evening’. The Genesis narrator’s culturally discordant choice of ‘and there was evening and there was morning’ would impress Sabbath-keeping and Festival-keeping Hebrew readers of adequate literary attentiveness, who, thinking along the stylistic line I have drawn attention to, would grasp its metaphorical and figurative significance and associate the narrator’s intense repetition of his distinctive phrase, not with days of their world, but with those of the mysterious temporal world of their God who is beyond his creation of heaven and Earth (Gen 14.19b, 22b; 24.3a). Such a God does not keep their Sabbath day, but commands them to do so.

Importantly, the narrator’s well crafted literary performance in avoiding a culturally attractive poetic modifier of yôm as a workday of Rūah ‘elōhîm serves effectively to avoid a direct and probable implication of the invention of just another god, a god who, like so many others, acted on the same plane and with the same actions as his human inventors, here supposedly creating in the same human days that the author himself experienced as a matter of his unique cultural practice. The Spirit would surely want to avoid this perception at all costs. Such a culturally self-serving performance would signal a false physical reality and could be a recipe for unbelief and potential ridicule. Another anthropocentric ancient Near Eastern god would certainly not serve the immediate or long-term interests of the people of the one true invisible God.

The creative acts and their physical effects briefly described in Gen 1.1, 2, 3, 11, 14, 20, and 27, for example, in concert with the interpretation advanced here, now seem to imply the following observation, namely that an ancient text unfolds in a literary meaning so as to demonstrate consistency with a reasonable assessment of modern scientific knowledge supported by experimental findings. That this could actually occur might be considered to be amazing in itself. A harmony begins to emerge between biblical interpretation and the rational structure of the transient physical world around us, wherein the Spirit now rests from his creative work. My analysis here in light of contemporary literary customs has sought for a plausible intuitive understanding that could come from being a part of that era and culture. Physically speaking, it is right to ask how is the interpretation borne out and
lived out? A significant answer here is that the creative deeds of the Spirit as briefly described by this written prophecy have now been seen both in cosmic and Earth history, providing a physical fingerprint of the invisible God, which humankind has now been able to detect.111 Given the assumption of hidden and anti-natural divine action, interaction fully consistent with known physics112 and functioning to build complexity with spectacular design, the prophetic nature of this ancient text may now be understood as having been, in sufficient measure, confirmed by numerous experimental findings.

Perhaps this suggests a need to reflect again upon the nature of the inspiration given to its omniscient narrator who speaks for God who sees and evaluates.113 Prophetic revelations claiming to represent a message from a divinity in a literary format were, of course, not uncommon,114 but when a genuine literary prophecy demonstrates an impressive

111 This creation history (Schöpfungsgeschichte) has eventually yielded the observable effect of a physically harmonious and understandable fingerprint, a schöpferische und physikalische Wirkungsgeschichte, if you will. This physical fingerprint, coherent with hidden divine action, provides an intellectually satisfying glimpse of the Creator’s intentions and accords well with an honest theism, where the impersonal is not to be preferred above the personal (n. 1). I applaud the insight that ‘Theism is concerned with making total sense of the world. The force of its claims depends upon the degree to which belief in God affords the best explanation of the varieties, not just of religious experience, but of all human experience’ (Polkinghorne, Belief, p. 24).

112 Aside from previous comment on plausible divine action in the text of this study, see nn. 61, 96, 101, 107.

113 The omniscient and hidden narrator so speaks as if aligned with God (with Sternberg, Poetics, p. 131). This, and its relative compatibility with experimental findings of modern science, suggest that this creation narrative is one that has a ‘divine nature’ (Lee, History to Narrative Hermeneutics, p. 218), that it embodies ‘a great spiritual vision’ (Dale Patrick and Allen M. Scult, Rhetoric and Biblical Interpretation [Sheffield: Almond, 1990], p. 18), waiting to be fulfilled in due time.

On my reading of Gen 1.1-2.4a as written prophecy that is culturally attuned, the inspirational element would be forceful divine oversight and concern for later observable fulfillment, deterring the natural human propensity to craft just a culturally pleasing and readily understandable contemporary account that would be misleading both then and now.

harmoniousness with scientific experimental verification in the light of sound hermeneutical principles, this suggests the Spirit’s personal anticipative concern and care about forthcoming human experience. A part of this human experience is the development of both theological and scientific hermeneutical tools, through which humankind is now becoming able to frame a coherent interpretation of what the Genesis narrator wrote as he obeyed the Spirit’s inspiration. As cosmic development and the history and sequence of life on Earth become better understood and more transparent, the voice of God that once spoke about his creative deeds within far off days now resonates throughout the world in concert with an ever increasing number of textually harmonious experimental findings. On the narratologically and rhetorically sensitive ancient Near Eastern reading proposed here, the Genesis narrator not only produced an opening introduction to his book that would, on its mysterious surface, serve to complement Sabbath-keeping and devotion with a composition that is artistic and sophisticated, but with one that is deeply prophetic as well. Chouraqui’s literary conclusion seems fitting on this occasion, namely,

‘To think that the Hebrews were simple people who, under their tents, recounted stories which were later put into writing or (to think) that the biblical books are the echo of purely oral tradition is to lose the sense of the Bible (avoir de la Bible une conception aberrante). A text like Genesis is magnificently crafted (magnifiquement surélaboré). It is not only written, it is written as no one ever wrote. I do not know, in all the world’s literature, a text that makes use of such word technique, of such science of expression, of so much art’.

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Moskala, Takamitsu Muraoka, Kirsten Nielsen, John Rea (collaborator extraordinaire), Kevin Spawn, Joe Sprinkle (dialogist *cum laude*), and Ellen van Wolde. Dr. van Wolde, chairperson of the 1996 Tilburg Conference on Narrative Syntax and the Hebrew Bible, is to be thanked for stimulating thereat an atmosphere of studiousness and dialogue. Collaboration rendered by diverse specialists in the various Near Eastern disciplines is also duly appreciated. Responsibility for the interpretation offered here is solely mine.

**APPENDIX**

Sometimes one may have to step back from his or her work and examine a religious, social, and misinformatonal phenomenon that affects one’s own culture over time in a perverse manner. I realize that others could be more qualified to address how a Christian sect within Western culture is able to attract otherwise relatively informed adherents from everyday life, hold sway over pastors, and intimidate educators. I have personally sought for understanding from sociologists, psychologists, and anthropologists among my colleagues and I acknowledge their help. Political scientists might explore how public campaigns with allegiance to scientific disinformation appear to result in governance that panders to a constituency waging a war against all of science, governance that claims that the age of the universe is a matter of debate, not a matter of experimental and observational findings. How such pervasive influence over clientele is exerted and maintained in an otherwise informational age by those with a both a clear theocratic and easily appraised pseudoscientific agenda might merit serious consideration by future historians. I can only share my observations in the hope that they may contribute to a thorough investigation.

During the debate over the experimental findings of Copernicus and Galileo and the ‘biblical’ teaching of a stationary Earth, it took three hundred years before Copernicus’ treatise, *De Revolutionibus*, was placed on the library shelves of Europe. This obscurantism was influenced by the geocentric interpretation of Pope Urban VIII. Now the 43rd president of the United States publicly expresses his religious belief that the age of the earth is a matter of debate. Given this, young-Earthism in at least one Western country may have a long run, because even today there are those who would easily believe that the Earth does not move, especially if told, untruthfully, that the Bible says so.
In any case, over the past thirty years I have gradually made a few observations of this strange religious phenomenon. The details may inevitably be unpleasant, given that they pertain to a very unfortunate cultural development, a tragic development, which has had and continues to have serious retrograde cultural and spiritual consequences. I realize that not everyone will agree with the deductions I draw from these observations. That is certainly acceptable to me. Other perspectives may indeed be possible because the cultural phenomenon under consideration is complex. Perhaps there are spiritual factors at work as well. What is pressing for me is a solution with the hope that what is being observed does not have to run a historical course of several hundred years.

My perceptions of the contentious movement of young-Earthism are based upon studying its literature and tactics, as well as interviewing participating devotees and former adherents. Perhaps my perceptions may serve some explanatory role as to how such an aggressive sect with anti-physical and conflicting tenets, that range from obtuse to unreal, is able to function invasively within an Evangelical Protestant socio-religious group in a Western country. Based upon its behavior, young-Earthism may best be labeled as physical cessationism, as I will attempt to suggest, and not, mistakenly, by a title it pompously employs, ‘creationism’. Perhaps my remarks here, citing several other studies, may help correct and eventually help heal what is a spiritually harmful wound to Christendom and to the better nature of Western culture.

First and foremost, the denial and distortion of both natural revelation and prophetic biblical history, and the danger this presents on many fronts, has admittedly been of concern to many scholars and teachers who have witnessed the devastating mental and spiritual effects of this particular sectarian influence upon some of their students. The ruination of the potential for anointed ministry is a serious concern. Imbibing propaganda against the Spirit’s previous creative work may be reasonably expected to eventually have Spirit-quenching effects.

Unfortunately, but from what I believe to be a fair perspective, it should be realized at the outset that bilking the public, misleading pastors, and indoctrinating students affords young-Earthism leaders an extremely lucrative business. Dinosaur and Noah’s ark museums raise millions of dollars that enrich young-Earthism entrepreneurs who readily grasp the investment potential of further exploitative strategies to lead an unsuspecting public into
‘biblical truth’ and ‘true science’. The marketing of these sectarian interests is a serious commercial enterprise, and not, as its simplistic façade might initially suggest, just a pious but gravely misguided ‘ministry’. The hope of gain totally eclipses any thought whatsoever of the probable adverse spiritual effects stemming from false claims against the Holy Spirit’s creative work in cosmic and Earth history. Doctrine and greed seem to have replaced God and the love of God. Similarly, the hope of gain prevents any serious consideration of the many obvious difficulties with young-universe ideology. As to the strange anti-physical attitudes explicit in young-universe ideology, I must compliment the pastoral effort of astronomer Hugh Ross to correct these and to attempt to restore some measure of basic biblical sanity (so, his *Creation and Time: A Biblical and Scientific Perspective on the Creation-Date Controversy* [Colorado Springs, CO: NavPress, 1994]). However, the entrepreneurial spirit of young-Earthism leadership appears undeterred.

Physical cessationism itself is a movement that germinated around the practical ploy of simply erasing time so that macro-evolution would not be able to happen. Around the middle of the twentieth century physical cessationism was conceived and successfully propagated by those who devoutly and militantly held that the Pentecostal/charismatic faith-tradition was akin to ‘modernist thinking’ and stemmed from ‘beliefs and experience rather than the Bible’ (Ronald L. Numbers, *The Creationists: The Evolution of Scientific Creationism* [Berkeley: University of California Press, 1993], p. 307). In 1971 the former chairperson of the science department at Lee University, a Church of God liberal arts institution, ‘warned Pentecostal theologians not to be taken in by claims for a young Earth,’ noting correctly that ‘great care should be taken to distinguish between facts and theory, original works and philosophers’ thinking’ (so, Myrtle Fleming, cited in Numbers, *Creationists*, p. 307).

Rationalistic germination around the idea of erasing time and reinventing the entire universe would seem like a ridiculous, nonsensical task. So one has to ask, how could this seem feasible to some? A major part of the answer lies, I believe, in the contemporaneous condemnation of and condescension toward those who hold the aforementioned ‘modernist thinking’ and who supposedly endorse ‘beliefs and experience rather than the Bible’. Here I refer to global Pentecostalism and the International Charismatic Renewal. This hostile attitude was directed toward those who rejected the supposed intellectual superiority of
doctrines that encapsulated selectively filtered spiritual experience within an ‘apostolic age’, as set out in traditional Protestant dispensational theory with its repeated history of formal Protestant embellishment reaching back to the mid-nineteenth century (for an analysis of one aspect of this theoretical scheme, see Peter E. Prosser, Dispensationalist Eschatology and Its Influence on American and British Religious Movements [Lewiston, NY: Edwin Mellen Press, 1999]).

It may be suggested that this aforementioned attitude arising from an unconditional allegiance toward ‘apostolic-age’ doctrinal purity and an unconditional acceptance of a divine edict of cessation of arbitrarily selected spiritual enablements, does appear to have all the hallmarks of an absolutistic philosophy. Given the flimsy textual evidence from which it was invented and formalized by Protestant scholars, the quick and dogmatic claims of some even today who champion its supposed unquestionable status seem, to many, difficult to accept and even to comprehend. For a large sector of Christendom, such an absolutistic attitude unavoidably illustrates an implicit form of disrespect toward those who do not readily fall in line with the traditionally established cessationistic paradigms of the Protestant faith-tradition of centuries past. Throughout the last century those who disagreed were often treated as unpersons and as if they simply could not be of any intellectual significance. On the positive side, however, these unpersons were thereby inoculated, for the most part, from the ensuing ultra-rationalistic and false claims of young-Earthism.

Similarly, at least the impression of epistemological arrogance, in my opinion, was at the root of the belief among a few Evangelicals in the middle of the last century that all of experimental science should be written off and that only one possible ‘interpretation’ of biblical texts was ‘right’. At that time, such a self-centered and self-serving attitude appears to have lent itself to the delusion that it would be ‘right’ to simply construct or invent another temporal-confining epoch, a new doctrinal epoch not at all unlike the temporal chasm constructed in past Protestant dogmatics between the original and later readers of the New Testament used to justify a system of ‘apostolic-age’ reading of New Testament texts. The success of dispensationalism within Evangelical Protestantism, an epochalistic scheme that supposedly eliminated ‘beliefs and experience rather than the Bible’, could be duplicated in the physical realm. Perhaps this duplication of similar ‘success’ may be appraised as a pious delusion, but one that nevertheless came to pass.
The founders of young-Earthism believed that such a new chasmal and epochalistic belief-system was both appropriate and feasible. It would nicely imitate what was already in place in their faith-tradition. It was feasible because it could be successfully marketed and touted as ‘biblical’ among a group of Evangelical Protestants. This group was already well conditioned to easily defer to another scheme of cessationistic claims. Among such clientele an epoch of physical erasure would never be unmasked as pious charlatanism. Its underpinnings would go unquestioned. No doubt the founders of physical cessationism were sincere, as were those who believed that since the Earth had four corners, according to Rev. 7.1, it must be flat. A possible difference between flat-Earth ideology and the mindset of the inventive founders and initial propagators of young-Earthism is that the latter undertook to seek to destroy the experimental foundations of modern science and eventually establish a political theocracy, with all due piety, of course. At least, that is how it has turned out and how the evidence may be understood.

As a concrete example of this seemingly presumptuous attitude and lack of humility, it was well known in the mid-twentieth century that Edwin Hubble had successfully measured galactic recession at the Mount Wilson Observatory in Pasadena. It was a matter of common public knowledge that Einstein, at the height of his popularity for predicting that gravity bent light, had traveled from Princeton to visit Hubble on the occasion of his great discovery. It was also well known that Einstein had then announced that Hubble had discovered strong evidence for a beginning of the universe and that this expansion from that beginning was real. Einstein spoke of a Beginner and what Einstein said at that time got into the press and quickly into the public sphere. The founders of young-Earthism were certainly aware that even readers of contemporary newspapers had been exposed to these events. How then could this information be erased?

The Andromeda galaxy, the first galaxy to be detected by humankind outside of our own Milky Way galaxy, was known at that time to be several million light years away (now measured at 2.52 million years away). The concept of an extra-biblical cessation that served to temporally erase those several million years of time for light from the Andromeda galaxy to reach Earth was actually just a little physically cessationistic starter in the bigger ploy of physical erasure and cessation. However, this particular little cessationistic erasure, focused on a well known galaxy in the public media, would pose a troubling tension for all those
who would now be told that the only possible correct way to determine the expansion-age of
the entire universe was to count up Old Testament genealogies, ignore any gaps, and then
add to that total six twenty-four hour days.

That a few thousand years, months, and days must replace, for authentic Christians,
those several million years of time travel between us and the Andromeda galaxy, with much
more time to be erased later, would pose a troubling tension in people’s lives. But that
tension was disregarded. Authentic Christians would not be troubled by ‘truth’. There was
a marked lack of pastoral concern. An expanding universe and its probable beginning--
discovered in 1964 by Penzias and Wilson--must also be disallowed. ‘Right’ must be done
and the epochalistic mindset of modern cessationism knew how to do ‘right’.

As a little boy in grade school I joined the Indiana Astronomical Society and my
father took me to many of its meetings and social gatherings. We visited the observatory at
Indiana University to see the famous star cluster known as Messier 13. Photographs
published at that time in the press of the great Andromeda galaxy were beautiful and with
my small telescope I could quickly locate it. The summer after my eighth-grade graduation
from Trinity Lutheran School in Indianapolis my pastor caught up with me reading a book
on variable stars at a church picnic. Periods of some variable stars, stars that vary
periodically in their intrinsic brightness like some in the Andromeda galaxy, are useful in
determining distance to that galaxy. Had my Lutheran pastor told me then that the distance
to the Andromeda galaxy was not real and that perhaps even the galaxy itself was not real,
and that Henry Morris and John Whitcomb said that such science was tinged with
ungodliness since it contradicted the Bible, my fragile little-boy faith would have been
undermined and placed in tension with reality. The desire I had at that time, to be the
astronomer in our family, might have been broken.

It is evident that in their fantasy of cosmic revisioning the concocters of young-
universe ideology did not really care about that little boy or about all the other young minds
they would eventually subvert and tragically indoctrinate. Instead, perhaps what came
foremost into their view, since their implausible notions had led their respective academic
institutions to say au revoir to them (in Morris’ case against his tenure), was a single-
minded opportunity to be influential within their own cessationist tradition and religious
culture. That religious culture was indeed both uncorrective and receptive to a physical
extension of its own dispensational mindset. However, imposing another cessationistic epoch on God and limiting, erasing, and defining what He could do or did not do, especially when camouflaged as ‘biblical truth,’ did infiltrate other faith-traditions to a limited extent.

When I was teaching astronomy and physics at California State University at Northridge, Henry Morris’ young-Earthism co-founder, John Whitcomb, contacted me about reading and commenting on his manuscript, assisted therein by Donald DeYoung, for a forthcoming book, *The Moon: Its Creation, Form and Significance* (Winona Lake, IN: BMH Books, 1978). No doubt naively, I tried to respond thoughtfully with some critical comments that were entirely ignored; nevertheless my name was listed as a scientific collaborator in one of the most misguided books ever to reach print, a dubious distinction co-shared with Morris’ *Science and the Bible*, a review of which is highlighted below.

Although certainly having no direct relation to the present study of Genesis 1 and the Spirit, nor to any reputable biblical or scientific studies of any kind, over the past half-century young-Earthism has, nevertheless, been able to dogmatically misrepresent both the authorial intent of the Pentateuch together with all of physical reality. This is a remarkable achievement as well as an indictment of both the biblical and scientific literacy of some within Western culture. Morris’ and Whitcomb’s initial misrepresentations, now pressed further by their young-Earthism progeny like ‘Answers in Genesis’ and ‘Dr. Dino,’ are slyly skillful in their effort to be deliberately inconsiderate of all inconvenient evidence and scholarship, both scientific and biblical. Gary Eamberger, “Theological Analysis of Selected Recent Creationist Assertions Concerning the Occurrence of Death before Sin,” *Perspectives on Science and Christian Faith* 52/3 (2000), pp. 160-68, attempts to correct physical cessationist writers who follow in the train of Morris and Whitcomb.

Young-Earthism misrepresentations continue to be aimed at unsuspecting Christian clientele and at the public sphere, both of whom are duped by the pious-sounding and boisterous claim of ‘biblicalness’, the nation’s youth being a special target. A thoroughly irresponsible distortion of both the nature and the benefits of all of experimental science for the public good is an ever-present and dangerous drumbeat. Accordingly, the deportment of this Evangelical Protestant sect may be considered a dire influence. This behavior also especially obscures any serious attempt to understand and appreciate what the Genesis narrator most probably had in mind for his Sabbath-keeping literary audience.
By physical cessationism then, I mean the banishing to nonexistence, the erasure, of many wise and important creative actions of the Spirit. Such reasonably inferable actions, reasonably inferable on my argument by spectacular creative actions that run counter to an exclusive naturalistic paradigm and are now observable for the benefit of humankind, are unwelcome as far as devotees of young-Earth ideology are concerned. Such intriguing and impressive experimental findings of modern science must be, at best, ignored in this anachronistic version of flat-Earth and stationary-Earth ideology. Since all the interconnected laws of physics known today and much of experimental science today are in continuity with the past, thereby allowing beneficial exploration of the past so as to better understand the present, all disciplines of modern science are, to the mind-set of physical cessationism, essentially unwelcome. They must be nullified and erased, replaced by ‘true science’. Past creative actions of the Spirit are then made to disappear from both cosmic and Earth history. This mirage is perpetrated in exactly the same manner that personal actions of the Spirit are made to vanish and so be brought under suspicion. The anti-literary imposition of artificial epochs on New Testament texts, as in paleoreformed dispensationalism, resulting in effect to extinguish spiritual reality, is extended methodologically in young-Earthism by the foisting of similar artificial temporal periodization upon physical reality so as to extinguish awesome, prophecy-fulfilling, but cessationistically unwelcome acts of God.

and absolutistic philosophical commitment had already been made. Extending it may seem to that mindset to be perfectly appropriate. Further thought-life in this entire domain, other than repetitive efforts to justify that commitment, appears to simply be off the radar screen, even though the screen is sweeping over many identifiable blips. Perhaps future historians may find this phenomenon of religious behavior to be broadly explainable in a way other than the one I am suggesting, but if so, I at least submit that the young-Earthism mindset is deeply tied to physical cessationism as a redeployment of dispensational proof-texting and “apostolic-age” hermeneutics.

From the perspective of an outside observer this aforementioned worldview--one that would indeed appear alien to the New Testament writers--appears to be a worldview that amounts to a rationally exuberant extension of Calvinistic piety. However, Calvin himself, who once remarked that we should all be astronomers, would probably not sign off on the dictums of young-universe ideology. In my analysis of this sectarian development, the model of dispensational closure already imposed upon New Testament thought afforded a scheme that by its overt rationalistic charm would conceptually await another extension, another continuation or embellishment, another redeployment. Modern cessationism easily served, in my opinion, as an ideological hotbed for an uncritical political and theocratic extension of itself to ‘true believers’, namely the concoction and propagation of its physical outgrowth and counterpart, with an accompanying anti-physicality underpinned by a procedure of unliterary shredding of biblical texts to ‘make it fit’ that was already in place.

The erasure from ‘authentic Christianity’ of non-rational spiritual experience after enscripturation (see Ruthven, *Cessation*), was simply transferred ideologically to the physical realm. *Another artificial temporal epoch was imposed, this time, not directly upon God, but upon his universe and indirectly upon Him, an arbitrary epoch again purported to be historical and again with tight temporal boundaries.* This presumptuous and pious philosophically-driven method, now reapplied to the absolutistic elimination of the Spirit’s creative acts, is, while incredible to many, continuously and dogmatically flouted by its adherents as ‘biblical’. But it is doubtful that the probable intentions of competent and intelligent biblical authors will be determined by this anti-literary tactic, although their communicative intentions may be masked and confounded for a time.
For many observers in the academic community, this willful style of denial and distortion of physical reality yields nothing short of deeply unbiblical charlatanism allied to ghastly pseudoscience. Given the adverse cultural phenomena that we are attempting to understand, this characterization by observers may not be unduly harsh. Perhaps it might provide for a glimmer of correction, if it would be contemplated. For many in the theological academy, other manifestations of this posture of epistemological arrogance represent a misleading form of fundamentalism that is difficult to reconcile with the meaning of faith (so, Cheryl Bridges Johns, ‘Athens, Berlin, and Azusa: A Pentecostal Reflection on Scholarship and Christian Faith’, *Pneuma: Journal of the Society for Pentecostal Studies* 27.1 [2005], pp. 136-47).

Regrettably as well, the physically cessationistic, creation-defying, and Gospel-alienating posture of young-Earthism organizations today toward both biblical and scientific challenges has been authoritarian. Many view this posture not as consistent with ethical policy, but as dissembling. Cessationistic organizations, keen to develop their very lucrative financial base and gain political influence, have systematically denied, disparaged, and misrepresented all kinds of valid biblical and scientific information on topics relative to public policy. The benefits of all experimental science within democratic governance, since all of science is suspiciously ungodly, are apparently to be filtered through their theocratic agenda.

In the fantastic scheme of physical cessationism the foe of macro-evolutionary theory is replaced with the promotion of young-Earth Darwinism, that is, the unobserved evolution of animals to repopulate the Earth after a supposedly global flood (for correction of this hoax, one among many, cf. Ross, *Genesis Question*, pp. 145-72; idem, *A Matter of Days: Resolving a Creation Controversy* [Colorado Springs, CO: NavPress, 2004], pp. 121-29; John C. Munday, Jr., ‘Eden’s Geography Erodes Flood Geology’, *WTJ* 58 (1996), pp. 123-54). With some degree of objectivity, the American Physical Society passed a corrective resolution in 1981 befitting the threat to science and society posed by physically cessationistic claims. This reads, in part: ‘In contrast to “Creationism”, the systematic application of scientific principles has lead to a current picture of life, of the nature of our planet, and of the universe which, while incomplete, is constantly being tested and refined by observation and analysis’.
Dramatically misusing the concepts of ‘creationism’ and ‘intelligent design’ toward profitable and political ends, it would appear that democratic governance is to be replaced by an Orwellian theocracy based on pseudoscience. Any Christian or any democratic opposition to this scheme simply cannot be the Christian position. Lavish Noah’s ark and dinosaur ‘creationist’ museums display the Christian position. Splashy television studios with bombastic dinosaur exhibits and the latest Noah’s ark discoveries serve as the backdrop for presenting a pageantry of fables as ‘true science’ to an often astonished public. Gullible and scientifically illiterate Christians supply the monetary engine, which historians may later assess as a disgrace to Western culture and its better values. Young-Earth Darwinism supposedly expresses the Christian worldview. Just enough spiritual truth is admixed to cleverly provide the necessary sectarian ingredient, that of contributing to an enticing allure for potential devotees. Shamefully, physically cessationistic doctrine is touted as ‘the word of God’.

The Genesis narrator and biblical credibility are just two of the many casualties. Reasonable arguments for intelligent anthropic-oriented design from reputable physicists might fall on deaf ears as well, being wrongly perceived as repackaged ‘stealth creationism’, a derisive term applied to an embarrassing sect that has anathematized itself to the thinking community.

However, with respect to a coherent reading of the Pentateuch, why is it better to believe that Adam was endowed with mythological hyper-speed to name the animals within the Genesis narrative and that plants and animals therein were originally endowed with immortality? Why is it better to believe that hundreds of dinosaur genera and species, although very much long, long dead (see n. 108 above), including carnivores like *Tyrannosaurus rex* whose dimensions ranged up to twelve meters and seven tons (E. Stokstad, ‘*Tyrannosaurus rex* Gets Sensitive’, *Science* 310 [2005], pp. 966-67), all had suites in Noah’s ark and played with children?

Doubt, even if sincerely expressed by devotees of young-Earthism, concerning a pantheon of improbable and bizarre claims exuding a mythological aura, is, unfortunately, met by demagoguery. That all science is an ally of satan is the demagogic brainwashing tactic of choice. John Burgeson, in his review of Henry Morris’ *Science and the Bible* (Chicago: Moody Press, 1986), the most venerated sectarian tome by one of the founders of
‘creationism’ (Numbers, Creationists, 184-213), asks the readers of his review to ‘Imagine a world in which the practice of science is primarily qualitative. A world where the highest use of science is seen as that of supporting one group’s interpretation of secondary references in an ancient and honorable book . . . Welcome to Henry’s world . . . Welcome to a world in which dissent implies satanism, skepticism implies evil thinking’. Burgeson concludes that ‘The science it [Morris’ Science and the Bible] portrays is myopic, irrational, avoids hard questions, and takes little note of real science, either historically, or in this age . . . Put this book on your shelf then--right next to that of Immanuel Velikowski’ (Perspectives on Science and Christian Faith 48.1 [1996], pp. 56-57).

Sociologists can probably explain the result when counterfeit claims are hammered home among devotees. To question the physically cessationistic faith, to even think about reasonable alternatives, would be to embrace the slippery slope to atheism! It seems fair to say that the gullible are bewitched. I have personally witnessed good physics students discard everything they ever learned about physics almost overnight when they fall under the spell of the absolutistic philosophical influence and propaganda of this sect. The destruction of the promise of their professional lives is heartbreaking. Their former inquisitive nature is stamped out and they appear mesmerized as if in a mental reversion to another time, as if when flat-Earth or stationary-Earth worldviews were prevalent because they too were deemed ‘biblical’. Oddly, devotees captured by the sect do not find it problematic to enjoy the technology of a scientific age; it is the experimental and observational methods of modern science and engineering that underpin that technology they must reject. Their lives become full of fear and they withdraw from scientific discussion. They become afraid of what they don’t know and of what they might know. In light of these terrible causalities and given the silliness of the young-Earth gospel (the Iowa Academy of Science ranking it alongside belief in levitation and UFOs), using charges of atheism by young-Earth leaders to suppress thought makes an appearance of disingenuousness that is difficult to avoid.

It may be fairly concluded that ‘To understand twentieth-century creationism, little knowledge of formal science and philosophy is necessary; familiarity with the Byzantine world of popular religion is essential’ (Numbers, Creationists, p. 337). What little knowledge victims themselves may have originally possessed appears soon to be
extinguished by pious assurances that now they have learned the ‘truth’; the fantasy of being absolutely ‘right’ about all of physical reality, without any effort, has an easy and darkening charm. Quite possibly, history may assess that flat-Earth and stationary-Earth ideology may, unfortunately, extend intellectually downward to an ultimate ideological and cultural nadir in the twentieth-century conception of physical cessationism.

As far as education is concerned, the boisterous theocratic agenda of physical cessationism has shown no interest whatever in hermeneutical principles or in biblical scholarship. Alarmingly, however, its liberally unthoughtful version of ‘Christian’ education effectively weakens and marginalizes the teaching of physics, astronomy, and geology, thereby destroying culture while perverting the Gospel (so, Langdon Gilkey, Blue Twilight: Nature, Creationism, and American Religion [Minneapolis, MN: Fortress, 2001], p. 52). Another irenic unmasking of the physical cessationistic young-universe worldview demonstrates how the hearts of the unsuspecting can be deceived, putting school children so exposed at risk, while bringing grave danger to the Gospel and potential devastation to biblical faith (so, Mark S. Whorton, Peril in Paradise: Theology, Science, and the Age of the Earth [Waynesboro, GA: Paternoster, 2005], pp. 216-19).

Perhaps then, for any or all of the above reasons, this is why the Hebrew scholar William Sanford LaSor (‘Biblical Creationism’ [n. 83 above], 7) insightfully refers to the make-it-fit ideology and false biblical claims of young-Earthism as representing a ‘cult of creationism’.

In summary, as New Testament cessationism brings truncation to the Gospel, so too does its physical rendition stemming from the same ideological hotbed. Also, the Spirit-quenching and Gospel-alienating physical rendition of cessationism poses serious danger to every potential victim within its reach. Young-Earthism has the ominous potential to disable thinking skills, obstructing and hindering God’s call upon young men and women to productive careers in biblical studies, theology, natural sciences and engineering (hence Langdon Gilkey’s warning in Blue Twilight about the destruction of culture). It is evident that false, militant, and bizarre claims against the Spirit’s creative work undercut and destroy motivation for such careers. Perhaps the most unchristian of all the consequences of physical cessationism’s sectarian erasure and willful denial of much that is found to be wise, important, enriching, and perceptible in creation, as prophetically revealed, in part, by the
Genesis narrator, is that the dissemination of misinformation serves to obstruct and hinder the possible perception of God’s eternal power and divine nature through an understanding and appreciation of the Spirit’s past creative deeds.