THE "DAYS" OF CREATION IN GENESIS 1:
LITERAL "DAYS" OR FIGURATIVE "PERIODS/EPOCHS" OF TIME?

Gerhard F. Hasel
John Nevins Andrews Professor of
Old Testament and Biblical Theology
Andrews University
Berrien Springs, Michigan


I. INTRODUCTION

The increased focus of recent decades on creationism, "creation-science,"1 "origin science,"2 and "theistic science"3 has created a climate in which old questions are raised anew with specific focus and additional sophistication. One of those questions concerns the meaning of the term "day" in Genesis 1:1 - 2:3.

The nature of the Genesis account of creation with its six "days" (Genesis 1:5-31) followed by the "seventh day" (Genesis 2:2-3) is of special interest, since it is customarily understood to mean a short time of one week. This short time in the creation account is under debate on the basis of the current naturalistic theory of evolution. The contrast is between the short time of the creation account and the long ages demanded by naturalistic evolution.

This paper will seek to accomplish several interrelated tasks: 1) to provide some methodological observations with a brief history of interpretation; 2) to cite representative recent published opinions suggesting that the "days" of creation are long epochs or periods of time and not literal twenty-four hour days; 3) to present the data in Genesis 1 in relationship with other data found in the Old Testament; and 4) to apply to the data of Genesis 1 the standard linguistic and semantic investigations requisite in sound scholarship based on the best current knowledge.

II. METHODOLOGICAL OBSERVATIONS AND THE HISTORY OF INTERPRETATION

A knowledge of some aspects in the history of interpretation of the "days" of creation in Genesis 1 may prove to be helpful from the perspective of methodology for interpretation. Historical information assists the modern interpreter to recognize that it is incorrect to suggest that only since the publication of Charles Darwin's epochal work, On the Origin of Species (1859), the Genesis creation "days" were transposed into non-literal periods of time. Earlier extra-biblical considerations led interpreters to depart from the literal meaning of creation "days."

1. Some Medieval Understandings of Creation "Days"
The Alexandrian church father Origen (ca. A.D. 185 - ca. 254), an accomplished practitioner and defender of the allegorical method of interpretation, is credited with being the first to understand the creation "days" in an allegorical and non-literal manner. Augustine (A.D. 354 - 430), the most famous of the Latin Fathers, followed Origen in arguing that the creation "days" are to be understood allegorically, rather than literally. Augustine is understood to teach that God created the world in a single flash of a moment.

At this point it seems appropriate to reflect on some methodological matters. Neither Augustine nor Origen had any evolutionary concept in mind. They took the creation "days" as non-literal, standing for something else, because it was philosophically mandatory to assign to God creation activity which was unrelated to human time. Since the "days" of creation are related to God, it was argued, these "days" have to be representative of philosophical notions associated with God taken from their philosophical perspectives.

In Greek philosophy God is timeless. Since the creation "days" are part of divine activity, it was assumed that they also should be understood in a timeless sense. The thinking of Origen and Augustine was influenced by Greek philosophy, not by scientific speculations, which led to a reinterpretation of the creation "days."

What this approach has in common with modern attempts, which also take the creation "days" to mean something other than what the face value of the terminology seems to suggest, is that both are based on influences from outside the biblical text itself. Medieval theologians, who took the creation "days" to be non-literal, based it on non-biblical, pagan philosophical modes of thinking.

Today there is another influence from outside the biblical text that leads interpreters to change what seems to be the plain meaning of "days." At present it is a naturalistically based scientific hypothesis, the modern theory of evolution, which provides the impetus for such changes.

The thinking of medieval Catholic theologians was influenced by the Alexandrian allegorical method of interpretation. The fourfold sense of Scripture was adopted in medieval times and is still supported in current official Roman Catholicism. The three non-literal meanings of the fourfold sense of Scripture (i.e., allegory, anagogy, tropology) carried the day and held primary importance for over a millennium in Christendom, providing the hermeneutical means for the reinterpretation of the literal sense of the creation "days."

2. Reformation Understanding of Creation "Days"

The sixteenth-century Reformers agreed that the fourfold sense of Scripture compromised the literal sense of the Bible, making its authority for faith and life null and void. They insisted that the single, true sense of Scripture is the literal sense, the plain meaning of the text.

One of the major achievements of the Protestant Reformation is the return to Scripture. This meant that Scripture is in no need of an external key for interpretation — whether that key be the Pope, the church councils, philosophy, or any other human authority. Scripture's clarity and perspicuity became the norm of the day; its reading from within its
own context was paramount. External meaning must not be superimposed on it, as had been the practice under medieval Catholicism. The Bible was to be read in its literal and grammatical sense.9

Martin Luther, accordingly, argued for the literal interpretation of the creation account: "We assert that Moses spoke in the literal sense, not allegorically or figuratively, i.e., that the world, with all its creatures, was created within six days, as the words read."10 The other Reformers understood the creation "days" in the same way.

This literal and grammatical interpretation, known in the history of hermeneutics as the historical-grammatical method, was the norm for biblical interpretation more or less into the nineteenth century.11

3. Changes Under the Influence of Modernism

As the concept of long time periods made its way into the understanding of Earth's origins in the wake of the publications of James Hutton (1726-1797) and Charles Lyell (1797-1875), some Christian concordist interpreters started to reinterpret the Genesis "days" of creation in a non-literal manner. The impetus for this was not found in the Bible itself but in the new world view which was being developed on the basis of uniformitarianism and its concomitant understanding of origins which demanded long periods of time.

The understanding of the creation "days" as "days of restoration,"12 "days of revelation,"13 aside from taking a "day" for an "age" ("day-age" theory) or an epoch/era,14 goes back to this time and the changes in time frames required by the new geology. The approach of a non-literal reinterpretation of "days" was typical of concordists who had accepted long ages for the origin of Earth.15 In view of these developments, it is unavoidable to conclude that external influences exerted by a new understanding of geological ages became the catalyst for the reinterpretation of the "days" of creation.

4. Recent Changes in Interpretation Among Broad Concordists

Broad concordists of the last ten years are increasingly attempting to interpret the "days" in the Genesis creation account in non-literal ways, in order to bring about harmony between the long ages called for by the evolutionary theory and the time implications of the biblical record of divine creation in Genesis 1.

It is an acknowledged fact that the long and checkered history of the relation between science and Scripture has had an impact on the present understanding of the Bible.16 The shift from the Ptolemaic world view to the Copernican one is probably the most celebrated example.17

The non-Christian Ptolemaic world view had been adopted by Christian medieval theologians both as the correct Christian and biblical view of Earth. Earth was conceived as the center of the solar system, and often of the universe. It became a first-class dilemma when the heliocentric Copernican world view became prominent and seemingly irrefutable.

From a methodological point of view the interpretational model at work by the scientist as interpreter of data observed in nature will predetermine to a large degree the
outcome of the enterprise itself, as well as the meaning of data derived from non-natural sources, including the Bible. It is generally recognized that "scientific theories do affect biblical interpretation at least to the extent that they become the occasion for reassessing the interpretation of a few passages (Genesis 1-2; 6-8)." 18 The decisive question which emerges is whether the reassessment becomes a superimposition of a meaning on the biblical text on the part of concordists and others — a meaning which is alien to the meaning found in Scripture within its own context.

At least two major options seem to present themselves: 1) A reassessment on the basis of "scientific" conclusions could lead to an interpretation of biblical texts which is permitted within the framework of the context and intention of the totality of Scripture. In such a case the reassessment does not do violence to the internal norms of cohesion and unity of Scripture. 2) The reassessment of a biblical text could likewise lead to a conclusion regarding the specific meaning of a given biblical text or a biblical passage which does not agree with what a current scientific hypothesis holds. For those who accept full biblical authority this should lead to a reassessment of the conclusion(s) drawn from the interpretation of data in nature by the scientist. The latter, in turn, may affect the scientific theory, or science broadly perceived, "at the very least by leading us to reassess whether all the conclusions drawn from a scientific theory are warranted, or in some cases to ask whether the theory as a whole is suspect." 19

5. The Inherent Authority of Scripture

Some have taken the stance that a scientific theory, by its very nature and the breadth of its acceptance, has priority over Scripture. 20 It is far beyond the confines of this paper to unfold the complexity of this question. Suffice it to say that if Scripture is understood to be the result of divine revelation and written under inspiration, it would have a dimension of authority not found in the so-called book of nature. Based on that higher dimension of authority, Scripture can assist in interpretation of the book of nature, providing a more comprehensive model of interpretation than might be expected from a purely naturalistic model.

Scripture, if it is to maintain its own integrity, can hardly be interpreted in such a way as to be accommodated time and again to any kind of interpretation derived from science, sociology, history, etc. Scripture, based on its own nature and authority, has its own integrity of meaning and its inherent truth claims. They emerge ever more clearly on the basis of a careful study of the Bible with sound methods of interpretation which are in harmony with and rooted in the testimony of Scripture itself. This implies that Scripture's authority resides in itself; it is based in revelation and grounded in inspiration.

The self-sufficiency of Scripture of which we have spoken does not mean that any question raised from other areas of investigation such as science, history, sociology and so on cannot be discussed with reference to Scripture. But there is a vast difference between asking new questions of Scripture and superimposing meaning on Scripture.

III. FIGURATIVE INTERPRETATIONS OF THE CREATION "DAYS"
1. Representative Arguments for Long Ages

The clearly stated purpose of current attempts to interpret the "days" of Genesis 1 in terms other than face value is often quite clearly stated. A few citations from respected scholars will speak for themselves.

John C. L. Gibson, a British scholar, argues that Genesis 1 is to be taken as a "metaphor,"21 "story," or "parable,"22 and not as a straightforward record of events of creation. He writes in his 1981 Genesis commentary as follows:

... if we understand 'day' as equivalent to 'epoch' or 'era', we can bring the sequence of Creation in the chapter into relationship with the accounts of modern evolutionary theory, and so go some way towards recovering the Bible's reputation in our scientific age.... In so far as this argument begins with an attempt to go beyond the literal meaning and to take the week assigned to Creation as a parable of a much longer period, it is to be commended.23

In 1983 the German commentator Hansjö Brä states:

The creation 'day' which is described to contain 'evening and evening [sic]' is not a unit of time which can be determined with a watch. It is a divine day in which a thousand years are equal to but yesterday [Ps. 90:4 in margin]. Day one in creation is a divine day. It cannot be an earthly day since the temporal measure, the sun, is still missing. It will, therefore, do no harm to the creation account to understand creation in rhythms of millions of years.24

D. Stuart Briscoe, an American progressive creationist, addresses the issue in his commentary on Genesis as well:

The natural scientist talks convincingly in terms of millions of years and evolutionary eras while the Bible believer looks at the six days and wonders what on earth to do.... It is not at all unreasonable to believe that 'day' (Hebrew, yôm), which can be translated quite literally as 'period,' refers not to literal days but to eras and ages in which God's progressive work was being accomplished.25

Explanations of this kind can be duplicated and derive typically from scholars who are in the concordist camp. More precisely they belong to the branch of "broad concordists" who in recent times are associated with progressive creationism.26

2. Analysis and Evaluation of Psalm 90:4 and 2 Peter 3:8
Psalm 90:4

Let us begin with considerations concerning Psalm 90:4. This passage has been invoked time and again to indicate that the creation "days" are to be non-literal, standing for long periods/epochs/ages of time.

Psalm 90:4 reads: "For a thousand years in Thy sight are like yesterday when it passes by, or [lit.'and'] as a watch in the night" (New American Standard Bible). Of immediate interest is the comparison of the long time-period of 1,000 years with but "yesterday" and "a watch in the night." This Scripture passage contains a comparative particle in the original Hebrew to make the comparison between 1,000 years and "yesterday" and "a watch in the night." The comparative particle is rendered into English either as "like" or "as."

From the point of view of Hebrew syntax this comparative particle serves not only the expression "yesterday" but also the expression "as a watch in the night." It applies to both phrases. This demonstrates that the comparison is not between a "day" being like 1,000 years. A thousand years with God are "like" yesterday, that is, the past day, or "like" "a watch in the night," which is even a briefer period of time than "yesterday." The point is that God reckons time differently from the way humans reckon time.

Genesis 1 is not interested in depicting how God reckons time. The Genesis context of creation speaks of "days" in the sense of creation time during which God created this world and whereby He set the rhythm of the week. Genesis 1 does not explain or address how time is reckoned on God's scale, but how the creation "days" set the norm for subsequent days in the weekly cycle of time.

Furthermore, Genesis 1 lacks any comparative particle such as "like" or "as" in connection with the usage of the term "day." The lack in Genesis 1 of a Hebrew comparative expression with either the term "day," or the expression "evening and morning," indicates that no comparison is intended. Comparison is not the issue in Genesis 1. The issue is the amount of time God uses to create the world and whether this time period is identical to the seven-day week which is the rhythm of historical time.

From contextual as well as grammatical-syntactical and semantic points of view the application of Psalm 90:4 to Genesis 1 does not work. Appropriate linguistic and phraseological criteria of comparison are lacking. Those who link the two texts are insensitive to contextual, linguistic and phraseological criteria. The impression is left that those who compare the "days" of Genesis 1 with the "yesterday" and the "watch in the night" or the 1,000 years in God's scale of time compare apples with oranges.

Another type of objection has been noted in making the creation "days" into long periods of time: if one were to read the "sixth day as the sixth epoch of creation, this opens the door to some kind of pre-Adamic homo [sic] sapiens." In other words, the long-age substitution for a literal "day" does away with the view that Adam and Eve were the first human beings which God created on Earth.

A third difficulty relates to the fact that Psalm 90 is not a creation psalm. Contextually speaking Psalm 90 does not address the issue how God regards the "days" of creation but how humans are to regard time when compared to time in the realm of God.

Fourth, Psalm 90 does not even use the term "day" by itself. It is used in a linguistic relationship in verse 4 in which two words are syntactically joined together. The English language has one word for that linguistic relationship, "yesterday." But "yesterday" in
Psalm 90:4 is in parallelism with the expression "as a watch in the night," i.e., a very short interval of time. This means that the 1,000 years are not compared simply to a day but to a short interval of time.

In short, Psalm 90:4 does not define the meaning of the designation "day" in Genesis 1. In view of the problems cited and other difficulties that exist, it is not surprising that many of those who currently take the "day/age theory" as a solution to the tension between science and religion refrain from referring to Psalm 90:4. This text when read on its own terms does not address the issue of the length of the creation "day."

2 Peter 3:8

Broad concordists have also used 2 Peter 3:8, "... with the Lord one day is as a thousand years," to support the day-age theory. It has been taken by some as a "biblical" mathematical equivalent "one day equals a thousand years" literally. Others take the 1,000 years to mean a long period, an age, or the like. In that case it is argued that "one day equals a long period of time" or "one day equals an age."

It should be pointed out that those who invoke this text face several major problems: 1) 2 Peter 3:8 has no creation context; 2) 2 Peter 3:8 has a comparative particle which is lacking in Genesis 1; 3) 2 Peter 3:8 is used non-literally when the 1,000 years are taken to mean an "age" or the like; 4) 2 Peter 3:8 reveals that God is not limited to time or subject to it in fulfilling His promises.

The intent of this passage is well put by Lloyd R. Bailey, a broad concordist himself:

_The text of 2 Peter (3:8) has been misused by those who would bring it to bear upon the word 'day' in Genesis 1.... Rather, the purpose of that text is to point out that 'The Lord is not slow about his promise ... but is forbearing ... not wishing that any should perish ...' (3:9; cf v. 4). That is, God is not subject to time in the sense that humans are ('... as some count slowness,' v. 9). The intent, then, is to make a statement about God's fidelity to promises, and not to define the meaning of the word 'day' as it is used in Genesis 1.30_

It seems best to let 2 Peter 3:8 make its own point and not to use it for something which is topically, contextually, and linguistically unrelated.

3. "Days of Revelation"?

The theory that the creation "days" are actually "days of revelation" is held by a few scholars today.

This theory was brought to prominence by the Scottish geologist Hugh Miller in the nineteenth century. In this century P. J. Wiseman has revived it in his 1946 publication, _Creation Revealed in Six Days_, which was reprinted in 1977.

According to this interpretation God did not create the world in six days, but He "revealed" and explained in six literal days to man what He had already done over many spans of time. The recurring phrase, "and God said," is taken to support the theory that the "days" of creation are actually "days of revelation." In this theory the world does not require a relatively recent origin nor creation in six literal 24-hour days.
It has been noted incisively that the "days of revelation theory," also called the "vision theory," rests to a large degree upon a "misunderstanding of the word 'made', in Exodus 20:11" 33 for which Wiseman claims the meaning "showed."34

The meaning of "showed" is not a valid meaning for the Hebrew term 'asah. There is no Hebrew-English dictionary which supports this meaning for this Hebrew term. The Hebrew term 'asah, which is used more than 2,600 times in the Old Testament, means "to make, manufacture, produce, do, etc."35 but never once does it mean "to show" in either the Old Testament or in extra-biblical Hebrew.36 The meaning "to show" is invented for the sake of the theory. In view of this fact it is not surprising that the "days of revelation theory" has not found much support.37

In summary, current broad concordists seek to interpret Genesis 1 in some sort of "figurative, symbolic, or otherwise loose reading — such as the idea that the 'days' of Genesis 1 may be interpreted as long periods of time."38 The purpose is to make an accommodation to current claims of the evolutionary theory for long time. Based on this time frame hypothesis, Scripture is reinterpreted to bring about some sort of harmony between the claims of the biblical creation account and naturalistic evolution. Those who seek to make adjustments in Scripture for the sake of concordism are known as broad concordists.

In contrast, strict concordists are scholars of equal erudition and skill. They are also interested in bringing about harmony between science and religion. However, they are unwilling to give the biblical text a "loose reading." They agree that a meaning of a text is to be based on the internal criteria of language and its usage according to the commonly accepted standards of linguistics. They agree that the context of Scripture is primary and that the linguistic standards need to follow sound grammatical-syntactical conventions. Thus, strict concordists are fully aware of the tensions but resist forcing a meaning on the biblical text that is not supported by sound linguistic analysis.

IV. THE LITERARY GENRE OF GENESIS 1

1. Literary Genre/Form Argument

The recent Genesis commentary by evangelical scholar Victor P. Hamilton takes the position that the "days" of Genesis 1 must be taken as non-figurative and nonmetaphorical, that is, as literal, consisting of solar days of 24 hours.39 However, as a broad concordist he is already committed to long ages and remains interested in bringing about a harmony with modern naturalistic science. In order to do so he appeals to "a literary reading of Gen. 1 [which] still permits the retention of 'day' as a solar day of 24 hours."40 How is this accomplished?

Hamilton speaks of a "literary reading" of the Genesis creation account. The "literary reading" allows him to understand the "days" of creation literally but "not as a chronological account of how many hours God invested in His creating project, but as an analogy of God's creative activity."41 In this view the 24-hour "days" in Genesis 1 are but an "analogy" based on a "literary [non-historical] reading" of the Genesis creation account.
This view of a "literary reading" is dependent on Charles E. Hummel.42 Hummel argues that even if the "days" in Genesis 1 are to be meant as solar days of 24 hours, which he believes they are, "the question still remains whether the [literary] format is figurative or literal, that is, analogy of God's creative activity or a chronological account of how many hours he worked."43 Hummel believes that the "who" and "why" but not the "how" of creation is important (following Bernard Ramm) and that, therefore, the "analogy ... provides a model for human work."44

The "analogy" theory consists of the understanding of the literal "day" as "a metaphor" which uses "the commonplace (or commonly understood, if you wish) meaning of a word" (viz. the word "day") "in a figurative manner."45 The analogy transfer suggested by the "analogy" theory removes the schema of six days of work and one day of rest from a chronological piece of information and makes it into a broad pattern of work-and-rest applicable to humanity.46

As appealing as this "analogy" theory seems to be, the issue is still the problem of the contextual and literary warrant within the context of Genesis 1 and the Bible as a whole for taking the time designation "day" as simply analogous for work/rest. Hummel is forced (followed by Hamilton) to redefine the literary genre of Genesis 1 from that of a straightforward creation account to a genre which is designated as a "semipoetic narrative"47 which has significance. This falls under the "historical-cultural" approach to creation.48

It is evident that these broad concordist scholars are partially influenced by form-criticism and its genre method of interpretation. Form-criticism, a sub-method of the historical-critical method, was begun by Hermann Gunkel, known as the father of form criticism, at the turn of the century.49 Gunkel raised the question, "Are the narratives of Genesis history or legend?"50 His premise is that "many things reported in Genesis ... go directly against our better knowledge."51 The idea of "our better knowledge" is an admission on Gunkel's part that a naturalistic evolutionary world view provides the authoritative norm of what is history or legend. Thus, he suggested that the literary genre of Genesis is not history but "legend." Gunkel was the first liberal scholar to assign to the creation account in Genesis a literary genre other than history in the sense of a factual account. He has been followed by other liberal scholars, by neo-orthodox theologians, and now also in part by neoevangelical scholars who are broad concordists.

Although we need not attempt to be exhaustive in citing the literary genre categories which have been proposed for categorizing Genesis, some major representative examples should be cited. Karl Barth, the father of neo-orthodox theology, takes Genesis 1-2 as "saga"52 and, of course, non-historical. S.H. Hooke, the leader of the myth-and-ritual school, says that the Genesis creation account is a "cultic liturgy."53 Gordon Wenham, a neo-evangelical scholar, believes it to be a "hymn."54 Walter Brueggemann, a liberal non-concordist, suggests that it is a "poem."55 Claus Westermann, a form-critic, calls it a "narrative."56 John H. Stek, a broad concordist, names it a "metaphorical narration."57 Gerhard von Rad, a tradition critic, designates it as "doctrine."58 Others hold that it is a "myth,"59 "parable,"60 "story," "theology,"61 "allegory," etc.

There are several essential observations to be made in view of this plethora of current opinions on the nature of the literary genre of the Genesis creation account.
1) The obvious consensus is that there is no consensus on the literary genre of Genesis 1. This makes the literary genre approach for a non-literary reading of Genesis 1 suspect of special pleading.

Since there is no consensus, the careful interpreter will be rather cautious and avoid jumping on the bandwagon of literary genre identification with the aim to redefine the literal intent of Genesis 1. The intention of form-critical genre description from its beginning, the time of Gunkel to the present, has been to remove the text of Genesis 1 from being considered to be historical and factual in nature.62

2) The "literary genre" approach reveals it to be another way, at first used by non-concordists, to remove the creation account of Genesis from functioning as an authoritative, literal text which has implications for the relationship of science and the Bible. It is rightly suggested that "the way in which God revealed the history of creation must itself be justified by Scripture"63 and not by appeal to form-critical literary genre description from which historicity is removed.

3) Interpreters following the "literary genre" approach with the aim to remove the creation account from the realm of its literal intent feel free to interpret the "days" of creation in a literal and grammatical way.

The use of the "literary genre" approach is meant to restrict the meaning of Genesis 1 to a thought-form which does not demand a factual, historical reading of what took place. The "literary genre" redefinition of the creation account is intended to remove the creation account from informing modern readers on "how" and "in what manner" and in what time God created the world. It simply wishes to affirm minimalistically that God is Creator. And that affirmation is meant to be a theological, nonscientific statement which has no impact on how the world and universe came into being and developed subsequently.

The "literary genre" approach is based on a literary critical methodology,64 which is intended to assign to the creation account as a whole a function different from that of historicity or factuality. In this case it does not matter whether the creation "days" are taken as literal 24-hour days in its intent, because the account as a whole, including the creation "days," has a meaning other than a historical or factual one.

2. Genesis 1: Literal or Figurative?

The question remains whether the creation account of Genesis 1 is literal or figurative as a whole.65 Often Genesis 1 is taken together as part of the larger unit of Genesis 1-11 to answer the question of its nature, purpose and function.

It is an acknowledged fact that these chapters at the beginning of the book of Genesis have singularities, that is, unrepealed, one-time events, that have no immediate analogy in present experience.

How does the modern historian handle such singularities? The standard position of modern historiography is based on the principle of analogy (cf. Ernst Troeltsch), that is, the principle that nothing in past experience can be reckoned to be historical except as it corresponds to present experience.66 This principle is based on the notion of the basic uniformity of human experience and historical events.67 The principle of analogy holds that the past is understood only by borrowing from the present and applying it to the past.
Based on the consistent application of this uniformitarian basic to the principle of analogy, there is cause to deny the historicity and facticity of most of Genesis 1-11, including the creation account of Genesis 1.

Can and should the uniformitarian principle of analogy reign as the supreme norm for understanding the past?68 "A problem arises when the uniformity [of past and present] is raised to a universal principle that makes some evidence inadmissible," writes a strong supporter of the principle of analogy and modernistic historiography.69 This admission of the problem requires great caution in the application of the uniformitarian principle of analogy.

Human beings know of experiences in present reality that are singular and without parallel in the past. For example, twenty-five years ago the first human beings were walking on the moon. This had never happened before. Another example is the use of atomic bombs for the destruction of two Japanese cities in 1945. This type of destruction has never happened before and stands unique to the present. Many other singularities could be mentioned.

As there are singularities today that are either man-made or part of another order, that is to say, there are real events and situations that have no analogy in the past, so one can recite singularities in the past which have no analogy at present. For example, R. G. Collingwood, the famed British philosopher of history, noted that the ancient Romans engaged in population control by exposing newborn infants to die. This is a singularity which has no analogy at present in population control attempts.70

With these limitations of the principle of analogy in mind,71 it is not sound to reject the creation account as non-historical and non-factual because we know of no analogy at present. Genesis 1 contains singularities that may be perceived to be just as real, historical and factual as the singularities of another kind in the present or the past.

There are good reasons for maintaining that Genesis 1 is a factual account of the origin of the livable world. This record is accurate, authentic and historical.

3. Genesis 1 and Comparative Literature of the Past

From a purely comparative approach of the literary structures, the language patterns, the syntax, the linguistic phenomena, the terminology, the sequential presentation of events in the creation account, Genesis 1 is not different from the rest of the book of Genesis72 or the Pentateuch for that matter.

Compared to the hymns in the Bible, the creation account is not a hymn; compared to the parables in the Bible, the creation account is not a parable; compared to the poetry in the Bible, the creation account is not a poem; compared to cultic liturgy, the creation account is not a cultic liturgy. Compared to various kinds of literary forms, the creation account is not a metaphor, a story, a parable, poetry, or the like.

One recent study of the literary form of Genesis 1-11 done on the basis of current comparative Near Eastern literature has concluded that "we are dealing with the genera of historical narrative-prose, interspersed with some lists, sources, sayings, and poetical lines."73 This is a fairly good description of the content of Genesis 1.

A detailed study of the literary form of Genesis 1 has concluded that we are dealing with the literary genre of "prose-genealogy."74 Even Gunkel noted long ago that Genesis is "prose." He noted also that it is "more artistic in its composition and has some sort of
rhythmical construction." The non-poetic nature of Genesis 1 shows that its intention is to take it in its plain sense as a straightforward and accurate record of creative events.

Looking at the information provided in Genesis 1 from a perspective of comparison with other ancient Near Eastern literature, it must be concluded that "Genesis 1 has no parallel anywhere in the ancient world outside the Bible." Genesis 1 is the most cohesive and profound record produced in the ancient world of "how" and "when" and by "whom" and "in what manner" the world was made. There is no parallel to it from the ancient world in any type of literature. There are bits and pieces which have been compared from various cosmogonic myths and speculations, but the biblical creation account as a unit stands unique in the ancient world in its comprehensiveness and cohesiveness.

4. The Literary Form of Genesis 1 Within Its Biblical Context

It would be helpful to analyze the literary form in distinction to the "literary genre" of form criticism discussed above.

John H. Stek suggests that the "literary type [of Genesis 1], as far as present knowledge goes, is without strict parallel; it is sui generis." It has already been noted that the presentation and content of Genesis 1 as a whole is unparalleled in the ancient world. Does this mean, however, that it is sui generis in the sense that it should not be understood to be literal in its intention? Surely as creation itself is unique so the creation account is of necessity unique. But it is hardly sui generis in an exclusive literary sense which will remove it from communication on a factual, accurate and historical level.

Based on the relationship with the remainder of Genesis (and the Bible as a whole), the creation account (Genesis 1:1 - 2:3), can be properly designated in its literary form. The creation account of Genesis 1 is a historical prose-record, written in rhythmic style, recording factually and accurately "what" took place in the creation of "the heavens and the earth," depicting the time "when" it took place, describing the processes of "how" it was done and identifying the divine Being "who" brought it forth. The result of creation week was a perfect, "very good" world with an environment suited to the utmost for created humanity to live in. This historical prose-record of creation reports correctly in specific sequences the creation events within chronological, sequential, and literal "days." These "days" inaugurate the subsequent historical process of time ordered in weekly cycles in which man and nature function under God's ultimate control. In this sense Genesis 1 is the inaugural history of initial beginnings which shapes from creation week onward the following flow of the history of the world and humanity.

V. LITERAL INTERPRETATION OF CREATION "DAYS"

We shall consider the usage of "day" (Hebrew yôm) along major lines of current scholarship. There are liberal and non-liberal scholars who have concluded that the word "day" (Hebrew yôm) in Genesis 1 must be singularly understood in a literal sense. We will review some of their reasons and provide additional ones.
1. Considerations from Commentaries

The influential Continental liberal Old Testament theologian and exegete Gerhard von Rad states, "The seven days are unquestionably to be understood as actual days and as a unique, unrepeatable lapse of time in the world." Gordon Wenham, a British non-concordist Old Testament scholar, concludes, "There can be little doubt that here 'day' has its basic sense of a 24-hour period." James Barr, renowned Semitist and Old Testament scholar, notes with vengeance against figurative interpreters that the creation "days" were six literal days of a 1 44-hour period. Form critic Hermann Gunkel concluded long ago, "The 'days' are of course days and nothing else." This refrain can be continued with many additional voices, sharing the same non-concordist position.

Victor P. Hamilton concludes, as do other broad concordist neoevangelical scholars, "And whoever wrote Gen. 1 believed he was talking about literal days." John H. Stek, another broad concordist, makes a number of points in his support for literal "days":

Surely there is no sign or hint within the narrative [of Genesis 1] itself that the author thought his 'days' to be irregular designations — first a series of undefined periods, then a series of solar days — or that the 'days' he bounded with 'evening and morning' could possibly be understood as long aeons of time. His language is plain and simple, and he speaks in plain and simple terms of one of the most common elements in humanity's experience of the world.... In his storytelling of God's creative acts, the author was 'moved' to sequence them after the manner of human acts and 'time' them after the pattern of created time in humanity's arena of experience.

Numerous scholars and commentators, regardless of whether they are concordist or non-concordist, have concluded that the creation "days" cannot be anything but literal 24-hour days. They are fully aware of the figurative, non-literal interpretations of the word "day" in Genesis 1 for the sake of harmonization with the long ages demanded by the evolutionary model of origins. Yet, they insist on the ground of careful investigations of the usage of "day" in Genesis 1 and elsewhere that the true meaning and intention of a creation "day" is a literal day of 24 hours.

2. Considerations from Lexicography

The most widely recognized Hebrew lexicons and dictionaries of the Hebrew language published in the twentieth century affirm that the designation "day" in Genesis 1 is meant to communicate a 24-hour day, respectively, a solar day.

A prestigious recently published lexicon refers to Genesis 1:5 as the first scriptural entry for the definition of "day of 24 hours" for the Hebrew term yôm ("day"). Holladay's Hebrew-English lexicon follows suit with "day of 24 hours." The Brown-Driver-Briggs lexicon, the classical Hebrew-English lexicon, also defines the creation "day" of Genesis 1 as a regular "day as defined by evening and morning." Lexicographers of the Hebrew languages are among the most qualified of Hebrew scholars. They are expected to give great care in their definitions and also usually
indicate alternative meanings, if there is warrant to do so in given instances. None of the lexicographers have departed from the meaning of the word "day" as a literal day of 24 hours for Genesis 1.

3. Considerations from Dictionaries

Magne Saeboe writes in the acclaimed Theological Dictionary of the Old Testament that the "day" (yôm) in Genesis 1 has a literal meaning in the sense of "a full day."90 He does not entertain another meaning or alternative.

Ernst Jenni, an acclaimed Hebrew scholar of the twentieth century, states in the most-widely used theological dictionary of the Hebrew language that the meaning of "day" in the Genesis creation account is to be understood in its literal meaning as a "day of 24 hours in the sense of an astronomical or calendrical unit of time."91

4. Considerations Based on Semantics

The field of semantics in linguistic study refers to what is called signification.92 It deals with the issue of "the accurate evaluation of the meaning of expressions [words, phrases, clauses, sentences, etc.] which have actually been used."93

Semantics calls for attention to the crucial question of the exact meaning of the Hebrew word yôm. Could the designation "day" in Genesis 1 possibly have a figurative meaning in this chapter? Is it to be understood on the basis of the norms of semantics as a literal "day"? This matter of semantics is particularly important in view of the fact that the Hebrew term yôm in the singular and plural has a large variety of meanings, including extended meanings such as "time," "life time," and so on. Is it possible to import an extended meaning from the Old Testament into Genesis 1? Could this not solve the problem of the conflict of a short creation week and the long ages called for by naturalistic evolution?

The Hebrew term yôm, in its variety of forms, can mean aside from a literal "day" also a time or period of time (Judges 14:4) and in a more general sense "a month [of] time" (Genesis 29:14), "two years [of] time" (2 Samuel 13:23;14:28; Jeremiah 28:3,11), "three weeks [of] time" (Daniel 11:2, 3). In the plural form it can mean "year" (1 Samuel 27:7), a "life time" (Genesis 47:8), and so forth. Any good lexicon will provide a comprehensive listing of the various possibilities.94

It is important to keep in mind that "the semantic content of the words can be seen more clearly in their various combinations with other words and their extended semantic field."95

What are the semantic-syntactical guidelines for extended, non-literal meanings of the Hebrew term yôm? The extended, non-literal meanings of the term yôm are always found in connection with prepositions,96 prepositional phrases with a verb, compound constructions, formulas, technical expressions, genitive combinations, construct phrases, and the like.97 In other words, extended, non-literal meanings of this Hebrew term have special linguistic and contextual connections which indicate clearly that a non-literal meaning is intended. If such special linguistic connections are absent, the term yôm does not have an extended, non-literal meaning; it has its normal meaning of a literal day of 24-hours.
In view of the wealth of usages of this Hebrew term, it is imperative to study the usage of the term **yôm** in Genesis 1 so that it can be compared with other usages. Does this chapter contain the needed indicators by which **yôm** can clearly be recognized to have a literal or non-literal meaning? How is this term used in Genesis 1? Is it used together with combinations of other words, prepositions, genitive relations, construct state, and the like, as mentioned in the previous paragraph, which would indicate a non-literal meaning? It is exactly these kinds of semantic-syntactical combinations which inform us about the intention of the meaning of this term.

Let us present the facts of the usage of the term **yôm**, "day," in Genesis 1 as any scholar who knows Hebrew can describe them:

1. The term **yôm** is always used in the singular.
2. The term **yôm** is always joined to a numeral. In Genesis 1:5 it is a cardinal and elsewhere in Genesis 1:1 - 2:3 it is always an ordinal. We will pay attention to this below.
3. The term **yôm** is never combined with a preposition, genitive combination, construct state, compound construction, or the like. It always appears as a plain noun.
4. The term **yôm** is consistently defined by a temporal phrase in the preceding sentence, "and there was evening and there was morning." This clause serves in a defining function for the word "day."
5. The complementary creation account of Genesis 2:4-25 contains a non-literal, figurative meaning of the singular of the term **yôm**, "day." When the non-literal meaning is intended the semantic-syntactical conventions known from the remainder of the Old Testament for such a meaning are employed. This is the case in the non-literal usage in Genesis 2:4.

Let us note these criteria as they are employed in Genesis 2:4. The noun **yôm** is joined to the preposition be to read beyôm. Secondly, it is used in a construct relation with the infinitive form of 'asah, "to make." It reads literally, "in the day of making." This combination of the singular with a preposition in construct with an infinitive98 makes this combination a "temporal conjunction,"99 which serves as a "general introduction of time."100

Genesis 2:4b reads literally, "in [the] day of the Lord God making the earth and heaven. Proper English calls for the literal "in [the] day of," which is syntactically a temporal conjunction that serves as a general introduction of time, to be rendered with "when." This sentence then reads, "When the Lord God made ....." This clear-cut case of an extended, non-literal use of **yôm** in the creation account of Genesis 2:4-25 shows that the contrary usage of **yôm** in Genesis 1, without any expected qualifier that marks it as a non-literal use, has a literal meaning. The term **yôm** in Genesis 1 has no prepositions; it is not used in a construct relation and it has no syntactical indicator expected of an extended, non-literal meaning. Thus, in Genesis 1 **yôm** can mean only a literal "day" of 24 hours.

In short, the semantic-syntactical usages of **yôm**, "day," in Genesis 1 as compared with semantic-syntactical usages and linguistic connections of this term in other Old Testament passages where it has an extended meaning, does not allow it to mean a long period of time, an age, or the like. The Hebrew language, its grammar, syntax, linguistic
structures as well as its semantic usage allows for only the literal meaning of "day" for the creation "days" of Genesis 1.

5. Considerations Based on Singular Usage

The Hebrew term יָומָ (yôm) appears in the Hebrew Old Testament 2,304 times101 of which 1,452 usages are in the singular.102

In the Five Books of Moses (Pentateuch) this term is used 668 times and in the book of Genesis it is employed 152 times.103 In Genesis the singular usage of "day" appears 83 times, the remainder usages are in the plural.

In the enumeration of the six "days" of creation the term "day" is used consistently in the singular. There is one plural use in the phrase "for days and years" in vs.14 which is, of course, not a creation "day." This plural usage in vs.14 hardly enters the discussion of making creation "days" long periods of time since calendrical usage of "days and years" keeps it literal itself. There is no doubt but that the literal meaning of 24-hour days are meant in vs.14 just as the "years" are likewise understood as literal years.

The additional usages of "day" in the singular in Genesis 1 are found in vss.5 and 16. "And God called the light 'day' (yôm)" (vs.5) and God made the "greater light to govern the day" (vs.16). The term in vs.5 is employed in the sense of the literal daylight period of the light part of the 24-hour period of time in contrast to the night part, "the night" (vs.16), of the same period of time.104 Both "day" and "night" make a "full day."105

We have to recognize the fact that the term יָום in every one of the six days has the same connection: a) It is used as a singular; b) it has a numeral; and c) it is preceded by the phrase, "there was evening and there was morning." This triple interlocking connection of singular usage, joined by a numeral, and the temporal definition of "evening and morning," keeps the creation "day" the same throughout the creation account. It also reveals that "time is conceived as linear and events occur within it successively."106 To depart from the numerical, consecutive linkage and the "evening-morning" boundaries in such direct language would mean to take extreme liberty with the plain and direct meaning of the Hebrew language.107

6. Considerations Based on Numeral Usage

The six creation "days" are in each instance joined with a numeral in the sequence of one to six (Genesis 1:5,8,13,19,23,31). The day following the "sixth day," the "day" on which God rested, is designated "the seventh day" (Genesis 2:2 [2 times],3).

What seems of significance is the sequential emphasis of the numerals 1-7 without any break or temporal interruption. This seven-day schema, the schema of the week of six workdays followed by "the seventh day" as rest day, interlinks the creation "days" as normal days in a consecutive and non-interrupted sequence.

When the word יָום, "day," is employed together with a numeral, which happens 150 times in the Old Testament, it refers in the Old Testament invariably to a literal day of 24 hours.

This rule is pervasive in the Old Testament. The only exception in numbers of 1-1,000 is found in an eschatological text in Zechariah 14:7. The Hebrew expression יָום 'echad employed in Zechariah 14:7 is rendered into English in a variety of ways: "for it will be a
unique day" (New American Standard Bible, New International Version); "and there shall be continuous day" (New Revised Standard Version); "it will be continuous day" (Revised English Bible); or "and the day shall be one." 108 The "continuous day," or "one day," of the eschatological future will be one in which the normal rhythm of evening and morning, day and night, as it is known will be changed so that in that eschatological day there shall be "light even at the evening" (vs.7). It is generally acknowledged that this is a difficult text in the Hebrew language and can hardly be used to change the plain usage in Genesis 1.109

7. Considerations Based on Article Usage

The term "day" is used in Hebrew without the article in each instance of each creation day, except in the cases of "the sixth day" (Genesis 1:31, Hebrew yôm hashshishî) and "the seventh day" (Genesis 2:2).110

It is noted from time to time that the first "day" of Genesis 1:5 in Hebrew reads literally "one day,"111 because we have the cardinal number "one" used with the term "day."

The lack of the definite article has been interpreted to mean that all creation "days" (except "the sixth day," which has the article) will allow "for the possibility of random or literary order as well as a rigidly chronological order."112 This is a rather shaky interpretation. It cannot be supported from semantic-syntactical points of view.

We need to understand the syntax of the Hebrew text and interpret the text accordingly without violence to the internal structure of the Hebrew language. The recent research grammar by Bruce K. Waltke and M. O'Connor points out that the indefinite noun yôm with the indefinite cardinal numeral for "one" (Hebrew 'echad) in Genesis 1:5 has "an emphatic, counting force" and a "definite sense" in addition to having the force of an ordinal number which is to be rendered as "the first day."113

Based on this syntactical observation of the Hebrew language, "the first day" and "the sixth day" of the creation week are meant to be definite in the sense that they have the article by syntactical rule or by writing (not to speak of "the seventh day" which will be considered below). The first and last creation "days" are definite by syntax or writing, the first by syntactical function and the last by the usage of the article. One observation emerges — this definite usage of the first and last day of creation forms a literary device, an inclusio, which frames the six creation "days" with definite or articular days. One of the intentions of this usage seems to be that the "days" of Genesis 1 do not permit the conclusion that random order or chronological order is an open-ended issue.114

The opposite is actually the case. Since the first and sixth days are definite, providing a clear boundary, the days are meant to be chronological and sequential, forming an uninterrupted six-day period of literal 24-hour days of creation. Thus, the definite use of the first and sixth days respectively mark and frame the six-day sequence into a coherent sequential and chronological unit of time which will be repeated in each successive week.

"The seventh day" is also written with the Hebrew article. Since "the first day" (vs.5) is definite as well as "the sixth day" (vs.31), a larger unit is formed. It is the unit of six workdays followed by "the seventh day" (Genesis 2:2,3), the day of rest. In this way the sequence of six workdays find their goal and climax chronologically and sequentially in
"the seventh day," making together the weekly cycle with the day of rest being the "seventh day" of the week.

The larger unit of literal time accordingly consists of the divinely planned unit of the "six-plus-one schema" which consists of the "six" workdays followed in an uninterrupted manner and in sequence by "the seventh day" of rest. This uninterrupted sequence is divinely planned and ordained as the rhythm of the time for each successive week.

8. Considerations Based on the "Evening-Morning" Boundary

The Genesis creation account not only links each day to a sequential numeral but it also sets the time boundaries by "evening and morning" (vss.5,8,13,19,23,31). The rhythmic boundary phrase, "and there was evening and there was morning," provides a definition of the creation "day." The creation "day" is defined as consisting of "evening" and "morning." It is a literal "day."

The term for "evening" (Hebrew 'ereb) covers the dark part of the day in a pars pro toto (meaning that a part, in this case the "evening," stands for the whole dark part of the day) usage (cf. "day-night" in Genesis 1:14). The corresponding term "morning" (Hebrew bqer) stands pars pro toto (meaning that a part, in this case the "morning," stands for the light part of the day) "for the entire period of daylight." It is to be noted that the "evening-morning" expression must be understood to have the same signification in every one of its six usages.

"Evening and morning" is a temporal expression which defines each "day" of creation as a literal day. It cannot be made to mean anything else.

9. Considerations Based on Pentateuchal Sabbath Passages

Another kind of internal evidence provided in the Old Testament for the meaning of days derives from two Sabbath passages in the Pentateuch which refer back to the creation "days." They inform the reader how the creation "days" were understood by God.

The first passage is part of the Fourth Commandment spoken by God on Mt. Sinai and recorded in Exodus 20:9-11: "Six days you shall do all your labor ... but the seventh day is the sabbath of the Lord your God.... For in six days the Lord made the heavens and the earth ... and rested on the seventh day; therefore the Lord blessed the sabbath day and made it holy."

"These words" are spoken by Yahweh Himself (vs. 1). The linkages to creation are in wording ("seventh day," "heaven and earth," "rested," "blessed," "made it holy") and in the "six-plus-one" schema (see also Deuteronomy 5:13-14) to mention but these. Evidently the words used in the Ten Commandments take the creation "day" as "a regular day" of 24 hours and demonstrate that the weekly cycle is a temporal creation ordinance.

These words of the Lord provide an internal Pentateuch and Old Testament guideline on how God, the Giver of the "Ten Words" understands the creation "day." The divine speech which promulgates the Sabbath commandment takes the "six days" of creation to be sequential, chronological and literal.
The argument that the relationship of the Fourth Commandment is but an "analogy" or "archetype" in the sense that man's rest on the seventh day ought to be like God's rest in creation is based on reductionism and an impermissible change of imagery. Terence Fretheim noted incisively that the Commandment does not use analogy or archetypal thinking but that its emphasis is "stated in terms of the imitation of God or a divine precedent that is to be followed: god worked for six days and rested on the seventh, and therefore you should do the same."122

The second Pentateuchal Sabbath passage is Exodus 31:15-17, which is again spoken by God Himself. It has several terminological linkages with Genesis 1 and is conceptually and thematically related to it. This passage has to be understood to mean that the creation "day" was a literal day and that the days were sequential and chronological. The weekly sabbath for God's people is based on imitation and example, for "in six days the Lord made heaven and earth, but on the seventh day he ceased from labor, and was refreshed" (vs. 17, New American Standard Bible).

God was refreshed because He had delight in His completed work of creation. Humankind will also be refreshed and have delight when the Sabbath as "seventh day" (vs. 15) is kept.

The "sign" nature of the Sabbath in vs. 15 reveals that the Sabbath keeper follows the divine Exemplar. He Himself kept "the seventh day" which humans who belong to Him will imitate. They will do so in the same rhythm of the literal weekly cycle of six literal workdays followed chronologically and sequentially by "the seventh day" as a day of rest and refreshment as their Creator had done during creation week.

10. Considerations Based on Sequence of Events

The creation of vegetation with seed-bearing plants and fruit trees took place on the third day (Genesis 1:11-12). Much of this vegetation seems to need insects for pollination. Insects were created on the fifth day (vs.20). If the survival of those types of plants which needed insects for pollination depended on them to generate seeds and to perpetuate themselves, then there would be a serious problem should the creation "day" consist of long ages or aeons. The type of plant life dependent on this type of pollination process without the presence of insects could not have survived for these long periods of time, if "day" were to mean "age" or "aeon." In addition, "consistency of interpretation in the 'day-age theory' would demand a long period of light and darkness during each of the ages. This would quickly be fatal both to plant and animal life."123

It seems that the creation "day" is expected to be understood as a literal day and not as a long period of time whether ages, periods, or aeons.

Although these arguments may not be decisive, they nevertheless point in the same direction as the decisive linguistic and semantic points which are found in the Hebrew text itself.

VI. CONCLUSIONS
This paper investigated the meaning of creation "days." It has considered key arguments in favor of a figurative, non-literal meaning of the creation "days." It found them to be wanting on the basis of genre investigation, literary considerations, grammatical study, syntactical usages, and semantic connections. The cumulative evidence, based on comparative, literary, linguistic and other considerations, converges on every level, leading to the singular conclusion that the designation yôm, "day," in Genesis 1 means consistently a literal 24-hour day.

The author of Genesis 1 could not have produced more comprehensive and all-inclusive ways to express the idea of a literal "day" than the ones that were chosen. There is a complete lack of indicators from prepositions, qualifying expressions, construct phrases, semantic-syntactical connections, and so on, on the basis of which the designation "day" in the creation week could be taken to be anything different than a regular 24-hour day. The combinations of the factors of articular usage, singular gender, semantic-syntactical constructions, time boundaries, and so on, corroborated by the divine promulgations in such Pentateuchal passages as Exodus 20:8-11 and Exodus 31:12-17, suggest uniquely and consistently that the creation "day" is meant to be literal, sequential, and chronological in nature.

ENDNOTES

1. The designation "creation-science" has been defined by Louisiana law (Senate Bill No. 86, 1981) as follows: "'Creation-science' means the scientific evidences for creation and inferences from those scientific evidences." A similar wording was used shortly before in the Arkansas Bill (Act 590) of March 19, 1981. For details, see: Norman L. Geisler, The Creator in the Courtroom (Milford, MI: Mott Media, 1982), 5, 224. Phillip E. Johnson (Darwin on Trial, 2d ed. [Downers Grove, IL: InterVarsity Press, 1993], 4 n. 1) states that "'creation science' refers to young-earth, six-day special creation."


3. The significant volume of essays edited by J. P. Moreland (The Creation Hypothesis: Scientific Evidence for an Intelligent Designer [Downers Grove, IL: InterVarsity Press, 1994]) uses the designation "theistic science" as opposed to "naturalistic science," the common notion of science which rules out the God-hypothesis from the start. "Theistic science" is a "research program ... that, among other things, is based on two propositions: 1. God, conceived of as a personad, transcendent agent of great power and intelligence, has through direct, primary causation and indirect secondary causation created and designed the world for a purpose and has directly intervened in the course of its development at various times.... 2. The commitment expressed in proposition 1 can appropriately enter into the very fabric of the practice of science and the utilization of scientific methodology" (pp. 41-42). This definition is elaborated in the remainder of the seminal essay by J. P Moreland in the above volume ("Theistic Science & Methodological Naturalism," 41-66).

5. The decisive section from Origen's *On First Principles: Book Four* (excerpt quoted in Karifried Froehlich, trans./ed., *Biblical Interpretation in the Early Church* [Philadelphia: Fortress Press, 1984], 63) noted that the days of creation cannot be understood to be literal just as it "is foolish enough to believe that, like a human farmer, God planted a garden to the east of Eden and created in it a visible, physical tree of life...." See also Terence E. Fretheim, "Were the Days of Creation Twenty-Four Hours Long?" in *The Genesis Debate: Persistent Questions About Creation and the Flood*, ed. Ronald R. Youngblood (Nashville, TN: Thomas Nelson, 1986), 12-35.


7. The fourfold sense of Scripture consists of the following: 1) the literal sense, 2) the allegorical (spiritual-mystical) sense; 3) the anagogical (future) sense, and 4) the tropological (moral) sense. See Farrar, 205.

8. The new *Catechism of the Catholic Church*, published in English in 1994, states: "According to an ancient tradition, one can distinguish between two senses of Scripture: the literal and the spiritual, the latter being subdivided into the allegorical, moral [tropological], and anagogical senses. The profound concordance of the four senses guarantees all its richness to the living reading of Scripture in the Church." Later on the same page it is affirmed: "It is the task of exegetes to work, according to these rules, toward a better understanding and explanation of the meaning of Sacred Scripture ..." (*Catechism of the Catholic Church* [Vatican City: Libreria Editrice Vaticana, 1994], 33).


10. Martin Luther, *Lectures on Genesis: Chapters 1-5*, *Luther's Works* (St. Louis, MO: Concordia Publishing House, 1958), 1:5. Later, Luther in commenting on the phrase "evening and morning" states that the creation day "consists of twenty-four hours" (1:42).

11. The development of the historical-critical method from the late seventeenth century onward until its full maturity at the end of the nineteenth century did not decisively change the interpretation of the creation "days." The reason for this is that the biblical text was now seen as an artifact of the past which has no direct relationship to the belief systems of the present.

12. The Scottish theologian Thomas Chalmers (1780-1847) is credited with being the first proponent of the view that the six creation "days" are actually "days of reconstruction," giving rise to the "ruin-reconstruction hypothesis" (see W. Hanna, ed., *Select Works of Thomas Chalmers* [Edinburgh: T. Constable and Co., 1855], 5: 146-150). This hypothesis has found strong defenders such as George H. Pember (*Earth's Earliest Ages*, 2d ed. [London: Hodder and Stoughton, 1907]) and more recently A. C. Custance, *Without Form and Void* (Brookville, Ont: By the Author, 1970). The most detailed and scholarly critique of the "ruin-reconstruction hypothesis" has been produced by Weston W. Fields, *Unformed and Unfilled: The Gap Theory* (Phillipsburg, NJ: Presbyterian and Reformed Publishing Co., 1978). See also, Henn Blocher, *In the Beginning: The Opening Chapters of Genesis* (Downers Grove, IL: InterVarsity Press, 1984), 41-43.
13. While not the first to claim that the days of creation are actually six days of revelation, and not days of creation, the Scottish geologist Hugh Miller (1802-1856) was the foremost nineteenth-century author to proclaim this idea (Francis Haber, *The Age of the World: Moses to Darwin* [Baltimore, MD: The Johns Hopkins University Press, 1959], 236-237). In this century this view was propounded by R. J. Wiseman, the father of the famous Assyriologist Donald Wiseman. More on this later.


15. For a review of these ideas, see Thomas A. McIver, "Creationism: Intellectual Origins, Cultural Context and Theoretical Diversity" (Ph.D. diss., University of California, Los Angeles, 1989), 450-495.


19. Ibid.

20. In the final analysis the ultimate conclusion about the final norm for scientific views and religious faith is probably made on the basis of the conviction, or presupposition, of the interpreter's stance on the authority levels of science and faith. We must also contend that science is constantly in flux and makes no absolute claims.


22. Ibid., 55.

23. Ibid.


27. For example, Derek Kidner, Genesis: An Introduction and a Commentary, Tyndale Old Testament Commentaries (Chicago: InterVarsity Press, 1967), 56.


30. Ibid., 126.


33. Kidner, 54.

34. Wiseman, 132-133.


37. A recent exception is Duane Garrett, Rethinking Genesis: the Sources and Authorship of the First Book of the Pentateuch (Grand Rapids, MI: Baker Book House, 1991), 192-194, who recognizes that Wiseman's "presentation was somewhat confused, however, and did not persuade many" (193 n. 12). Garrett seeks to bolster the idea of "days" as "seven days of divine revelation to Moses" with form-critical arguments, an attempt quite problematical in itself.

38. Davis, 27 n. 2.


40. Ibid., 55.

41. Ibid., 55-56.


44. Ibid., 215.

45. Ibid.

46. Ibid., 213-216.

47. Ibid., 214.

48. Ibid, 213.

Excellent analyses and critiques of form criticism are provided by Patricia G. Kirkpatrick, *The Old Testament and Folklore Study* (Sheffield: JSOT Press, 1987) and especially Carrett, 35-50.


51. Ibid., 7.


62. The genre/form approach so widely used today, especially by critical scholars but also employed for other reasons by some evangelicals to Genesis 1, is formally identical or closely associated with the demythologization program of Rudolph Bultmann. He demythologizes the New Testament at any place where it does not conform to the worldview of modern man. Thus, the resurrection narrative is demythologized in such a way that the resurrection never took place in a literal sense. Evangelicals have to be aware that they cannot demythologize Genesis 1 without carrying this over to the New Testament.


We do not address the question of a structural interpretation of Genesis 1 by the method of structuralism which seeks to expose the alleged deep structures of a text. The subsequent method of deconstructionism in linguistics is an attempt to undermine the reader's expectations that a text will communicate some independently existing truth, by showing that author and reader alike are caught in the system of constraints imposed by the linguistic and literary system to which they belong, and are capable of communicating or receiving only such meanings as the system makes possible" (John Barton, "Structuralism," Anchor Bible Dictionary, ed. David N. Freedman [NY: Doubleday, 1992], 6:216; cf. Jonathan D. Culler, The Pursuit of Signs: Semiotics, Literature, Deconstruction [Ithaca: Cornell University Press, 1981]). Just as deconstructionism denies to any text a fixed and stable meaning so in "reader-response criticism" the idea of a fixed meaning of a text is given up as well (see J. Severino Croatto, Biblical Hermeneutics: Toward a Theory of Reading as the Production of Meaning [Maryknoll, NY: Orbis Books, 1987]; Edgar V. McKnight, The Postmodern Use of the Bible: The Emergence of Reader-Oriented Criticism [Nashville, TN: Abingdon Press, 1988]).

Paul D. Hanson, "Theology, Old Testament," Harper's Dictionary of the Bible, ed. Paul Achtemeier (San Francisco: Harper & Row, 1987), 1059: "We have already observed that every scholarly endeavor inevitably is based upon presuppositions. This is already true on the level of the descriptive task with which OT theology begins. For example, the scholar who accepts Ernst Troeltsch's 'analogy principle' (i.e. to be credible, a happening recorded in a historical source must have parallels in modern experience) will dismiss all reconstructions of the Exodus from Egypt or the resurrection of Jesus, which defy explanation within the nexus of cause and effect as understood by modern science, whereas others may not be so bound."


Gunkel, Legends, 38.

Garrett, 192.

Gerhard F. Hasel, "The Polemical Nature of the Genesis Cosmology," Evangelical Quarterly 46 (1974), 81-102, pointed out that there are a number of explicit
and implicit polemical emphases in Genesis 1. This fact does not diminish in the least the biblical author's intention to write an account that has a literal intent to provide factual and historical information.

78. Stek, 241.
79. Hummel, _The Galileo Connection_, 216: "Genesis 1 contrasts sharply with the cyclical, recurring creations described by Israel's pagan neighbors."
80. It is neither "metahistory" which is removed from real history, nor "salvation history" which never happened in the way it is written in the Old Testament. Cf. Robert Gnuse, _Heilsgeschichte as a Model for Biblical Theology_ (Lanham, MD: University Press of America, 1989).
81. von Rad, 65.
82. Wenham, 19.
85. Hamilton, 53.
86. Stek, 237-238.
89. Brown, Driver and Briggs, 398.
93. Ibid.
94. HAL, 382-384: Brown, Driver and Briggs, 398-401.
95. Saeboe, 14.
96. Ibid., 15.: "... in the Hebrew OT, 1,057 (45.9%) involve a preposition (esp. with the singular)."
97. Ibid., 14-20.
98. E. Kautzsch and A. E. Cowley, eds., _Gesenius' Hebrew Grammar_, 2d. ed. (Oxford: Clarendon Press, 1910), 347 § 114e: "This use of the infinitive construct is especially frequent in connection with be or ke to express time-determinations (in English resolved into a temporal clause, ...) ...."
100. Saeboe, 15.
101. Ibid., 13; Jenni, 708.
102. Jenni, 707, notes that there are only four nouns used more often in the Old Testament.

103. Ibid., 708.

104. Stek, 237, is correct in noting that each "day" of creation has to be the same since the "evening and morning" time expression and the numeral is in each instance identical. In other words, each creation "day" is of equal length. From this he shows that it is not defensible to argue that the first three "days" were long periods of time while the remaining "days" were 24-hour days. The latter position was argued by Edward J. Young, *Studies in Genesis One* (Philadelphia: Presbyterian and Reformed Publishing House, 1964), 104, and has found a recent supporter in R. Clyde McConic, "Were the Days of Creation Twenty-four Hours Long?" *The Genesis Debate*, 24. Young and followers are inclined to separate the lengths of creation days because they claim that the sun and moon had not been created yet until the fourth day. The question really is whether this is the case. It seems likely that on the fourth day God appointed the sun and moon to rule the day and night respectively. This appointment to the ruling function does not negate that the sun and moon were in existence before. It is possible that they were not visible to the human eye before the fourth day. Some have for this reason suggested that there may have been a vapor or cloud cover before the fourth day.

105. Saeboe, 22-23.


109. The other exception is with numbers above 1,000 in the apocalyptic text of Daniel 12:11-12 with the reference to 1,290 "days" and the 1,335 "days." There are some differences from Genesis 1. In both instances in Daniel 12 the plural form of "days" is employed in contrast to Genesis 1. In Genesis 1 the "day" refers to what has happened in the past; in Daniel 12 "days" refer to a prophetic time in the future. The context of all other prophetic time predictions in the book of Daniel makes it clear that in prophetic perspective each time element whether "times" (4: 16, 23, 25, 32), "time, times and half a time" (7:25), "evening[s and] morning[s]" (8:14), "weeks" (9:24), and respectively "days" (12:11-12) stands for another reality in real historical time. In other words in Daniel the year/day principle is at work each time a time prophecy is provided. The Danielic apocalyptic context is different from the creation context of Genesis 1. Time at the beginning, in creation, is not identical with predictive time which finds its fulfillment in the historical future. There is nothing predictive in Genesis 1. The latter is a prose-record of the past and not apocalyptic prophecy of the future. These content and contextual perspectives do not warrant a departure from the plain meaning in the Genesis creation account.

110. In Genesis 1:31 the Hebrew has an article both before yôm and the numeral. In Genesis 2:3 the article is only before the numeral following the noun yôm. According to Hebrew syntax the article in the latter case makes the word which the numeral qualifies articular.

113. Bruce K. Waltke and M. O'Connor, *An Introduction to Biblical Hebrew Syntax* (Winona Lake, IN: Eisenbrauns, 1990), 274. The translation "day one" is syntactically not correct, even though the cardinal is used here. In clauses of the type of Genesis 1:5 the cardinal serves effectively as an ordinal number (Nahum M. Sarna, *Genesis*, The JPS Torah Commentary [Philadelphia: Jewish Publication Society, 1989], 8, 353).
119. Schmidt, 68 n. 5.
120. See also Weeks, 18: "The commandment loses completely its cogency if they [the 'days'] are not taken literally."
122. Fretheim, 20.
123. Bailey, 126.
The view that each day of the Genesis Creation account is actually an extremely long period of time—rather than literal days of twenty-four hours—causes problems. For example, Genesis says that plants were created on the third day (see Genesis 1:11-13) and that sunlight was created on the fourth day (see verses 14-19). If the third day is actually a long period of time, how could plants have existed without sunlight? Likewise, many plants require insects for pollination. How could these plants have survived and reproduced without insects which were not created until the sixth day (see Genesis 1