

R. Sungenis: Michael, as you requested, I have made comments on Seth Evangelho's interpretations of Genesis 1, which, I assume, are representative of the St. Paul Center for Biblical Theology. I hope you find them useful. Seth writes:

Dear Michael,

Great questions! By "anti-biblical," do you mean "not taught explicitly in Scripture" or "in opposition to Scripture?" The Church is neither willing nor eager to compromise the faith. The three interpretive criteria for biblical interpretation are 1) content and unity, 2) living tradition, and 3) the analogy of faith. The Church will never accept "science" that contradicts these three invaluable tools, and specifically here, the Analogy of Faith.

God is the author of both "books," Scripture and nature; He is the master scientist, and therefore Truth (in whatever field of study) can never contradict, or it is not Truth. One point of confusion arises on account of two unfortunate human realities: on the one hand, there are a number of atheists who have embraced the ideas of evolution in light of their materialistic presuppositions; this dishonest use of science has led to a converse reaction that is equally irrational. Many God-fearing people have overreacted to the deceptive tactics of atheists and become afraid of science itself. Evolution proves nothing in the realm of spirit; in fact, the scientists who do not carry the heavy baggage of an atheistic agenda (yet support at least some form of evolution) realize that the intricate characteristics of evolutionary science itself suggest the existence of an intelligent designer. Atheistic materialism (because of science!!) is becoming a position requiring more "faith" than Christianity.

R. Sungenis: I agree with Seth's conclusion here. END

In regard to the Genesis account, it is not just to be read allegorically. The only point we need to understand in order to remain unscathed by atheist accusations is that it is not written as a science book. For instance, it is difficult to have seven actual "days" as we understand them scientifically when the sun was not even created until "day" 4. The literary genre is so important; it points us to the truth that it wants to convey. The structure of Genesis is one of repetition, and it has multiple meanings, none of which require an explicitly literal interpretation. But just because the arrival of mankind on earth may have taken longer than six literal days, it does not mean that the truth of who man is (Original Sin, for example) is somehow disproven and our faith shaken.

R. Sungenis: Here, I believe, Seth makes presumptions on the Genesis text. First, Catholics need to be very careful when they claim "the Bible is not a science book." Granted, the Bible doesn't have equations like $F = ma$ or $E = mc^2$, but that doesn't mean that the Bible doesn't have scientific information, however cursory it may appear to us. If, for example, the Bible says that God made the species "in their kinds" (as it does six times in Genesis 1) that is essentially "scientific information" about the composition and nature of the species. We may assign a fancy name to it in our modern nomenclature (such as "taxonomy" or Linnean classification) but it is essentially the same "science" as that found in Genesis.

Be that as it may, a larger problem with Seth's view about how to interpret the text of Genesis (and it is not only Seth's problem, but the problem of an inordinate number of Catholics who have been unduly influenced by popular science and theistic evolutionists such as Stanley Jaki) is his unproven assertion that the creation of the sun and stars on the Fourth day as opposed to the Light on the First day somehow must be interpreted by the reader as a sign that Genesis is neither giving us scientific language nor indicating that the days are 24 hours each. Why is it that modern interpreters so quickly deny two light sources separated by three days, especially when the text is explicit that there is such a duality? With

nothing other than the assertions of popular science to support his interpretation, Seth seems to be going against the very rule he stated in his first paragraph, namely,

“The three interpretive criteria for biblical interpretation are 1) content and unity, 2) living tradition, and 3) the analogy of faith. The Church will never accept "science" that contradicts these three invaluable tools, and specifically here, the Analogy of Faith.”

But where does either “content or unity” demand that we ignore the chronology explicit in the text of Genesis 1 and thereby conclude that Day 1 and 4 need to be coalesced? Answer: nothing.

Second, where does the “living tradition” dictate such an artificial conclusion? Answer: nowhere. The Fathers were unanimous that the days of Genesis 1 were 24 hours each, and in the chronological sequence detailed in Genesis 1. Even Augustine agreed to this, but also said that a One Day creation was also possible.

Third, where does the “analogy of faith” teach us to coalesce the First and Fourth days, or conclude the Genesis 1 cannot be interpreted literally because of this apparent anomaly? Answer: nowhere. The history of Catholic interpretation, at least until the onset of atheistic Darwinism, gives us no recourse to a non-literal interpretation of Genesis. And Scripture certainly doesn’t provide any “analogies” whereby we would be prompted to interpret Genesis 1 non-literally. Every reference we have in the New Testament to the creation story projects a literal understanding of the text.

The fact is, Genesis 1 can be interpreted very scientifically, if you will, by keeping the days of Genesis 1 in their chronological order and by having two sources of Light. In fact, there is nothing in modern science that would negate two-sources of light. We show how it could have transpired, scientifically, in our book *Galileo Was Wrong: The Church Was Right* (which, incidentally, brings up another issue about literal interpretation, since Genesis 1 is clear that the earth was created before the sun and stars, and other Scripture specify that it is immobile while the sun circles around it, just as Genesis 1 implies).

In this scenario, the Light, which is probably fire, surrounds the earth in a hemisphere and rotates around the earth in a 24-hour rhythm. But since the earth is surrounded by a massive amount of water (which is probably millions of miles deep, with the earth being like a tiny seed in the center of the mass), this surrounding light mass is many millions of times bigger than the sun, and this large size is required in order to keep the water above freezing point. In other words, we are talking about a mass of water with the diameter the size of the orbit of Neptune and with a plasma (fire) hemisphere even bigger than Neptune’s orbit. When on the Second Day the water surrounding the earth is removed, it is sent off into the “heavens,” and all that remains is a little water on earth. The Light is also sent off into space as the firmament expands. By the Third day, the original Light, since it is now very far from earth, is no longer able to keep the earth warm, and thus the sun is now needed to continue the heat and light processes, only this time, since the earth is no longer surrounded by millions of miles of water, only a small portion of light is needed, and thus the sun, being much smaller than the original mass of Light, is sufficient to do the job. As I said, you can read all about this in our book, and I will provide excerpts for you here:

The Genesis Day/Night Sequence Revisited

As we have noted earlier, some Christian scholars are reticent to assign a literal day/night sequence to Genesis 1 due to nothing more than the fact that the sun and stars appear on the Fourth Day rather than the First Day. The objector claims that, since today it is obvious that the sun causes the day/night sequence on Earth, there could have been no day/night sequence before the sun was created, and therefore, the days of Genesis are neither literal nor chronological. Stanley Jaki considers this argument

his strongest in denying a chronological, 24-hour/day period to Genesis 1. For him, if the sun is missing from the first day, then there can be no darkness and light, and thus the days of Genesis are symbolic of long periods of time, or the sun existed on the first day and is recapitulated on the fourth day.¹ Jaki is well aware of the fact, however, that neither the Fathers of the Church nor the medieval theologians who followed them saw any problem with having two sources of light on the First and Fourth Day, respectively. For example, being consistent with his literal hermeneutic, Thomas Aquinas postulated that the effusive light on the First Day was then made into the sun and stars on the Fourth Day, perhaps similar to God fashioning man on the Sixth Day from the dirt He created on the First Day.

Now it seems to be required, for two reasons, that the formlessness of darkness should be removed first of all by the production of light. In the first place because light is a quality of the first body, as was stated, and thus by means of light it was fitting that the world should first receive its form. The second reason is because light is a common quality. For light is common to terrestrial and celestial bodies. But as in knowledge we proceed from general principles, so do we in work of every kind. For the living thing is generated before the animal, and the animal before the man, as is shown in *De Generatione Animalibus* ii, 3). It was fitting, then, as an evidence of the Divine wisdom, that among the works of distinction the production of light should take first place, since light is a form of the primary body, and because it is more common quality.

Basil (*Hom. 2 in Hexaemeron*), indeed, adds a third reason: that all other things are made manifest by light. And there is yet a fourth, already touched upon in the objections; that day cannot be unless light exists, which was made therefore on the first day.

According to the opinion of those who hold that the formlessness of matter preceded its form in duration, matter must be held to have been created at the beginning with substantial forms, afterwards receiving those that are accidental, among which light holds the first place.

In the opinion of some the light here spoken of was a kind of luminous nebula, and that on the making of the sun this returned to the matter of which it had been formed. But this cannot well be maintained, as in the beginning of Genesis Holy Scripture records the institution of that order of nature which henceforth is to endure. We cannot, then, say that what was made at that time afterwards ceased to exist.

Others, therefore, held that this luminous nebula continues in existence, but so closely attached to the sun as to be indistinguishable. But this is as much as to say that it is superfluous, whereas none of God's works have been made in vain. On this account it is held by some that the sun's body was made out of this nebula. This, too, is impossible to those at least who believe that the sun is different in its nature from the four elements, and naturally incorruptible. For in that case its matter cannot take on another form.

¹ *Genesis 1 through the ages*, p. 144. Jaki claims that by 1520 "...it was no longer possible not to take the sun for the source of light in Gen. 1:3." He writes: "Where is the biblical suggestion that light crystallizes into sparkling celestial bodies" (p. 62). He lays the blame at the "...concordist exegesis of many of the Church Fathers..." (p. 169) seemingly unmoved by his dismissal of this Tradition; and at the same time dismissing Protestants for holding similar views which were derived from "waving their Bibles" (p. 168). Early claims to Jaki's view occur in such exegetes as Eusthatius, who objects to Basil's idea of "light and heat coming together on the fourth day" with the words "How can this be if there is no evidence for such a distinction, since we neither see light distinct from fire, nor fire distinct from light" (PG 18, 718); yet quite a few agree with Basil that the light of the first day condensed into the heavenly bodies of the fourth day.

I answer, then, with Dionysius (*De Divinis Nominibus iv*), that the light was the sun's light, formless as yet, being already the solar substance, and possessing illuminative power in a general way, to which was afterwards added the special and determinative power required to produce determinate effects. Thus, then, in the production of this light a triple distinction was made between light and darkness. First, as to the cause, forasmuch as in the substance of the sun we have the cause of light, and in the opaque nature of the earth the cause of darkness. Secondly, as to place, for in one hemisphere there was light, in the other darkness. Thirdly, as to time; because there was light for one and darkness for another in the same hemisphere; and this is signified by the words, "He called the light day, and the darkness night."²

Some scholars claim that the use of the Hebrew *וַיַּעַשׂ* (from *עָשָׂה* (*asah*): "made" in the clause "And God made") rather than the word *בָּרָא* (*bara*: "created" in the clause "In the beginning God created...") means that the celestial bodies were already in existence on the First Day but became available for observation on the Fourth Day. The fact is, however, that "made" (*וַיַּעַשׂ*) is also employed in Gn 1:7 when the firmament is created to divide the waters. The appearance of the firmament is certainly a separate act of creation, since it is the only event recorded for the Second Day. Obviously, then, "made" is equivalent to "create." The same word (*וַיַּעַשׂ*) appears also in Gn 1:25 in reference to the appearance of the animals. It also appears in both Ex 20:11 and 35:17 in the sentence, "For in six days God *made* the heavens and the earth..." showing again that "made" is completely interchangeable with "created."

That the sun created on the Fourth Day takes over the day/night sequence from the light created on the First Day is an important fact. Since today as in the past we know that the sequence of darkness to light caused by the sun is a 24-hour period, this allows us to take the same 24-hours and extrapolate back to the first three days of creation when there was no sun but only light. In other words, the mechanics of the Fourth Day allows us to know that the First, Second and Third Days were 24-hour periods. Moreover, since Gn 1:14-17 indicates that the sun is made to fit the day rather than the day to fit the sun, this is further confirmation that the Creation days were of the same length. Since the 24-hour period of the sun's rising and setting must fit into the Day, it means the Day must have already been established as a 24-hour period prior to the Fourth Day. In this respect, various passages indicate that heaven's time is coincident with earthly time in the day/night sequence.³ One additional fact worthy of note is that the Light of Gn 1:3 must be light of a wavelength in the visible spectrum, that is, not long radio

² *Summa Theologica*, Bk 1, Ques. 67, Art. 4. Agreeing with Aquinas here are: Gregory of Nyssa (*Hexameron*, PG 44, 66-118); Ephrem the Syrian (*Genesim et in Exodum commentarii*, in CSCO, v. 152, p. 9); Chrysostom (*Homilies on Genesis* (PG 53, 57-58); See especially, Basil in *The Hexameron*, Homily II, 7; Victorinus in *On the Creation of the World*. The opposite viewpoint is held by Origen in *Origen Against Celsus* "By far the most silly thing is the distribution of the creation of the world over certain days, before days existed; for, as the heaven was not yet created, nor the foundation of the earth yet laid, nor the sun yet revolving, how could there be days?" (Book VI, Ch 60). Leo the Great stated: "But what is the sun or what is the moon but elements of visible creation and material light: one of which is of greater brightness and the other of lesser light? For as it is now day time and now night time, so the Creator has constituted divers kinds of luminaries, although even before they were made there had been days without the sun and nights without the moon" (Sermon XXVII). Medieval theologians are also of the same opinion: Honorius of Autun (*Hexameron* PL 172, 257); Peter Lombard (*Lombardi opera omnia*, PL 192, 651); Colonna, aka Aegidius Romanus (*Opus Hexameron*); Nicholas of Lyra (*Postillae perpetuae*); Cajetan (*Commentarii de Genesis I*).

³ Ap 8:1: "there was silence in heaven for about half an hour"; Jb 1:6-7: "Now there was a day when the sons of God came to present themselves before the Lord, and Satan also came among them. The Lord said to Satan, 'Whence have you come?' Satan answered the Lord, 'From going to and fro on the earth, and from walking up and down on it.'"

waves or short gamma rays, but a wavelength which would create the evening/morning sequence specified by the text.

Other scriptural accounts also indicate clearly that the Light of Gn 1:3 is separate from the sun and stars of Gn 1:14-17. For example, in the book of Job, God interrogates Job with rhetorical questions that he knows Job cannot answer. In chapter 38:18-24 God asks Job:

¹⁸Have you understood the expanse of the earth? Tell Me, if you know all this. ¹⁹Where is the way to the dwelling of light? And darkness, where is its place, ²⁰That you may take it to its territory And that you may discern the paths to its home? ²⁴Where is the way that the light is divided, Or the east wind scattered on the earth?

The fact that Job cannot answer these questions rules out the sun and stars Job sees everyday as a possible retort to God's question. It is thus readily apparent that God is teaching us through this revelatory dialogue a fact about the constitution of light that we could not determine on our own, that is, this particular light has a source that is not from the stars or sun. Of course, in order to accept this unique information one must accept that Scripture is giving trustworthy propositional truth and not mere fables and myths to "uneducated peoples."

Jb 26:10 reads: "He has inscribed a circle on the surface of the waters at the boundary of light and darkness." The "circle" here refers to the earth itself, and is speaking about God's creation of the earth in the midst of the waters in Gn 1:2 and 2Pt 3:5 in which "long ago the earth was formed out of water and by water." It is this circle (or sphere) of the earth that is between the boundary of light and darkness at the beginning of creation.

As for the distinction between light and the sun, various passages testify to this phenomenon. For example, Psalm 74:16 states: "Yours is the day, Yours also is the night; You have prepared the light and the sun." Ec 12:1-2 prohibits one from concluding that the "light" of Ps 74:16 refers to the stars since it separates it from the sun: "Remember also your Creator in the days of your youth...before the sun and the light, and the moon and the stars are darkened." Notice how the writer mentions all the known luminous bodies that emanate light, but he insists there is still an additional independent source of light. As in Ps 74:16, these four sources are specifically put in sequence by Hebrew *waw*-conjunctions so that it does not say "sun's light" but the sun and the light and the moon and the stars.⁴

Some theories hold that the Light of Gn 1:3 represents God or that God Himself was the source of the Light. This is untenable, since before the Light of Gn 1:3 there was total darkness in Gn 1:1-2. Since God, if He were to be associated with Light, would always be luminous, then there would have been no darkness to dispel. Moreover, the finite verb "let there be" (יְהִי) is employed for the Light in Gn 1:3 the same as it is for the firmament in Gn 1:6 and the celestial bodies of Gn 1:14, thus showing that the verb refers to something created out of nothing and not to something already existing.

⁴ In sequence, the Hebrew reads: וְהַיָּרֵחַ (and the light) וְהַשֶּׁמֶשׁ (the sun) וְהַכּוֹכָבִים (are not darkened) לֹא־תִחְשָׁךְ (and the stars). Cf., Ez 32:6-8; Ps 104:2; Is 45: 7; 60:19; Br 3:33; Zc 14:6-7; 2Co 4:6; Ap 22:5; Gn 19:11; Ac 26:13. Some raise the objection that Genesis 1:14-16's assigns the moon as one of the "two lights," even though the moon merely reflects light from the sun. This can be answered by pointing out that "light" in Genesis 1:14-16 is the Hebrew *meor*, (לְמְאוֹרֵת) which can refer to a emanating body or reflecting body (cf. Ps 74:16; Pr 15:30).

Another objection to separating the First Day and the Fourth Day is the claim that the light from both days is the same and therefore it is an unnecessary redundancy on the Creation account. There is no redundancy, however. Gn 1:15-17 state that the light of the stars and sun are to “give light on the earth,” and Gn 1:14 says that they serve as markers for “seasons, and for days and years.” In contrast, the light of Gn 1:3 appears prior to the separation of the waters surrounding the earth and is not considered a seasonal marker. The primitive state of the earth in Gn 1:1-5 suggests that the light of Gn 1:3 is directed more toward distinguishing the day/night sequence for the entire cosmos, whereas the light of Gn 1:14-19 is meant specifically for the earth.⁵

Another objection postulates that Gn 1:14 should be translated “Let the lights in the firmament be to separate the day and night,” as opposed to the traditional reading “Let there be lights in the firmament to separate the day and night.” The argument claims that since the verb “let there be” (יָדָה) is not repeated before “to separate” (לְהַבְדִּיל) the correct meaning is that the lights of the Fourth Day were already in existence on the First Day, and their specific *task* is the focus of the Fourth Day, not their creation. As in the other objections, this one also fails to incorporate all the details of the text. The First Day had already performed the task of separating the day and the night (Gn 1:4: “...and God separated the light from the darkness”). If the sun on the Fourth Day is the light of the First Day (as the above theory postulates) the sun would have already separated day from night and thus there would be no reason for Gn 1:14 to specify that the sun was assigned this same task on the Fourth Day. The easier explanation would be that the Hebrew infinitive (“to separate”) serves to show that the action of separating day from night was already occurring in the three prior Days. In contrast, the marking of the seasons in Gn 1:14 is introduced by the finite verb “let there be” (יָדָה) since this represents a new function that was not present during the first three Days.

In the final analysis, any exegete who comes to the text of Genesis 1-2 claiming that the events did not happen as recorded would necessitate his showing that he possessed some kind of all-knowing perspective from which to judge the validity of the text’s propositions. If the exegete were to de-literalize every Scripture that posed an apparent conflict if read at face value, much of the Bible would become historically useless. For example, if the critiques levied against a literal interpretation of Genesis 1 were applied to the account of the plagues of Egypt in Exodus 8-10, the latter would present even more problems. Ex 9:6 records that all the cattle of Egypt died in the fifth plague, but according to Ex 9:19 more cattle were to be killed in the seventh plague. According to Ex 8:24, the insects of the fourth plague destroyed all the plants of Egypt, but in Ex 9:31 the flax and barley were destroyed in the seventh plague, while in Ex 10:15 the locusts of the eighth plague eat the remaining vegetation. It is not the prerogative of the exegete to conclude that these apparent conflicts bar a chronological reading of the text in favor of a thematic one. The exegete must carefully compare the various accounts in Scripture and work out a viable chronology, for Scripture does not err.

⁵ Analogously, the fourfold orientation of the Tabernacle resembles the first four days of creation: Ark-throne at western end equals heaven of Day One. The altar of the eastern end equals the firmament of Day Two. The table of bread at the northern end equals the plants of Day Three. The lampstand of the southern end equals the luminaries of Day Four. (See Ex 25:1-40). Moreover, the Tabernacle was made of the spoils of the Egyptians (1Ch 26:27; Nm 31). Once built, God set a “fire” on the altar (Ex 40:38; Lv 9:23-24), resembling the light of fire he set on the fourth day after the tabernacle of heaven was built. In the same way, God lit a fire at Pentecost when he rebuilt the tabernacle of David (*cf.* Ac 2:3; 15:16).

All the other apparent anomalies between Genesis 1 and Genesis 2 can be solved rather easily.⁶ For now, the chronology of both chapters can be summed up as follows:

The Stars and the Speed of Light in Genesis 1

Here we will tackle one of the most common objections raised against a literal reading of Genesis 1. The objection concerns the apparent anomaly regarding the speed of light and the creation of the stars. It is argued that, since it is established from modern science that the stars are very far away, so far away that light from the nearest star, *Proxima Centauri*, presently takes four years to reach the Earth as it travels 300,000 km/sec, it would have been impossible for the light from stars, which were made on the Fourth day of creation, to reach Earth on that very day; and, in fact, *Proxima Centauri* would not have been seen until at least four years after Adam was created. It could further be argued that if the other stars are hundreds of thousands of light-years from Earth, then the age of the universe could not be anywhere close to the 6000 years that a literal reading of the biblical text demands, otherwise, we would not be seeing the light from these most distant stars today.⁷

On the surface this seems to be a very logical and worthy objection, and as a result, it has perplexed and paralyzed not a few biblical scholars. Their reactions to this apparent problem are many and varied. Some have been persuaded to abandon a literal reading of Genesis 1 altogether, or at the least, have tried to advance alternative literal renderings.⁸ Some have moved to a theistic evolutionary interpretation of Genesis. Others have proposed using the time-warping principles of Special and General Relativity to answer the anomaly,⁹ while still others are so bothered by the anomaly that they are willing to rearrange the whole chronology of Genesis 1.¹⁰

⁶ Please consult the *CASB Volume IV, The Book of Genesis, Chapter 1-11*, by Robert Sungenis for further detail on this topic.

⁷ A time span of 6000 years (~ 4000 B.C. to 2000 A.D.) is produced from interpreting the ancestral lines of Genesis 5 and 11 as strictly father-son relationships.

⁸ Fr. Stanley L. Jaki, *Genesis 1 Through the Ages*, 1992.

⁹ In particular, D. Russell Humphreys in the book *Starlight and Time: Solving the Puzzle of Distant Starlight in a Young Universe*, Green Forest, AR, Master Books, 1994. Humphreys' bottom line is that "God used relativity to make a young universe" as he sides with what he calls "the experimentally well-established general theory of relativity." He further suggests, "the universe started as either a black hole or white hole. I suggest here that it was a black hole, and that God let gravity take its course" (pp. 128, 127, 123, quoted in order). In other words, General Relativity's dilation of time through gravity is the basis of Humphreys' theory. Hence, a clock on Earth would measure the Earth's present age as 6000 years, whereas a clock at the edge of the universe would measure 13 billion years. In essence, Humphreys uses the mathematics of General Relativity to posit that the 13 billion years commonly associated with the age of the universe is an illusion created, but allowed, by the principles of General Relativity. However, someone who also employed Relativity's principles came to the exact opposite opinion, which is not surprising, since in Relativity everything is "relative" (G. L. Schroeder, "The Universe – 6 Days and 13 Billion Years Old," *Jerusalem Post*, September 7, 1991). Humphreys can have little argument against this, since according to General Relativity, a person standing at the edge of the universe would think that his immediate vicinity is 6000 years old and the Earth is 13 billion. All in all, this is just another case in which General Relativity becomes the wax nose that can be molded to fit a variety of cosmologies due to the very nature of its inability to have a fixed and absolute reference point.

¹⁰ In particular, Gorman Gray in the book *The Age of the Universe: What are the Biblical Limits?* Washington, Morning Star Publications, 2005, in which he argues that the clause in Gn 1:1, "In the beginning God created the heavens," denotes that at that time the sun and the stars must have been created, and that the text allows for an indefinite time-gap between the appearance of the stars/sun and the creation of the Earth. During this "indefinite

At the outset we must note that it makes little difference if one bases his argument on the idea that the stars are billions of light years or just four light years from Earth. In either case, if the speed of light is given an unchanging value of 186,000 miles per second, yet it is agreed that when the stars were created on the Fourth day an observer on Earth would have seen their light immediately, then the light of the stars must have reached Earth either instantaneously or sometime before the close of the Fourth day. Even if we give light an extra day or two to arrive on Earth such that it would have appeared on the Fifth or Sixth days of creation, this does not provide an adequate solution to the problem, since the nearest star is, at least according to modern astronomy, four light years away. As such, the light from *Proxima Centauri* would have arrived four years after Adam was created, and light from stars that are farther away than 6,000 light years would not yet have reached the Earth, according to the biblical timetable.

Some might advance the counterargument that, after the stars are mentioned in Gn 1:16, they are not mentioned again in the biblical text until Gn 15:5, when God tells Abraham to look up at the stars and count them. This would allow their light to travel for the whole time from the creation week to the time of Abraham's old age. As such, the total time of travel could have been two thousand years (4,000 B.C. to 2,000 B.C.). If we assume light's speed has always been the same, then, at the maximum, the total miles traveled would have been 3.5×10^{16} miles in 6,000 years, or 3.5 quadrillion miles. This distance could accommodate quite a few stars in the universe. In fact, it would more than satisfy the only empirical method of determining the distance to the stars, namely, stellar parallax, which, beyond 100 parsecs or 1.92 quadrillion miles, cannot be applied as an accurate means of measuring distance.

It could further be argued that the alternative and more common method of measuring the distance to the stars beyond the limits of parallax, that is, the redshift of light, is simply an unproven scientific hypothesis that remains in the throes of controversy, and therefore no biblical scholar is required to accept or apply a redshift/distance relationship as an irrefutable scientific fact. Moreover, various astrophysicists have already proposed a mathematical model for a much shorter travel time for light in the universe. Parry Moon of M.I.T. and Domina Spencer of the University of Connecticut introduced the idea in a paper titled "Binary Stars and the Velocity of Light." The authors state:

time," starlight is said to be traveling to Earth and, based on a speed of 186,000 miles per second, would have had enough time to make the multi-million year journey. To substantiate this interpretation, Gray further argues that the Hebrew עָשָׂה (*asah*) appearing in Genesis 1:16 and normally translated "made" really means "brought forth," such that the light of the sun and stars is now allowed to penetrate to Earth, having previously been obscured by a "cloud of thick darkness" (cf. Jb 38:9) that has since been removed. This is similar to the view we noted earlier propounded by Hugh Ross, yet it must be rejected for the same reasons. There is absolutely no indication in the Genesis text that stars were created before the Earth, and it is likewise exegetically presumptuous to limit the definition of Gn 1:1's "heavens" to the existence of stars in the heavens as opposed to the heavens itself. According to Gn 1:14-16, the sun and stars are placed "in the heavens," that is, they are not *the* heavens but are attached to the heavens. The Hebrew phrase is מֵאֲרֶת בְּרָקִיעַ הַשָּׁמַיִם which translates as "lights in the firmament of the heavens," with the preposition "in" denoted by the consonant "ב" prefixing the word רָקִיעַ "firmament" This phrase is repeated in Gn 1:17 ("And God set them in the firmament of the heavens") with the addition of the word נָתַן ("set") to reinforce that the sun and stars are distinct from the firmament in which they are set. In addition, there is no "firmament" on the first day of creation, there is only the empty heavens, and as such, the emptiness is waiting to be filled by both the firmament and the celestial bodies, on the second and fourth days, respectively. Moreover, Gray's contention that "brought forth" is a clearer translation than "made" of the Hebrew *asah* is untenable. Although *asah* has some variation in its contextual meaning, when it appears in creation contexts, its meaning is closer to "made" than it is to "brought forth." For example, Psalm 33:6 [32:6] states: "By the word of the Lord the heavens were *made* [*asah*], and by the breath of His mouth all their host." Here *asah* is used in the almost identical wording that appears in Gn 1:1 ("In the beginning God *created* the heavens...") although in that case the Hebrew בָּרָא (*bara*) is used instead of *asah*, which shows that the words are exegetically interchangeable.

The acceptance of Riemannian space allows us to reject Einstein's relativity and to keep all the ordinary ideas of time and all the ideas of Euclidean space out to a distance of a few light years. Astronomical space remains Euclidean for material bodies, but light is considered to travel in Riemannian space. *In this way the time required for light to reach us from the most distant stars is only 15 years.*¹¹

The problem with all the above proposals, however, is that they will not allow light from the stars to appear on Earth on precisely the Fourth day of creation, yet the text of Genesis insists the opposite is true since the stars are included among the celestial bodies given the task of time-keeping (Gn 1:14: "and let them be for signs and for seasons and for days and years"; Gn 1:18: "and to govern the day and the night"). We know the stars' role in time keeping today as "sidereal time," and it is an essential ingredient in chronology for it allows us to have a contrasting background in order to measure the sun's path around the Earth. So precise is this star/sun relationship that the sidereal day is always four minutes shorter in length than that which we keep by the sun on a 24-hour-per-day clock.

Although we are not compelled to include distances beyond 100 parsecs because of the uncertainty of the redshift hypothesis, still, since redshift is considered as a viable measuring device by the modern scientific community, and since, in any case, there certainly could be stars that are further away than the limits our present parallax capabilities can judge, there needs to be another solution to the starlight problem. In other words, if there is a star beyond the round figure of 6,000 light years away from Earth, biblical chronology (at least based on an unchanging speed of light) seems to have no way of explaining how that star's light reached Earth during the Earth's biblical time of existence.

When we dig deeper into the biblical text, there is an easy solution to the problem, and, in fact, there are several solutions, all of which may be working together.

(1) Any solution must never discount the possibility that the stars could have been created many thousands of light years from the Earth and their light could have been brought to Earth instantaneously by an act of creative fiat. It would certainly be illogical to argue, on the one hand, that God created the stars instantaneously, but then argue, on the other hand, that He could not perform a creative miracle and allow their light to stretch instantaneously to the Earth. If one accepts a divine intrusion for the former, on what basis can he deny it for the latter? God himself determines the boundary line for how and when His miraculous intrusion ceases and natural processes take over. None of us can set arbitrary limits on when the crossover should take place, especially in the very beginnings of creation when most events are dependent on God's miraculous direction. One of the main reasons that modern atheistic science believes the universe is 13.5 billion years old is that it denies a creative fiat *at any time*, insisting that everything, from the appearances of matter to starlight, respectively, must occur by natural processes. At some point, the biblicist must deny the premise of naturalism, whether he decides to do so on the Fourth day of creation or at the so-called Big Bang, for even the most liberal-minded biblical scholar knows that something cannot come from nothing. Hence, it is no great stretch for the conservative biblicist to include the creative fiat not only the stars themselves but also the light intervening between them and the earth.

(2) We can also address this issue by pointing out that the cosmological principle has certainly not been proven. The speed assigned to light (300,000 km/sec) has only been demonstrated in our local

¹¹ Parry Moon and Domina Spencer, "Binary Stars and the Velocity of Light," *Journal of the Optical Society of America*, Vol. 43, No. 8, August 1953, p. 635, emphasis added. By an exhaustive study of the binaries, Moon and Spencer concluded: "Velocity of light in free space is always c with respect to the source, and has a value for the observer which depends on the relative velocity of source and observer. True Galilean relativity is preserved, as in Newtonian gravitation" (*ibid.*, p. 641).

environment, not throughout the rest of the universe. Although it is reasonable for one to assume that the speed of light is the same everywhere in the universe, by the same token, it would be rather presumptuous to build a whole cosmological system on something that has no demonstrable proof. At the least, cosmologies that posit a faster speed of light for other parts of the universe which may be under different cosmological constraints should not be dismissed out of hand, especially since there is growing experimental evidence that the speed of light has, on the one hand, been generally slowing down since the inception of the universe in conjunction with the laws of thermodynamics, and, on the other hand, has been increased *in vacuo* beyond the value of *c* in various laboratory experiments. As we noted earlier, even Einstein was caught having to modify his major premise that *c* remained constant, both in Special and General Relativity.¹²

(3) After we recognize that God could have made starlight appear on Earth miraculously, other biblicists may feel compelled to at least offer some naturalistic explanation for the starlight's reaching Earth, if for no other reason than to cover all the bases and convince the opponent that there is no escape for those looking for a more naturalistic approach to Genesis 1 (e.g., evolutionists). As such, we refer ourselves to the events of the Second Day of creation, when God created the firmament. We have already noted that the firmament includes both the expanse of space to the limits of the universe (Gn 1:6-9, 14-19) as well as the space in the immediate vicinity of Earth in which "the birds fly" (Gn 1:20). As also noted, the Hebrew word אֲקָאֵר רְקִיעַ (firmament) denotes something hard and dense like metal but it also describes something ethereal and penetrable. Fitting the firmament between those two extremes means that we have a truly amazing substance in our universe. In Volume I we belabored the point that the best way to incorporate the two extremes is to understand the firmament as an extremely fine yet dense particulate substance that is frictionless and which permeates every part of the universe and constitutes its vast internal substructure.

In addition, Scripture speaks of the firmament being transformed from its original dimensions to an "expanded" state. For example, Psalm 104:2 says that God is "stretching out heaven like a curtain." Depending on the Hebrew passage cited, the expansion of the firmament is an event that occurred once in the past; occurred in the past but was also a progressive event for a certain period of time; or occurred in the past and is still continuing today.¹³

The first question regarding the expansion concerns how fast it occurred. Since the sun and stars were placed "in the firmament of the heavens," the firmament would need to be big enough at the dawn of the Fourth Day to house the sun and all the stars. As the celestial bodies were placed in the firmament, it would have continued to expand away from the Earth, and in the process it would have carried the stars with it to the outer-most recesses of the universe.

¹² See Appendix 1: "Anomalies Concerning the Speed of Light" in Volume I for more information on these laboratory experiments. Regarding Einstein's modifications to the speed of light, see Volume I, Ch. 5.

¹³ Based on the stipulation in Gn 1:8 that "God called the firmament heaven," the term "heaven" is often interchangeable with "firmament." In regard to the "expansion," Jb 9:8 contains the Qal participle הִטָּה which can refer to a progressive "stretching out," and matches the progressive speech in the preceding verse: "the One speaking to the sun, and it does not rise and to the stars he sets a seal." The same Qal participle appears in Ps 104:2 and Is 42:5 in a similar context of progressive action, whereas Is 44:24 uses the same Qal participle but could refer to a single act or a progressive action. Is 45:12 uses the Qal perfect הִטָּה referring to a past act, as does Jr 51:15. In Is 51:13 the Qal participle is coupled with a past act ("founded the Earth"), yet Zc 12:1 uses the Qal participle coupled with two other Qal participles ("founding the Earth" and "forms the spirit of man within him," the latter of which is a continuing action). All in all, the evidence leans towards the "stretching out" as an event with a definitive beginning in the past but in continual progress, at least for some indefinite period of time, and thus a process that did not cease on Day Two of creation week.

If we limit the speed of light to 186,000 miles per second at the time the stars are placed in the firmament, and also limit ourselves to affirming that their light reached Earth on the Fourth Day, this means that the size of the firmament at the end of its expansion on the Fourth Day would be no bigger than the allowable distance light could travel in 24 hours (*i.e.*, the 24 hours from the beginning of the Fourth day to the end of the Fourth day). As such, the radius of the firmament would have been no bigger than 1.6×10^{10} miles (or 16 billion miles); and its volume would have been 1.256×10^{31} cubic miles.

Here is the crucial point: within the distance of 16 billion miles, the light from the stars travels to Earth in a period of 24 hours or less. As such, we have satisfied the objection concerning how starlight could appear on Earth on the Fourth Day of creation. All that is needed now is to add the subsequent events. Consequently, as the starlight reaches Earth on the Fourth Day, the expansion of the firmament continues. After an initial expansion, the rate of expansion could then be accelerated in order to arrive at the size the universe is today. In any case, the expansion will cease once the universe reaches its optimal size, but we do not know when that termination point occurred, or if it has yet occurred.

As the firmament continues to expand beyond the radius of the Fourth Day it will carry the newly created stars with it. As a result, light from the star will be stretched and, depending on the intensity of the stretch due to whether the star was initially placed nearer to or farther from the Earth, it will produce a corresponding redshift in the wavelength of the starlight. Whether this is the cause of the redshift we see today is not certain, but the major point is made that, within the context of the expanding firmament, the Bible places no limitations on starlight reaching Earth on the Fourth Day.

Using the Redshift Formula for a Small and Young Universe

In regard to the redshift, it is interesting to see what happens when we use Big Bang cosmology's very own formula for measuring the age of distant objects. The age is calculated by the formula $t = t_0 (1 + z)^{-3/2}$, where t_0 is the current age of the universe and z is the redshift factor of the object.¹⁴ Most of modern science believes the universe began during a Big Bang, and using their own assumptions and scale factors, it believes that this seminal event occurred 13.7 billion years ago, at least according to the latest data from NASA's Wilkinson Microwave Anisotropy Probe. Let's say NASA finds a distant object in the sky and assigns it a z -factor of 1. NASA will then plug in the value for t_0 as 13.7 billion years and will compute a value for t , which is understood as the age of the universe when the radiation emission of the distant celestial object took place. In the case where $z = 1$ then $t = 4,844,413,013$ years. Since using the number 13.7 billion years is completely arbitrary (for it is based on the unproven Big Bang assumptions of the universe), let's say we assume t_0 is 10,000 years instead of 13.7 billion. In this case, where $z = 1$ then $t = 3,536$ years. In other words, when an astronomer sees a star with a z -factor of 1, he might just as well assume the universe was 3,536 years old rather than 4.8 billion years old, since the z -factor is only a function of one's assumption regarding the beginning of the universe. If an astronomer finds an even more distant object that correlates to a z factor of 2, then the age of the universe when the object began radiating was 1,924 on the biblical scale but 2.6 billion years on the Big Bang scale.

Of course, the biblicist does not interpret either the 3,536 years or 1,924 years as the different times that two stars were created, for he holds, on a dogmatic basis, that all the stars were created on the same day. It only means that, as the firmament expanded and carried the variously placed stars within it, their wavelength would be stretched by their medium, the firmament, in proportion to the distance they were originally placed from Earth. (See 1Co 15:41, which teaches that "star differs from star in glory,"

¹⁴ This z -factor formula is based on the so-called "dust model" of the universe wherein the major components of the universe do not exert any pressure on their surroundings. But if one were to base the z -factor on the radiation of the CMB in terms of number of particles, the formula would be $t = t_0 (1 + z)^{-2}$. This again, shows the complete arbitrariness of the formulas since they invariably depend on one's unproven assumptions.

presumably because of their specific composition and purpose, which required them to be placed at different distances from the Earth). Thus, if we were to understand redshift as a distance indicator, what we see as differences in redshift values today is merely the result of the differences of the original placement of the stars on the Fourth day of creation. The stars that were placed closer to Earth will now exhibit lower redshift values today, and vice-versa for the stars placed farther away.

Interestingly enough, if we use modern science's formula for measuring the age of the universe when the cosmic microwave background radiation (CMB) was released, we get very close to the time we have predicted that the firmament would create the 2.73° Kelvin temperature. The formula is $T = T_0 (1 + z)$. Plugging in a z-factor of 1089 for the CMB, the Big Bang theory arrives at a universe age of 380,711 years after the primordial explosion for the arrival of the CMB, whereas using the same z-factor the biblicist obtains 0.278 years, which puts the CMB well within the first three months of the first year of creation and after the fall of man when, as we will see in Chapter 16, according to Hildegard, the universe began rotating and the firmament needed to be cooled at 2.73° Kelvin. END

More Analysis of Seth's Position on Genesis

Also, I take some exceptions to what Seth is proposing in his latter words of the above paragraph. He writes:

“The literary genre is so important; it points us to the truth that it wants to convey. The structure of Genesis is one of repetition, and it has multiple meanings, none of which require an explicitly literal interpretation. But just because the arrival of mankind on earth may have taken longer than six literal days, it does not mean that the truth of who man is (Original Sin, for example) is somehow disproven and our faith shaken.”

R. Sungenis: Granted, the “literary genre is so important,” but what I so often see among those who appeal to it turns out to be a wax nose that the interpreter can mold to his own liking. Obviously, none of us were there to know what the precise “literary genre” was for Genesis, so a lot of this search is mere speculation. What ends up happening is, if the interpreter doesn't want to interpret the text literally, he finds a “literary genre” that would suit as the influence on what the Genesis writer had in mind.

I find this in Seth's description of Genesis as being a text of “repetition and multiple meanings” and then he concludes that this composition warrants that the reader be free from the constraint of “literal interpretation.” How so? Even if Seth were correct in emphasizing that Genesis 1 is “repetitive” and has “multiple meanings,” how do these qualities lead us away from literal interpretation? Isn't repetition a sign of literal intent also? Read the genealogies of the Pentateuch, and the enumerations of the population in Numbers, or the regimens of the priest in Leviticus. There you will find repetition to your heart's content, but it is for the very purpose of being as literal as possible. Likewise, in Genesis 1, if the author repeats a phrase such as “and there was evening and morning” six times, once after each day of creation, doesn't that repetition convey the idea that all the days are the same, and does not the explicit phrase “evening and morning” convey a day and night? In reality, the “repetition” argument that Seth advances actually works against his thesis, not for it.

As for “multiple meanings,” let's presuppose there are multiple meanings. But does that not leave much room, then, for us to maintain a literal interpretation of the text alongside say, a figurative interpretation that sees the days as a successive order of hierarchy? And would this not agree with our Catholic Catechism that says the literal interpretation is to be given precedence, and that other kinds of interpretation can be added to it? (CCC, para 115-117). The Church has been clear that we are “required”

to interpret the text literally, unless there is some clear and precise obstacle to doing so. But neither “repetition” nor “multiple meanings” nor “literary genre” are sufficient enough for us to conclude that Genesis 1 need not be interpreted literally.

Moreover, there is certainly no scientific reason why Genesis 1 cannot be interpreted literally, since it can be shown, very scientifically, that the earth can maintain an immobile and central position in the universe, and that there can be two sources of Light. The real problem here, I believe, is that Catholic interpreters have accepted, without proof, the theoretical assumptions of popular science that says the Big Bang came first, and then the sun, and then the earth, but there is absolutely no proof to this. So the warning of St. Augustine still holds, which is “But if they are able to establish their doctrine with proofs that cannot be denied, we must show that this statement of Scripture...is not opposed to the truth of their conclusions” (*The Literal Interpretation of Genesis* Book 2, Chapter 9, paragraph 21.)

I think there are two additional problems with the average Catholic interpreter. First, he has been unduly stigmatized by the Galileo affair. If I've heard it once, I've heard it a thousand times: The Catholic Church does not want a repeat of the Galileo affair wherein the Church, putting her full magisterium behind the condemnation of both Galileo and heliocentrism, is found to be wrong by the authorities of popular science. So instead, the Church has now gone to the other extreme, such that anything science spits out, the Church accepts, if even only on a theoretical level. The only line in the sand the Church seems willing to draw today is when science begins denying the existence of God. That leaves popular science, no matter how hare brain an idea it propounds, to fill our heads with the rest of the story, as it were.

Second, I think the average Catholic is very intimidated by modern science. Often, the last science course the average Catholic had was in high school. So when today's scientist comes with his fancy mathematical equations and highfalutin theories, the average Catholic has little defense against it. And even today, most Catholics in academia have little time to sort through the intricacies of the evolutionary theory, and most couldn't even if they wanted to. And this is not something that only I have discovered. This fact is known by the world's scientists, and they use it with abandon. For example:

Scientific historian, Paul Feyerabend writes: “It is a pity that the Church of today, frightened by the universal noise made by the scientific wolves, prefers to howl with them instead of trying to teach them some manners” (*Farewell to Reason*, p. 260).

Feyerabend noticed the tremendous difference between how the modern Church handles scientific claims and how the Church of Galileo's day handled them. In a 1982 letter Feyerabend wrote to a Catholic priest who attended a debate in Zürich on the “the modern relation between the sciences and the Catholic Church,” he remarks:

Dear Father Rupert, I listened with interest to your talk of Thursday last. I was surprised by two features. The one is the speed with which the Church now retreats in the face of scientific results...When I was a student I revered the sciences and mocked religion and I felt rather grand doing that. Now that I take a closer look at the matter I am surprised to find how many dignitaries of the Church take seriously the superficial arguments I and my friends once used, and how ready they are to reduce their faith accordingly. In this they treat the sciences as if they, too, formed a Church...Best wishes, Paul Feyerabend. (Paul Feyerabend, *Farewell to Reason*, pp. 263-264).

Here are a few additional excerpts from my book:

As Alfred O’Rahilly opined: “The mathematicians got their chance and the semi-educated developed their natural gullibility.”

Engelbert Schücking boasted: “We have been able to scare most of the ministers out of cosmology by a straightforward application of tensor analysis.”

J. J. Thomson: “We have Einstein’s space, de Sitter’s space, expanding universes, contracting universes, vibrating universes, mysterious universes. In fact the pure mathematician may create universes just by writing down an equation, and indeed if he is an individualist he can have a universe of his own.”

Aldous Huxley: All our science is just a cookery book, with an orthodox theory of cooking that nobody’s allowed to question, and a list of recipes that mustn’t be added to except by special permission from the head cook” (Brave New World).

If you are interested in this subject, Cardinal Schonborn (the most influential contributor to the Catechism and great friend of Pope Benedict) has written an excellent book in detail on the subject titled, *Chance or Purpose? Creation, Evolution and a Rational Faith*. Dr. Hahn has also released a new book, co-authored with Benjamin Wiker titled, *Dismantling Dawkins: Answering the New Atheism*. This is a short and well-articulated argument that soundly picks apart the arguments of atheistic science. I thoroughly enjoyed reading it and highly recommend it since you are obviously fired up about the subject (as am I).

R. Sungenis: I would be most interested to read this new book. But if the book is suggesting that a literal interpretation of Genesis 1 has, more or less, been dethroned by popular science, then it is denying our tradition and capitulating to the unproven dictates of popular science. Unfortunately, Catholics today, in order to get a voice in the public debate, think they have to accept the mechanics of evolution (as Cardinal Schönborn does) just as long as they don’t accept the atheism of evolution. What we have is a war of attrition between science and religion, neither side winning the debate but both sides hobbling on one leg, as it were. I just wish Hahn and Wiker were as diligent in promoting the literal interpretation of Genesis that our Catholic tradition teaches, as much as they are probably as diligent in denying Dawkins his atheism. But my guess is that Hahn and Wiker argue the case against Dawkin’s atheism by showing that evolution can be divinely ordained. If that is the case, then Hahn and Wiker have, in my honest opinion, done a disservice to our Catholic community. It is high time that we divest ourselves of the unproven theories of evolution and bring ourselves back to trusting God’s word for what it actually says. Genesis 1 does not teach evolution. It teaches the exact opposite. Trying to force evolution into Genesis 1 is like trying to fit a square peg in a round hole. It won’t work. Speaking of “literary format,” Genesis 1 is written in such a way where nothing but miraculous divine intervention can make it progress from day to day. END

Your question about death is very interesting. First, it seems that death must have somehow existed before the Fall; otherwise, the warning by God that they would surely die implies that Adam and Eve had some familiarity with death. If they did not know about death, the warning would not have meant much to them.

R. Sungenis: I am at a loss to Seth’s reasoning here. To argue that Adam and Eve wouldn’t have known about death unless death occurred before the Fall is like arguing that Adam and Eve couldn’t have sinned in the Garden unless sin occurred before the Fall, and sin that they would have had to witness. I’m afraid that Seth’s suggestion is just another clumsy attempt to accommodate the theory of evolution, which requires death to be continual. The alternative is that, as God communicated with Adam on a daily basis, He would have taught Adam what death was, and how it would affect him and his progeny. I would also

like to add that, as opposed to what is normally assumed for evolution, death is not a neatly fit piece of the puzzle for evolutionary theory, for if the specimen is on an upward progression of complexity to the point that it generates a highly sophisticated brain and anatomical system, then what, in the natural process of things, will dictate that the specimen will deteriorate and die? Death, barring death by accident, is an anomaly in evolution, not a support. I cover this issue in my new Genesis commentary (The CASB, Volume IV).

Second, the Hebrew verb for "die" used in the passage is literally translated "die die" or "die the death," and this word refers explicitly to spiritual death. The irreconcilable nature of the evolutionary mechanism of death is only apparent. Satan's introduction of suspicion, "you will not die," actually holds true if by death we mean biological. This was part of his deception. After all, they did not "die." But immediately, they lost their communion with divine life, a spiritual death far worse than the physical. This is Original Sin--the absence of divine life we all inherit (spiritual death); hence, our need to be reborn in the waters of baptism.

R. Sungenis: First, the Hebrew expression "die the death" (mut tamut) does not "refer explicitly to spiritual death." It is simply an emphatic Hebrew phrase in the Qal infinitive absolute which essentially means "you shall certainly die." It was a way of saying, "you will die and there is no ands, ifs or buts about it." Second, "you shall die" does not refer only to spiritual death. As I note in my Genesis commentary:

Hb: מוֹת תְּמוּת, *lit.* "you shall die death," Qal infinite absolute followed by Qal imperfect, the former acting to emphasize the latter, which can thus be translated "You shall certainly die." Additionally, the phrase בַּיּוֹם אֲכַלְךָ ("in the day of your eating of it") implies that Adam should have died on the very day he sinned. If there had been no mitigating circumstances (*e.g.*, if he hadn't been deceived into eating the fruit by the serpent and Eve, see 1Tm 2:14; 2Co 11:3) and decided to eat of the fruit on his own recognizance, it is likely that God would have taken his life immediately. Hence, Adam is given a reprieve and the promise of a Redeemer (Gn 3:15). In a similar way, Adam is not punished with total depravity but is left with a residual grace allowing him to find his way back to God. The seeds of both physical and spiritual death, however, will be transmitted to his progeny who, like Adam, will be given a period of time to reverse the effects (*e.g.*, Hb 11:1-7; Rm 5:1-20). The devil, having no mitigating circumstances since all was of his own devious volition, is judged eternally with no possibility of reprieve. But because Adam is not destroyed immediately, justice requires that Satan not be destroyed immediately as well. END

Whatever you do, Michael, do not let the fast-talking antics of so-called scientists fool you with their atheism. The Church is fully prepared to give an answer. The more you familiarize yourself with the true teachings of the Church with regard to evolution, the less threatening it will become. He is Lord of Heaven *and Earth*, and He is truly Risen! If you ever have any questions, do not hesitate to throw them this way. But do take advantage of the material I suggested (especially Dr. Hahn's new book) if you can. I would love to hear what you have to say after reading it. It answered most of my questions effortlessly.

May God bless you abundantly!

In Christ,

Seth Evangelho

St. Paul Center for Biblical Theology
www.salvationhistory.com
www.scotthahn.com

R. Sungenis: My honest opinion is that Seth has a good heart and is trying to find the truth, but unfortunately, he is being heavily influenced by the theistic evolutionary crowd, which to me is nothing more than a lukewarm no-man's-land of equivocation, both with science and with theology. I find it so sad that my Catholic brothers have decided to take the middle road between evolutionary science and theology, believing that this compromise position gives them the best of both worlds. In reality, it gives them the worst of both worlds because it is neither true science nor true theology, in addition to putting our Fathers and councils in a bad light since neither of them taught theistic evolution. Moreover, true and provable science does not support or teach evolution; and true Catholicism and Scripture does not teach a hybrid between evolution and theology. I only wish that Catholics would study the science to find this out, and remain faithful to the tradition that was passed down to us, a tradition that started much earlier than us as it fought the Greeks and their evolutionary ideas, for Darwin was not the first.

God be with you, Michael.

Robert Sungenis