

Response to Steve Kellmeyer's Comments about Geocentrism

<http://skellmeyer.blogspot.com/2013/05/the-bible-as-science-text.html>

Kellmeyer: The Bible As Science Text. Many people, even many Catholics, have an incoherent desire to treat the Bible as a science textbook. Let's examine how well that works out. 1) The Earth is Flat: Most of the Old Testament was written by about 400 BC. Unfortunately, Eratosthenes of Cyrene didn't demonstrate that the earth was round until about 200 BC. So, the Old Testament assumes that the earth is a flat disc...

R. Sungenis: The Old Testament does not "assume" the Earth is a flat disc, and it does not teach it is a flat disc. The Bible speaks about the "corners of the Earth," (Jb 37:3; Is 11:12; 41:9; Ez 7:2; Ap 7:1; 20:8) or "ends of the Earth." (Dt 28:64; 33:17; 1Sm 2:10; Jb 28:24; 38:13; Ps 19:4-6; 22:27; 46:9; 48:10; 59:13; 61:2; 65:5; 41:9; Jr 51:16; Dn 4:10-11; Mk 13:27). The latter two terms do not, of course, mean that the Earth has literal corners or ends. Rather, "corners" refers to the four compass points (north, east, south and west), while "ends" refers to the respective east and west horizons. Hence, Scripture is not implying that the Earth is flat. Not only does Scripture imply that the Earth is a sphere (Jb 26:10; Pr 8:27-29; Is 40:22), it never refers to the Earth as being flat.

Jb 38:4 shows that the foundation of the Earth is a complicated structure with precise measurements that are unfathomable to Job. Jr 31:37 echoes this perspective as it says "the foundations cannot be discovered." We understand from this language that the "foundation of the earth" is its core, upon which everything else rests. It is a substance of extreme strength, as Mi 6:2 and Ps 104:5 indicate. Modern science has not been able to tell us the composition of the core of the earth, since everything from molten iron to rock has been proposed without resolution.

The Bible also speaks of the "the foundation of the earth" (2Sm 22:16; Ps 18:15; 102:25; Pr 8:27-29; Is 48:13; Jn 17:24) and the "pillars of the earth." (1Sm 2:8; Jb 9:6; 38:4-6). The latter would be the structures that rest on the foundation, which is more or less indicated in 1Sm 2:8. Some have assumed that the Bible is merely reiterating something akin to the ancient Hindu idea that earth is flat and rests upon a giant turtle. But no such notions are displayed in Scripture. Scripture maintains that the earth rests in space and is not supported by any material thing for it "hangs upon nothing" (Jb 26:7). This would mean that the "pillars" apply only to the interior of the Earth. The pillars rest between the core and the surface. Science knows this as the "mantle" of the earth. They also know that the mantle is made up of rock, much of it granite rock, which is one of the hardest structures known. They also know that these structures appear intermittently around the globe, and are always positioned vertically, one end facing the core and the other facing the surface of the Earth. To recap, there is an inner core. Around the core is the mantle, which contains vertical pillars radiating from the top of the mantle to the surface of the Earth. Around the mantle, is the land surface of the Earth, but it is uneven. Between the uneven portions, water collects. If one were looking at this from a two-dimensional perspective, one could draw a circle (concentric with the core and the mantle) that would cut through the uneven land mass and the water mass, serving as a boundary for the land and water (Pr 8:27; Jb 26:10; Is 40:22).

Lastly, the Fathers, who interpreted the Bible's cosmological passages literally, never held to the idea that the Bible taught a flat earth.

Gregory of Nyssa: On the Soul and the Resurrection.

Basil: Orthodox Faith, Book 2, chapter 10.

Basil: Hexameron, Homily IV, 4.

Clement of Alexandria: Paedagogus (also found in Clement of Rome)

Augustine: City of God, Bk XVI, Ch 9

Augustine: Homilies on First John, Homily X, 5

Augustine. Homily on Psalm 61, 2

Augustine: Homily on Psalm 67, 8

Augustine: Homily on Psalm 69, 1

Augustine: Homily on Psalm 72, 9

Eusebius: Life of Constantine, Bk 2, Ch LVII

Gregory of Nyssa: On the Making of Man, XXI, 3.

Jerome: Letters, 124, To Avitus

The Fathers knew the moon reflected light and traveled in a circle around the earth.

Gregory of Nyssa: On the Soul and the Resurrection

John Chrysostom: Homily on Hebrews, Homily 8, 7

Cyril of Jerusalem: Catechetical Lectures, Lec 6, 3

The Fathers recognized both the earth as the center of the universe, and that it is round, as noted by the stipulation that water goes "round the Earth."

Athanasius: Against the Heathen, First Book, Part 1, 27

Kellmeyer: ...hanging in space and immoveable.

R. Sungenis: Yes, the Bible does say the Earth is hanging in space upon nothing and is immoveable. The Fathers took these words at face value just as they took the words "This is my body" to teach the physical presence of Jesus Christ in the Eucharist.

Kellmeyer: The sky is a dome, and above the sky are the waters. When doors in the sky open up, the waters fall: this is called rain.

R. Sungenis: The Bible does not teach that the sky is a "dome." The word "dome" is an idiosyncratic translation adopted only by the New American Bible for the Hebrew word RAQIA, normally translated as "firmament" by older and modern translations, both Catholic and Protestant. The Douay-Rheims, King James Bible, American Standard Version, Revised Standard Version and RSV Catholic edition, New American Standard, New Jerusalem Bible, New International Version do not use the word "dome," but use the word "firmament" or "expanse" or something similar to it. If the word "dome" is implied by RAQIA, it is only because the sky curves around the spherical Earth. Anything that curves and is

overhead is a dome-like structure. But RAQIA is much more than a dome. It is called the “heavens” in Genesis 1:8 (“and God called the firmament heaven”). It is the place where both the birds fly and the sun, moon and stars are placed (Genesis 1:13-20). Obviously, then, it is not a dome; rather, it is space itself that stretches out to the entire universe. Obviously, the universe’s space doesn’t have “doors.” That is merely a metaphor for a torrential downpour, as if someone suddenly opened a dam and the water that was once held back now pours forth violently.

Kellmeyer: Now, when the ancient Hebrews heard about Eratosthenes' work, they undoubtedly said that his proposal was just an unproven theory, and that there was a lot of evidence against this novel and un-Biblical idea of sphericity.

R. Sungenis: The Hebrews didn't “hear” about Eratosthenes' work since Eratosthenes died in 196 BC, at least 1300 years before Moses penned the Pentateuch and 800 years before the poetical books (e.g. the Psalms, Job, Ecclesiastes) were written, all of which teach a spherical Earth, not a flat one. The Bible taught a spherical Earth long before Eratosthenes. Eratosthenes merely calculated the circumference of the Earth. Moreover, there is no evidence that the Hebrews who lived in Eratosthenes' time believed the Earth was flat. The Septuagint, which was translated near the era of Eratosthenes, rendered into Greek the very spherical Earth that was taught in the Hebrew Bible.

Kellmeyer: But, if the Bible is a science textbook, then we must assume that the sphericity of the earth is unproven.

R. Sungenis: First, let's deal with the issue of whether the Bible is a “science textbook,” since so many conclusions, right or wrong, are being made from it. Obviously, the Bible is not, in the technical sense, a science textbook. It doesn't contain extended studies and analysis of natural science and does not reduce reactions to mathematical equations. Rather, the Bible just makes assertions of fact regarding what is occurring in nature and it doesn't have the need to prove those assertions, since they are revelations from God who cannot lie. For example, Psalm 8:8 speaks of the “paths of the sea.” Modern science has discovered that the sea does, indeed, have paths of warm and cold currents that circle the globe. Isaiah 51:6; Psalms 102:25-26 and Hebrews 1:11 say the universe is wearing out like a garment. Likewise, science has discovered the law of entropy. Amos 9:6 says that God calls for the waters of the sea and pours them out upon the land. Science has discovered that the atmosphere draws water from the oceans which then form clouds, which then rain upon the land. The Bible gives specific dimensions to build Noah's ark. Science has discovered that the ratio of length to width to height (30:5:3) of the ark is the most stable dimensions for large modern ships. Job 28:25 says there is weight to the wind. Science later discovered atmospheric pressure of 15 lbs per cubic inch on the surface of the Earth. There are literally dozens of such scientific assertions in the Bible even though the Bible is not technically a science book.

Second, we could say that the Bible is not a political book, a financial book, a geography book, a psychology book, a mathematics book, a music book, or an engineering book. The difference is this, however: when the Bible touches upon issues of politics, finances, geography, psychology, mathematics, music or engineering, it speaks the veritable truth about those topics. Analogously, we can say that the Declaration of Independence and the US Constitution are not religious documents. But when the Declaration and Constitution touch upon issues of religion we hold them just as true when they speak

about politics and government. For example, the basis upon America was founded is “We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable Rights...” That is a prima facie statement about religion, even though the Declaration and Constitution are not considered religious documents.

The same is true with the Bible. Even though it is not a science textbook, if and when it makes statements about things of science, it is just as true as when it speaks about religious things. This is precisely what the Church Fathers taught us and what the Traditional Church held to. It is only with the advent of Copernicanism in the modern age that we have begun to doubt the Bible’s veracity on these scientific topics, and that is because we have been unduly influenced to accept the new idea that the Earth is not motionless. From that one seed of distrust in the word of God has come a flood of doubt about much of the historical content of the Bible, to the point where many in the Catholic Church, to their own destruction, teach that the Bible is only inerrant when it speaks about salvation – a heretical doctrine that was never taught by the Fathers, the Councils, the Popes, saints or doctors of the Church.

Kellmeyer: And, indeed, you might even point out that the earth is not actually a sphere. Most modern geographers insist it is actually pear-shaped, with the Northern Hemisphere pinched slightly inward in comparison to the Southern Hemisphere. Because there are competing theories - perfect sphere versus slight pear-shape - we can argue there is no consensus and thus the world must, indeed, be flat.

R. Sungenis: No, we would not conclude that the Earth is flat since the two choices are: (a) a perfect sphere, or (b) an imperfect sphere.

Kellmeyer: 2) The Earth is Young: Of course, the same arguments are used to hold to the idea that both the earth and the universe it inhabits are around 6000 years old. When confronted with the evidence to the contrary, Young Earthers have even been known to say that God is not bound by the laws of logic!

R. Sungenis: I don’t know of any “young earthers” who make the claim that God is not bound by the laws of logic. If there are such people, they are wrong, and the Catholic Church has never taught such nonsense. What the Catholic Church holds is that God cannot lie, and thus as He inspires Scripture, all that is put forth as propositional divine truth in Scripture, whether it deals with theology, history, science or whatever, is true because it came from the mouth of God.

Kellmeyer: This is a much stronger argument for Muslims than it is for Christians, since Muslims teach exactly this: God is *SO* powerful that he is not bound by the laws of logic. He can make a square circle. He can make a rock so big He can't lift it. Except He could, because He's God and can do whatever He wants, even to the point of wanting or doing logically contradictory/impossible things.

R. Sungenis: It is also called Nominalism, and it was rejected by the Church in the early second millennium. But this discussion is not about squaring circles or making rocks that can’t be lifted. It is about truth and lies. God cannot square a circle because a square circle is a lie. God is limited by truth and can do nothing that is a lie (Titus 1:2). But this cuts both ways, for as God says that he created Adam at a certain time, which time is only a few thousand years until Abraham, then unless there is something either in Scripture itself or another divine revelation that mitigates interpreting the genealogies of Genesis as

only thousands of years as opposed to millions, then to doubt the Scriptural account is to accuse God of a lie. This is the exegesis of Scripture that was taught to us by the Church Fathers and sustained by every Council and Pope following. It is the very reason we, as Catholics, are not ashamed to interpret “This is my body” (Mt 26:26) as being the very presence of Jesus Christ in the Eucharist. We took the Scripture literally when the rest of the world was telling us it is just a symbol of Christ. What’s harder to accept? That a wafer becomes God or that God limited the world’s longevity to less than 10,000 years? What’s harder to accept? That water poured on the forehead instills grace into the soul and procures salvation or that God placed the Earth motionless in the center of the universe. As even Galileo finally admitted in the year of his death, nothing is impossible for God, and thus he rejected the heliocentrism he had held previously. There is not one shred of proof from modern science that the Earth moves, including stellar aberration, stellar parallax, the Foucault Pendulum, the bulge of the Earth. There is also not one shred of proof that the universe is 13.7 billion years old, including evidence from radiometry.

Kellmeyer: Sadly, most Young Earthers are Christians who don't appear to realize that Christianity has always taught God to be pure rationality. Not only is God bound by the laws of rationality, He IS rationality itself. All that is rational is a reflection of His perfect nature, all that is irrational is a distortion of who God is. God is rational for His own Name's sake, because to do that which is irrational would be to violate his own divinity.

R. Sungenis: I don't know who the “young earthers” are that Mr. Kellmeyer has in view, but the ones I know hold that God is rational, for it is precisely why they take Scripture as face value when it gives propositional truth regarding history and science, for to believe that God says something He didn't mean is irrational.

Kellmeyer: The problem here is clear. People who insist on Intelligent Design when it comes to the creation of life apparently want to insist on Inscrutable Design when it comes to the creation of the physical universe. If we accept that God is rational and that the heavens are telling the glory of God and all creation shows forth His handiwork, then we must accept that rational evidence is to be accepted as part of nature's testimony about God. Robert Bellarmine, one of the 35 Doctors of the Church, wrote to Galileo explaining precisely this:

I say that if there were a true demonstration that the sun was in the center of the universe and the earth in the third sphere, and that the sun did not travel around the earth but the earth circled the sun, then it would be necessary to proceed with great caution in explaining the passages of Scripture which seemed contrary, and we would rather have to say that we did not understand them (the Scriptures) than to say that something was false which has been demonstrated.

Catholics, did you catch that? According to Bellarmine, the mute testimony of nature actually trumps the literary communications of Scripture!

R. Sungenis: That is not really what Bellarmine taught or meant. He was merely making a hypothetical gesture to Fr. Foscarini (NB: he did not say it to Galileo). This is proven by the fact that Bellarmine went on to condemn, with the full approval of Pope Paul V, the whole concept of heliocentrism; after which Foscarini's book was condemned and Galileo was given a canonical injunction never again to teach the

idea of heliocentrism, which he later broke in 1632 and was the reason he was called before Pope Urban VIII and condemned again in 1633. The true intent of Bellarmine's hypothetical statement is noted in these additional words of Bellarmine to Foscarini:

First. I say that it seems to me that Your Reverence and Galileo did prudently to content yourself with speaking hypothetically, and not absolutely, as I have always believed that Copernicus spoke. For to say that, assuming the earth moves and the sun stands still, all the appearances are saved better than with eccentrics and epicycles, is to speak well; there is no danger in this, and it is sufficient for mathematicians. But to want to affirm that the sun really is fixed in the center of the heavens and only revolves around itself without traveling from east to west, and that the earth is situated in the third sphere and revolves with great speed around the sun, is a very dangerous thing, not only by irritating all the philosophers and scholastic theologians, but also by injuring our holy faith and rendering the Holy Scriptures false.

Kellmeyer: Why? Because nature can speak with only one voice, while literary works can be interpreted in multiple ways. Since truth cannot contradict truth, if something is demonstrated in nature, the truth that has many levels of interpretation must be interpreted in such a way that the truth with more limited levels of interpretation coincide.

R. Sungenis: It seems Mr. Kellmeyer suffers from too high of an esteem of science, and my guess is that he has never really studied the sciences. He seems to believe that science is just one big monolithic consensus of truth and veracity. That is absolutely not the case. What is of absolute necessity here is that Mr. Kellmeyer make the proper distinction between scientific data and scientific interpretation. The former is almost always correct. The latter is often wrong. That is why Max Planck once quipped, "science advances funeral by funeral," since the interpretation of the scientific data changes from generation to generation. Science is always in flux as much as men might want to know the correct interpretation of the data they are viewing in their microscopes or telescopes, they are quite limited in their perceptions and reasoning powers. In fact, knowing theology and science as well as I do, I can safely say that there is just as much danger in interpreting a Bible passage incorrectly as there is in interpreting scientific data incorrectly. Let me give an example. The 1887 Michelson-Morley experiment was a conundrum for modern science. As Einstein's biographer put it:

"In the United States Albert Michelson and Edward Morley had performed an experiment which confronted scientists with an appalling choice. Designed to show the existence of the ether...it had yielded a null result, leaving science with the alternatives of tossing aside the key which had helped to explain the phenomena of electricity, magnetism, and light **or of deciding that the earth was not in fact moving at all.**" (*Einstein: The Life and Times*, p. 57).

"The problem which now faced science was considerable. For there seemed to be only three alternatives. The first was that the Earth was standing still, which meant scuttling the whole Copernican theory and was unthinkable" (*Ibid*, pp. 109-110).

We see that a non-moving Earth was certainly one possible solution to the Michelson experiment, but modern academia simply could not accept it. It was "unthinkable." I can certainly understand why. It

would overturn almost everything modern science had striven for in the past 500 years. Every career, every book, every sheepskin, including the fame and fortune that went along with them, would have been put in jeopardy if a non-moving Earth was found to be the best solution to the Michelson dilemma. But the fact is, they all knew a non-moving Earth was the simplest solution. Take for example the words of physicist G. J. Whitrow in the 1950s:

“It is both amusing and instructive to speculate on what might have happened if such an experiment could have been performed in the sixteenth or seventeenth centuries when men were debating the rival merits of the Copernican and Ptolemaic systems. The result would surely have been interpreted as conclusive evidence for the immobility of the Earth, and therefore as a triumphant vindication of the Ptolemaic system and irrefutable falsification of the Copernican hypothesis. The moral of this historical fantasy is that it is often dangerous to believe in the absolute verification or falsification of a scientific hypothesis. All judgments of this type are necessarily made in some historical context which may be drastically modified by the changing perspective of human knowledge” (G. J. Whitrow, *The Structure and Evolution of the Universe*, 1949, 1959, p. 79).

Modern scientists are not immune to philosophical presuppositions and historical movements when they interpret the scientific data, not to mention are they immune from the fame and fortune the “politically correct” interpretation will do for their careers. If Mr. Kellymeyer believes otherwise, then he is quite naïve.

Kellmeyer: Now, does the Catholic Church require Young Earthism? A lot of traditionalist Catholics would insist that She does. I would disagree. Neither the Catechism of Trent nor the Universal Catechism teaches it, nor do any of the Councils require it. The Church doesn't forbid Catholics believing it, but She doesn't encourage it.

R. Sungenis: The Catechism of Trent taught geocentrism in four places and followed the consensus of the Church Fathers and medievals, but I don't think that would make a difference to Mr. Kellmeyer's conclusions about geocentrism. Regarding creation, Trent's catechism mentions it in four places, and although it doesn't specify a young earth, a young earth was the only belief the Church had in the patristic and medieval age, including St. Augustine. It was only in the late 1800s after the introduction of Darwin's unproven theory that various Catholic liberals began entertaining the idea that Genesis' chronology was a myth and that the universe was billions of years old.

Let's turn the table and use Mr. Kellmeyer's tactic of using Robert Bellarmine's hypothetical comment to Fr. Foscarini. To make the quote relevant to our topic, let's just change a few of the words:

“I say that if there were a true demonstration of evolution and long ages, then it would be necessary to proceed with great caution in explaining the passages of Scripture which seemed contrary, and we would rather have to say that we did not understand them (the Scriptures) than to say that something was false which has been demonstrated.”

The fact is, there has never been a “true demonstration” of long ages given to us by modern science. Every claim modern science makes to long ages from the given data has an equally viable interpretation from a young age perspective, including evidence from the geologic column, radiometry, fossil remains, ocean sediments, ancestral archtypes and cosmological events. I have a detailed explanation of these in my book, *Genesis Chapters 1 – 11*.

Why is this important? Because according to the Catholic Church, both traditional and modern, we are required to interpret Scripture literally unless there is some good and sufficient reason not to do so. The “good and sufficient reason” cannot be a theory or hypothesis of modern science, since they change like the wind. The only good and sufficient reason would be when science provides irrefutable proof of its claims. Only then would we depart from a literal interpretation of Scripture.

That being the case, let’s see what the Church has said about literal interpretation of Scripture: Pope Leo XIII, in *Providentissimus Deus* in 1893 stated:

The commentator...must carefully observe the rule...not to depart from the literal and obvious sense, except only where reason makes it untenable or necessity requires, a rule to which it is the more necessary to adhere strictly in these times, when the thirst for novelty and unrestrained freedom of thought make the danger of error most real and proximate.

Accordingly, the 1994 Catholic Catechism, quoting St. Thomas Aquinas from the *Summa Theologica*, it says in paragraph 116:

The literal sense is the meaning conveyed by the words of Scripture and... ‘all other senses of Sacred Scripture are based on the literal.’

As for creation, there is not a hint of long ages in Church teaching, and all the teachings either implicitly or explicitly teach a young earth that was created instantaneously by God.

Lateran Council IV and Vatican Council I assure us that all things, visible and invisible, were created in the six days of Creation week, and there is nothing being created by God at the present time. Lateran VI says:

Firmly we believe and we confess simply that the true God is one alone, eternal, immense, and unchangeable, incomprehensible, omnipotent and ineffable, Father and Son and Holy Spirit: indeed three Persons but one essence, substance, or nature entirely simple. The Father from no one, the Son from the Father only, and the Holy Spirit equally from both; without beginning, always, and without end; the Father generating, the Son being born, and the Holy Spirit proceeding; consubstantial and coequal and omnipotent and coeternal; one beginning of all, creator of all visible and invisible things, of the spiritual and of the corporal; who by His own omnipotent power at once from the beginning of time created each creature from nothing, spiritual, and corporal, namely, angelic and mundane, and finally the human, constituted as it were, alike of the spirit and the body. For the devil and other demons were created by God good

in nature, but they themselves through themselves have become wicked. But man sinned at the suggestion of the devil.

Vatican Council I says:

If anyone does not confess that the world and all things which are contained in it, both spiritual and material, as regards their whole substance, have been produced by God from nothing, or, shall have said that God created not by a volition free of all necessity, but as necessarily as He necessarily loves Himself, or, shall have denied that the world was created to the glory of God: let him be anathema.

In 1441, the Council of Florence stated in its decrees:

God...is the creator of all things visible and invisible, who, when he wished, out of his goodness created all creatures, spiritual as well as corporal; good, indeed...since they were from nothing..."

In 1860, the Council of Cologne condemned the idea of human evolution in very straightforward words:

Our first parents were formed immediately by God. Therefore we declare that those who assert man emerged from spontaneous continuous change of imperfect nature to the more perfect, is clearly opposed to Sacred Scripture and to the Faith."

Pope Pius X in *Pascendi Dominici Gregis*, remarks how the theory of biological evolution has infected theological studies:

First of all they lay down the general principle that in a living religion everything is subject to change, and must in fact change, and in this way they pass to what may be said to be the chief of their doctrines, that of Evolution. To the laws of evolution everything is subject - dogma, Church worship, the books that we receive as sacred, even faith itself...

So, in the end, what does Mr. Kellmeyer have that would lead him to adopt a non-literal interpretation of Genesis? He certainly has no Church teaching to that effect, but he also has no scientific proof for such an alternative reading of Genesis. All he has are claims made by mostly atheistic and agnostic scientists who have already admitted that they will not consider a divine creator as the source of life. Take for instance geneticist, Richard Lewontin. He stated the following:

"We take the side of science in spite of the patent absurdity of some of its constructs, in spite of its failure to fulfill many of its extravagant promises of health and life, in spite of the tolerance of the scientific community for unsubstantiated just-so stories, because we have a prior commitment, a commitment to materialism. It is not that the methods and institutions of science somehow compel us to accept a material explanation of the phenomenal world, but, on the contrary, that we are forced by our a-priori adherence to material causes to create an apparatus of investigation and a set of concepts that produce material explanations, no matter how

counterintuitive, no matter how mystifying to the uninitiated. Moreover, that materialism is absolute, for we cannot allow a Divine Foot in the door” (“Billions and Billions of Demons,” *The New York Review of Books*, January 9, 1997, pp. 28, 31).

Or take the admission of D. M. S. Watson in 1929:

“The extreme difficulty of obtaining the necessary data for any quantitative estimation of the efficiency of natural selection makes it seem probable that this theory will be re-established, if it be so, by the collapse of alternative explanations which are more easily attacked by observation and experiment. If so, it will present a parallel to the theory of evolution itself, a theory universally accepted not because it be can proved by logically coherent evidence to be true but because the only alternative, special creation, is clearly incredible” (*Nature*, August 10, 1929, p. 233).

Kellmeyer: 3) The Earth is the center of the Universe: The great irony of "Bible as science textbook" lies in the assertion of geocentrism. Of all the things you can say about the Bible as science, geocentrism is the one experimentally demonstrably provable tenet. Despite this, almost no one who wants to make the Bible a science textbook insists on this point.

R. Sungenis: Mr. Kellmeyer makes a good point here. He is pointing out the total inconsistency of “young earth creationists” who, on the one hand, claim that Genesis 1:20-31 must be interpreted literally and thus form their apologetic against modern evolutionary theory, but on the other hand, they almost totally reject the same literal interpretation when the chronology and details of the first four days recorded in Genesis 1:1-19. The versions are many and varied, but they all boil down to the same basic attempt – to reinterpret Genesis’ clear language that says the Earth was made on the first day and the sun and stars on the fourth day and change it into the sun and stars being created first and the earth last. The contortion these “young earthers” go through to reach this goal is amazing to watch (e.g., Hugh Ross, John Hartnett, Russell Humphries, Ken Ham, et al).

Why do they do this? They have more or less admitted that to embrace a thoroughly literal interpretation of Genesis 1:1-19 and other similar Scriptures would mean that geocentrism is a biblical teaching, and because teaching the doctrine of geocentrism would be embarrassing and detract from the great inroads they have made against evolution, they have chosen not to follow the literal hermeneutic to its logical conclusion. This decision was made by Henry Morris, the author with Whitcomb of the 1960s book, *The Genesis Flood*, who, although he made great strides in interpreting Genesis 6 – 9 literally concerning the Noachic flood, for some odd reason he did not feel compelled to apply the same literal hermeneutic to the chronology of Genesis 1:1-19 or any of the other Scriptures that spoke, implicitly or explicitly, about a geocentric universe. As Kellmeyer points out, the inconsistency speaks for itself.

Kellmeyer: Now, I am not a geocentrist, but I am fairly well-acquainted with someone who is: Robert Sungenis of Catholic Apologetics International and the Bellarmine Report. And here's the mystery: while most Young Earthers would reject geocentrism, the idea that the earth is at the center of the universe, it is the only proposition which is undeniably true. Well, given certain caveats. Let me explain.

R. Sungenis: Let me make one correction. The Bible doesn't say that the Earth is in the center of the universe. It says the Earth doesn't move and that the sun, moon and stars revolve around the Earth. From this truth, we deduce logically that the Earth is the center of the universe, for only the center of a sphere doesn't move. The Church Fathers made the same deduction.

Kellmeyer: From the beginning of human history until about the time of the Greeks, everyone thought the earth was the center of the universe. About 270 BC, a Greek, Aristarchus of Samos, proposed that the sun was actually at the center of the universe. Seleucus of Seleucia (190 BC) agreed with him and used a theory of tides to support the idea. While many Greeks accepted this idea, Ptolemy (90-168 AD) did not. Ptolemy taught what had always been taught: the earth is at the center of the universe.

In the 1500s, Copernicus ran across Aristarchus' idea and revived it. Galileo adopted Seleucus' tidal argument to support Copernicus. The heliocentric theory, the idea that the sun is at the center of the universe, was gradually adopted throughout the civilized world. Now, that version of heliocentrism is just as wrong as geocentrism, in the sense that the sun is not the center of the universe, merely of the solar system. But we'll let that pass. The point is, at least one version of heliocentrism was so universally accepted that, today, even Young Earthers swallow it without question.

Which just goes to show that Young Earthers don't understand physics. When Einstein came along, he pointed out that what was considered the center of any system depended entirely on one's frame of reference. With appropriate modifications, math equations can be used which allow *ANY* given body to be considered the center of the universe without doing any harm to the observational results obtained from the system.

R. Sungenis: Allow me to make one addition to what otherwise is a very astute conclusion by Mr. Kellmeyer. Although it is true to say that the theory of relativity allows one to use reciprocal mathematical equations to make either the sun, the Earth or any other body the center of the universe, this is only because the mathematics does not have the power to show us which one is the correct equation. For example, one can say that $2 + 2 = 4$. The 4 in this equation is analogous to the center of the universe. You can get to the center by adding $2 + 2$. But you can also get to the center by adding $3 + 1$, since it also equals 4. Hence, the mathematics gives us two options with two different sets of addends. Both are correct mathematically, but which one, for a given physical event, is true for that particular physical event? We need some other means than mathematics to show us which one is the correct physical reality. That information comes mainly from divine revelation and secondarily from the empirical evidence.

Ultimately, God is the only one who has a supreme enough view (not to mention that he created the universe the way it is) who can tell us what is the true center of the universe and what object, if any, is motionless in it. With respect to that viewpoint, Scripture tells us that, of the two bodies that Relativity says could be moving, the sun or the Earth, the one that is not moving is the Earth. As Bellarmine told Galileo, as Scripture says the Earth does not move, it is just as true as when it says Jacob had twelve sons.

Second, as I noted in my reference to the 1887 Michelson-Morley experiment, we can collaborate with Scripture from the scientific empirical evidence that the Earth is not revolving around the sun but that the

star field is rotating around a fixed Earth. This was an obvious solution to the experiment that was admitted by the leading scientists of the day.

Of his own MMX experiment, Albert Michelson said: “This conclusion directly contradicts the explanation...which presupposes that the Earth moves.” (“The Relative Motion of the Earth and the Luminiferous Ether,” *American Journal of Science*, Vol. 22, August 1881, p. 125). Arthur Eddington said the same about MMX: “There was just one alternative; the earth’s true velocity through space might happen to have been nil.” (*The Nature of the Physical World*, 1929, pp. 11, 8.). Historian Bernard Jaffe said: “The data were almost unbelievable... There was only one other possible conclusion to draw — that the Earth was at rest.” Jaffe’s philosophical barrier was then revealed when he concluded: “This, of course, was preposterous.” (Michelson and the Speed of Light, 1960, p. 76.).

So we see that interpreting MMX as showing a motionless Earth is not Bob Sungenis’ interpretation. It is only the case that Bob Sungenis accepts the non-moving interpretation since: (1) it makes the most scientific sense, and (2) it is the consensus of the Fathers and the medieval Church, and (3) it coincides with the Catholic traditional literal interpretation of Scripture passed down from them. I, unlike Einstein, have no need to shorten lengths of moving objects or increase their mass or dilate their time in order to answer MMX. I take the simplest solution – one that keeps lengths, mass and time the same and interprets the empirical evidence *prima facie* – a motionless Earth. Contrary to Jaffe, the simple solution is not “preposterous.” It is only preposterous to those who have been highly influenced by the Copernican Principle as the be-all and end-all of cosmological discussion.

As for MMX itself, the common interpretation by Special Relativity theorists is that the experiment yielded a “null” result. Yes, if you are looking for fringe shifts in the interferometer that coincide with an Earth moving around the sun at 30km/sec, I guess one would be predisposed to conclude that the results of MMX were “null.”

But the truth is, in the technical sense of the term, the results of MMX were anything but “null.” Null means zero, but MMX did not register a zero ether drift. It measured one-sixth to one-tenth of the 30km/sec that the Earth was supposedly moving around the sun. Here are Michelson’s own words:

“Considering the motion of the Earth in its orbit only, this displacement should be $2D v^2/V^2 = 2D \times 10^{-8}$. The distance D was about eleven meters, or 2×10^7 wavelengths of yellow light; hence, the displacement to be expected was 0.4 fringe. The actual displacement was certainly less than the twentieth part of this, and probably less than the fortieth part. But since the displacement is proportional to the square of the velocity, the relative velocity of the Earth and the ether is probably less than one-sixth the Earth’s orbital velocity, and certainly less than one-fourth” (A. A. Michelson and E. W. Morley, “On the Relative Motion of the Earth and the Luminiferous Ether,” Art. xxxvi, *The American Journal of Science*, eds. James D and Edward S. Dana, No. 203, vol. xxxiv, November 1887, p. 341.)

So was the case for every interferometer experiment performed for the next 80 years until the 1960s – a small ether drift that was a fraction of 30km/sec. This was a conundrum for Einstein and his followers, since the Special Theory of Relativity, which was invented to answer MMX, claimed that there was NO ether at all in space – none, nada, zilch, zero. In fact, Einstein said that if there was any ether in space,

then his theory is nullified. He said, “If Michelson-Morley is wrong, then Relativity is wrong.” (Einstein: The Life and Times, p. 107.). So Einstein simply dismissed the fractional ether drift of MMX as a mere artifact. But the sad fact is, scientifically speaking, artifacts would not have appeared in all the dozens of interferometer experiments performed over the next 80 years. “Artifacts” are posited only because modern interpreters are bound to the Copernican Principle, by their own admission.

Interestingly enough, Michelson performed another interferometer experiment with Gale in 1925 (MGX), but this one was designed to measure the rotation of the Earth, not a revolution around the sun. Lo and behold, Michelson found an ether drift that was near 100% of a 24 hour rotation period. So, whereas MMX measured 0.1% of a 365-day revolution around the sun, MGX measured a 99% of a 24-hour rotation, simply by using the measured ether drift. This presents quite a problem for the heliocentric camp, for the interferometers measure a rotation but not a revolution. But heliocentrism must have both, otherwise it is falsified.

Conversely, geocentrism needs only one, the rotation, since if the star field is rotating around a fixed Earth we would expect to see a near 100% ether drift against the Earth, which is precisely what the 1925 MGX showed. But since there is no revolution of the Earth in the geocentric system, this answers why the 1887 MMX did not produce anywhere near a 30km/sec ether drift. The facts speak for themselves. On a purely scientific basis, there is absolutely no reason why a motionless Earth cannot be used to explain both MMX and MGX.

Kellmeyer: So, from:

- the dawn of time to Copernicus, the earth was considered the center of the universe.
- Copernicus to Einstein, the sun was considered the center.

R. Sungenis: No, that is not quite correct. It is only within the last 180 years or so that heliocentrism began to dominate the scientific landscape, since that was the time that stellar parallax was discovered by Friedrich Bessel in 1838. Stellar parallax was considered the long-awaited proof of an Earth revolving around the sun. Prior to that, the lack of a visible stellar parallax was used by Tycho Brahe as evidence against heliocentrism. After Bessel came Foucault’s Pendulum in the 1860s, which was considered the second greatest proof of a moving (rotating) Earth. What we now know from science is that neither of these phenomena prove heliocentrism, since both can be demonstrated very easily from the geocentric system.

Kellmeyer: •Einstein to today, we recognize that anything can be considered the center. Using one point instead of another might make the calculations easier, but there really isn't any difference.

R. Sungenis: Again, although helpful in gaining perspective on the problem, it is not quite true. First, Einstein admitted the following result about his Relativity theory:

“The struggle, so violent in the early days of science, between the views of Ptolemy and Copernicus would then be quite meaningless. Either coordinate system could be used with equal

justification. The two sentences: “the sun is at rest and the Earth moves,” or “the sun moves and the Earth is at rest,” would simply mean two different conventions concerning two different coordinate systems.”¹

Others have noted the same about Einstein’s Relativity:

According to Einstein, the argument over whether the earth turns around or the heavens revolve around it, is seen to be no more than an argument over the choice of reference frames. There is no frame of reference from which an observer would not see the effects of the flattening of the poles. Thus in frame number 1 (the earth turns round while the sky is at rest), the centrifugal force is a consequence of the earth’s motion (uniform acceleration) relative to the heavens. This causes the flattening. In the latter frame, number 2 (the sky rotate and the earth stands still), the centrifugal force should be understood as being an effect of “the rotating heavens,” which is generating a gravitational field that causes the flattening of the poles. The two explanations are equivalent as there is equivalence between inertial and gravitational mass.²

Consequently, Einstein concludes:

When two theories are available and both are compatible with the given arsenal of facts, then there are no other criteria to prefer one over the other except the intuition of the researcher. Therefore one can understand why intelligent scientists, cognizant both of theories and of facts, can still be passionate adherents of opposing theories.³

Famous physicist, George F. R. Ellis said much the same:

“People need to be aware that there is a range of models that could explain the observations. For instance, I can construct [for] you a spherically symmetrical universe with Earth at its center, and you cannot disprove it based on observations. You can only exclude it on philosophical grounds. In my view there is absolutely nothing wrong in that. What I want to bring into the open is the fact that we are using philosophical criteria in choosing our models. A lot of cosmology tries to hide that” (“Profile: George F. R. Ellis,” W. Wayt Gibbs, *Scientific American*, October 1995, Vol. 273, No. 4, p. 55).

As it is with many scientists, Einstein had his biases that led him to choose which of the two relativistically equivalent systems he would endorse. Much of his bias came from his disdain for theology in general and the Catholic Church in particular. For Einstein, Galileo was

¹ *The Evolution of Physics: From Early Concepts to Relativity and Quanta*, Albert Einstein and Leopold Infeld, 1938, 1966, p. 212. In another sense, Relativity has no basis making such judgments, for as Einstein himself notes: “The theory of relativity states: ‘The laws of nature are to be formulated free of any specific coordinates because a coordinate system does not conform to anything real’” (*Annalen der Physik* 69, 1922, 438, in *The Expanded Quotable Einstein*, p. 244).

² “Einstein’s Ether: D. Rotational Motion of the Earth,” Galina Granek, Department of Philosophy, Haifa University, Mount Carmel, Haifa 31905, Israel, *Apeiron*, Vol. 8, No. 2, April 2001, p. 61.

³ “Induction and Deduction in Physics,” *Berliner Tageblatt*, December 25, 1919. Cited in *The Expanded Quotable Einstein*, p. 237.

...a representative of rational thinking against the host of those who, relying on the ignorance of the people and the indolence of teachers in priest's and scholar's garb, maintain and defend their positions of authority" wherein Galileo had the will to "overcome the anthropocentric and mythical thinking of his contemporaries and lead them back to an objective and causal attitude toward the cosmos.⁴

So we see quite vividly that the model one chooses of his universe has much to do with his philosophical presupposition. If, someone is wedded to the Copernican Principle, it is almost a sure fire bet that he is going to interpret the scientific data as supporting heliocentrism. As noted in a recent blog posting titled

"An Overdose of Copernicus?" the author writes:

"The Copernican Principle says that you, as an observer, are not special. You don't live in a special time. You don't see things from a special position. The power behind the Copernican principle is that scientists try to never, ever, ever, forget its admonition as they attempt to explain the world." ("An Overdose of Copernicus: Our Universe Might Yet Be Special," <http://nautil.us/blog/an-overdose-of-copernicus-our-universe-might-yet-be-special>)

So if, as Einstein says, both models are mathematically equivalent and both models work, which model would the Catholic Christian be expected to accept? I think the obvious answer to that is the geocentric model. The Church Fathers chose the geocentric model, and so did the medievals following them. The Tridentine catechism taught geocentrism, and two Popes approved the condemnation of heliocentrism as formally heretical. Their choice wasn't in a vacuum either. The Fathers and the 17th century Church were well aware that the Greek Pythagorean school had been promoting heliocentrism for many centuries prior to Ptolemy. In fact, in the Church's condemnation of Galileo in 1633, she made mention of the "Pythagorean school" of cosmology as the main source from which Galileo adopted his heliocentrism. Having two choices, the Fathers and the Church rejected heliocentrism and accepted geocentrism. It was based on their devotion to the literal interpretation of Scripture – the same literal interpretation they used for Mt 26:26, "This is my body," when the rest of the world, to this very day, makes it into a symbol. So, we have:

- Scripture, literally interpreted, as the Church has always practiced since her inception
- The unanimous consent of the Church Fathers, without one deviation
- The papal approved condemnations of heliocentrism and no formal and official attempt by the modern Church to rescind those condemnations
- The scientific evidence that is at least neutral, and at best preferable, to geocentrism.

So, with all this evidence, why would a Catholic Christian decide for heliocentrism against geocentrism? I think the reason is the very one Kellmeyer is suggesting of the "young earth creationists" – it is embarrassing to defend such an esoteric doctrine as geocentrism when the whole world believes in heliocentrism. It takes guts and backbone to defend the truth when the whole world is accepting

⁴ Albert Einstein's foreword in Stillman Drake's translation of Galileo's *Dialogue Concerning the Two Chief World Systems*, 2001, p. xxiii.

falsehood. Hence, the main problem is that most Catholics today have a character problem, not a cosmology problem.

Kellmeyer: Now, does the Church require Catholics to hold a geocentric position? Bob Sungenis, who is a wonderful Catholic apologist in most respects, says "YES! It's DOCTRINE that the earth is the center of the universe. Given that anything can be center, Catholics are required to hold that the earth is the most appropriate center." I say "I sincerely doubt that it is doctrine."

R. Sungenis: So, this begs the question that, with the four criteria stated above about Scripture, the Fathers, the Church condemnations and the scientific evidence supporting Scripture's statements and the Church's decision for geocentrism, what would make Steve Kellmeyer "sincerely doubt that geocentrism is doctrine"? Perhaps to save himself the embarrassment of being labeled a geocentrist, he used the word "doctrine" because it is a loaded term that produces somewhat of a neutral position and allows him to doubt but not totally reject geocentrism. He feels safe in that middle position.

At last count, there are at least seven levels of "doctrine" in the Catholic Church, if not ten levels, depending on which book one reads. At the very top is "defined infallible and irreformable dogma." At the bottom is qualified opinions from authoritative people. In between those two extremes are about a half dozen intermediate levels of Catholic doctrine. So, perhaps we can say that geocentrism is not at the top level, but it certainly isn't at the bottom level either. But it is still "doctrine." If it wasn't doctrine, how could the 1616 and 1633 popes and cardinals, guided by the Holy Spirit, call heliocentrism a "formal heresy" and then give Galileo an injunction not to teach heliocentrism and later convict him of being "vehemently suspect of heresy" and incarcerate him until he died if geocentrism wasn't a "doctrine" of the Church? Has the Church ever made a formal and official practice of doing such ecclesiastical adjudications for anything but "doctrine"? I dare say not.

If someone plays the "infallible card" and state that he doesn't have to believe in geocentrism because it has never been defined as an infallible and irreformable doctrine, he can do so, but that doesn't make geocentrism any less of a "doctrine" than it already is. It only means that geocentrism hasn't had a chance to be defined at the highest levels of Church dogma.

But playing the "infallible card" cuts both ways. It is not only papal (or extraordinary magisterium) doctrine that the Church regards as infallible and irreformable. She can also regard the ordinary magisterium as infallible and irreformable. In fact, the Church's historic teaching on geocentrism and her condemnation of heliocentrism fulfills all the criteria of *Lumen Gentium* 25:

- "that his supreme teaching authority be acknowledged with respect":

It was certainly the case that popes Paul V, Urban VIII and Alexander VII understood themselves and their decrees against heliocentrism as coming from their "supreme teaching authority" and commanded that it be "acknowledged with respect." Urban VIII, for example, approved his Holy Office's conclusion that heliocentrism was "formally heretical" and "erroneous in faith," and demanded that Galileo sign an abjuration to that effect. Obviously, Pope Urban VIII also considered his predecessor's decree, Paul V's,

as authoritative, binding, and demanding respect, since the 1633 decree was based on the condemnations of the 1616 decree.

- “and sincere assent be given to decisions made by him”:

It was certainly the case that the decrees against Copernicanism required the “assent” of Galileo, Foscarini, and all the other theologians who were venturing into the area of biblical cosmology. Urban VIII sent letters of the decree against Copernicanism and Galileo’s abjuration to all the papal nuncios and universities of Europe showing the seriousness of the issue and his desire to have it widely disseminated so that the Christian faithful would be obedient to it. Alexander VII devoted a signed papal bull to the subject of banning books that threaten the faith and welfare of the Christian faithful, stating: “We command each and every one of our venerable brethren, the patriarchs, archbishops, bishops and other Ordinaries of places, as well as those beloved sons who are their vicars and officials, the inquisitors of heretical depravity, the superiors of every kind of religious Order, congregation, society, or institute, and all others...” to obey his words.

- “conformably with his manifest mind and intention”:

Few can read the documents surrounding the Galileo affair and come away without the conviction that the popes, cardinals and the Holy Offices were as resolute in their condemnation of Copernicanism as they have been about most major doctrines of the Church. The popes used and approved very solemn and foreboding language and made sure that the decrees were enforced throughout Europe.

- “which is made known principally either by the character of the documents in question”

The decrees against heliocentrism were put in place for the express purpose of protecting Scripture from false interpretations and protecting the Christian faithful from harmful teachings. Although the decrees may not reach the level of being declared formally infallible, they are, nevertheless, on the same level of “ordinary” or “traditional” authority as most other doctrines that the Church has taught.

- “or by the frequency with which a certain doctrine is proposed”

The formal and official condemnations of Copernicanism spanned a period of fifty years (1615-1665) and were delineated by three different popes. The number of ecclesiastical documents and other personal correspondences written about the Galileo affair over the course of three decades (1615-1633) exceed 7,000. Obviously the Church considered this a grave matter. She incessantly appealed to the 1500 years of tradition on the teaching of geocentrism as her greatest bulwark against the new ideas of Copernicus and Galileo.

- “or by the manner in which the doctrine is formulated”:

During the condemnations against heliocentrism the Church issued some of the most detailed and comprehensive decrees ever written. Every wrinkle of the issue was investigated, arguments were presented and rebutted, witnesses were put under oath, experts were called in for testimony, the most

severe and condemnatory language was formulated in the final decree, that is, that heliocentrism was “formally heretical” and “erroneous in faith.” If geocentric doctrine does not qualify under the rubrics of *Lumen Gentium* 25, what does?

Vatican I also had some important things to say regarding the authority of the ordinary magisterium and the claims of modern science. They are as follows:

Vatican I: Further, by divine and Catholic faith, all those things must be believed which are contained in the written word of God and in tradition, and those which are proposed by the Church, either in a solemn pronouncement or in her ordinary and universal teaching power, to be believed as divinely revealed.⁵

In regard to “those things proposed by the Church,” Vatican I makes no distinction between a “solemn pronouncement” (an infallible, *ex cathedra*, definition) and the ordinary magisterium, insofar as it concerns the truth of a doctrine. Both sources are to be considered as “divinely revealed.” Hence, if the condemnations of heliocentrism, which were “declared and defined” as being “formally heretical” and “erroneous in faith” were not “solemn pronouncements,” it follows that they were then authoritative decisions from the “ordinary magisterium,” and are likewise to be understood as “divinely revealed.”

Vatican I adds:

Vatican I: By enduring agreement the Catholic Church has held and holds that there is a twofold order of knowledge, distinct not only in principle but also in object: (1) in principle, indeed, because we know in one way by natural reason, in another by divine faith; (2) in object, however, because, in addition to things to which natural reason can attain, mysteries hidden in God are proposed to us for belief which, had they not been divinely revealed, could not become known.⁶

In this case, the matter of geocentrism, which, on one level, the Church proposed as a “matter of faith,” it is a fact that modern science, especially the relativistic forms, admits that it cannot determine whether the Earth moves or is stationary. In effect, the immobility of the Earth is something that can only be revealed by “divine faith.”

Vatican I: But, although faith is above reason, nevertheless, between faith and reason no true dissension can ever exist, since the same God, who reveals mysteries and infuses faith, has bestowed on the human soul the light of reason; moreover, God cannot deny Himself, nor ever contradict truth with truth. But, a vain appearance of such a contradiction arises chiefly from this, that either the dogmas of faith have not been understood and interpreted according to the mind of the Church, or deceitful opinions are considered as the determinations of reason. Therefore, “every assertion contrary to the truth illuminated by faith, we define to be altogether false.”⁷

In regards to the issue of geocentrism, both of the above warnings come into play: (a) Cardinal Bellarmine informed Galileo that geocentrism was a “matter of faith” and that the Church, based on the consensus of the Fathers, could not interpret Scripture in opposition to the same literal interpretation that

⁵ Denzinger ¶1792.

⁶ Denzinger ¶1795.

⁷ Denzinger ¶1797.

had been passed down to it through the preceding centuries. In essence, Galileo was accused of not interpreting Scripture “according to the mind of the Church”; (b) since false claims of scientific proof for heliocentrism were consistently being advanced (*e.g.*, Foscarini, Galileo, Kepler, Bradley, Settele, Boscovich, Newton, Bessel), and from which many people became convinced that heliocentrism was correct, these would have to be classed as “deceitful opinions [that] are considered as the determinations of reason.”

Vatican I: Further, the Church which, together with the apostolic duty of teaching, has received the command to guard the deposit of faith, has also, from divine Providence, the right and duty of proscribing “knowledge falsely so called” [1Tm 6:20], “lest anyone be cheated by philosophy and vain deceit” [Cl 2:8]. Wherefore, all faithful Christians not only are forbidden to defend opinions of this sort, which are known to be contrary to the teaching of faith, especially if they have been condemned by the Church, as the legitimate conclusions of science, but they shall be altogether bound to hold them rather as errors, which present a false appearance of truth.⁸

Obviously, Galileo was “forbidden to defend opinions” of “knowledge falsely so called,” concerning the claims of science that asserted the Earth revolved around the sun.⁹ Galileo was reminded in 1633 that heliocentrism, as early as 1616, had already been “declared and defined as opposed to Scripture,” and was now declared to be “formally heretical” and “erroneous in faith” in 1633. Hence, the Church made it known that heliocentrism was, in the language of Vatican I, “known to be contrary to the teaching of faith,” since it had clearly “been condemned by the Church,” even though it was commonly believed to be a “legitimate conclusion of science.” These “legitimate conclusions,” the Church warned, could “present a false appearance of truth,” which is certainly the case for heliocentrism since geocentrism can be demonstrated to work just as well on a geometric basis. It is quite clear that the ordinary magisterium can, without invoking infallibility, declare these theoretical beliefs of science as propping up a “false appearance,” and are thus “formally heretical” and “erroneous.” It is clear that this was done in 1616, 1633 and 1664, and these teachings against heliocentrism were never officially and formally rescinded or reformed.

Vatican I: And, not only can faith and reason never be at variance with one another, but they also bring mutual help to each other, since right reasoning demonstrates the basis of faith and, illumined by its light, perfects the knowledge of divine things, while faith frees and protects reason from errors and provides it with manifold knowledge. Wherefore, the Church is so far from objecting to the culture of the human arts and sciences, that it aids and promotes this cultivation in many ways. For, it is not ignorant of, nor does it despise the advantages flowing therefrom into human life; nay, it confesses that, just as they have come forth from “God, the Lord of knowledge” [1 Samuel 2:3], so, if rightly handled, they lead to God by the aid of His grace. And it (the Church) does not forbid disciplines of this kind, each in its own sphere, to use its own principles and its own method; but, although recognizing this freedom, it continually warns

⁸ Denzinger ¶1798.

⁹ Some Bibles during this precise time in history (1611-1633) translate 1 Timothy 6:20 as “science falsely so called” (KJV), which shows a common understanding in the early 1600s that “science” was often equated with “knowledge.”

them not to fall into errors by opposition to divine doctrine, nor, having transgressed their own proper limits, to be busy with and to disturb those matters which belong to faith.¹⁰

If, for example, “right reasoning” was employed in 1887 when the Michelson-Morley experiment was performed, it would have shown that a slight impedance of light’s velocity would be due to the rotation of space around a stationary Earth and not because matter shrank when it moved or that time slowed down. In that case “reason” would have worked very well with “faith.” But Einstein, being an atheist, had no faith. He ridiculed Christianity. Therefore, he would consider the rotation of space around a stationary Earth as “unthinkable,” and his colleague Edwin Hubble, a like-minded atheist, even though he saw through his telescope evidence that the Earth was in the center of the universe, rejected it as a “horrible” conclusion and something that must be “avoided at all costs.” Faith in Scripture could have provided the necessary boundaries for the crucial interpretations of the scientific experiments of the late 1800s and 1900s. Science would have been spared the wild goose chase it was forced to run as it began inventing a world in which twins age at different rates, clocks slow down at will, matter shrinks upon movement, where one is forced to say that up may be down and left may be right in order to have at least some answer to the crucial experiments. As Thomas Aquinas put it:

The knowledge proper to this science of theology comes through divine revelation and not through natural reason. Therefore, it has no concern to prove the principles of other sciences, but only to judge them. Whatever is found in other sciences contrary to any truth of this science of theology, must be condemned as false.¹¹

Vatican I concludes:

For, the doctrine of faith which God revealed has not been handed down as a philosophic invention to the human mind to be perfected, but has been entrusted as a divine deposit to the Spouse of Christ, to be faithfully guarded and infallibly interpreted. Hence, also, that understanding of its sacred dogmas must be perpetually retained, which Holy Mother Church has once declared; and there must never be recession from that meaning under the specious name of a deeper understanding. “Therefore...let the understanding, the knowledge, and wisdom of individuals as of all, of one man as of the whole Church, grow and progress strongly with the passage of the ages and the centuries; but let it be solely in its own genus, namely in the same dogma, with the same sense and the same understanding.”¹²

Kellmeyer: What I can't understand is this: if the Church requires us to hold to Young Earth Creationism, why aren't Young Earthers logically consistent? Why don't they ALSO hold to geocentrism, which is a lot easier to defend than Young Earthism is? This is a mystery to me.

R. Sungenis: It's a mystery to me also.

¹⁰ Denzinger ¶1799.

¹¹ *Summa Theologica*, I, Ques. 1, Art. 6, ad. 2.

¹² Denzinger ¶1800.

Kellmeyer: So, if you want to use the Bible as a science text, I ask only that you be consistent. If you are a Young Earther, you really should promote geocentrism as well. Stop attributing to evolution that which evolution doesn't even address: the beginning of life. Seriously consider joining the Flat Earth Society. Be consistent.