# I couldn't have done better for Geocentrism than Karl Keating did on *Catholic Answers Live*!

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#### Introduction

This paper is a detailed critique of Karl Keating's interview on Catholic Answers Live of February 13, 2015.

If you don't know already, Mr. Keating has recently published a book titled, *The New Geocentrists*. In it he seeks to denigrate and marginalize the major adherents to geocentrism, first by digging into their personal lives and exposing things he believes to be damaging to their credibility (but in fact are an assortment of half-truths, exaggerations and subjective judgments). Suffice it to say, it is a smorgasbord of libelous statements for a lawyer who just may want to slap Mr. Keating with a lawsuit for defamation sometime in the near future.

I am not going to trade barbs with Mr. Keating. It will only divert the discussion into the gutter where apparently Mr. Keating wants it to go. All I can say is, from my experience with people like Mr. Keating, when one's scientific arguments are weak or have been discredited, the natural reaction and last resort is to attack the messenger, for it is the only way one can save face. After you read this critique, you will realize that such has happened to Mr. Keating.

Second, in his book, Mr. Keating tries to present what he believes is an indisputable proof of the heliocentric system, namely, the geosynchronous satellites that remain at one location above the Earth. I will show in this paper that this so-called proof can be discredited rather easily.

For now, however, I will concentrate on Mr. Keating's radio interview of February 13. To be brief, after thoroughly listening to his interview, I honestly want to thank him for his efforts, since he did a better job in supporting geocentrism than even I could. This is because almost everything Mr. Keating said on the program was false, and now it is only a matter of correcting his mistakes by delving deeply into the actual history and science that I will show the credibility of the geocentric universe.

#### Section 1: Is the Center of the Universe Significant?

First, Patrick Coffin, the host of the program, suggests to Mr. Keating that geocentrism may be what he terms "geographical narcissism," Mr. Keating replies:

**Keating:** "Some people think, and the people I write about in this book, The New Geocentrists think this, that if the Earth isn't the literal center of the universe, motionless in that spot, then mankind isn't important. That if man lived on some planet, on some distant spiral arm of some galaxy out in the middle of no place surrounded by billions of stars... like us, which is in fact the case, then man's not important. One of the things I bring out in this book is that this is a fundamental misunderstanding of what make's man important. It's not his spatial location, but the fact that he is made in the image and likeness of God, so, wherever man is, that's what makes him important."

**R. Sungenis:** Mr. Keating couldn't be more wrong. At best, his argument shows that he has entirely missed the message of geocentrism. At worst, it shows that Keating has deliberately distorted the geocentrist's message so that he can make it appear delusional.

Similar to political questionnaires that frame questions in a specific manner to get the desired answer from the interviewee, Keating has done a similar thing with the "centrality" issue. He tactfully reversed the issues in order to make it appear as if geocentrists look at the world and themselves with a kind of narcissistic navel-gazing.

The truth is quite different, however. Geocentrists do not hold that if man wasn't in the center of the universe he would be unimportant. That would be like saying that if a father is not at home but is away on a business trip, his importance as a father is lessened. No, he is important to his family no matter what place he resides.

Contrary to the impression Mr. Keating wants to portray, the geocentrists realize that those of a Christian belief already understand that man's significance comes from his being created in God's image, and it doesn't matter whether God put him in the center or on the edge of the universe.

Rather, the geocentrist's first target is the secular atheist who holds that the universe happened by time and chance, without any involvement from a God. He believes we are just a cosmic accident and thus we have no special importance over any other celestial body or inhabitant.

But if man is actually in the center of the universe, it is much harder for an atheist to claim that the universe happened by chance and that Earth has no rhyme or reason for its existence. If the Earth is in the center of the universe, then people of intelligence and common sense realize that Someone with a capital S had to put it in that unique position, for it could not have happened by chance. If that is the case, then it means that this Someone is bigger and better than man, and man will be required to seek and submit himself to this Someone.

If you read the scientific literature, one of the most disdained and feared situations for secular scientists is an Earth in the center of the universe. This was displayed to us no better than the first

man in history to actually see from his own telescope that Earth could be in the center of the universe. His name was Edwin Hubble. In seeing that the redshift of galaxies implied that Earth was in the center, Hubble wrote these amazing words of scorn for a geocentric universe in his 1937 book, *The Observational Approach to Cosmology*:

**Hubble:** "Such a condition would imply that we occupy a unique position in the universe, analogous, in a sense, to the ancient conception of a central earth. The hypothesis cannot be disproved but it is unwelcome and would be accepted only as a last resort in order to save the phenomena. Therefore, we disregard this possibility and consider the alternative, namely, a distribution which thins out with distance....The unwelcome supposition of a favored location must be avoided at all costs."

Such a favored position, of course, is intolerable; moreover, it represents a discrepancy with the theory, because the theory postulates homogeneity. Therefore, in order to restore homogeneity, and to escape the horror of a unique position, the departures from uniformity, which are introduced by the recession factors, must be compensated by the second term representing effects of spatial curvature. There seems to be no other escape.<sup>2</sup>

**R. Sungenis:** The means by which Hubble "escaped" the "horror" of a central Earth was to use obtuse mathematics to create a universe in the shape of a balloon in order to remove the center. He writes about this invention in the same book, saying:

...all observers, regardless of their location, will see the same general picture of the universe...if we see the nebulae all receding from our position in space, then every other observer, no matter where he may be located, will see the nebulae all receding from his position. However, the assumption is adopted. There must be no favored location in the universe, no center, no boundary; all must see the universe alike. And, in order to ensure this situation, the cosmologist postulates spatial isotropy and spatial homogeneity, which is his way of stating that the universe must be pretty much alike everywhere and in all directions.<sup>3</sup>

So don't let anyone pull the wool over your eyes. The reason the scientific atheists want a Big Bang expanding universe with no center (and want to brainwash your children of the same) is because they don't want the Earth in the center of the universe, for such a location does not bode well for atheism.

The Christian can also gain great comfort and value from knowing that Earth is in the center of the universe. First, it tells him that the modern theories that place man at the outskirts of the universe

<sup>&</sup>lt;sup>1</sup> The Observational Approach to Cosmology, 1937, pp. 50, 51.

<sup>&</sup>lt;sup>2</sup> The Observational Approach to Cosmology, 1937, pp. 58-59.

<sup>&</sup>lt;sup>3</sup> The Observational Approach to Cosmology, 1937, p. 54.

are wrong. It tells him that all the scientific data we have accumulated over the last few hundred years can, on an a priori basis, be best explained from a geocentric model of the universe. Instead of being saddled with Relativity in which we don't know left from right or up from down, we can use a motionless Earth to measure everything in the universe and know it for certain.

Second, it tells the Christian that his location in the universe does, indeed, have significance, since God decided to put man in the center, especially as the birthplace for his only begotten Son, Jesus Christ. Granted, man's importance is primarily derived from his relationship with God, but having a unique central location amidst all the trillions and trillions of celestial bodies in the universe does, indeed, provide man with great significance, just as a king sitting on his throne portrays much more significance and authority than when he is sitting on his commode. Location does matter. Ask any real estate agent.

Third, and most important, for the Catholic Christian (and I say Catholic Christian because many Catholics are not practicing Christians), it shows him that his own Church was indeed correct when it condemned Galileo for holding the heliocentric theory, and thus we can take comfort in knowing that the Holy Spirit did not decide to take a vacation when the Church needed him most.

Fourth, it shows that Scripture, which we have always interpreted at face value, in its literal sense, can be thoroughly trusted to give us the truth, not only of God and salvation, but of everything God created to bring us to salvation. It thus shows that the modern hermeneutic, which claims that Scripture is only inerrant when it speaks of salvation (and which most Catholics today have adopted, including Karl Keating), is entirely wrong.

Fifth, it shows that all the criticism the Church has had to endure for the last 400 years for condemning Galileo, mainly from secularists who have touted heliocentrism, relativity and the Big Bang, has been discredited. In fact, the criticism should now be directed toward themselves for not only ignoring the Church and Scripture, but for foisting such ludicrous interpretations on the scientific data as Inflation, Dark Matter and Dark Energy, that are simply ad hoc devices used to prop up a Big Bang universe that can't work without them. In fact, according to Big Bang cosmologists, the universe is missing 95% of the matter and energy it needs to work under Big Bang mathematics. Yet geocentrists are called the kooks. If the geocentrist had claimed such phantom devices to prop up a geocentric universe, you can imagine the outcry from the secular community.

#### Section 2: Is the Earth the anus of the universe?

At 3:49 to 5:28, Keating then says:

Keating: "These new geocentrists who are saying that the Earth is the center of our solar system and of the whole universe, they actually misunderstand the ancient understanding of Earth's position. They think that the center is the best place to be. But actually, under the ancient cosmology, it was the worst place to be... In the "Discarded Image," what Lewis points out is, Earth is at the center of everything. At the center of the Earth is hell, which is obviously the worst place to be. So this means mankind is not that far from hell.... The empyrean is where God lives. So if you think of a big sphere, the center point is the worst place to be because it's furthest from God. The exterior of the sphere is where God is, that's where you want to go....that is where the angels are... the heavens. But under what the new geocentrists think, they've got this exactly backwards. They think the old way, that Earth was in the middle because it was the best place of all and to remove Earth from that center spot, even our solar system, to put the Sun there, is to demote the Earth. So they make a fundamental mistake right off."

**R. Sungenis:** This is one of the most short-sighted and distorted arguments I have ever seen anyone give against a central Earth.

Yes, the ancient world view, say, of Aristotle, was that the Earth was the sump or anus of the universe. But what Mr. Keating failed to reveal was that Aristotle's notion was rejected by the Church, especially by Thomas Aquinas who had the unenviable job of cleaning out the pagan notions from Aristotle's books. In the writings of the Church Fathers and Aquinas they rejected Aristotle's demotion of Earth and instead upheld Scripture's elevation of Earth as the footstool of God's throne, from such passages as Isaiah 66:1 and Matthew 5:35; and they saw Earth as the place where God comes to reign over mankind from such passages as Psalm 46. Aristotle didn't believe in a personal God, and therefore he would have had no concept of a God who would be so intimate with Earth that He would use it as a footrest, in addition to daily sending His angels, and lastly His own Son, to redeem it from sin.

In essence, Keating has made a fallacious connection between the Christian belief of Earth's high significance with the pagan notion of Earth's low significance. Mr. Keating fails to see that modern cosmologists have rejected Aristotle's conception and now understand the center of the universe as very unique. As it stands, it is Mr. Keating who has surrendered to the pagan opponents; while it is I who am trying to wrest these pagan notions out of the hands of the atheists and restore the Earth to the glory God originally gave it.

I suggest Mr. Keating do a study of the Church Fathers. He will find something quite different than what he finds in C. S. Lewis who, by the way, was a liberal-leaning Protestant that did not consider the Fathers of the Church as an authority on anything, much less authorities on biblical cosmology. In fact, Mr. Keating has left out the Church Fathers entirely from his argument, yet their views of the

Earth's position in the universe dominated the Christian consensus. Why would Mr. Keating leave out the most important evidence for his audience to consider?

I think it is also important to add that Mr. Keating ignores the fact that the universe of the first millennium and at least three-quarters of the second millennium, was hundreds of orders smaller than the universe of modern cosmology. Putting an object on the rim of the ancient world's small and finite universe did not take it very far away, and more or less gave it a higher position, since it would be considered directly "above" the center.

But that is not the case with modern cosmology's universe where there is no "higher position" or a place "above" the center. Whether it is the Steady State or the Big Bang/Multiverse, in the modern version, space and time are infinite, and there is no high or low, right or left, up or down. Consequently, the more vast the universe, the more special a center becomes since the center gives a definitive location and direction out of all the vastness. Conversely, uniqueness is precisely why modern cosmologists want an infinite universe, since it will allow a universe of time and chance instead of one designed by God with a center.

Speaking of the Church Fathers, let's look at a few who said the Earth was in the center. See for yourself if at any time these Fathers state that the Earth is "insignificant" or is the sump or "anus" of the universe.

**Athanasius:** For the Sun is carried round along with, and is contained in, the whole heaven, and can never go beyond his own orbit, while the moon and other stars testify to the assistance given them by the Sun... But the earth is not supported upon itself, but is set upon the realm of the waters, while this again is kept in its place, being bound fast at the center of the universe.

**Athenagoras:** To Him is for us to know who stretched out and vaulted the heavens, and fixed the earth in its place like a center.

**Augustine:** Let not the philosophers, then, think to upset our faith with arguments from the weight of bodies; for I don't care to inquire why they cannot believe an earthly body can be in heaven, while the whole earth is suspended on nothing. For perhaps the world keeps its central place by the same law that attracts to its center all heavy bodies.

**Basil:** In the midst of the covering and veil, where the priests were allowed to enter, was situated the altar of incense, the symbol of the earth placed in the middle of this universe; and from it came the fumes of incense.

**Chrysostom:** "For they who are mad imagine that nothing stands still, yet this arises not from the objects that are seen, but from the eyes that see. Because they are unsteady and giddy, they think that the Earth turns round with them, which yet turns not, but stands firm. The derangement is of their own state, not from any affection of the element."

And again, the earth is fixed, but the waters are continually in motion; and not the waters only, but the clouds, and the frequent and successive showers, which return at their proper season.

Clement of Rome: the Creator, long-suffering, merciful, the sustainer, the benefactor, ordaining love of men, counseling purity, immortal and making immortal, incomparable, dwelling in the souls of the good, that cannot be contained and yet is contained, who has fixed the great world as a centre in space, who has spread out the heavens and solidified the earth.

**Cyril of Jerusalem:** The earth, which bears the same proportion to the heaven as the center to the whole circumference of a wheel, for the earth is no more than this in comparison with the heaven: consider then that this first heaven which is seen is less than the second, and the second than the third, for so far Scripture has named them..."

**Gregory Nanzianzus:** There have been in the whole period of the duration of the world two conspicuous changes of men's lives, which are also called two Testaments, (a) or, on account of the wide fame of the matter, two Earthquakes; the one from idols to the Law, the other from the Law to the Gospel. And we are taught in the Gospel of a third earthquake, namely, from this Earth to that which cannot be shaken or moved.

**Gregory of Nyssa:** "This is the book of the generation of heaven and earth," saith the Scripture, when all that is seen was finished, and each of the things that are betook itself to its own separate place, when the body of heaven compassed all things round, and those bodies which are heavy and of downward tendency, the earth and the water, holding each other in, took the middle place of the universe; ....for neither is the earth shifted from its own base, nor does the heaven ever relax in its vehemence, or slacken its motion.

**Gregory of Nyssa:** And how does earth below form the foundation of the whole, and what is it that keeps it firmly in its place? What is it that controls its downward tendency? If anyone should interrogate us on these and such-like points, will any of us be found so presumptuous as to promise an explanation of them? No! the only reply that can be given by men of sense is this: that He Who made all things in wisdom can alone furnish an account of His creation. For ourselves, "through faith we understand that the worlds were framed by the word of God," as saith the Apostle.

**Gregory of Nyssa:** "...the vault of heaven prolongs itself so uninterruptedly that it encircles all things with itself, and that the earth and its surroundings are poised in the middle, and that the motion of all the revolving bodies is round this fixed and solid center..."

Not only did Mr. Keating not give us evidence of early Christians who believed that the Earth was the anus or "sump" of the universe, he also never mentioned that Scripture holds Earth as the place where God reigns over man (Psalm 46) and is his unmovable footstool (Isaiah 66:1).

Mr. Keating also never mentioned that Scripture holds the Earth's immobility (and thus centrality) as the perfect analogy to God's immutability, as David describes it in Psalms 75, 93, and 96. The only thing Mr. Keating did was refer to the ancient pagans. He then referred to C. S. Lewis, a Protestant who has a special dislike for the Catholic Church as his authority on this subject. Mr. Keating gave us pagans and Protestant but did not give us even one reference to Scripture, Church Fathers, medievals, popes, saints, doctors or theologians who said the Earth was the anus of the universe.

#### Section 3: Is Citing the Bible to Support Geocentrism being Protestant?

At 5:28 – 5:40: Mr. Coffin says: "The idea that God has revealed this somehow in the Bible strikes me as ironically Protestant..." from which Mr. Keating says, "yes, yes."

**R. Sungenis:** What is really ironic is that the truth or falsity of Mr. Coffin's and Mr. Keating's assessment depends on what group of Protestants are in view.

The traditional Catholic Church had a great respect for Scripture, which was also true of many traditional Protestant denominations, albeit they often interpreted the Bible's words differently. The sadder story, however, is that modern or liberal Catholics, like Karl Keating, have the same watered-down mentality about Scripture that modern and liberal Protestants do.

When it comes to interpreting Genesis and the Psalms in regards to origins and cosmology, there is little or no difference between modern Catholics (e.g., Karl Keating) and liberal mainstream Protestants. In these instances, they both claim Scripture cannot be interpreted in a face value and literal sense. They claim that the historical accounts of Scripture are the product of authors from different times who wrote for social or cultural reasons that are far removed from giving any real truth about how the universe is built or functions. This is because both modern Catholics and modern Protestants hold that, at most, Scripture is only inerrant when it speaks about things directly concerning salvation, which eliminates about 90% of the Bible as being inspired by God. In fact, most of the Protestant liberals don't believe the Bible is inspired at all.

To help prove the point, the limited inerrancy of Scripture, although it had never been taught by Catholics prior to the 19<sup>th</sup> or 20<sup>th</sup> centuries, is now being taught in most Catholic seminaries (which are mostly liberal) and universities (which are mostly liberal) and secondary education (which is mostly liberal).

A good example of this new biblical hermeneutic is Fr. Raymond Brown who wrote *The Jerome Biblical Commentary*, with two other liberals, Fr. Joseph Fitzmyer of Catholic University of America (a very liberal institution) and Fr. Roland Murphy, a Carmelite of Duke University Divinity School.

The Jerome Biblical Commentary is the premier go-to commentary for most of modern Catholic academia, but it is one of the most liberal commentaries ever written. Many of its anti-traditional footnotes grace such well known Catholic pew bibles as the New American Bible and the New Jerusalem Bible. There is a saying among more astute Catholics that if one reads either the New American or New Jerusalem bibles, don't read the footnotes or you will lose your Catholic faith.

It should come as no surprise then, that Raymond Brown, who professed to be Catholic, taught biblical hermeneutics at one of the most liberal Protestant seminaries in the world, Union Theological Seminary in New York; while Roland Murphy's Duke university is not only liberal, but was begun by Protestant Quakers and Methodists. Each of the authors could switch schools, and if so, they would teach the same thing at one that they teach at the other. Mr. Keating could teach his biblical hermeneutics in any one of them and feel right at home.

Where did these Catholics get the idea that Scripture is only inerrant when it speaks directly about salvation and that its historical accounts (like Genesis) are filled with errors and non-factual statements? They got it first from the liberal Protestants coming out of Germany in the 1800s, such as the Graf-Wellhausen school of hermeneutics. They then ram-rodded this hermeneutic down the throats of those in Catholic academia in the mid 1960s by seizing on a phrase in Vatican II's document *Dei Verbum*. The phrase in question, "for the sake of salvation," appears in the following paragraph of *Dei Verbum* 11:

#### CHAPTER III

#### SACRED SCRIPTURE, ITS INSPIRATION AND DIVINE INTERPRETATION

11. Those divinely revealed realities which are contained and presented in Sacred Scripture have been committed to writing under the inspiration of the Holy Spirit. For holy mother Church, relying on the belief of the Apostles (see John 20:31; 2 Tim. 3:16; 2 Peter 1:19-20, 3:15-16), holds that the books of both the Old and New Testaments in their entirety, with all their parts, are sacred and canonical because written under the inspiration of the Holy Spirit, they have God as their author and have been handed on as such to the Church herself.(1) In composing the sacred books, God chose men and while employed by Him (2) they made use of their powers and abilities, so that with Him acting in them and through them, (3) they, as true authors, consigned to writing everything and only those things which He wanted. (4)

Therefore, since everything asserted by the inspired authors or sacred writers must be held to be asserted by the Holy Spirit, it follows that the books of Scripture must be acknowledged as teaching solidly, faithfully and without error that truth which God wanted put into sacred writings (5) for the sake of salvation. Therefore "all Scripture is divinely inspired and has its use for teaching the truth and refuting error, for reformation of manners and discipline in right living, so that the man who belongs to God may be efficient and equipped for good work of every kind" (2 Tim. 3:16-17, Greek text).

**Dei Verbum 11:** "Therefore, since everything asserted by the inspired authors or sacred writers must be held to be asserted by the Holy Spirit, it follows that the books of Scripture must be acknowledged as teaching solidly, faithfully and without error that truth which God wanted put into sacred writings for the sake of salvation. Therefore 'all Scripture is divinely inspired and has it use for teaching the truth and refuting error, for reformation of manners and discipline in right living, so that the man who belongs to God may be efficient and equipped for good work of every kind."

Using Catholic tradition as the guide, Dei Verbum 11 is easily interpreted, since it merely repeats what the Church had taught for two millennia, namely, that for the sake of our salvation God made all of Scripture inspired and inerrant.

Rest assured, neither Catholic tradition nor *Dei Verbum* 11 says that God limited Scripture's inspiration and inerrancy for the sake of our salvation, but that is how it was twisted by the Catholic liberals and that is precisely what is now being taught in about 95% of Catholic institutions today, and nothing even close to the new view was taught in these same institutions prior to the 20<sup>th</sup> century.

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http://www.vatican.va/archive/hist\_councils/ii\_vatican\_council/documents/vat-ii\_const\_19651118\_deiverbum\_en.html

The traditional understanding of Scripture as fully inspired and fully inerrant was confirmed by the five footnotes added to paragraph 11 of *Dei Verbum* by the Vatican Council fathers. But the modernists ignored the footnotes and subsequently distorted *Dei Verbum's* wording by making it appear that the phrase "for the sake of our salvation" meant that Scripture was only inspired and inerrant when it specifically addressed matters of salvation. Here are the words of Raymond Brown himself in his New Jerome Biblical Commentary to prove the point:

**Fr. Brown:** On inerrancy Vatican II made an important qualification as our italics indicate: 'The books of Scripture must be acknowledged as teaching, firmly, faithfully, and without error that truth which God wanted put into the sacred writings 'for the sake of our salvation.' Some have tried to interpret the italicized phrase to cover everything the human author expressed; but pre-voting debates show an awareness of errors in the Bible. Thus, it is proper to take the clause as specifying: Scriptural teaching is truth without error to the extent that it conforms to the salvific purpose of God."<sup>5</sup>

So what the sneaky Fr. Brown did was to make a conclusion that the Bible is not fully inerrant merely because there were "debates" between the Vatican II fathers on biblical inerrancy! This subterfuge wouldn't have been so bad except that 95% of Catholic hermeneutics swallowed it hook, line and sinker, but it was one of the most outrageous lies ever to come into the Church since the devil deceived Eve into eating the forbidden fruit (at least for those of us Catholics who still believe that the narrative of Genesis 3 is true). Common sense tells us, however, that if Vatican Council II meant to adopt such an earth-shattering change to its traditional understanding of the Bible, there would have been a whole treatise written on it in Dei Verbum! As it stand, Fr. Brown and his liberal colleagues twisted one small phrase, just as the devil did to Eve, and produce a lie of gargantuan consequences.

Essentially, in order to make room for Galileo and Darwin, the modernists claimed that Scripture could be in error when it addressed any issue other than salvation. Consequently, the modernists concluded that the historical narratives of Scripture, including Scripture's account of the creation, its operation, or its structure, were neither inspired nor without error.

That there were "debates" between traditionalists and modernists at Vatican II that eventually caused an acute rupture in the aftermath of Vatican II concerning how Scripture is interpreted is not mere speculation. One of the highest ranking cardinals of the Church, Walter Kasper, stated recently that in various instances the wording of Vatican II's documents was deliberately made ambiguous so that both traditionalists and modernists could afterward formulate different interpretations of the Council documents. In April 2013, Kasper stated:

**Cardinal Kasper:** "In many places, [the Council Fathers] had to find compromise formulas, in which, often, the positions of the majority are located immediately next

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<sup>&</sup>lt;sup>5</sup> The New Jerome Biblical Commentary, published 1990, p. 1169.

to those of the minority, designed to delimit them. Thus, the conciliar texts themselves have a huge potential for conflict, open the door to a selective reception in either direction." "For most Catholics, the developments put in motion by the council are part of the church's daily life. But what they are experiencing is not the great new beginning nor the springtime of the church, which were expected at that time, but rather a church that has a wintery look, and shows clear signs of crisis." "For those who know the story of the twenty councils recognized as ecumenical, this [the state of confusion] will not be a surprise. The post-conciliar times were almost always turbulent. The [Second] Vatican, however, is a special case."

It was then just a matter of which group would dominate the Church subsequent to the Council, and that opportunity fell overwhelmingly to the modernists and liberals since they all believed that the traditional Church was wrong about Galileo and Darwin.<sup>6</sup>

Consequently, the floodgates were open for post Vatican II scholars to reject or modify Catholicism's traditional beliefs, at least by making it appear so by popular consensus. Various modernists such as, Karl Rahner, Edward Schillebeeckx, Hans Küng, John Courtney Murray, Yves Congar, Raymond Brown, and Henri de Lubac, ascended to such prominence that they became household names in Catholic circles. All of them sought to upend the traditional interpretation of Scripture, and one of the main reasons was the popular belief that the Church was wrong in its interpretation of Scripture against Galileo. Mr. Keating follows right along with their interpretations of Scripture.

There is, of course, a serious caveat for them, for the very prelates who came out of the Council in 1965 to correct the "errors" of the past were themselves in error for distancing the Church from its past. Logically, if the modern prelature reserves the right to accuse the traditional Church on a matter of doctrine, then it has nothing left with which to make itself immune from a similar or even bigger error, and that error was claiming that Scripture is only inerrant when it speaks about salvation, a view Mr. Karl Keating himself holds (at least if he is following the modern consensus).

At this point I must add one of the more enlightening pieces of information surrounding the Galileo affair and its modern aftermath. It concerns what Pope Benedict XVI recently revealed about Galileo's connection with Vatican Council II. In 1962 he attended the Council as Father Joseph Ratzinger. When he became Pope Benedict XVI some fifty years later, he recalled that one of the major reasons the Church had initiated the Council was that many of its bishops believed the Church had made a mistake in condemning Galileo and the heliocentric system, and thus they wanted to rectify the situation which had been a scar on the Church's credibility for four centuries. The context of Pope Benedict's words are as follows:

**Pope Benedict XVI**: So we went to the Council not only with joy, but with enthusiasm. There was an incredible anticipation. We hoped that everything would be renewed, that a new

<sup>&</sup>lt;sup>6</sup> Cardinal Walter Kasper made the long-awaited admission in L'Osservatore Romano on April 12, 2013.

Pentecost would truly come, a new era of the Church...And we knew that the relationship between the Church and the modern period was a bit in conflict, beginning with the error of the Church in the case of Galileo Galilei; we thought we could correct this wrong beginning and find the union between the Church and the best forces in the world in order to open up the future of humanity, to open true progress. So we were full of hope, of enthusiasm, and of the will to do our part for this thing.<sup>7</sup>

Since Father Joseph Ratzinger was present at the Council in 1962 and personally knew many of its major participants, his inside knowledge of what we can now call the "Galileo mentality" of Vatican II, must be taken as a reliable testimony.

Obviously, if we take a realistic look at the Church today, the springtime of Vatican II never blossomed and we can only surmise that Pope Benedict XVI is blaming it, in part, on the mentality of the Vatican II clerics.

Another important issue regarding Galileo and geocentrism in the mind of Pope Benedict was what he said in a speech in 1990 when he was Cardinal Joseph Ratzinger. He said the following:

Cardinal Joseph Ratzinger: Today, things have changed. According to Bloch, the heliocentric system—just like the geocentric—is based upon presuppositions that can't be empirically demonstrated. Among these, an important role is played by the affirmation of the existence of an absolute space; that's an opinion that, in any event, has been cancelled by the Theory of Relativity. Bloch writes, in his own words: "From the moment that, with the abolition of the presupposition of an empty and immobile space, movement is no longer produced towards something, but there's only a relative movement of bodies among themselves, and therefore the measurement of that [movement] depends to a great extent on the choice of a body to serve as a point of reference, in this case is it not merely the complexity of calculations that renders the [geocentric] hypothesis impractical? Then as now, one can suppose the earth to be fixed and the sun as mobile."

So we see that Cardinal Ratzinger came to the conclusion that the popes of 1616 and 1633 had a good reason for denying Galileo's claims. In fact, this speech was such an about-face for Cardinal Ratzinger that the secularists at the Parma speech in 1990 were so incensed that he was implying that the Church was right to condemn Galileo, that they refused to invite him to return to Parma many years later when he was Pope Benedict XVI.

roma\_en.html <sup>8</sup> From a speech given in Parma, Italy, March 15, 1990, titled: "The Crisis of Faith in Science," partly reported in *Il Sabato*, March 31, 1990, pp. 80ff, and in the *Corriere della Sera*, March 30, 1990, and cited in *30 Days*, January 1993, p. 34

<sup>&</sup>lt;sup>7</sup> Pope Benedict's farewell address to priests at the Vatican, as reported by *L'Osservatore Romano*, February 14, 2013, page 4, paragraph #5 in the article "Al concilio pieno di entusiasmo e speranza." http://www.vatican.va/holy\_father/benedict\_xvi/speeches/2013/february/documents/hf\_ben-xvi\_spe\_20130214\_clero-

#### Section 4: Does the Catholic Church Teach Science?

At 5:48 – 7:00, Mr. Coffin then asks Mr. Keating: "Has there ever been a Catholic teaching to do with science?" Mr. Keating answers as follows:

Keating: "No, there has not. Now there have been some Catholic teachings that, for example, Pius XII in Humani Generis in 1950 indicates certain limits on the understanding of human origins, for example... but there is nothing in Church history telling us the ordering of the planets and the stars and the like. So there are some people who think that happened and appeal to certain passages of Scripture and to writings of early Christians, but all the passages are really inept (?) to the question since they don't go past saying what today's astronomers say. When they get up in the morning they turn to their wives and say 'oh look, the sun is rising in the east,' but every single astronomer doesn't really think the sun is moving around the Earth. He thinks the Earth is moving around the sun. But we all speak in phenomenological ways. This is the way it appears to us. Wherever we are on Earth or wherever we are in the universe, we appear to be in the middle of everything."

**R. Sungenis:** Mr. Coffin's question is similar to the question: "have you stopped beating your wife?" If one answers 'yes,' then he admits he has beaten his wife. If one answers 'no,' than he admits he has beaten his wife.

Here is what Mr. Keating didn't tell you. The Catholic Church does not teach science, *per se*, but that does not mean that the Catholic Church's teaching does not sometimes overlap with science or share the same knowledge with science. The origins, structure and function of the universe is one of the areas of overlap or shared knowledge.

Likewise, the Bible is not a science book. It does not contain formulas such as F = ma or E = mc squared. But when the Bible touches upon science, it is just as inerrant as it is when it speaks of the resurrection of Jesus Christ, since all of Scripture, as 2 Timothy 3:16 dictates, is divinely inspired.

It is the same reason that Cardinal Bellarmine and Pope Paul V told Galileo that his teaching of heliocentrism was wrong, since when the Bible says the Earth doesn't move it is just as inerrant as when it says Jacob had twelve sons or Elijah was taken into heaven in a chariot of fire. In fact, the Bible uses truths from nature as analogies to truths about God, such as when the Psalms compare the Earth's immovability to God's immutability.

We can understand this principle by analogy with the Declaration of Independence. Everyone would agree that the Declaration is a political document, but when the Declaration teaches religious truth, such as "all men are created equal and endowed by their Creator with certain inalienable rights," it is just as authoritative for Americans as the political statements in the Declaration.

Be that as it may, Mr. Keating is making another claim which is off the mark, which is to say that none of the passages in the Bible can be used to teach geocentrism because they are all of a phenomenological nature. He says this occurs when an astronomer says to his wife, 'oh look, the sun

is rising in the east,' yet none of them believe the sun is really moving around the Earth, but that the Earth is moving around the sun.

What Mr. Keating doesn't tell his listeners, however, is that even the geocentrist uses phenomenological language, for he also says to his wife, "look at the beautiful sunrise this morning," but he doesn't believe that the sun is actually rising. It only appears to rise because it is in relative motion with the Earth's horizon. So, Mr. Keating's appealing to the use of phenomenological language does not advance his argument. In fact, it is a red herring.

The real questions that Mr. Keating needs to answer are these:

- (1) of the two possible ways that we see the sunrise in the morning, a rotating earth or a moving sun, which one is the actual reality?
- (2) Are there other Scriptures that are not to be considered phenomenological language but actually clarify for us which of the two possibilities is correct?
- (3) Are there "early Christians," such as the Church Fathers, who told us which of these two possible movements was the real one?
- (4) Did the Church herself teach us which of the two possibilities was the actual reality?

The truth is, Mr. Keating avoided dealing with any of these deeper issues in his interview, and Mr. Coffin avoided asking any of them. We can surmise that Mr. Coffin's inquires to Keating were well-scripted and designed to shield Mr. Keating from the more difficult questions concerning the Church's history on the subject of geocentrism.

For the record, the answer to each of the four questions is a resounding 'yes.' Of the two possible ways to make it appear that the sun is rising over the Earth's horizon, Scripture, the Church Fathers, and the Church herself, tell us that the Earth is motionless and the sun is moving around it.

In Scripture, Joshua 10 tells us that both the sun and the moon were stopped for a whole day so that Joshua could defeat the invading armies. No heliocentrist has ever been able to explain this passage from a heliocentric perspective. The difficulty is that if the Earth were stopped from rotating, the moon would continue to move across the sky and end up below the Mediterranean sea in a short time. But Joshua 10 insists that it stays in the sky with the sun for a whole extra day.

Because of such non-phenomenal Scripture passages, the Church Fathers were in absolute consensus on geocentrism, even against the Greek heliocentrists. All the Fathers that gave arguments for geocentrism used Joshua 10 as their main passage.

This consensus among the Fathers is the very reason the Church codified the doctrine of geocentrism in its 1566 Tridentine Catechism; and why in 1616 and 1633 it condemned Galileo's interpretation of Joshua 10. Galileo, Fr. Foscarini, Kepler, Copernicus and Fr. Zuniga were put on the Index and heliocentrism was decreed a heresy by the Holy Office and approved by the reigning pope, after

which the pope himself (Urban VIII) sent letters out to all the papal nuncios and universities of Europe demanding their compliance to the anti-heliocentric decrees.

Not only do Scripture, Tradition and the Magisterium teach a geocentric universe, but during the last 100 years or so, modern science itself has shown that a moving sun around a fixed Earth is certainly possible; in addition to admitting that it has no way to disprove geocentrism. This is why Albert Einstein admitted in his 1938 book, The Evolution of Physics:

"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."9

<sup>&</sup>lt;sup>9</sup> The Evolution of Physics: From Early Concepts to Relativity and Quanta, Albert Einstein and Leopold Infeld, 1938, 1966, p. 212.

#### Section 5: What is the true history of Copernicus, Galileo, Tycho and Kepler?

At 7:00, Mr. Coffin asks Mr. Keating if Galileo was a geocentrist. Keating says no, and then adds:

**Keating:** "it started really with Copernicus in the prior century... and had come to the conclusion that the old cosmologies, known as originally the Ptolemaic system and later as the Tychonian system... weren't adequate in explaining what was visible to scientists. So he, Copernicus, came up with the idea that the sun is at the center of the solar system, and the earth and the other planets go around the sun. And his argument was better at explaining what we could see in the sky. Galileo accepted that, but went further. But Galileo, as you know, makes use of the telescope, is able to discover moons around Jupiter, sunspots and the like... So Galileo is best known for promoting the heliocentric theory... and he gets into trouble because he is trying to interpret Scripture.

As time went by and these early scientist began to take more exact measurements of what could be seen... but as time went by and we approached the 16<sup>th</sup> and 17<sup>th</sup> centuries and the telescope comes along and clocks come along, it becomes evident that the data that has been accumulated doesn't fit anymore with these old theories. So Copernicus, Galileo, Kepler are looking at different ways to explain all these observations."

**R. Sungenis:** First, Copernicus was not the first to present the heliocentric model. Copernicus obtained his model from the Greeks, specifically the Pythagorean school (NB: the Aristotelian school was geocentric). The main proponent of heliocentrism was Aristarchus of Samos. Copernicus was enamored with the Greeks and believed that the sun had some special dignity that needed to be honored, which was at least one motivation for him to put the sun in the center, which was similar to Kepler's motivation to do the same.

Having an affinity for the Pythagoreans, Copernicus believed the circle was the perfect shape, and he insisted that if he put the sun in the center and had the earth and planets revolving around it, they should do so in perfect circles. As such, his model never worked correctly and was much further off target than his rival, the Ptolemaic system, which had put the Earth in the center and used epicycles and an Equant to produce non-uniform orbits.

To correct his model, Copernicus was forced to put the planetary orbits on epicycles, and when he was done in 1543, the year his book was published, he ended up with 48 epicycles whereas Ptolemy's model, which Copernicus originally ridiculed for its use of epicycles, used only 40. So, if Copernicus' model had been used to correct the calendar, it would have made the calendar worse than it already was.

Also, for the historical record, Galileo was not the first Catholic to argue from Scripture that the heliocentric model would be permitted. That dubious distinction goes to Fr. Paolo Foscarini whose book on heliocentrism was banned by the Church in 1615, which book was accompanied by lengthy letters from Foscarini to Cardinal Bellarmine seeking the Cardinal's approval for Foscarini's heliocentric interpretation of Scripture. Galileo's conflict with the Church started a year later in 1616.

#### Section 6: Did Professor Wilson put Karl Keating on the wrong track?

At 13:50: Coffin asks Karl how he got into this issue. Keating answers:

**Keating:** "We had to take certain elective courses, and I took one on the History of Science, taught by Professor Curtis Wilson. He is the top American expert in Johannes Kepler. Kepler was a scientist in the 17<sup>th</sup> century who formulate the three laws of planetary motion on which all of modern astrophysics is based....The class was actually on geocentrism. And what we did was to take Ptolemy's ancient writings... and he was the first to come up with a consolidated theory of how the planets and the sun and the stars interacted. And it's his theory that the Earth is at the center. The planets that could be as far as Saturn... and the sun, rotated in circles around, revolved in circles around the Earth. He had to elaborate this with many accourrements in order to make his theory seem to accommodate the observations he had at the time....In this course, while I was in school Professor Wilson took us through Ptolemy's work; through his much later successor Tycho Brahe who died in 1601, who had an alternative theory but with Earth still in the center, and took us through the actual calculations and observations. We did the math. We did the arithmetic and the geometry and worked this through. And we were able to see over the course of the class that as time when on and observations became ever more precise, that the Ptolemaic theory and later the Tychonian theory did not accommodate the appearances. And as time went on they were less and less able to explain why the planets and the stars and the sun were doing what they seemed to be doing... Now I see that decades later, this notion of geocentrism has made a comeback.

**R. Sungenis:** Well, now we can see why Mr. Keating has such confidence in his testimony against geocentrism. He took one elective class some forty years ago in college and is convinced from that one course that geocentrism can't be correct. The key sentence in his description is this:

"And we were able to see over the course of the class that as time when on and observations became ever more precise, that the Ptolemaic theory and later the Tychonian theory did not accommodate the appearances."

If that is what Professor Curtis Wilson taught Mr. Keating, then Prof. Wilson is at least half wrong. If Prof. Wilson was only dealing with kinematics and not dynamics, then it would be true to say that Ptolemy's model can be shown to be inadequate, but Tycho Brahe's model matches both the Copernican and the Keplerian models, orbit for orbit, equation for equation.

Hence, my suspicion is that Mr. Keating probably misunderstood Prof. Wilson, but unfortunately, this means Keating has carried the fallacious idea with him for the last forty years that the Tychonic model is also inadequate, when it is only the Ptolemaic that has proven to be so.

I suggest that Mr. Keating go back and check the notes that Prof. Wilson gave him. I know of no professor in astrophysical kinematics that would ever claim that Tycho Brahe's model was

inadequate to explain the motions in the heavens, and I dare say that I don't think Prof. Wilson would dare do so either.

Moreover, if Prof. Wilson taught Mr. Keating that only the Keplerian model could explain stellar parallax, he is wrong there as well. Although accusing Tycho's model of being unable to explain parallax was popular a few years ago, it has been discredited, for the simple reason that we now realize that if the stars are aligned with the sun instead of the Earth, then both parallax and aberration are produced. As one professor from the University of Illinois put it in his 2004 lecture notes:

**Univ of Illinois:** "It is often said that Tycho's model implies the absence of parallax, and that Copernicus' requires parallax. However, it would not be a major conceptual change to have the stars orbit the sun (like the planets) for Tycho, which would give the same yearly shifts in their apparent positions as parallax gives."

Another possibility for the miscue is that Mr. Keating, without telling us, believes that Tycho's model is inadequate because Tycho's original model did not include elliptical orbits of the planets. Since the elliptical orbits of Kepler's model made the heliocentric version more accurate, Tycho's geocentric model would not be able to match it.

If this is Mr. Keating's reason, then he is playing a shell game with the audience. Every professor of astrophysical kinematics, including the late Christopher Wilson, knows that if elliptical orbits of the planets are included in Tycho's model, it is just as accurate as Kepler's model. This was already known in the time of Galileo. In 1665, Giovanni Riccioli, in his book, Astronomia Reformata, added elliptical orbits to Tycho's model for this very reason, and afterward he remained a devoted geocentrist.

I also want to make an interesting observation of Kepler's system. It is not as accurate as Mr. Keating has been led to believe. Professor of celestial mechanics at Columbia University, Charles Lane Poor, shows us why:

**Poor:** From the time of Newton, it has been known that Kepler's laws are mere approximations, computer's fictions, handy mathematical devices for finding the approximate place of a planet in the heavens. They apply with greater accuracy to some planets than to others. Jupiter and Saturn show the greatest deviations from strictly elliptical motion. The latter body is often nearly a degree away from the place it would have been had its motion about the sun been strictly in accord with Kepler's laws. This is such a large discrepancy that it can be detected by the unaided eye. The moon is approximately half a degree in diameter, so that the discrepancy in the motion of Saturn is about twice the apparent diameter of the moon. In a single year, during the course of one revolution about the sun, the Earth may depart from the theoretical ellipse by an amount sufficient to appreciably change the apparent place of the sun in the heavens.<sup>11</sup>

 $<sup>^{\</sup>rm 10}$  University of Illinois, Physics 319, Spring 2004, Lecture 03, p. 8.

<sup>&</sup>lt;sup>11</sup> Charles Lane Poor, *Gravitation versus Relativity*, p. 129. Owen Gingerich adds: "Naturally astronomy textbooks don't show it this way, because they can't make the point about ellipses unless they enormously exaggerate the eccentricity of the ellipse. So

So, the upshot of this bit of history is that Mr. Keating is either unaware of the truth or is trying to keep it from the audience. His forty-year objection to geocentrism is based on nothing more than a misconception of the Tychonic model. How sad to know that Mr. Keating's vociferous campaign against geocentrism for the past decade has been based on his own ignorance of the subject matter. It is my hope that Mr. Keating will correct his misconception and apologize to his audience for leading them down this blind alley.

By the way, one more historical note of import is that Ptolemy was aware that his model might not be correct since he did not know the distances of the planets from the sun, especially Mercury and Venus. But to compensate for this lack he included six variables in his theory so that when the correct distances and placement could be made, they would be added to his model to correct it.

In fact, the Tychonic geocentric model made those six corrections and thus allowed the Tychonic model to be either as accurate as Copernicus' model without elliptical orbits of the planets, or as accurate as Kepler's model with elliptical orbits.

Additionally, Ptolemy had another device, the Equant, which served as the forerunner of Kepler's elliptical orbits. The Equant allowed the planets to revolve around the sun in non-uniform orbits very similar to Kepler's elliptical orbits. But since Copernicus wanted to do away with non-uniform orbits and have the planets revolve in perfect circles around the sun, thus Copernicus' model could not even come close to the accuracy of either the Ptolemaic or Keplerian models for the outer planets.

for centuries, beginning with Kepler himself, a false impression has been created about the elliptical shape of planetary orbits. The eccentricity of planetary orbits (that is, their off-centeredness) is quite noticeable – even Ptolemy had to cope with that – but the ellipticity (the degree the figure bows in at the sides) is very subtle indeed. Observations of Mars must be accurate to a few minutes of arc for this tiny ellipticity to reveal itself" (*The Book that Nobody Read*, p. 166).

#### Section 7: Are "New Geocentrists" the only ones who have taught Geocentrism?

Keating then goes on to speak of modern geocentrist as a group. He says:

**Keating:** "And as you said...it's a small group of people, Protestants and Catholics, who subscribe to the theory and are promoting it. But it's a growing small group, and it's something that was not known, in the Catholic world, before the 1980s, in modern times, and in the Protestant world, not before the 1960s."

**R. Sungenis**: Apparently, Mr. Keating is claiming that geocentrism was not promoted in the Catholic world of modern times before 1980, but that depends on how one is looking at the history. As noted earlier, in 1965, only 50 years ago, Vatican II refrained from condoning heliocentrism or saying that the Church made a mistake in teaching geocentrism, even though various clerics at the Council wanted to exonerate Galileo.

Prior to that was in 1941 when the Pontifical Academy of Science commissioned Pio Paschini, a priest and professor of ecclesiastical history in Rome, to write a biography of Galileo for the third centenary of his death, 1942. After completing the work three years later, Paschini submitted it to the Pontifical Academy of Science but it was rejected by both the Academy and the Holy Office, mainly because it was judged to be too favorable to Galileo.

One interesting statement from Paschini in his letter to Deputy Secretary Montini (who would later be elected Paul VI in 1963) reveals that his opponents at the Vatican were voicing with one accord the same historical facts that the president of the Pontifical Academy of Sciences, Agostino Gemelli, had stated in 1941, namely, "...although Galileo did not provide a decisive demonstration of Copernicanism, neither did Newton, Bradley, or Foucault." Paschini concurred with: "They oppose me with the already superseded difficulty that Galileo had not advanced conclusive proof for his heliocentric system."

In 1850, only 165 years ago, the Church commissioned Mario Marini to write a book defending the Church's stand against heliocentrism.

In 1833, only 182 years ago, a Catholic disclaimer was put on Newton's *Principia*, stating: "the Supreme Pontiffs have decreed against Newton that the Earth does not move."

So, within the last century or two, we see the Church continuing to make comments supporting the prior tradition on geocentrism, and issuing no official statement rejecting what the Church previously decreed against heliocentrism. One just has to dig a little to find it.

#### Section 8: Is it wrong to take the Bible literally?

At 18:20 – 19:28, Keating says:

**Keating:** "They all seem to take a very literalistic view of the early chapters of Genesis. Most of them... would be considered Creationists... in the narrow sense of the word. Most of them, not all, are young earth believers. They think the Earth was formed no more than 6 to 10,000 years ago."

**R. Sungenis:** Of course, as he usually does, Mr. Keating fails to reveal to his audience that the belief that God created the world 6000 years ago and did it in six days was the consistent belief of the Church, stemming from the consensus of the Church Fathers and throughout the medieval period. The only deviation was Origen, and possibly St. Augustine who had a second opinion that the days of Genesis could have been instantaneous instead of spread over six days (but this view was due to a misunderstanding Augustine had between the Greek LXX and the Latin translation of Sirach 18:1, and Augustine was in error on this matter).

The belief in the ex nihilo creation of material objects and creatures in their whole substance was established first at Lateran Council IV in 1215 and reiterated at Vatican Council I in 1870, eleven years after Charles Darwin published his book on evolution in 1859.

There was never a time the Church endorsed the concept of evolution nor rejected its traditional belief in creationism. Even Pius XII's 1950 encyclical Humani Generis, while allowing Catholics to investigate the claims of evolution, gave severe warnings against embracing the theory.

The only ones who were pushing evolution were the liberal Catholics, beginning with such late 19<sup>th</sup> century notorious figures as Fr. Teilhard de Cardin, Fr. George Mivart and Fr. Ernest Messenger.

In the 20<sup>th</sup> century, more liberals joined the fray, among them was Fr. Raymond Brown, whom I noted previously as one of the architects of the new hermeneutic that claims the Bible is only inerrant when it speaks about salvation. He included a whole section supporting the theory of evolution in his New Jerome Biblical Commentary.

It is these liberal mavericks that Mr. Keating is following when, as he sometimes does in public, espouses his belief in evolution and rejection of the Church's traditional belief in creationism.

To illustrate the connection between creationism and geocentrism, it was the notorious heretic, Fr. Teilhard de Chardin who stipulated that it was the fall of geocentrism that laid the pathway for the belief in evolution. He writes:

**De Chardin:** In earlier times, until Galileo, there was perfect compatibility between historical representations of the Fall and dogma of universal redemption – and all the more easily, too, in that each was modeled on the other. So long as people believed as St. Paul himself did, in one week of creation and a past of 4000 years – so long as people thought the stars were satellites of the earth, and that animals were there to serve man – there was no

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difficulty in believing that a single man could have ruined everything, and that another man had saved everything. Today we know, with absolute physical certainty, that the stellar universe is not centered on the earth, and that terrestrial life is not centered on mankind.... With the end of geocentrism, what was emerging was the evolutionist point of view. All that Galileo's judges could distinctly see as menaced was the miracle of Joshua. The fact was that in consequence the seeds of decomposition had been introduced into the whole of the Genesis theory of the fall: and we are only today beginning to appreciate the depth of the changes which at that time were already potentially completed [in Galileo's day].<sup>12</sup>

Could it be any clearer that the fall of creationism in modern Catholic belief was caused by the fall of geocentrism in modern Catholic belief?

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<sup>&</sup>lt;sup>12</sup> Teilhard de Chardin, "Fall, Redemption and Geocentrism," *Christianity and Evolution*, 1969, 1971, William Collins Co., Harcourt, pp. 37-38.

#### Section 9: Do Geosynchronous Satellites Disprove Geocentrism?

Keating goes on to say the following:

**Keating:** "They are all insistent that if we do not accept geocentrism, what we are really doing is saying that the Bible (and in the case of Catholics, the magisterium), would not be infallible. And, of course, after that everything collapses.

**R. Sungenis:** What Mr. Keating doesn't tell his audience is that his self-assessment of what he and his colleagues are doing is precisely what Cardinal Bellarmine, Pope Paul V and Pope Urban VIII told Galileo he was doing, that is, that Galileo was twisting Scripture and ignoring the patristic consensus and the medieval tradition. Why would this not apply also to Mr. Keating if it applied to Galileo?

Mr. Keating has a bad habit of putting the onus on what he calls "The New Geocentrists," but he is rather shy telling his audience about the "Old Geocentrists" who came long before the New Geocentrists. Why does Mr. Keating do this? Probably because he doesn't want his young Catholic audience to know that their Catholic tradition is against everything Mr. Keating is saying to them.

Of course, Mr. Keating thinks he has an ace up his sleeve that will bring the young Catholics to his side. He believes that modern science trumps Bellarmine, Paul V and Urban VIII because Mr. Keating, who had only one science course as an elective in college, is insistent in his new book, *The New Geocentrists*, that satellites prove that the Earth is rotating, and thus prove that the Church of Galileo's day was wrong in saying the Earth did not rotate.

In essence, this is what is happening: On the one hand, Mr. Keating devolves both Scripture and the Catholic Magisterium to being fallible when it comes to judging what orbits what, but elevates the mere opinions of modern science to being infallible when it comes to the same. If that is the case, let's examine Mr. Keating's example of the "infallibility" of modern science to judge this issue. In this case, we will go directly to his book.

Mr. Keating's definitive proof against geocentrism is the geosynchronous satellites that hover above the Earth in a stationary position. They are 22,236 miles above the Earth, and only at that particular distance will they stay the same place above the Earth indefinitely. Mr. Keating thinks that there is no credible explanation for this phenomenon in the geocentric system. I can only assume that by giving what he believes is his major disproof of geocentrism, Mr. Keating is laying all his chips on table. Hence, if he loses, then his case against geocentrism is finished, and he owes an apology to every person he slandered in his book.

Keating begins with the following argument:

**Keating:** Sungenis's argument depends on placing the satellite at a point at which the gravitational attraction of the Earth is exactly countered by the force of something on the

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other side of the satellite....Sungenis believes he has discovered such a powerful force: it emanates from the distant star field....or so Sungenis says."

The point of equilibrium is found at 22,236 miles above the Earth's surface. At that point—about five times the radius of the Earth—the Earth's gravity is attenuated enough that it is counterbalanced by the gravitational pull of the distant stars. If the satellite were any lower, the Earth's gravity would pull it into the atmosphere and to its destruction. If the satellite were any higher than 22,236 miles, it slowly would move out of Earth's grasp and would float toward the stars, moving directly away from the Earth.

**R. Sungenis:** Actually, I could argue for a Machian or Einsteinian solution to the geosynchronous satellites, but I have found that with people who want to use Newtonian mechanics (such as Keating), it is best to use Newtonian mechanics. Thus I put a Newtonian solution in the 10<sup>th</sup> edition of *Galileo Was Wrong*. Interestingly enough, Keating complains that it is rather short, which is odd. It is short only because it doesn't need a long explanation. As you will see, the solution is very simple for the geocentric system.

In the heliocentric model, the Earth is rotating counter-clockwise at 1000 mph at the equator and the satellite is also moving counter-clockwise but at 7000 mph to keep up with the Earth. The result is that the satellite remains over one place above the Earth at the equatorial line.

Now we will use the Newtonian system to analyze the heliocentric model. As such, a satellite moving at 7000 mph wants to go off into a straight line into deeper space (like when you twirl a rock on a string and let it go, it moves in a straight line). But the gravity of the Earth pulls on the satellite so that the satellite stays at 22,236 miles above one place on the Earth.

In the geocentric model, the Earth is fixed but space is rotating clockwise around the Earth's surface at 1000 mph. A 22,236 miles above the equator, space is moving at 7000 mph. Hence the satellite must move counter-clockwise at 7000 mph in order to go against the 7000 mph clockwise tide of space if the satellite wants to stay over one place above the Earth.

Now we will use the Newtonian system to analyze the geocentric model. As such, a satellite moving at 7000 mph with respect to space wants to go off in a straight line into deeper space (just as happens in the heliocentric model), but the gravity of the Earth pulls on the satellite so that the satellite stays at 22,236 miles above one place on the Earth.

Hence, the geocentric system has the same solution as the heliocentric.

Notice that in both the heliocentric and geocentric models, the satellite is moving 7000 mph, and it is doing so in a counter-clockwise direction, so all things are equal. Hence, when NASA sends up the satellite, they give it enough thrust to go 7000 mph in a counter-clockwise direction with respect to the Earth. What they don't realize is that if it were a geocentric model, the space is moving clockwise at 7000 mph hour with respect to the Earth, and thus the satellite needs the same 7000 mph of thrust to go counter-clockwise against space to remain above one place on Earth.

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Keating tries to dismiss this simple solution by the following statement:

**Keating:** In Galileo Was Wrong... he offers a quite different explanation. He says that in fact the satellite is moving swiftly though space at '7000 miles per hour eastward against the westward rotating universe, which will allow the satellite to remain stationary over a particular location on Earth.'

#### Keating contends that,

"this explanation will not do. If it is a centrifugal force that keeps the satellite at a certain level, the force can exist only if the satellite itself is moving. Motionless objects are not subject to centrifugal force."

Apparently Mr. Keating doesn't understand that in Newtonian mechanics a satellite moving at 7000 mph, even in the geocentric system, will seek to go in a straight line in the medium of space against which it is moving, and thus the gravity of the Earth is needed to pull the satellite downward if the satellite is going to stay above one place on the Earth.

To perhaps understand this better, take the Earth out of the picture for the moment. So now we have a satellite traveling 7000 mph against a space that is rotating 7000 mph. According to Newton, what will the satellite seek to do? It will seek to avoid rotating and want to go off in a straight line into deeper space since there is no centripetal force to make it go in a circle.

So now we put a fixed Earth in the center. The Earth's gravity will pull the satellite (the centripetal force) so that it does not go off in a straight line at 7000 mph, and the satellite will constantly tug (centrifugal force) on Earth's gravity so that the satellite can stay at a height of 22,236 miles above one place on the Earth.

It's really very simple. According to Newton's laws, it works in either the heliocentric or geocentric system.

Unfortunately for Mr. Keating, his best argument against geocentrism has been discredited, and thus all the time he spent denigrating his opponents in his book has not amounted to anything but embarrassment for him.

#### Section 10: Does the speed of light limit how fast stars can travel around Earth?

Next, Coffin asks Keating: "If the Earth is the center of the entire universe, then don't planets and distant galaxies have to be traveling at awfully fast rates?" Keating responds:

"The nearest star to us is Alpha Centauri... now keep in mind, if the Earth is the center of the universe... and most of these geocentrists say the Earth does not rotate on its axis. It's completely stationary. It doesn't move through space and doesn't rotate on the axis. If that's the case, they say, then, the entire universe revolves around the Earth once every 24 hours. So if you go to Alpha Centauri... 26 trillion miles away... if it were to go in a circle around the Earth each night, to revolve around the Earth as these folks think it does, you would have to go 10,000 times the speed of light. And that's the nearest star. What happens to a star that is 100 or 1000 times further away?

Coffin then says, "I'm sure they have an answer for that," and Keating says:

"They do. They acknowledge that modern physics has said that nothing can go faster than the speed of light, which is 186,000 miles per second, but Alpha Centauri would have to go 10,000 times faster, so how do you handle this?

**R. Sungenis:** Let's clear up some misrepresentations and misconceptions that Mr. Keating has created here. First of all, when Mr. Keating says "modern physics has said that nothing can go faster than the speed of light, which is 186,000 miles per second," he is depending on Einstein's Special Relativity theory, which will also entail that Mr. Keating depending on Einstein's General Relativity theory. Curiously, however, on Mr. Keating's blog, he is denying all arguments that opponents are using from General Relativity to answer the issue about the Geosynchronous satellites.

Second, Mr. Keating's view of the speed of light is actually a misrepresentation of modern physics. The only part of modern physics that says nothing can go faster than light is Einstein's Special Relativity, which was invented in 1905. But that theory was superseded ten years later by General Relativity in 1915.

Einstein's General Relativity, which is the foundation for all modern physics, astrophysics and astronomy, says that Alpha Centauri can go any speed it wants around the Earth. Either Mr. Keating didn't know this, or he did (since he has read my books) and either doesn't understand it or is hiding it from his audience.

Actually, you aren't going to hear too many physicists admit this little gem, except the very honest ones who know the gig is up. Here is one of the honest ones. His name is G. V. Rosser. In his book, An Introduction to the Theory of Relativity, he admits this astounding truth:

**Rosser:** "If gravitational fields are present the velocities of either material bodies [e.g., Alpha Centauri] or of light can assume any numerical value depending on the strength of the gravitational field. If one considers the rotating roundabout [earth] as being at rest, the centrifugal gravitational field assumes enormous values at large distances, and it is

consistent with the theory of General Relativity for the velocities of distant bodies to exceed  $3 \times 10^8$  m/sec [i.e., the speed of light] under these conditions."<sup>13</sup>

But perhaps it might be better to hear this amazing fact from the pen of Albert Einstein himself. Just a year before he published his General Relativity theory, Einstein stated in a 1914 paper the following:

**Einstein:** "We need not necessarily trace the existence of these centrifugal forces back to an absolute movement of K' [the Earth]; we can instead just as well trace them back to the rotational movement of the distant ponderable masses [the universe and its stars] in relation to K' whereby we treat K' as 'at rest.'... On the other hand, the following important argument speaks for the relativistic perspective. The centrifugal force that works on a body under given conditions is determined by precisely the same natural constants as the action of a gravitational field on the same body (*i.e.*, its mass), in such a way that we have no means to differentiate a 'centrifugal field' from a gravitational field....This quite substantiates the view that we may regard the rotating system K' [the Earth] as at rest and the centrifugal field [the universe] as a gravitational field....The kinematic equivalence of two coordinate systems, namely, is not restricted to the case in which the two systems, K [the universe] and K' [the Earth] are in uniform relative translational motion. The equivalence exists just as well from the kinematic standpoint when for example the two systems rotate relative to one another.<sup>14</sup>

So, since no limitations to light speed is true of modern physics' understanding of the universe, what, then, was Mr. Keating referring to? Doesn't everyone today believe that nothing can travel faster than light? As noted, they are referring to Einstein's prior theory, Special Relativity, but Special Relativity did not include gravitational and inertial forces, and thus it doesn't really fit most of the universe since we know of no places in the universe that are absent of gravity and inertial forces.

So what use is Special Relativity, and why, if it's not practical in the universe, was it invented? Well, here's where we get into a bit of history that, once again, Mr. Keating is not revealing to his audience. Special Relativity was invented for one reason: to answer the 1887 Michelson-Morley experiment that showed the Earth wasn't moving through space. Essentially, Einstein invented Special Relativity to keep the Earth moving, at least on paper with his convenient mathematics. How do we know this? In essence, it was a "special" theory developed for a "special" problem. It comes right from the mouth of Einstein.

Although many of Einstein's adherents try to conceal the fact that the Michelson-Morley experiment was a direct cause for Einstein inventing Special Relativity in 1905, it was admitted two decades later by Einstein himself at his speech in Kyoto, Japan in 1924.

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<sup>&</sup>lt;sup>13</sup> An Introduction to the Theory of Relativity, William G. V. Rosser, 1964, p. 460.

<sup>&</sup>lt;sup>14</sup> Einstein's October 1914 paper titled: "Die formale Grundlage der allgemeinen Relativitätstheorie," trans. by Carl Hoefer, in *Mach's Principle: From Newton's Bucket to Quantum Gravity*, eds. Julian Barbour and Herbert Pfister, pp. 69, 71.

**Einstein:** "Soon I came to the conclusion that our idea about the motion of the Earth with respect to the ether is incorrect, if we admit Michelson's null result as a fact. This was the first path which led me to the special theory of relativity. Since then I have come to believe that the motion of the Earth cannot be detected by any optical experiment, though the Earth is revolving around the sun." <sup>15</sup>

Einstein said much the same three years earlier in 1921 at a lecture he gave at Princeton University:

**Einstein:** "But all experiments have shown that electro-magnetic and optical phenomena, relative to the earth as the body of reference, are not influenced by the translational velocity of the earth. The most important of these experiments are those of Michelson and Morley, which I shall assume are known. The validity of the principle of special relativity can therefore hardly be doubted." <sup>16</sup>

We get the same admission from Einstein's major biographer, Ronald Clark, in the book "Einstein: The Life and Times."

After the famous Michelson-Morley experiment of 1887, Ronald W. Clark describes what came next:

**Clark:** "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." <sup>17</sup>

**Clark:** "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*." <sup>18</sup>

**R. Sungenis:** We must give credit to Clark for even mentioning a motionless Earth as a possible explanation to this famous experiment, for many other biographers and historians do not even allow their readers the privilege of knowing that such an option exists. Some allude to the possibility, and some even admit it anachronistically, such as physicist G. J. Whitrow's comment that a very simple explanation to the Michelson-Morley experiment is that the Earth doesn't move. Whitrow writes:

**Whitrow:** "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

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<sup>&</sup>lt;sup>15</sup> Yoshimasa A. Ono, *Physics Today*, 35 (8), 45 (1982).

<sup>&</sup>lt;sup>16</sup> The Meaning of Relativity, four lectures delivered at Princeton University, May 1921, Princeton University Press, 1923, p. 29.

<sup>&</sup>lt;sup>17</sup> Einstein: The Life and Times, 1984, p. 57.

<sup>&</sup>lt;sup>18</sup> *Ibid.*, pp. 109-110.

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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."<sup>19</sup>

**R. Sungenis:** In the end, isn't it ironic that the theory Einstein invented to keep the Earth moving in the face of the experiments that said it wasn't moving, was necessarily replaced by another theory 10 years later that said the Earth can be motionless in space and the whole universe can revolve around it??

And how ironic is it that Mr. Keating, purporting to know the physics, doesn't reveal these astounding historical developments to his listeners and readers. Why is he trying to hide it from them? Wouldn't this astounding information from Einstein himself redeem the Catholic Church from the curse of Galileo, the very Church that Mr. Keating says he has worked to defend the last 40 years from all those who attack it?

We also see that Mr. Keating doesn't want his audience to know that the 1887 experiment he will later refer to in his interview as merely an "experiment made in 1887 by a pair of physicists and they were trying to determine whether this ether actually existed, and their experiment failed," is the very experiment that showed the astounding possibility that Earth was motionless in space. We will see momentarily how Mr. Keating hid this knowledge from his listeners.

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<sup>&</sup>lt;sup>19</sup> G. J. Whitrow, *The Structure and Evolution of the Universe*, 1949, 1959, p. 79.

#### Section 11: Does Ether Discredit the Geocentric arguments?

Mr. Keating then continues his interview, saying:

**Keating:** "Their argument [that is, the geocentrists] is, you don't measure Alpha Centauri's speed to the Earth, you measure Alpha Centauri's speed to the ether.

**R. Sungenis:** Well, not quite. This is another case in which Mr. Keating is trying to make a boogeyman so that he and his host, Patrick Coffin, can make jokes and make it appear ridiculous. The real answer is similar to what Einstein stated in his General Relativity theory we quoted earlier. That is, due to the nature of relativity, it is just as correct to say that the universe revolves around a stationary Earth as it is to say the Earth rotates in a stationary universe.

Of these two possibilities, the theory of General Relativity cannot tell us which one is the actual reality, since, obviously, the whole theory is based on relative motion. Hence, it doesn't matter whether the universe is made of ether or schmeather or nothing at all. The fact remains, that the best and most popular science today, Albert Einstein's General Relativity, says the universe can rotate around a stationary Earth, with or without ether. Hence, all Mr. Keating's talk about ether is nothing but a red-herring.

But we will allow him to continue down this track in order to further discredit this objection. Continuing, Mr. Keating says:

**Keating:** "In the 19<sup>th</sup> century, scientists were trying to figure out how light could propagate through space. We know sound can propagate through air or water by waves... How does light propagate? And they postulated that there is a very thin substance, thinner than anything we can imagine, called the ether, through which light and waves would propagate much like sound would propagate through air. There were experiments made in 1887 by a pair of physicists and they were trying to determine whether this ether actually existed, and their experiment failed. And ultimately scientists came to conclude ether doesn't exist and space is actually virtually a vacuum, and our understanding of light was incorrect, there are other ways that light can go through a vacuum and can propagate.

**R. Sungenis**: As noted above, the geocentric universe does not need ether to work, thanks to Einstein who, as Mr. Keating's accepted authority on cosmology, has already told us that his theory allows for geocentrism.

But for the sake of argument, let's talk a little bit more about the ether. First, let's deal with the major players in modern physics who accept ether just to show Mr. Keating that he is barking up the wrong tree.

Lo and behold, the first one to accept ether on our list is none other than Albert Einstein! Yes, folks, we have yet another departure from his 1905 Special Relativity theory which said there was no ether! Einstein took back ether for his General Theory of Relativity (but don't say that too loud because not to many people want it known). He is what Einstein said in 1920:

**Einstein:** "Recapitulating, we may say that according to the general theory of relativity, space is endowed with physical qualities; in this sense, therefore, there exists an ether. According to the general theory of relativity space without ether is unthinkable; for in such space there not only would be no propagation of light, but also no possibility of existence for standards of space and time (measuring-rods and clocks), nor therefore any space-time intervals in the physical sense. But this ether may not be thought of as endowed with the quality characteristic of ponderable media, as consisting of parts which may be tracked through time. The idea of motion may not be applied to it.<sup>20</sup>

Here is how the 1993 Nobel Prize winner in Physics, **Robert Laughlin**, describes Einstein's resurrection of ether:

Laughlin: "It is ironic that Einstein's most creative work, the general theory of relativity, should boil down to conceptualizing space as a medium when his original premise was that no such medium existed.... Einstein... utterly rejected the idea of ether and inferred from its nonexistence that the equations of electromagnetism had to be relative. But this same thought process led in the end to the very ether he had first rejected, albeit one with some special properties that ordinary elastic matter does not have. The word "ether" has extremely negative connotations in theoretical physics because of its past association with opposition to relativity. This is unfortunate because, stripped of these connotations, it rather nicely captures the way most physicists actually think about the vacuum."

Notice how Laughlin refers to the "vacuum." Is this the same vacuum that Mr. Keating referred to in his interview when he said:

**Keating:** "And ultimately scientists came to conclude ether doesn't exist and space is actually virtually a vacuum, and our understanding of light was incorrect, there are other ways that light can go through a vacuum and can propagate."

Yes, it is. In fact, the so-called "vacuum" of space to which Mr. Keating refers is what modern quantum physics understands to be filled with quantum particles, a very, very dense yet very granular physical substance in the Planck dimensions, which is 20 orders of magnitude smaller and more dense than the atom. It's only a vacuum to us because we can't detect what's inside of it with our feeble instruments, except, perhaps, if we measure the speed of light through it.

Curiously, Mr. Keating faults the new geocentrists for incorporating modern science's understanding of modern ether when he says in his interview:

**Keating:** "Modern geocentrist go back to the idea of ether, but the modern ones, instead of saying it's an immensely thin substance, go the other direction and say it's fantastically dense. So that just as water or air is very thin compared to steel – we can move through air

<sup>&</sup>lt;sup>20</sup> Äther und Relativitätstheorie. Rede gehalten am 5. Mai 1920 an der Reichs-Universität zu Leiden. Berlin: Springer, 1920 [Vol. 7, Doc. 38, 305–323; trans. 160–182]; http://en.wikisource.org/wiki/Ether\_and\_the\_Theory\_of\_Relativity.

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easily, we can't go through steel – so ether is denser than steel by a fantastic number of times."

So Mr. Keating is once again caught with his pants down. He criticizes the makeup of the geocentric universe but apparently he isn't aware that geocentrists have incorporated into their model the very ether that modern physics has said exists since the time of Einstein and Quantum mechanics. Mr. Keating is obviously the odd man out.

Although there are many other sources from top notch physicists who hold to the modern ether theory, one source I do want to mention is the Catholic Church herself.

During the seventeenth-century investigations of the Congregation of the Holy Office into the Copernican theory, a Carmelite friar by the name of Fr. Paolo Foscarini was censured in 1615 (prior to the Galileo case) for his heliocentric cosmology. Little known is the fact that he was also censured for his belief that the heavens were "very thin and tenuous." Among other things, the censor stated:

On page 45 he says that the heavens are very thin and tenuous, not solid and dense. This is clearly contrary to Job 37:18 'Together with this you have created the heavens which are most solid and spread out like the air.' This cannot be explained as an appearance (as the author indicates) because the solidity of the heavens is not apparent to us.<sup>21</sup>

Obviously, the Catholic censor was treating Job 37:18 the same way the Catholic Church was treating the geocentric verses – they were taken at face value and considered factual truth. Here we see that even the particulate constitution of the space constituting all of the heavens is not considered a trivial and obscure point that can be ignored. It is regarded with the utmost divine authority and the basis for rejecting Foscarini's whole approach to Scripture.

Accordingly, Job 37:18 has some very interesting features that support the censor's contention against Foscarini. The Hebrew sentence reads as follows: מוֹצֶלְ ("can you beat out or spread out") ("with him") לשהקים ("the sky, the heavens") הזקים ("hard") עמו ("like a mirror") עמו ("cast"). The first word, תרקיע, is a verb appearing twelve times in the Hebrew bible and normally means "to spread or stretch out."<sup>22</sup> It is very similar to the noun רקיע, which is translated as "firmament" in Genesis and the Psalms.<sup>23</sup>

The word לשהקים ("the sky, the heavens") is from the root מהל and appears twenty-one times as either "sky";<sup>24</sup> "clouds"<sup>25</sup> "heavens,"<sup>26</sup> or even "dust,"<sup>27</sup> with a notable difference between "sky"

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<sup>&</sup>lt;sup>21</sup> The censor's document is titled: *Judicium de spistola F. Pauli Foscarini de mobilitate terrae* (Lerner in *The Church and Galileo*, p. 24). The text is from Blackwell in *Galileo*, *Bellarmine and the Bible*, pp. 253-254. We have changed "Tobit 37" to Job 37 since Blackwell apparently misread the original Latin.

<sup>&</sup>lt;sup>22</sup> Ex 39:3; Nm 16:39; 17:4; 2Sm 22:43; Jb 37:18; Ps 136:6; Is 40:19; 42:5; 44:24; Jr 10:9; Ez 6:11; 25:6.

<sup>&</sup>lt;sup>23</sup> Gn 1:6-8, 14-17, 20; Ps 19:1.

<sup>&</sup>lt;sup>24</sup> Dt 33:26; 2Sm 22:12; Jb 37:18; Ps 18:11; 77:17; 108:4; Is 45:8; Jr 51:9.

<sup>&</sup>lt;sup>25</sup> Jb 35:5; 36:28; 37:21; 38:37; Ps 36:5; 57:10; 78:23; Pr 3:20; 8:28.

<sup>&</sup>lt;sup>26</sup> Ps 68:34; 89:6, 37.

<sup>&</sup>lt;sup>27</sup> Is 40:15.

and "clouds."<sup>28</sup> All in all, it carries the idea of a finely-grained substance that fills the sky, and by extension, the rest of the space of the firmament.

The word [] ["hard"] appears over forty times and is translated as "strong" (Ex 13:9); "mighty" (Ex 32:11); "hard" (Ez 3:9). The word ["Cast"] is from the root ["S"] and is translated variously as "cast" (Ex 25:12); "pour" (Lv 2:1); "forms" (Jb 38:38); "firm" (Jb 41:23-24); "attached to" (Ps 41:8); "molten" (1Kg 7:16). The literal meaning is that the sky, heavens or firmament, is not a tenuous, vaporous entity. Although ostensibly it is transparent and pliable, on another level (implied is the subatomic level), Jb 37:18 indicates the heavens are composed of an extremely dense material substance. At the beginning of creation it was expanded to fill the firmament, or perhaps became the firmament once it was expanded. Hence, modern science has corroborated these biblical truths with a plethora of scientific data showing that space is not empty but is filled with an extremely fine but extremely dense particulate matter.

So, with Mr. Keating's misconception of both geocentrism and ether, he continues his interview on *Catholic Answer Live* and says:

**Keating:** "So if the whole universe which is occupied by a planet or a star or what have you, is just filled with this ether stuff, then the idea is, it is so thick it can spin around the Earth every day as fast as it wants... so their idea is, when you have a star way out there like Alpha Centauri, yes, it's limited to the speed of light only with respect to the local ether. Okay, you know none of this works... there are a lot of problems here."

**R. Sungenis:** As we have seen, the only problems here are in Mr. Keating's mind. He has made a strawman of his own choosing, and in the process he has totally missed the essence of the geocentric model. He misses the fact that in using the ether provided to us by modern physics, we can then show the benefits for the geocentric model. Although it is certainly true that modern quantum physicists are not geocentrists, the fact remains that if the quantum particles of modern physics were to rotate around a fixed Earth every 24 hours, they could do so without ever affecting the stability of the universe.

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<sup>&</sup>lt;sup>28</sup> 2Sm 22:12; Ps 18:11.

#### Section 12: Does the Modern Church Contradict Herself Apologizing for Galileo?

At 31:00 – 34:00, a caller, Andrew, asks: "If Galileo was actually preaching false theology, and that's why he was condemned by the Church, why did the pope feel the need to apologize on behalf of the Church many years ago?"

Mr. Keating answers and says,

Keating: "Galileo... made the argument that there was some opposition between the Church and science. That is not really the case. Keep in mind that preceeding Galileo was Copernicus... Copernicus didn't get into any trouble. He even had a cardinal in Rome, one of the cardinals, backing him, but he didn't cause a problem. And yet Galileo did cause a problem. What happened with Galileo was that he wasn't satisfied to propose a scientific theory. He arrogated to himself the interpretation of Scripture. ... Galileo said 'and this is really the way things are situated.'... C. S. Lewis later would say that the story of the Galileo case was really about, not so much changing from a geocentric to a heliocentric view of the cosmos but really about changing the nature of what a theory is."

**R. Sungenis:** I find it quite puzzling how a man can spend three minutes answering a question and yet never answer the question. Andrew's question concerned the apparent contradiction between the Church in Galileo's day condemning heliocentrism but the Church of today apologizing for that condemnation, since, indeed, Galileo's position was already judged as false.

Andrew has put his finger on a most significant problem. If the Church at large is guided by the Holy Spirit into all truth, how can the Church that held to geocentrism 1600 years prior to Galileo be so wrong about one idea? How can the Church of today, without ever officially rescinding the prior Church's decision against Galileo, then apologize and say that the prior Church made an error?

And if the Church of today believes that the Church of yesterday made an error in condemning Galileo, does that not also mean that the Church of today can make a similar error by affirming Galileo? What's good for the goose is good for the gander. In other words, the modern Church has put itself in a Catch 22 situation by calling into question the prior Church's condemnation of Galileo.

But Mr. Keating simply pretends these problems don't exist. He never acknowledges the contradiction that Andrew brought to the surface. Mr. Keating can't seem to come to grips with the fact that the Church of Galileo's day officially said one thing and the modern Church is unofficially saying another. But that is what a modern Catholic apologist is trained to do – ignore any contradictions between the traditional teaching and the modern opinion and make it appear that all is well. It's been occurring for the last 50 years.

So, instead of directly answering Andrew's question, Mr. Keating goes off on some tangent about his belief concerning what the real nature of Galileo's contention was, and he even gets that wrong.

He first claims that "Copernicus didn't get into any trouble." Well, Copernicus died the year his book was published, so how could he get into trouble when he was dead? Be that as it may, Copernicus'

book was banned by the pope just a few years after it was published in 1543, and it was then put on the first Index of Forbidden Books in the 1560s. Is that not trouble?

Second, Mr. Keating limits Galileo's crime to "arrogating to himself the interpretation of Scripture." Although Galileo did claim that his interpretation of Scripture was better than the Church's, this was not the only fault. The main reason Galileo was condemned was that he was teaching heliocentrism, for which he was advancing many scientific arguments, such as the tides, the moons of Jupiter and the spots on the sun.

He was given a legal injunction in 1616 never to teach or speak of heliocentrism again. But Galileo disobeyed the injunction and began writing his book, *The Dialogue Concerning the Two Chief World Systems*, as early as 1623, and had it published undercover and obtained an imprimatur by stealth in 1632. When Pope Urban VIII found out about Galileo's double-dealing, Galileo was called to Rome for trial the next year.

Note well, the *Dialogo* is filled with arguments from science but doesn't contain any arguments from Scripture. As such, the reason the Church didn't accept his theory was because he presented no indisputable scientific proof that it was correct. But Cardinal Bellarmine had told Galileo that if he could prove his assertions scientifically, then the Church would change its interpretation of Scripture.

Third, Mr. Keating claims that the real issue in the Galileo affair was "not so much changing from a geocentric to a heliocentric view of the cosmos but really about changing the nature of what a theory is." This is false. But if we consider Mr. Keating's source, that is, C. S. Lewis, we can then understand why Mr. Keating went down this rabbit trail.

C. S. Lewis is one of Mr. Keating's favorite authors; and more or less one of his higher authorities on human activity. But C. S. Lewis was a Protestant and a heliocentrist, and as such, he certainly didn't want to give the Catholic Church any credit for correctly dealing with Galileo. Mr. Lewis certainly believed the Catholic Church made a mistake in condemning Galileo, so the next best thing for him to posit is that the Galileo affair wasn't really about whether the sun went around the Earth but only about changing the definition of what a "theory" is.

But Mr. Lewis is very similar to many other Galileo historians. They are convinced that the Church erred in condemning Galileo, so they are incessantly trying to find the one real reason the Church lowered the boom on him. Everything from political corruption to ecclesiastical bureaucracy, to deliberate chicanery, to religious fundamentalism, to corporate interests to total ignorance has been suggested as the real reason, but not a one of them will advance the argument that the real reason is that Galileo was wrong and the Church was right, the same as Mr. Keating and Mr. Lewis. Why? Because they have been convinced by modern science that heliocentrism has been proven, but no one, including Mr. Keating, has presented an indisputable proof. All the proofs have been discredited.

#### Section 13: Do Geocentrists think they're more Catholic than Others?

(45:40) A caller, Matt, wonders why geocentrists don't deal with science and why they stop their education of science at the year 1650. Mr. Keating answers:

Keating: "Well, Matt, they actually think they are more Catholic than the rest of us are, because they think they are sticking with what the Church really teaches about how the cosmos is arranged. They believe – the Catholics among them – that the Church infallibly taught at the time of Galileo that the geocentric system is actually true. In later years, popes and others failed the Church, according to this theory, by neglecting to teach geocentrism, even getting to the point of allowing or encouraging the teaching of heliocentrism, even getting to the point of John Paul II in 1992 of exonerating, to some degree at least, Galileo, and saying that he was not treated as he ought to have been treated. They are saying that all this has been a decline in the last 400 years from what the Church really thinks. So, they would say... that it's the rest of us who have been moving away for centuries from the authentic relationship between faith and science, and that these folks, in fact, have kept it."

**R. Sungenis:** First, we don't believe, and have never stated, that we think we are more Catholic than Mr. Keating or anyone else. Mr. Keating's statement is just another instance of his demagoguery in which he tries to get his audience to look askance at us. We are simply bringing the truth of the Church's traditional teaching to the world so that we can do our part in helping to save this dying world and scandal-ridden Church. Millions of people have been steered away from the Catholic Church due to the fact that they are convinced that if the Church erred with Galileo it can err with anything, including abortion, contraception, homosexuality, divorce and remarriage, a female priesthood, and just about any social issue pressing society today.

Second, Mr. Keating claims that we teach that "the Church infallibly taught at the time of Galileo that the geocentric system is actually true." This is another one of the strawman arguments Mr. Keating keeps touting, despite the fact that we have made it clear in our lectures and papers that the two popes who dealt with Galileo did not make what we consider today an infallible dogmatic pronouncement, at least under the definition of papal infallibility given some 250 years later at Vatican Council I.

What Mr. Keating is hoping to do by saying the 1616 and 1633 decrees were not made infallible is to create an excuse for not obeying the decrees. But if one is familiar with Catholic protocol, Mr. Keating's ploy simply doesn't work. Father Coyne, who was appointed to John Paul II's 1981 commission to study the Galileo case, put it this way:

**Fr. Coyne:** So far as we can conclude from the circumstances of the condemnation, Pope Urban VIII and the cardinals of the Holy Office certainly did not themselves think it to be "reformable." Furthermore, if it was reformable, why has the condemnation of 1633 or, for

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that matter, the Decree of the Congregation of the Index in 1616 never explicitly been "reformed?"<sup>29</sup>

**R. Sungenis:** Coyne's logic is sound. Although the claim of Cardinal Poupard stated in the 1992 papal speech on Galileo is that the 1616 and 1633 decisions were "not irreformable," this is actually an admission from Poupard that the Catholic Church has never reformed the seventeenth century decisions. If the intention of the 1992 speech was to clear up the matter, why did the Church not, at that crucial time, reform the apparent error that the 17<sup>th</sup> century popes committed? The silence speaks for itself. It is just another testimony to the divine protection that has been given to the traditional Church's teaching about Galileo.

Another Galileo historian, Ernan McMullin, likewise admits the following:

**Mc Mullin:** And let there be no mistake, the judgment of the qualifiers in 1616 and the language of the decree supported by it *were* couched in definitive terms; it was not proposed as something "reformable," to use a term favored by some recent theologians. The decree did not say that in the absence of a demonstration, maintaining the Copernican theses would be risky ("temerarious"). It described the theses as "contrary to Scripture," period, just as the qualifiers had "qualified" the heliocentric claim as "formally heretical."<sup>30</sup>

The Church's Ban on Copernicanism," in *The Church and Galileo*, p. 159.

<sup>&</sup>lt;sup>29</sup> The Church and Galileo, p. 354. Coyne adds: "In the Galileo case the historical facts are that further research into the Copernican system was forbidden by the decree of 1616 and then condemned in 1633 by official organs of the Church with the approbation of the reigning pontiffs" (*ibid*).

## Section 14: Does the Catholic Church teach Geocentrism? And if so, how high up the chain of authority is it? Let's look at Lumen Gentium 12 and 25 for the answer.

Mr. Coffin then says to Mr. Keating: "The Church has never taught geocentrism, true or false?"

Mr. Keating responds: "True, because it's never taught science. It hasn't taught heliocentrism either."

**R. Sungenis:** Keating's argument is typical of how he often tries to make things black and white when they are actually a shade of gray. Granted, as we have noted earlier, neither Scripture nor the Church is commissioned to teach science, *per se*, but that is a very different category than when Scripture or the Church touches upon something we consider scientific. In those cases, Scripture is just as inerrant as it is when it speaks of the resurrection of Christ or that Samson had long hair.

The fact is, the Church, from the Church Fathers, to the banning of Copernicus' book, to the Tridentine catechism, to the condemnations of Galileo, has taught that geocentrism is the true understanding of the cosmos simply because Scripture, when it speaks about this issue, insists that the Earth is motionless and the sun moves, ergo, the sun must travel around the Earth, not viceversa. This does not mean that Scripture is a science book or that the Church is a science teacher. It simply means that when Scripture needs to state which of the two possibilities is true for any historical narrative that requires us to know such facts, it tells us that it is the sun that moves around the Earth.

Finally, with all the testimony for geocentrism from the Fathers in the first century to Pope Urban VIII in the 17<sup>th</sup> century, one wonders why today's modern Catholics, like Karl Keating, fight so vociferously against readopting a geocentric universe. These are the people who claim to follow Vatican II without deviation, yet it was Vatican II that, for all intents and purposes, put its stamp of approval on geocentrism, first by making a decision not to reverse the 17<sup>th</sup> century decrees against Galileo (which is significant in itself because schemas were presented seeking to exonerate Galileo but were summarily denied); and second, by Vatican's II's revealing in Lumen Gentium 12 and 25 that longstanding and uninterrupted teachings of the Church are considered doctrines under the Ordinary Magisterium, and as such, have their own intrinsic infallibility. Let's take a look at them:

#### Lumen Gentium, Paragraph 12 says the following:

The holy People of God shares also in Christ's prophetic office: it spreads abroad a living witness to him, especially by a life of faith and love and by offering to God a sacrifice of praise, the fruit of lips praising his name (*cf.* Heb. 13:15). The whole body of the faithful who have an anointing that comes from the holy one (*cf.* 1 Jn. 2:20 and 27) cannot err in matters of belief. This characteristic is shown in the supernatural appreciation of the faith (*sensus fidei*) of the whole people, when, "from the bishops to the last of the faithful" they manifest a universal consent in matters of faith and morals. By this appreciation of the faith, aroused and sustained by the Spirit of truth, the People of God, guided by the sacred teaching authority (*magisterium*), and obeying it, receives not the mere word of men, but

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truly the word of God (*cf.* 1 Th 2:13), the faith once for all delivered to the saints (*cf.* Jude 3). The people unfailingly adheres to this faith, penetrates it more deeply with right judgment, and applies it more fully in daily life.

Since it is a fact that the "People of God," which includes "the bishops to the last of the faithful," have believed unanimously, firmly and without equivocation in the doctrine of geocentrism from the beginning of the Catholic Church and throughout two millennia, and who were "guided by the sacred teaching authority" to do so, this belief necessarily fulfills the criteria of *Lumen Gentium* 12 that these same People of God "cannot err."

It is an undeniable fact that all the Fathers, all the medievals, all the bishops, priests, saints, doctors, theologians and the remaining Christian faithful of every nation believed in the doctrine of geocentrism. Additionally, three popes and their Holy Offices officially confirmed this absolute consensus in the 17<sup>th</sup> century against a few men who, because of their own misguided convictions, sought to depart from that consensus, making the attempt in the wake of unproven scientific claims with the express purpose of reinstituting a novel and subjective interpretation of Holy Writ.

As we have seen, even many years after modern science began to treat heliocentrism as a scientific fact, the Catholic faithful still maintained their vigilance for geocentric doctrine. It has only been in the last one hundred years or so that this consensus has waned.

Because of the waning consensus, some objectors might themselves appeal to the principle of *Lumen Gentium* 12 and posit that the Holy Spirit is now teaching the "People of God" that heliocentrism has been correct all along. But that notion, of course, is impossible, since the "People of God" could not have been "aroused and sustained by the Spirit of truth" into believing that geocentrism was correct for 1900 years and then have the Spirit suddenly change His mind to teach them the opposite. It would make the Holy Spirit a liar, which is certainly impossible. The reality is, if the "People of God" were led to believe that geocentrism was the truth, and which was, according to the stipulations of *Lumen Gentium* 12, "guided by the magisterium" in the 17<sup>th</sup> century to confirm their consensus, then there is simply no possibility that a change in their belief could be understood as a movement of the Holy Spirit.

#### Now let's look at Lumen Gentium 25:

In respect of the Church's geocentric teachings and its corollary condemnations of heliocentrism over the past two thousand years, *Lumen Gentium* 25 brings us back to square one, as it were, in authenticating the authority of the 1616-1664 decrees and the level of commitment and obedience Catholics must give to them.

In effect, Cardinal Poupard's and John Paul II's appeal to the decrees against heliocentrism as not being "irreformable" becomes moot or superfluous since, as is true with many teachings of the

Catholic Church, the mere "ordinary" or "traditional" authority of the decrees plays a larger part, according to Lumen Gentium 25, in commanding submission from the Catholic parishioner. 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?

#### 1870: Vatican I, the Ordinary Magisterium, and Modern Science

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 <u>or in her ordinary and universal teaching power</u>, to be believed as divinely revealed.<sup>31</sup>

**R. Sungenis:** 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:

<sup>&</sup>lt;sup>31</sup> Denzinger ¶1792.

**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, <u>had they not been divinely revealed</u>, could not become known.<sup>32</sup>

**R. Sungenis:** 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." 33

**R. Sungenis:** 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 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.<sup>34</sup>

<sup>&</sup>lt;sup>32</sup> Denzinger ¶1795.

<sup>&</sup>lt;sup>33</sup> Denzinger ¶1797.

<sup>&</sup>lt;sup>34</sup> Denzinger ¶1798.

**R. Sungenis:** 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.<sup>35</sup> 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 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.<sup>36</sup>

**R. Sungenis**: If, for example, "right reasoning" was employed in 1887 when the Michelson-Morley experiment was preformed, 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 shrinked 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

<sup>&</sup>lt;sup>35</sup> 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." <sup>36</sup> Denzinger ¶1799.

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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:

**Aquinas:** 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.<sup>37</sup>

<sup>&</sup>lt;sup>37</sup> Summa Theologica, I, Ques. 1, Art. 6, ad. 2.