

# Review of Gerard Keane's Creation Rediscovered

**This page is primarily a critical review of a 1999 book on the topic of creation, a book which purports to make the case that young-earth creationism is the truth which ought to be held both as scientific fact and as Catholic doctrine.** In the spring of 2008, Gerard Keane wrote a long response to this (below) review of his book, Creation Rediscovered. Coming after six years of silence, it suggests that the Mary Daly's work is having an effect. Keane's piece is posted on the Kolbe website.

The original review:

## **Creation Rediscovered: Evolution and the Importance of the Origins Debate**

by Gerard J. Keane Tan Publishers, Rockford Illinois, 61105 C. 1999

This book is the work of an interested Catholic layman, neither a theologian nor a scientist. He appears to have collected a large number of creationist arguments and organized them around principles which he regards as Catholic. I wonder whether he ever attempted to talk to a scientist who might have directed his attention to the most obvious answers to some of his issues with science. If so, he has neither reported it nor dealt with the most commonplace and accessible responses to his creationist arguments.

The question of the origin of the universe and of the origin of man is very important, and believers ought to participate credibly in these discussions. However, such participation depends on doing our homework. I do not think that Keane has done his fair share of that homework, and I believe his work is likely to generate such cloud of suspicion about science as to discourage the pursuit of the natural sciences by Catholic students. This would be a great tragedy, and a deeper tragedy will ensue if those who do pursue the natural sciences are made to feel that they must choose between their faith and various facts that will certainly become intuitively obvious as well as mathematically compelling to them. From the outset, let me state my own position in these matters.

I believe that Catholics have the right and the moral obligation to seek the

truth, including the free and unprejudiced examination of evidence from the natural sciences. Regarding evolution, I believe that the evidence for a single family tree of life is fairly compelling, and I note that the Pope John Paul II's statement about evolution (1996) is supportive of that position. It is not "de fide" but it is not heresy either. I find that the evidence for design is compelling. However, the doctrine of "special creation" does not follow as a logical necessity from the evidence for design. Design need not mean Intervention.

About the origin of the universe, I am aware (as Keane may not be) that the Big Bang is a creationist idea in the sense that it invites faith in a creator, although not in the sense of a literalist reading of the creation story. It indicates a dated, though not a "recent" act of cosmic creation. It is also a Catholic idea, originally the work of a Catholic priest and physicist who was mocked for it precisely because of the creationist implications.

What a reversal to have it now scorned by Catholics as an atheistic idea!

Here are my reflections on a few portions of this work.

## 1. Regarding the Body as image of God

Page xvii of the preface states: "The transcendent character of the human body, the "image" of God as no other material being, is directly proportionate to its miraculous origin."

The Catechism of the Catholic Church states that "In sacred scripture the term 'soul' often refers to human life or the entire human person. But 'soul' refers to the innermost aspect of man, that which is of greatest value in him, that by which he is most especially in God's image"

The Catechism then continues, stating that "the human body shares in the dignity of 'the image of God': it is a human body *precisely because* it is animated by a spiritual soul" (My emphasis.)

If the difficulty you have with the concept of a single family tree of life is the idea that your body cannot be in the image of God if your immediate physical antecedents are animals, you need to rethink your theology. The image of God is first of all in our souls; it is in our bodies precisely through the relationship between body and soul; thus this image is in proportion to the transcendent life of the soul, not, as this preface states, "in proportion to [the] miraculous origin [of the body]".

This preface is not the work of Keane himself, but of Fr. Peter Damien Fehlner, who has a degree in theology. Nevertheless, it seems to me to be in

error and as such it represents a poor starting point for Keane's war on the conglomerate of ideas he calls evolution. Fehlner is quoted in other parts of the volume and seems to be Keane's principal mentor in theological matters.

## **2. Regarding the metaphysical dimensions of Origins**

On pages xiv and xv, Father Fehlner gives a good explanation of the concept of metaphysics and the different dimensions of human knowledge. However, he is too quick to conclude that the question of origins is exclusively metaphysical. As long as we can make observations and take measurements, we are rightfully in the realm of natural science, and that includes radiometric dating of rocks or red-shift measurement of star recessions. These things are relevant to the earlier history of the universe, and to the evaluation of "origins theories" which teach an origin too recent to accommodate the reality of events for which scientists find clear and compelling evidence.

## **3. Regarding the age of the Universe**

In his introduction on page xxviii, Keane offers four lines of reasoning for rejecting a billions-of-years age for the universe:

**a** Keane says that these many years are crucial for [Darwinian] evolution. However, merely being crucial to another wrong theory does not make these numbers wrong.

**b** According to Keane, the vast pre-human time frames of modern cosmology challenge the Church's teaching about death being the result of sin, and also her teaching about God working through secondary causes. However, the Church does not teach that any but human death was the result of Adam's sin, so the scientific time frame which implies animal death before Adam's sin is irrelevant. Animals may certainly have died before Adam's sin; and plants must have, since he ate them.

Although I have read several portions of the book dealing with secondary causes, I have not been able to identify Keane's negative concern about their relationship with theology. Ordinarily, positive Catholic teaching about secondary causes is the very reason for Catholic openness to theories of indirect creation through secondary causes.

**c** Keane expresses concern that these "inconceivable" time frames are contrary to majority opinion in Tradition. However, "majority opinion" is

not normative in doctrine, and if Keane finds the time frames inconceivable, others do not. This is partly just a change in mathematical culture over the last thousand years. Before the use of the number zero, people didn't count much beyond the range of a hand-held abacus. It's just too hard.

**d** Keane believes that "belief in billions of years is, more than any other reason, the major factor preventing the truth of Origins [origins in God] from being taught rigorously." It is regrettable that the age of the universe has been used against faith. However, misuse of an idea does not make it wrong; if the truth about the Catholic origin of the idea of the Big Bang were properly taught, the truth about origins would be directly in front of us.

#### **4. Regarding the consistent interpretation of scripture**

Keane expresses, on page xxx (in his own Introduction) the concern that if we agree to take Genesis in a metaphorical sense and not in a literal sense, we may soon also take the Resurrection as a mere metaphor.

This is an old concern and an understandable one. Judging the complex interaction between an individual writer and the Holy Spirit in the act of written revelation is not easy. It takes time, patience, study, and humility. Fortunately for our fallen humanity and our crowded schedules, God has given us, in the Church, a reliable guide in these matters. It is called the Magisterium. We don't have to figure these things out alone; the Bible is not our only source of information.

Since Luther condemned the writings of Copernicus, and since the Anglican Bishop Ussher wrote 6000-year creationism into the Westminster Confession in 1646, insistence on the literal interpretation of Genesis in the face of modern cosmology has been a hallmark of Protestant theology. Keane appears to be persuaded by these traditions. He is repeating typically and essentially Protestant concerns.

The Catholic Church does not teach a strict association between faith in a literal 6-day creation and faith in a literal Resurrection of Jesus. The first is not required as an act of faith; the second is. Furthermore, there are important (and literal) aspects to the story of Genesis which disappear to mental vision when the days are taken literally. For example, the fact of a beginning points to a creator no matter how remote in time that beginning may be. So while the unbelieving scientist may readily dismiss Christianity if he sees it tied to an unimaginably short time frame, he is actually confronted with a creator by the concept of the Big Bang.

There is another reason why the New Testament is not at risk when we take Genesis 1 as a revelation made against the background of an elementary cosmology. It has to do with the difference between the leap of faith we and the authors are facing. I will explain.

In Genesis we find the portrayal of events which, while they seem impossible to us, were, for their author, merely the natural setting and the cultural background of the Word of revelation. For example, the creation of seed-bearing plants before the creation of the sun lies entirely outside any consistent modern understanding of either astronomy or biology. But Moses was not aware of these difficulties. His topic was the singularity of the Creator in relation to all of creation.

Similarly, he gave no thought to the need for a sun to gravitationally anchor the earth in the sky; it was no harder -- in terms of his comprehension of physics -- for him to imagine the earth created before the Sun than the Sun created before the earth. His topic was the created nature of the natural source of light which the cultures around him worshipped. He wanted to say that it was created, not divine.

The ever-lengthening string of supporting miracles which the literalist must add to the act of Creation, (faster travel of light, for example -- all the while irrefutably claiming that God can do anything) **were not extras to Moses**. It was enough that, in his seven-day cycle, he stated that the whole act of creation was oriented to a purpose, to a covenant in fact.

With the New Testament, it is otherwise. Everyone -- Matthew, Mark, Luke, John, Paul, Mary Daly, Jack and Jill -- everyone knows that water sitting in a jar can't just turn into wine, that virgins don't conceive, that people who have been in bed with palsy for 30 years can't stand up and walk off with their beds on their shoulders -- and that men do not rise from the dead. So we are on an equal footing with the authors when they record these miracles, and we take them or leave them based on whether we think miracles can be part of God's plan. When we choose to believe the human authors, we take **the same leap of faith which they took** and which they consciously asked of us. As such, these miracles do not assume a contradiction of what we know about the world; they claim a momentary and revelatory transcendence of what is known.

But the six-day schedule of Genesis 1 contradicts geology, astrophysics, microbiology, and -- as a literal schedule -- even Genesis 2.

In the end, the literal reading of Genesis 1 should mean the reading of Genesis 1 as Moses read it. (Or whoever the author was.) That certainly didn't include -- for Moses -- the consideration of miraculous or even

improbable geological or astrophysical events; therefore such considerations cannot reasonably be demanded of us as part of a literal reading.

## 5. Regarding the nature of revelation

The Church has always been cautious about tying the sense of revelation to a specific cosmology. While defending the truth of Genesis as being far more than a mere myth, She is sensitive to the limits of Hebrew cosmology. On page 8-9, Keane makes a statement which suggests that he believes that revelation is something like a process of dictation. It is not.

Keane's words are, "Some hold that empirical science has contradicted the Bible, but this conclusion is wrong. It must be wrong, by definition, for God, who is the principal Author of the Bible is omniscient."

The Catechism states (# 106) that "God inspired the human authors of the sacred books who, all the while he employed them in this task, made full use of their own faculties and powers so that, though he acted in them **it was as true authors** that they consigned to writing whatever he wanted."

When people are anxious to defend the inerrancy of the Bible, they should remember that the Biblical prophecy of people being called to judgment "from the four corners of the earth" was long considered Biblical proof that the world could not be round. Such past errors of fact should caution us against giving to the background of the revelation the same authority as the revelation itself.

In # 110, the Catechism states that "In order to discover the sacred author's intention, the reader must take into account the conditions of their time and culture."

The teaching of the Church regarding any apparent conflict between faith and science is that any such conflict means that we have misunderstood or incompletely learned either one or the other. Empirical science, in its definite conclusions, will not contradict faith, but it may very well be incompatible with a "literal" reading of scripture, particularly as scripture expresses, in the background of revelatory teachings, the cosmology of the authors. The sacred authors were "true authors" not merely secretaries; they were not omniscient, even if God is, and it shows.

## 6. Regarding Democracy

On page 10, Keane attributes our present confusion about Origins, in part, to life in pluralistic democracies, where conflicting belief systems are always around us. This is a disheartening slur on democracy. Must I note that monarchies with singular belief systems have also harbored men with varying -- and sometimes wounding -- degrees of faith and unbelief? Indeed, the openness of a democracy is a great help to faith since it offers no political motive for religious insincerity; we can put our cards on the table and talk openly and clearly about what we think. The trouble in our democracies is not pluralism but the deliberate sabotage of Christian education and the subtle and **undemocratic** persecution of men of faith. Certainly the least suggestion that Catholic Christianity is not fully compatible with democracy (which unquestionably took its birth in Catholic principles; see Rager's [The Political Philosophy of St. Robert Bellarmine](#)) would be repellant to the greatest Catholic heroes of American history. Furthermore, it plays directly into the hands of those who seek justification for their bigotry against us.

## 7. Regarding the vapor canopy whence came the Flood

Creationists see in Noah's flood the Biblical explanation for all old-appearing geologic strata and evidence. There are, however, many problems with this complex of explanations. First and foremost is the great difficulty of finding enough water, and final is the great difficulty in explaining where it is now. In between are myriad other problems. I will speak only of the first.

At present, the Creationists' most common explanation for the source of the water is a great, transparent, vapor canopy, (p. 75-78) high in the sky. This vapor canopy is thought to have originated from the work of the Second Day of Creation, when God separated the waters below the firmament and the waters above the firmament. [It would be well to note that the Sun and stars are "in" the firmament, so the waters "above the firmament" are above the Sun and stars. But I will not press this point.]

If we are looking for a canopy that will supply five miles' depth of water (to

cover Mt. Everest) we need a canopy that is almost the equivalent in water and not merely water vapor to the entire area of the present troposphere, which is itself only six miles. We are, then, looking for more water than in all the world's present oceans, which average something like 3 miles deep, are five miles deep only in a few trenches, and which in any case do not cover the entire earth.

Now, in order for all this water to be arranged as a vapor canopy, and also to make room for oxygen and carbon dioxide so animals and man can breathe, it must be many, many times higher than the present troposphere. This places it in the realm of the jet streams and the Van Allen belts, probably the ionosphere, to say nothing of the coldness of this realm in which rain, hail, and snow are made and in which the air is not dense enough to hold them up. Creationists may possibly suppose that Mount Everest was not formed until after the Flood, but Mt. Ararat, at close to three miles high (13,419 feet) was certainly there and apparently covered. Cutting the necessary water supply in half or even in a quarter or a fifth or a tenth still leaves insurmountable problems.

Consider how small a cloud can hide the Moon, or even how simple a cloud-blanket hides the Sun. One that holds perhaps two inches of rain, or five inches? But the creationists want 3-5 *miles* of rain up there. There are 63,000 inches in five miles. It is certain that neither the Sun nor Moon nor stars would have been visible through this vast vapor, which needs to have been continually and miraculously upheld by God's almighty (and all-warming) Hand. If on the second day, God literally set such waters in the sky, then the fourth-day making of sun and moon "to rule the day and night" must have been deeply metaphorical, since Adam and Eve could not possibly ever have seen them and indeed night and day would have been indistinguishable. Think how dark the thickest clouds can be and consider that the clouds required for this exercise needed to be twenty thousand times thicker.

## **8. Regarding Evolution**

The entire discussion of evolution is so troubled, it is necessary to lay down some principles before addressing the creationist position.

First of all, any species change means a change in the number or arrangement of chromosomes, not merely of genes. The failure of the scientific world to address this squarely may stem from the traditional eugenicist discomfort with the Catholic researcher, Father Gregor



Mendel. Darwinian evolution was originally a mystic evolution, not a response to chemical or mathematical realities as we now understand them. That is a serious part of why and how it was anti-Christian.

The significance of this much-needed change in perspective -- from genes to chromosomes -- is that it exhibits very clearly why evolution had to proceed in jumps. Genetic changes -- mere changes in individual genes -- are not going to jump, and are never going to change the species. All you're going to get is different colors of hair and eyes, different heights, things like hat. To change a species, a new chromosome must come into play (or go out of play). This cannot happen often; when it does happen, it cannot often be viable; and even if it is viable, it cannot survive unless it happens in two individuals who meet and mate. When it does happen and is viable, the changes are radical and immediate.

This perspective lays to rest the whole discussion about fossil jumps, and turns the discussion to matters which are still open to research. The argument as presently pursued pits the **fossil sequence**, which argues very credibly for sequential species appearance rather than simultaneous creation, against the **fossil gaps**, which argue against Darwinian gradualist expectations. This new perspective leads us to expect that evolution took place with jumps, according to physical and chemical laws.

Because this perspective separates the issues of timing and of creative design, it invites the greatest intellectual freedom for scientists without sacrificing theological truth or philosophical insight. Of course it had to be designed! But the designer did not need to lay out all his work in three days (days three, five, and six). Design does not, as creationists claim, mean "special creation" of each individual unit within a particular time frame. It just means work which is thoughtfully -- and artfully -- planned.

It is useful to offer a verifiable definition of design which exhibits this truth. Michael Behe (author of [Darwin's Black Box](#)) does this, and I take my inspiration from him in saying that **the scientific evidence for design** may be defined as the discovery of elements which are coordinated beyond their present (or past and present) functions. Evolution (in the Darwinian sense of survival of the fittest) can only be invoked to explain what is retained by the organism because it **is (or was)** useful, not because it **will be** useful down the road. This is a verifiable proposition, and Behe is wonderful. (And he's a Catholic.)

But the problem remains that Creationist opposition to evolution does not take serious account of the order of the fossil record. It is simply a guerrilla warfare against Darwinism, which is certainly dead in its pure form, but which still gives its name to the concept of time-sequenced appearance of species.

## 8. Regarding the Speed of Light

On page 155, Keane asks "Is the controversy about the speed of light definitely settled?"

What controversy? Indeed, Keane is referring to the bogus report of Mr. Norman and Mr. Setterfield, suggesting that the speed of light may have been millions of times greater in the early universe. The "research" behind this silly claim is a "graph" of the **various calculations** of the speed of light over nearly 400 years, and a statement that the differences between these calculations reflects a radical slowing in the speed of light corresponding to a log sine curve, with a logarithmic vertical axis.

This is absolute claptrap.

For starters, few if any of the points in question fall on the line in his "graph" and no reason is given why the this peculiar curve instead of some other line that doesn't touch any of his scattered points would be relevant to such an evaluation.

Furthermore, the speed of light is one of the numbers to which all other significant studies of physical cosmology must refer. Even Einstein, who is supposed to have taught us that "everything is relative," actually stated that "everything is relative to the speed of light in a vacuum." This is not a changing value. Consider, for example, that if light traveled faster, it would have bumped into atoms and molecules with greater force. This would have required a different chemistry throughout the entire universe. The speed of light is not a casual matter; it is a cosmic building block.

For a more extended discussion, see

<http://www.talkorigins.org/faqs/c-decay.html>

## **9. Regarding the age of the universe and starry creation**

On page 222-6 (the sixth illustration following page 222) Keane asks these rhetorical questions:

"Where is the proof beyond doubt that the universe is billions of years old? Why not creation of space, time, and matter on Day 1 and instantaneous transformation of matter throughout the universe on day 4?"

The radiometric dating of rocks and the calculations of star recession and red-shift have left our cosmologists with no doubt that the age of the universe is in the billions of years. I am aware of no substantial doubt about this except from creationist circles where a small number of degreed professors engage exclusively in creationist alibis. The evidences behind these conclusions are available in any elementary physics, astronomy, or geology text.

Keane asks why the creation of matter could not have taken place on day 1 and the transformation of that matter into stars on day 4?

I can answer this question.

First of all, it needs to be understood that this question suggests an image of stars as one might imagine great candles in the sky. A room may be full of unlit candles, and then one may come in and light them. Later on, one may blow them out, and the candles will still be in the room, though it is now dark. Similarly, Keane seems to imagine that the matter of stars could be in the darkness, waiting for God's lighting action.

But stars are not like candles. Stars don't burn because something outside themselves lights them; they burn in the hot crush of their own gravity and the fusion of their own elements. Once a certain amount of matter is gathered together, it burns. Therefore, in order for God to do as Keane suggests, He needs to have held the Day 1 matter in miraculous and intense refrigeration for two days.

Can God do this?

Of course God can do anything, but when we are asked to believe in a miracle, we have the right to know what the miracle is that demands our faith. When we are asked to believe in the virgin birth, we know perfectly well what this means, and we and the human authors of the New Testament both know perfectly well what is asked of us -- and why. We are both

equally aware of the unlikelihood of the event, and the need for God's power to bring it about. We equally accept it in faith.

But the Genesis author was certainly not aware of the transcendent refrigeration requirements of Keane's cosmology, nor, perhaps, is Keane, so they are not walking in faith when they believe these things. Indeed, there is there is no reason why this refrigerant should be an article of faith for anyone else. It is just nonsense, just ignorant theorizing by someone who has not done his physics and astronomy homework.

## 10. Regarding Geocentrism

One would think that everyone in the late 20th century would accept that the earth travels round the sun, and not the other way. However, Keane is quite evenhanded (p. 235) in his discussion of geocentrism, an earth-centered astronomical system. Evidently he has friends who believe in it (so do I) and is persuaded (as I am not) that the question may still be open.

The earth travels around the sun. This fact was proved in 1740 by a Catholic scientist named Cassini, and occasioned the removal of Copernicus' work from the Index of Forbidden Books. It was not something that Galileo could prove, though he and many of his contemporaries as well as many of his predecessors (especially since Copernicus) thought it very likely, and had good reasons for their opinions. Keane's unwillingness to take a firm stance even on this matter clearly shows that he is not willing to straightforwardly engage the issue of the inadequacy of Hebrew cosmology. This is absolutely essential.

Let me offer an illustration of why this is true.

When we speak of revelation, we do not for a moment imagine that the sacred writer could have given us the revelation in a language other than the one he himself spoke. Some might claim that Hebrew is the best language for revelation, and it may have been, but still, it is not the only one, since the New Testament was written in Greek, and the Church accepted the Greek word of Athanasius about the two natures and the single person of Jesus Christ.

The cosmology of a particular culture is like its language. It's the way its members understand words. God speaks to us within the parameters of our cosmological understanding for the same reason he speaks to us in our own language. There is no other way!

In a revelation, we may expect God to correct any **theologically or salvifically significant** errors of cosmology, but that is all.

The time-linear cosmology of Genesis, (the Beginning), seen against the despairingly repetitive cycles of all surrounding civilizations, is simply stupendous. It is far wiser than any contemporary myth. It represents an important advance and a revelatory correction of the cosmology. But the rest of Hebrew physical cosmology, in ways not important to receiving the message of salvation, still falls short. The issue of geocentrism, which is no longer in doubt, is Keane's opportunity to show how well he can handle this matter. Clearly, he has **nothing** to offer.

## 11. Regarding Relativity

Keane closes his section on geocentrism with some remarks about the confusions of relativity (p. 238ff). People have heard the rumor from physics that "everything is relative" meaning every motion is different depending on your point of view. They have drawn the conclusion that every value undoubtedly depends on other values in a completely circular manner. Such ideas are very destructive.

However, the most fascinating point about relativity, a point that needs to be better understood, -- is that Einstein did not say that "everything is relative" but that "everything is relative to the speed of light in a vacuum." There is indeed a reference point in modern physics. My sister with a degree in geology brought this to my attention. It is the sort of thing that is really helpful in our reflections on religion and science, for it exhibits the universe as a metaphor for spiritual truth, rather than a possible competitor. Everything is relative to an immutable fact -- Light! What a beautiful reflection on the nature of the Creation.

## 12. The Flood

The Flood of Noah may be the most confusing story in all of scripture. Aside from the difficulty (the insurmountable difficulty) of finding evidence (not to mention water) for a single, simultaneous, worldwide flood, there is the whole philosophical and theological issue: the suggestion that God once repented of his creation and tried to deal with sin by killing the sinners. It didn't work, so he promised the frightened Noah he would never do it again, at least not with water.

My own perspective on this completely changed when I read **Noah's Flood** by Pitman and Ryan. For the first time, I saw that there had been a flood of

massive proportions, one clearly marked in the geological record, one that certainly changed the course of human history, and one which contradicted no principles of meteorology or any other natural science. I have already discussed the difficulty of finding water to cover the entire earth, and the physical impossibility as well as the blinding darkness which must follow if it were reserved in the sky until the days of Noah. But the Church does not require Her children to believe that the entire earth was covered, or even that every single man on earth was killed; only that there was a real Noah, who "walked with God" -- that is, knew and loved him, and a real flood because of God's inability to work with mankind under the circumstances. It is real history, even if incomplete and "popular". The account of the Black Sea Flood meets these requirements.

In fact, it may take us one step further.

If Noah was a survivor of the Black Sea Flood, then we may perceive his role in salvation history as that of bringing the Covenant from the first City, which was drowned for some sins, to the new generation of Cities that would cover the world as the farming community abruptly migrated from the shores of the Black Sea Lake. The Jewish laws -- the laws of Noah's people -- against usury and slavery are precisely the essential laws for human civilization. Viewed in this way, the Flood of Noah fits right into salvation history, God building up a people who could know him on earth.

### **13. Regarding the Magisterium**

At the end of his book, Keane gives the complete text of the Pontifical Biblical Commission's statements about interpreting Genesis. The Pontifical Biblical Commission **of 1909**, that is.

Other documents that need to be considered are:

1. *Divino Afflante Spiritu*
2. *Humanae Generis* 1950
3. The 1979 words of our present Pope to the Pontifical Academy when he called them to an in-depth study of the Galileo case.
4. The 1996 words of the same Pope to the same Academy, regarding evolution.

This 1909 document, which was disciplinary not doctrinal, has been superseded by the later ones, and whatever you may think of such matters, it is hardly respectful of the Magisterium to quote an old document and make no reference to [*but he did make several references -- though making rather little of*] more recent ones.

Pope John Paul II was quite explicit in saying that, while we must believe in the direct creation of the soul, the idea of the indirect and evolutionary creation of the body has progressed from a hypothesis to a theory. It is not wise or right, therefore, to dismiss it. Indeed, to do so would be a serious failure of pastoral care for those working scientists who may seek our prayer support and be discouraged to receive only our suspicion. It is a further failure of support for young students of the sciences who find themselves deeply isolated and virtually accused of faithlessness as they pursue their work of their particular fields. If they should conclude that God, who is Truth, is asking them to choose between religious and scientific truth, their commitment to prayer may indeed become very difficult to sustain. I myself know something of the storms generated by this conflict. I would wish them on nobody.

Keane's remarks about later developments in the Church's understanding of evolution suggest that he puts himself above Pope John Paul II in his understanding of the Magisterium. Such claims are not new in the history of the Church, even in the 20th century. But I see no reason to attend to them.