

Origins Questions: Creation, Evolution, Intelligent Design, and Orthodoxy

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C.J.S. Hayward

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Questions and contact information: cjshayward.com/contact

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Preface

Creation and evolution became a central issue in Western Christianity, and Orthodox may be very interested in either young-earth Creationism or showing harmony between the Fathers and evolution. But the central question is on the wrong terms; both opposites are wrong because of what they both hold in common. The Church Fathers usually believed in a young-earth creationism, but none of them made it (to again borrow from Protestantism) "the Article by which the Church stands or falls"; for that matter, the Fathers apparently left behind no work focused on a young earth: an old earth is condemned along with other various opinions, including belief in atoms and molecules such as modern chemistry assumes.

These works are intended, not specifically to convince the reader that the author is right about how life came to be (a point on which the author himself is not convinced), but to put Orthodox bounds on the debate and point to bigger issues.

There are more things in Heaven and earth than are dreamed of in a copy of Western Christianity's debates about origins. This book is meant to help open the reader's eyes to what more there is to see.

QUICK! What's Your Opinion About Chemistry?

QUICK! What's your opinion about chemistry?

Readers who also read the popular usability author Jakob Nielsen may have read him give a popularized version of "the query effect," which is essentially that even if people don't have an opinion on something before you ask, if you ask their opinion they will very quickly come to an opinion, share the newly formed with you, and walk away thoroughly convinced of the opinion they just shared.

I haven't actually done this, but if I were to waste people's time and perhaps get in trouble with clergy by taking a survey at church and ask them what their opinion of chemistry was, I would expect some hesitation and befuddlement, people being perhaps a bit uncertain about where the question was coming from or my motives for asking, but given a bit of time to answer, something like the following might be expected:

- It's hard.
- It's boring.
- It's fascinating.
- I think it's really cool that a chemist can take two beakers full of clear liquid and pour them together and have it turn colors.

- Our lives are so much better for things that need chemistry for us to be able to manufacture them.
- Chemistry is foundational to how we as a society have raped the environment.
- What difference chemistry makes depends on how you make use of it.
- Chemistry came from alchemy—I'm a bit more curious about alchemy!
- ...

Now what about an answer of "*There are not hundreds of elements, e.g. [hydrogen](#), [helium](#), [lithium](#), etc., but the original four elements: earth, air, fire, and water. Chemistry is intrinsically atheistic, and no Orthodox should believe it."*?

Most readers may be even further confused as to where I may be going this, and suspect that the source of the opinion is occult, or deranged, or on drugs, or some combination of the above. But in fact that is the position of Church Fathers, although I will only investigate one of the Three Holy Hierarchs. In St. Basil's *Hexaëmeron* (Homily [1](#), [2](#), [3](#), [4](#), [5](#), [6](#), [7](#), [8](#), [9](#)), in which we read:

Others imagined that atoms, and indivisible bodies, molecules and [bonds], form, by their union, the nature of the visible world. Atoms reuniting or separating, produce births and deaths and the most durable bodies only owe their consistency to the strength of their mutual adhesion: a true spider's web woven by these writers who give to heaven, to earth, and to sea so weak an origin and so little consistency! It is because they knew not how to say "In the beginning God created the heaven and the earth." Deceived by their inherent atheism it appeared to them that nothing governed or ruled the universe, and that was all was given up to chance.

Elsewhere in these homilies, St. Basil clarifies that the four elements

are earth, air, fire, and water, and claims that this is the (non-negotiable) teaching of [Genesis 1](#).

Now a chemist who communicated well would be hard pressed to summarize chemistry (*not* alchemy) better in so few words as the opponents' position as summarized by St. Basil. Even if modern chemistry is developed in a great deal more detail and scientific accuracy than St. Basil's opponents. Compare the words of Nobel Prize laureate Richard Feynman, in the *Feynman Lectures* which are considered exemplars of excellent communication in teaching the sciences, in words that might as well have come from a chemist trying to explain chemistry in a single sentence:

If, in some cataclysm, all of scientific knowledge were to be destroyed, and only one sentence passed on to the next generation of creatures, what statement would contain the most information in the fewest words? I believe it is the atomic hypothesis that *all things are made of atoms* — "little particles that move around in perpetual motion, attracting each other when they are a little distance apart, but repelling upon being squeezed into one another." In that one sentence, you will see, there is an enormous amount of information about the world, if just a little imagination and thinking are applied.

Feynman and St. Basil's summary of his opponents are saying the same thing, and almost with the same economy. St. Basil's description could be used as a pretty effective surrogate if Feynman's words here were lost.

If that is the case, what should we make of it? Well, let me mention one thing I hope *doesn't* happen: I *don't* want to see even one pharmacist, weeping, make the confession of a lifetime, stop using chemistry to ease the sick and the suffering, after the sobbing confession, "*I thought I was an Orthodox Christian, but it turns out I was really an atheist all along!*"

A sane reading of the Fathers would take a deep breath—or simply not *need* to take a deep breath—and recognize that something other than legalism is the wisest course for dealing with occasional passages in the Fathers that condemn chemistry, just like with the passages that claim a

young earth.

Just like the passages that claim a young earth?

People in the U.S. who are not connected with Hispanic culture will often wonder that Mexicans, either in Mexico or the U.S., do not really celebrate *Cinco de Mayo*, and probably make less of a hubbub of what is assumed to be the the Mexican holiday. But, as my brother pointed out, "*Cinco de Mayo* legitimately is a Mexican holiday, but it's not on par with the U.S.'s Independence Day; it's on par with [the U.S.'s] Casimir Pulaski Day."

It is helpful in dealing with passages from the Fathers to recognize what are genuinely Independence Day topics and what are only Casimir Pulaski Day topics. Independence Day topics include *repentance, theosis, Grace, hesychasm*, and there tend to be numerous treatises devoted to them. Casimir Pulaski Day topics like rejection of chemistry as atheistic, or insisting on a young earth, may be agreed on, but I have not read or heard in thousands of pages of patristic writing where either topic is front and center. So far I have only found brief passages, generally among other passages condemning various opinions in ways that, when they touch scientific subjects, are a bit scattershot—*much as when one is proceeding the wrong way*—as regards contributing to any useful and coherent way of evaluating modern science.

The fourth volume of the [Philokalia](#) touches on scientific subjects as much as anything I've read from the Fathers, but while they assume a quite sophisticated grasp of solid geometry, I have great difficulty reconciling them with a good old-fashioned globe, which does not really depict the earth as a solid sphere partly embedded in a much larger sphere of water.

I'm not going to condemn believing in a young earth as it is a very easy conclusion to reach and it is shared among many saints. But I will suggest that even the conceptual framework of having an origins position is strange and not helpful, as it is spiritually really not that helpful to weigh in on whether chemistry makes you an atheist. *We're making a really big deal of a Mexican Casimir Pulaski Day, much to the confusion*

of those connected with Méjico!

Mainstream origins positions

Let me briefly comment on the mainstream origins positions held by Orthodox. Some things are non-negotiable; among them being that God created the world and that the human race is created in the image of God. Atheism, naturalism or materialism is not acceptable, with or without connection to evolution. The Ancient Near East and pagan Greek philosophy hold to various opinions which are not to be accepted: among these are that a hero or god fought a dragon or demon and ripped her body in half, making half into the sky and half into the earth; that the universe was created by divine sexual activity in a fashion that need not be described to Orthodox Christians; that the world has always existed and is as uncreated as God; and that the world is an emanation from God (divine by nature in a diluted form), in classical pantheistic fashion. All of these are to be rejected, but I am not aware of a camp among today's Orthodox, nor have I encountered a single Orthodox follower, for these kinds of positions. And none of these seem to really overlap any mainstream position.

Among mainstream positions, let me enumerate the following. This excludes being completely not sure, finding the whole question messy and hesitating between two or more basic options (where I am now), and a few others. As far as I know, this list covers all encounters where I have seen a definite position taken by Orthodox. (Some or all of these positions may admit varieties and clarification.)

1: The saints believed in a young earth and that's how I read Genesis.

If you believe this, and don't go further or mix it with anything *non-Orthodox*, this is fine.

2: I believe in an old earth where God miraculously intervened by creating new life forms over time.

This position is now backed by intelligent design movement

texts, such as Philip Johnson's [Darwin on Trial](#). The downside, at least as explained to me by two very hostile Orthodox theistic evolutionists who shut me down before I could make my point instead of letting me make my point and then refuting it, is that the new intelligent design movement was concocted by the Protestant creationist [Discovery Institute](#) to attract people not attracted by young earth creationism's handling of science. Like the position that follows, *most* of its followers don't jackhammer people who disagree.

3: I'm not a scientist, but I believe God could have done it through evolution.

This option, theistic evolution, is perfectly permissible, but I wince as it usually means "I'm coming to terms with the science of a hundred years ago."

One hundred years ago, *evolution* was a live option in the academy. Now people still use the term, but its meaning has been gutted and any belief that life forms slowly **evolve** into different life forms has been dead so long that it has long since stopped even smelling bad. The evidence (the "evolutionary" term being "punctuated equilibrium" or "punk eek") is that the fossil record shows long periods of great stability without real change in what kind of organisms there, abruptly interrupted by geological eyeblinks and the sudden appearance and disappearance of life forms. Or as my "University Biology" teacher at the [Illinois Mathematics and Science Academy](#) said, "*Evolution is like baseball. There are long periods of boredom interrupted by brief moments of intense excitement.*"

This option registers to me as a genuinely comfortable assent to science, but without awareness that the science in question has changed profoundly in the past hundred years.

But I wish to underscore: theistic evolution is (usually) an "I won't drop the hammer on you" signal, and that is an *excellent* kind of signal.

4: I am a scientist, and I believe God probably worked through evolution.

My experience with this has not been the most pleasant; in one case behind the open hostility and efforts to shut me down from arguing (and rudely stop me before I could make my point at all instead of letting me make my point and then explain its flaws) may have lurked an uneasiness that I represented enough authority that I was intrinsically a threat to their certitude that scientific evidence pointed to "evolution" (as the term has been redefined in the sciences of today).

With that stated, I have known several Orthodox physicians, and I expect some of them after extensive evolution-laden biology classes would lean towards theistic evolution. However, I'm not sure as they generally seemed more interested in knowing, for instance, if I was having a nice day, than convincing me of their views about origins.

(I don't remember any clergy or heirarch who was above me *bringing up* origins questions, although they have been willing to offer their thoughts if requested; "I'm not a scientist, but I believe God could have done it through evolution" is the most frequent opinion I've seen even among conservative clergy. Priests seem to be focused on bigger questions, like "*What hast thou to confess?*")

All four opinions above are at least tolerable, but there is one additional common opinion that is particularly problematic:

5: God created a young earth and we know because Creation Science proves it.

I am perhaps biased by my frustrating experience with this crowd. I've had people offer to straighten out my backwards understanding of science whose understanding of science was so limited that I could not lead them to see when I was making a scientific argument, as opposed to just arbitrarily playing around with words. I have an advanced degree from a leading institution and

a lot of awards. I am not aware of any of the people who sought to do me the favor of straightening out my backwards views on science as having a community college learner's permit associate's degree in any of the sciences.

The assertion is made that Creation Science is science (after all, how could it not, if it has "Science" in its name?). My best response is to say that "Creation Science is real, legitimate science" is wrong, in the same way, for the same reason, as saying "Pro-choice Catholics are real, legitimate Catholics". Pro-choice "Catholics" do not understand, appreciate, respect, or accept what it means to be a Catholic; Creation "scientists" do not understand, appreciate, respect, or accept what it means to be a scientist. Not only do Scientists and Catholics not accept the obnoxious intrusion, but arguing is pointless and brings to mind Confucious's warning, "*It is useless to take counsel with those who follow a different Way.*"

The problem with Creation Science is not that it is not science. It is painfully obvious to those outside of the movement that it is a feature of the Protestant landscape, perhaps a Protestantism of yesteryear rather than Protestantism today: Wheaton College, which is quite arguably the Evangelical Vatican, has something like three young earth creationists on its faculty, and I have never heard the one I know even mention Creation Science—he only claims to accept a young earth from reading and trusting the Bible), and the origin and nature of Creation Science are well described by a leading Evangelical scholar of Evangelicalism, Mark Noll in [The Scandal of the Evangelical Mind](#).

Kiddies, if you're going to take one feature of Protestantism and incorporate it into Orthodoxy, take Bible studies, or [My Utmost for His Highest](#), or some other genuine treasure that tradition has produced. It would be better to do neither, of course, but those are better choices. Taking Creation Science from Evangelicalism is like robbing Evangelicalism in a blind alley, and all you take away is its pocket lint!

And if you're going to ask, "Wait. Isn't the one position you present

as being without significant problems one that you don't particularly seem to believe?", my answer is, "Yes, that's *intended*. That's part of the point of outlining mainstream options for what is a Casimir Pulaski Day question."

More than one person who have held this last position, the Protestant option, have called into question whether I should be calling myself an Orthodox Christian at all because I didn't believe in a young earth. And I really think that's a bit extreme. In twelve years of being Orthodox, I have on numerous occasions been told I was *wrong* by people who were often *right*. I have been told I was wrong many times by my spiritual father, by other priests, and by laity who usually have had a little bit more experience, and I suspect that future growth will be fueled partly by further instances of people pointing where I am wrong. However, when I was newly illumined and my spiritual father said that what I had just said sounded very Protestant, he did not thereby call into question whether I should be calling myself an Orthodox Christian. The only context in the entirety of my dozen years of being Orthodox that anybody has responded to my words, faith, belief, practice, etc. by directly challenging whether I should be calling myself an Orthodox Christian at *all*, was Seraphinians who were exceedingly and sorely displeased to learn I did not share their certain belief in a young earth. This seems to say little about my weaknesses (besides that I am the chief of sinners), and a great deal more about an unnatural idol that has blown out of all proportions. The Casimir Pulaski day represented by the theologoumenon of a young earth has completely eclipsed every Independence Day question on which I've been wrong, from my early ecumenism (ecumenism has been anathematized as a heresy), to a more-inappropriate-than-usual practice of the Protestant cottage industry of archaeologically restoring the early Church. In both cases my error was serious, and I am glad clergy out-stubborned me as I did not give in quickly. But they refrained from casting doubt on whether I should be calling myself an Orthodox Christian; they seem to have seen me as both a nascent Orthodox and wrong about several things they would expect from my background. Really, we *do* need Church discipline, but *isn't dropping that sledgehammer on people who don't believe a young earth a bit extreme?*

I'll not return the insult of casting doubt on whether they're Orthodox; I don't see that this option is acceptable, but I believe it is coherent to talk about someone who is both Orthodox and wrong about something major or minor. I believe that Creation Science is a thoroughly Protestant practice (that it is not science is beside the point), and militantly embracing Creation Science is one of the ways that the Seraphinians continue a wrong turn.

But quite apart from that, the question of origins as I have outlined it is **itself** a heritage from Protestantism. Evangelicals once were fine with an old earth, before Evangelicals created today's young earth creationism; the article [Why Young Earthers Aren't Completely Crazy](#) talks with some sympathy about the Evangelical "line in the sand;" Noll tells how it came to be drawn. **The fact that it can be a relatively routine social question to ask someone, "What is your opinion about origins?" signals a problem if this Protestant way of framing things is available in Orthodoxy.** It's not just that the Seraphinian answer is wrong: the question itself is wrong, or at least not Orthodox as we know it now. Maybe the question "Did God create the entire universe from nothing, or did he merely shape a world that has always existed and is equally uncreated with him?" is an Independence Day question, or something approaching one. The questions of "Young or old earth?" and "Miraculous creation of new species or theistic evolution?" are Casimir Pulaski Day questions, and it is not helpful to celebrate them on par with Independence Day.

One friend and African national talked about how in her home cultural setting, you don't ask a teacher "What is your philosophy of education?" as is routinely done in the U.S. for teacher seeking hire who may or may not have taken a single philosophy class. In her culture, that question does not fit the list of *possibles et pensables*, what is possible and what is even thinkable in that setting. *(This whole article has been made to introduce a concept not readily available in the **possibles et pensables** of our own cultural setting, that having a modern style of "origins position" at all is not particularly Orthodox; and that some positions, even or especially among conservatives, are even more problematic.* A transposition to chemistry helps highlight just how

strange and un-Orthodox certain positions really are.) And let us take a look at Orthodox spiritual fathers. As advised in the [Philokalia](#) and innumerable other sources, if you are seeking a spiritual father, in or out of monasticism, you should make every investigation before entering the bond of obedience; after you have entered it, the bond is inviolable. I don't know exactly how Orthodox have tried spiritual fathers, but I have difficulty imagining asking a monastic elder, "What is your personal philosophy of spiritual direction?" *Quite possibly there is none.* Even thinking about it feels uncomfortably presumptuous, and while theological opinion does exist and have a place, defining yourself by your opinions is not Orthodox.

If I were to ask someone in the U.S. "What are your family traditions for celebrating Casimir Pulaski Day?" the best response I could get would be, "Cas-Cashmere *WHO?*"

And now I will show you a more excellent way

I feel I may be sending a very mixed message by the amount I have written in relation to origins questions given that my more recent postings keep downplaying origins debates. Much of what I have written has been because I don't just think certain answers have flaws; the questions themselves have been ill-framed.

But that isn't really the point.

These pieces are all intended to move beyond Casimir Pulaski Day and pull out all of the stops and celebrate Independence Day with bells on. They may be seen as an answer to the question, "Do you have anything *else* to discuss besides origins?" **If you read one work, [Doxology](#) is my most-reshared.**

1. [Doxology](#)

How shall I praise thee, O Lord?
For naught that I might say,
Nor aught that I may do,
Compareth to thy worth.
Thou art the Father for whom every fatherhood in Heaven and on earth is named,
The Glory for whom all glory is named,

2. [A Pilgrimage from Narnia](#)

Wardrobe of fur coats and fir trees:
Sword and armor, castle and throne,
Talking beast and Cair Paravel:
From there began a journey,
From thence began a trek,
[Further up and further in!](#)

3. [God the Spiritual Father](#)

I believe in one God, the Father, Almighty,

I BELIEVE IN ONE GOD, THE FATHER, ALMIGHTY...

The Nicene Creed

All of us do the will of God. The question is not whether we do God's will or not, but whether we do God's will as *instruments*, as Satan and Judas did, or as *sons*, as Peter and John did. In the end Satan may be nothing more than a hammer in the hand of God.

C.S. Lewis, paraphrased

4: [Akathist to St. Philaret the Merciful](#)

To thee, O camel who passed through the eye of the needle, we offer thanks and praise: for thou gavest of thy wealth to the poor, as an offering to Christ. Christ God received thy gift as a loan, repaying thee exorbitantly, in this transient life and in Heaven. Rejoice, O flowing fountain of Heaven's treasures! (*Repeated thrice.*)

5: [A Pet Owner's Rules](#)

God is a pet owner who has two rules, and only two rules. They are:

1. I am your owner. Enjoy freely the food and water which I have provided for your good!
2. **Don't drink out of the toilet.**

6: [The Orthodox Martial Art Is Living the Sermon on the Mount](#)

A look at India in relation to my own roots and formation

My live story up until now would be immeasurably impoverished if the various ways in which India had entered my life would simply be *subtracted*. I appreciate Indian food, even if I eat it in a non-Indian (Paleo) fashion. And that is not trivial, but there are deeper ways I've been enriched by that great nation. One of these relates to pacifism, where one of India's giants, one certain Gandhi, is perhaps the best-known person in history as I know it for the strength of pacifism.

7: Silence: Organic Food for the Soul

We are concerned today about our food,
and that is good:
sweet fruit and honey are truly good and better than raw sugar,
raw sugar not as bad as refined sugar,
refined sugar less wrong than corn syrup,
and corn syrup less vile than Splenda.
But whatever may be said for eating the right foods,
this is nothing compared to the diet we give our soul.

8: Repentance, Heaven's Best-Kept Secret

I would like to talk about repentance, which has rewards not just in the future but here and now. Repentance, often, or perhaps *always* for all I know, bears a hidden reward, but a reward that is invisible before it is given. Repentance lets go of something we think is essential to how we are to be—men hold on to sin because they think it adorns them, as the [Philokalia](#) well knows. There may be final rewards, rewards in the next life, and it matters a great deal that we go to confession and unburden ourselves of sins, and walk away with "no further cares for the sins which you have confessed." But there is another reward that appears in the here and now...

9: Why This Waste?

"Why this waste?" quoth the Thief,
Missing a pageant unfold before his very eyes,
One who sinned much, forgiven, for her great love,
Brake open a priceless heirloom,
An alabaster vessel of costly perfume,
Costly chrism beyond all price anointing the Christ,
Anointing the Christ unto life-giving death,
Anointed unto life-giving death,
A story ever told,
In memory of her:

10: The Transcendent God Who Approaches Us Through Our Neighbor

The temperature of Heaven can be rather accurately computed from available data. Our authority is the Bible: Isaiah 30:26 reads, *Moreover the light of the Moon shall be as the light of the Sun and the light of the Sun shall be sevenfold, as the light of seven days.* Thus Heaven receives from the Moon as much radiation as we do from the Sun and in addition seven times seven (forty-nine) times as much as the Earth does from the Sun, or fifty times in all.

11: Open

How shall I be open to thee,
O Lord who is forever open to me?
Incessantly I seek to clench with tight fist,
Such joy as thou gavest mine open hand.

12: The angelic letters

My dearly beloved son Eukairos;

I am writing to you concerning the inestimable responsibility and priceless charge who has been entrusted to you. You have been appointed guardian angel to one Mark.

Who is Mark, whose patron is St. Mark of Ephesus? A man. What then is man? Microcosm and mediator, the midpoint of Creation, and the fulcrum for its sanctification. Created in the image of God; created to be prophet, priest, and king. It is toxic for man to know too much of his beauty at once, but it is also toxic for man to know too much of his sin at once. For he is mired in sin and passion, and in prayer and deed offer what help you can for the snares all about him. Keep a watchful eye out for his physical situation, urge great persistence in the liturgical and the sacramental life of the Church that he gives such godly participation, and watch for his asceticism with every eye you have. Rightly, [when we understand what injures a man, nothing can injure the man who does not injure himself](#): but it is treacherously easy for a man to injure himself. Do watch over him and offer what help you can.

With Eternal Light and Love,
Your Fellow-Servant and Angel

Happy Independence Day! Enjoy the fireworks display.

Creation and Holy Orthodoxy: Fundamentalism Is Not Enough

Against (crypto-Protestant) "Orthodox" fundamentalism

If you read Genesis 1 and believe from Genesis 1 that the world was created in six days, I applaud you. That is a profound thing to believe in simplicity of faith.

However, if you wish to persuade me that Orthodox Christians should best believe in a young earth creation in six days, I am wary. *Every single time* an Orthodox Christian has tried to convince me that I should believe in a six day creation, I have been given recycled Protestant arguments, and for the moment the entire conversation has seemed like I was talking with a Protestant fundamentalist dressed up in Orthodox clothing. And if the other person claims to understand scientific data better than scientists who believe an old earth, and show that the scientific data instead support a *young* earth, this is a major red flag.

Now at least some Orthodox heirarchs have refused to decide for the faithful under their care what the faithful may believe: the faithful may be expected to believe God's hand was at work, but between young earth creationism, old earth creationism, and "God created life through evolution", or any other options, the heirarchs do not intervene. I am an old earth creationist; I came to my present beliefs on "How did different

life forms appear?" before becoming Orthodox, and I have called them into a question a few times but not yet found reason to revise them, either into young earth creation or theistic evolution. I would characterize my beliefs, after being reconsidered, as "not changed", *and not* "decisively confirmed": what I would suggest has improved in my beliefs is that I have become less interested in some Western fascinations, such as getting right the details of how the world was created, moving instead to what might be called "mystical theology" or "practical theology", and walking the Orthodox Way.

There is something that concerns me about Orthodox arguing young earth creationism like a Protestant fundamentalist. Is it that I think they are wrong about how the world came to be? *That is not the point*. If they are wrong about that, they are wrong in the company of excellent saints. If they merely hold another position in a dispute, that is one thing, but bringing Protestant fundamentalism into the Orthodox Church reaches beyond one position in a dispute. Perhaps I shouldn't be talking because I reached my present position before entering the Orthodox Church; or rather I haven't exactly *reversed* my position but de-emphasized it and woken up to the fact that there are bigger things out there. But I am concerned when I'm talking with an Orthodox Christian, and *every single time* someone tries to convince me of a young earth creationism, all of the sudden it seems like I'm not dealing with an Orthodox Christian any more, but with a Protestant fundamentalist who always includes arguments that came from Protestant fundamentalism. And what concerns me is an issue of *practical* theology. Believing in a six day creation is one thing. Believing in a six day creation like a Protestant fundamentalist is another matter *entirely*.

A telling, telling line in the sand

In reading the Fathers, one encounters claims of a young earth. However, often (if not always) the claim is one among many disputes with Greek philosophers or what have you. To my knowledge there is no patristic text in which a young earth is *the* central claim, let alone even approach being "the article by which the Church stands or falls" (if I may borrow phrasing from Protestant fundamentalist cultural baggage).

But, you may say, Genesis 1 and some important Fathers said six days, literally. True enough, but may ask a counterquestion?

Are we obligated to believe that our bodies are composed of earth, air, fire and water, and not of molecules and atoms including carbon, hydrogen, and oxygen?

If that question seems to come out of the blue, let me quote St. Basil, *On the Six Days of Creation*, on a precursor to today's understanding of the chemistry of what everyday objects are made of:

Others imagined that atoms, and indivisible bodies, molecules and bonds, form, by their union, the nature of the visible world. Atoms reuniting or separating, produce births and deaths and the most durable bodies only owe their consistency to the strength of their mutual adhesion: a true spider's web woven by these writers who give to heaven, to earth, and to sea so weak an origin and so little consistency! It is because they knew not how to say "In the beginning God created the heaven and the earth." Deceived by their inherent atheism it appeared to them that nothing governed or ruled the universe, and that was all was given up to chance.

At this point, belief in his day's closest equivalent to our atoms and molecules is called an absolutely unacceptable "spider's web" that is due to "inherent atheism." Would you call Orthodox Christians who believe in chemistry's molecules and atoms inherent atheists? St. Basil does provide an alternative:

"And the Spirit of God was borne upon the face of the waters." Does this spirit mean the diffusion of air? The sacred writer wishes to enumerate to you the elements of the world, to tell you that God created the heavens, the earth, water, and air and that the last was now diffused and in motion; or rather, that which is truer and confirmed by the authority of the ancients, by the Spirit of God, he means the Holy Spirit.

St. Basil rejected atoms and molecules, and believed in elements, not of carbon or hydrogen, but of earth, air, fire, and water. The basic belief is one Orthodoxy understands, and there are sporadic references in liturgical services to the four elements of earth, air, fire, and water, and so far as I know no references to modern chemistry. St. Basil seems clearly enough to endorse a six day creation, and likewise endorses an ancient view of elements while rejecting belief in atoms and molecules as implicit atheism.

Why then do Orthodox who were once Protestant fundamentalists dig their heels in at a literal six day creation and make no expectation that we dismiss chemistry to believe the elements are earth, air, fire, water, and possibly aether? The answer, so far as I can tell, has *nothing whatsoever* to do with Orthodoxy or any Orthodox Christians. It has to do with a line in the sand chosen by Protestants, the same line in the sand described in [Why Young Earthers Aren't Completely Crazy](#), a line in the sand that is understandable and was an attempt to address quite serious concerns, but still should not be imported from Protestant fundamentalism into Holy Orthodoxy.

Leaving Western things behind

If you believe in a literal six day creation, it is not my specific wish to convince you to drop that belief. But I would have you drop fundamentalist Protestant "creation science" and its efforts to prove a young earth scientifically and show that it can interpret scientific findings better than the mainstream scientific community. And I would have you leave Western preoccupations behind. Perhaps you might believe St. Basil was right about six literal days. For that matter, you could believe he was right about rejecting atoms and molecules in favor of earth, air, fire, and water—or at least recognize that St. Basil makes *other* claims *besides* six literal days. But you might realize that really there are much more important things in the faith. Like how faith plays out in practice.

The fundamentalist idea of conversion is like flipping a light switch: one moment, a room is dark, then in an instant it is full of light. The Orthodox understanding is of *transformation*: discovering Orthodoxy is the work of a lifetime, and perhaps once a year there is a "falling off a cliff" experience where you realize you've missed something big about Orthodoxy, and you need to grow in that newly discovered dimension. Orthodoxy is not just the ideas and enthusiasm we have when we first come into the Church; there are big things we could never dream of and big things we could never consider we needed to repent of. And I would rather pointedly suggest that if a new convert's understanding of Orthodoxy is imperfect, much less of Orthodoxy can be understood from reading Protestant attacks on it. One of the basic lessons in Orthodoxy is that you understand Orthodoxy by walking the Orthodox Way, by attending the services and living a transformed life, and not by reading books. And if this goes for books written by Orthodox saints, it goes all the more for Protestant fundamentalist books attacking Orthodoxy.

Science won't save your soul, but science (like Orthodoxy) is something you understand by years of difficult work. Someone who has done that kind of work might be able to argue effectively that evolution does not account for the fossil record, let alone how the first organism could come to exist: but here I would recall *The Abolition of Man*: "It is

Paul, the Pharisee, the man 'perfect as touching the Law' who learns where and how that Law was deficient." Someone who has taken years of effort may rightly criticize evolution for its scientific merits. Someone who has just read fundamentalist Protestant attacks on evolution and tries to evangelize evolutionists and correct their scientific errors *will be just as annoying to an atheist who believes in evolution*, as a fundamentalist who comes to evangelize the unsaved Orthodox and "knows all about Orthodoxy" from polemical works written by other fundamentalists. I would rather pointedly suggest that if you care about secular evolutionists at all, pray for them, but don't set out to untangle their backwards understanding of the science of it all. If you introduce yourself as someone who will straighten out their backwards ideas about science, all you may really end up accomplishing is to push them away.

Conversion is a slow process. And letting go of Protestant approaches to creation may be one of those moments of "falling off a cliff."

Note to Orthodox Evolutionists

Stop Trying to Retroactively ShanghaiRecruit the Fathers to Your Camp!

At least some bishops explicitly allow their faithful flock to believe theistic evolution, young earth creation, or any of several other options.

This article is not meant to say you can't be Orthodox and believe in evolution. It is, however, meant to say that you can't be Orthodox and misrepresent Church Fathers as saying things more convenient to evolution than what they really said.

Two examples of a telling symptom: Fishy, suspicious arguments

Alexander Kalomiros is perhaps a forerunner to Orthodox finding a profound harmony between the Church Fathers and evolution. To pick one of many examples, Kalomiros's [On the Six Days of Creation](#) cites St. Basil the Great as saying, "Therefore, if you say a day or an age, you express the same meaning" (homily 2 of St. Basil's *On the Six Days of Creation*). So Dr. Kalamiros cites St. Basil as clearly saying that "day" is a term with a rather elastic meaning, implying an indefinite length.

Something really piqued my curiosity, because a young earth Creationist cited the same saint, the same book, and even the same homily as Kalamiros, but as supporting the opposite conclusion: "one day" means "one day," period.

I honestly wondered, "Why on earth?" Why would the same text be cited as a proof-text for "days" of quite open-ended length, but also a proof text for precise twenty-four hour days? So I read [the homily of St. Basil that was in question](#). The result?

The young earther's claim is easier to explain: St. Basil does, in fact, quite plainly claim a young earth, and treats this belief as non-negotiable. And what Kalomiros cites? The text is talking about something else when St. Basil moves from discussing the Creation to matters of eternity and the Last Judgment. One of the names for eternity is "the eighth day," and in explaining the timelessness of eternity, St. Basil writes, "Thus whether you call it day, or whether you call it eternity, you express the same idea." Which is not exactly how Kalomiros quotes him, not *exactly*.

Kalomiros offers a quote out of context, and translates in a subtle but misleading wording, leading the reader to believe St. Basil clarified that a "day" [of Creation] can just as well be an "age" [of time]. This is sophistry. This is disingenuous. What is more, I cannot ever remember following one of Kalomiros's footnotes supporting evolution and find an appropriate and responsible use of the original text. When I check things out, little if any of it checks out. And that's a concern. When someone

out, little if any of it checks out. And that's a concern. When someone argues like that, the reader is being treated dishonestly, and deceptive argument is rarely the herald of truth.

Let me quote another of many examples celebrating a harmony between patristic Orthodoxy and evolution, Vladimir de Beer's [Genesis, Creation and Evolution](#). He writes:

The account of creation in the first chapter of Genesis is known as the *Hexaemeron* (Greek for 'six days'), on which a number of Greek and Latin Church fathers wrote commentaries. Some of them interpreted the six days of creation quite literally, like St Basil the Great who was much influenced by Aristotle's natural philosophy. Yet the same Cappadocian father insisted that the scriptural account of creation is not about science, and that there is no need to discuss the essence (ousias) of creation in its scientific sense.[1] Others followed a more allegorical approach, such as St Gregory of Nyssa who saw the *Hexaemeron* as a philosophy of the soul, with the perfected creature as the final goal of evolution.

It has been my experience that for a certain kind of author one of the cheapest ways to dismiss a Father is to say that they were heavily influenced by some kind of non-Orthodox philosophy. Usually they don't even give a footnote. *St. Basil the Great is a Church Father and one of the Three Hierarchy*, and if you are going to downplay whether his position is one we should believe, you should be doing a lot more than due diligence than making a dismissive bare assertion that he was heavily influenced by non-Orthodox forces.

But at least de Beer is kind enough to allow St. Basil to believe in six literal days. I am rather mystified by his treatment of St. Gregory of Nyssa, [whose commentary On the Six Days of Creation is here](#). Are we referring to the same work?

St. Gregory's commentary is not a allegorical interpretation, such as St. Maximus the Confessor's way of finding allegory about asceticism and ascetical struggles in the details of the Gospel. It is if anything 90% a science lesson, or an Aristotelian science lesson at any rate, and at face

value St. Gregory owes much more of a debt to Aristotle than St. Basil does. (At *least* St. Gregory spends vastly more time talking about earth, air, fire, and water.) St. Gregory's [On the Six Days of Creation](#) assumes and asserts that the days of Creation were, in fact, literal days. And that's not the end. St. Gregory of Nyssa explicitly ascribes the highest authority and weight to St. Basil's work and would almost certainly be astonished to find his work treated as a *corrective* to St. Basil's problematically literal *On the Six Days of Creation*; St. Gregory's attitude appears to be, "St. Basil made an excellent foundation and I want to build on it!" On all counts I can tell, St. Gregory does **not** provide a precedent for treating young earth creation as negotiable. De Beers may well have a friend among the Fathers, but St. Gregory is not that friend. And if this is his choice of friends, maybe he isn't aware of many real, honest friends among the Fathers. St. Augustine may be his friend here, but if the Blessed Augustine is your only friend among the Fathers, you're on pretty shaky ground.

Examples could easily be multiplied, but after a point it becomes somewhat tedious checking out more harmonizers' footnotes and finding that, no indeed, they don't check out.

Why it matters

Have you read much [creation science seeking to use science to prove a young earth?](#) The reason I'm asking is that *that's what scholars do when they use patristic resources to prove that Orthodoxy and evolution are in harmony*. The kind of distortion of facts that they wouldn't be caught dead in origins science is the kind of distortion of facts that is routine in those harmonizing Orthodoxy with evolution.

I wrote [a thesis calling to task a Biblical Egalitarian treatment of the Haustafel in Ephesians](#), and it is part of my research and experience to believe that sophistry matters, *because sophistry is how people seek to persuade when truth is against them*. And when I see misrepresentation of sources, that betrays a problem.

I myself do not believe in a young earth; I am an old earth creationist and have seriously entertained returning to belief in theistic evolution. I stand pretty much as far outside the patristic consensus as Orthodox evolutionists. **But I don't distort the Fathers to shanghai recruit them to my position.**

It may well be that with knowledge that wasn't available to St. Gregory and his fellow Fathers, the intellectual dishonesty and distortion needed to believe in a young earth may be greater than saying, "I know the Fathers' consensus and I remain outside of it." That's not ideal, but it is infinitely better than distorting the Fathers' consensus to agree with you.

It is better by far to acknowledge that you are outside the Fathers' consensus than make them agree with you. **If you are an Orthodox evolutionist, please stop shanghaiing recruiting ancient Fathers to your camp.**

A helpful analogy: What are the elements?

Some Protestants made young-earth creationism almost "the article by which the Church stands or falls," and much of young-earth and old-earth creationism in Orthodoxy, *and evolution*, is shaped by that Protestant "article by which the Church stands or falls."

Today's young-earth creationism and theistic evolution are merely positions on a ballot in single-issue voting, and single-issue voting that was unknown to the Fathers. [There are other issues.](#)

(What other issues are there, you ask?)

Let me give my standard question in dealing with young-earth Orthodox who are being pests and perhaps insinuating that my Orthodoxy is impaired if I don't believe their position: "Are we obligated to believe that the elements are earth, air, fire, water, and maybe aether?"

If that question seems to come from out of the blue, let me explain:

St. Basil's *On the Six Days of Creation* takes a position we can relate to readily enough even if we disagree:

"And the evening and the morning were the first day." Evening is then the boundary common to day and night; and in the same way morning constitutes the approach of night to day... Why does Scripture say "one day the first day"? Before speaking to us of the second, the third, and the fourth days, would it not have been more natural to call that one the first which began the series? If it therefore says "one day," it is from a wish to determine the measure of day and night, and to combine the time that they contain. Now twenty-four hours fill up the space of one day—we mean of a day and of a night; and if, at the time of the solstices, they have not both an equal length, the time marked by Scripture does not the less circumscribe their duration. It is as though it said: twenty-four hours measure the space of a day, or that, in reality a day is the time that the heavens starting

from one point take to return there.

That's on our radar. What's not on our radar is how bluntly St. Basil treats his day's closest equivalent to modern chemistry, and please note that alchemy has nothing to do with this; he does not condemn [alchemy](#) as being occult, but *chemistry* as atheistic:

Others imagined that atoms, and indivisible bodies, molecules and [bonds], form, by their union, the nature of the visible world. Atoms reuniting or separating, produce births and deaths and the most durable bodies only owe their consistency to the strength of their mutual adhesion: a true spider's web woven by these writers who give to heaven, to earth, and to sea so weak an origin and so little consistency! It is because they knew not how to say "In the beginning God created the heaven and the earth." Deceived by their inherent atheism it appeared to them that nothing governed or ruled the universe, and that was all was given up to chance.

The emphatic alternative he offers is a belief in the four or five elements, earth, air, fire, water, and possibly the aether. This is something he finds in Genesis:

"And the Spirit of God was borne upon the face of the waters." Does this spirit mean the diffusion of air? The sacred writer wishes to enumerate to you the elements of the world, to tell you that God created the heavens, the earth, water, and air and that the last was now diffused and in motion; or rather, that which is truer and confirmed by the authority of the ancients, by the Spirit of God, he means the Holy Spirit.

St. Basil takes the text to mean more than just that water exists; he takes it to mean that water is an element. Nor is St. Basil the only one to make such claims; as mentioned earlier, [St. Gregory's On the Six Days of Creation](#) is not in the business of condemning opposing views, but it not only assumes literal days for Creation, but the "science" of earth, air, fire, and water is writ large, and someone wishing to understand how ancients could see science and cosmology on those terms has an invaluable resource in [St. Basil's On the Six Days of Creation](#). Furthermore, the view

of the four elements is ensconced in Orthodox liturgy: the Vespers for Theophany, which is arguably the central text for Orthodox understanding of Creation, enumerates earth, air, fire, and water as the four elements. To my knowledge, no Orthodox liturgy ensconces the implicit atheism of modern chemistry.

What are we to make of this? Does this mean that modern chemistry is off-limits to Orthodox, and that Orthodox doctors should only prescribe such drugs as the ancient theory would justify? God forbid! I bring this point up to say that the obvious answer is, "Ok, there is a patristic consensus and I stand outside of it," *and that this answer can be given without shanghaiing recruiting the Fathers to endorse modern chemistry.* When science and astronomy were formed, someone was reported to say, "The Bible is a book about how to go to Heaven, not a book about how the Heavens go," and while it may be appropriate to say "On pain of worse intellectual dishonesty, I must accept an old earth and chemistry as worth my provisional assent," it is not appropriate to distort the Church Fathers into giving a rubber stamp to beliefs they would reject.

[Drawing a line in the sand at a young earth is a Protestant invention that has nothing to do with Orthodoxy](#), but casting the opposite vote of theistic evolution in a single-issue vote is *also* short of the Orthodox tradition. In reading the Fathers, one encounters claims of a young earth. However, often (if not always) the claim is one among many disputes with Greek philosophers or what have you. To my knowledge there is no patristic text in which a young earth is **the** central claim, let alone even approach being "the article by which the Church stands or falls." Single-issue voting here, *even for evolution*, is not an Orthodox phenomenon except as it has washed in from Protestant battle lines. If an Orthodox who questions the Orthodoxy of old-earthers is being (crypto-)Protestant, the Orthodox who cites the Fathers in favor of evolution is only slightly less so—and both distort the truth.

The young-earth Creation Science makes scientific evidence bow before its will. The Orthodox evolutionist makes the Church Fathers bow before his will. Which is the more serious offense? ["Religion and Science" Is Not Just Intelligent Design vs. Evolution.](#)

"When I became a man, I put childish ways behind me."

One Protestant friend said that I had a real knack for insulting analogies. The comment came after I said of mainstream Evangelical "Christian art" that it worked on the same communication principle as hard porn: "Make every point with a sledgehammer and leave nothing to the imagination but the plot." And I have used that ability here: I have said that Orthodox evolutionists writing of harmony between evolution and the Church Fathers are treating patristic texts the same way creation scientists treat scientific evidence. *Ouch*. The Orthodox-evolutionary harmonizers are playing the same single-issue politics game as their young-earth counterparts, and are only different by casting the opposite vote. **Ouch**.

Is there a method to this madness?

I cannot forbid origins questions altogether, for reasons not least of which I am not tonsured even as a reader, let alone being your heirarch or priest. At least some heirarchs have refused to decide for their flock what they may believe: perhaps people are expected to find God's hand at work in creation, but the exact mechanism of involvement, and time frame, are not decided. But I could wish something like the theology surrounding the holy mysteries, where in contrast to the detailed, point by point Roman account, the Orthodox Church simply says that at one point in the Divine Liturgy the gifts are only (blessed) bread and wine, and at a certain later point they have become the body and blood of Christ, and beyond that point speculation is not allowed.

There are some questions where having the right answer is less valuable than not asking the question at all. Origins questions in the scientific sense do not loom large in the Fathers, and what little there is appears not to match scientific data. But this is not a defect in the Fathers. It is, if anything, a cue that our society's preoccupation with science is not particularly Orthodox in spirit, and perhaps something that doesn't belong in Orthodoxy. Again, [Religion and Science Is Not Just](#)

[Intelligent Design vs. Evolution.](#)

But for the interim, for people who need an answer and are good enough scientists to see through Creation Science, please do not ~~shanghai~~ recruit the Church Fathers to rubber stamp the present state of scientific speculation. For starters, science is less important than you may think. *But that's just for starters.*

The Commentary

Memories flitted through Martin's mind as he drove: tantalizing glimpses he had seen of how people really thought in Bible times. Glimpses that made him thirsty for more. It had seemed hours since he left his house, driving out of the city, across back roads in the forest, until at last he reached the quiet town. The store had printer's blocks in the window, and as he stepped in, an old-fashioned bell rung. There were old tools on the walls, and the room was furnished in beautifully varnished wood.

An old man smiled and said, "Welcome to my bookstore. Are you—" Martin nodded. The man looked at him, turned, and disappeared through a doorway. A moment later he was holding a thick leatherbound volume, which he set on the counter. Martin looked at the binding, almost afraid to touch the heavy tome, and read the letters of gold on its cover:

**COMMENTARY
ON THE OLD AND NEW TESTAMENTS
IN ONE VOLUME
CONTAINING A CAREFUL ANALYSIS OF ALL CULTURAL
ISSUES
NEEDFUL TO UNDERSTAND THE BIBLE
AS DID ITS FIRST READERS**

"You're sure you can afford it, sir? I'd really like to let it go for a lower price, but you must understand that a book like this is costly, and I can't afford to sell it the way I do most other titles."

"Finances will be tight, but I've found knowledge to cost a lot and ignorance to cost more. I have enough money to buy it, if I make it a priority."

"Good. I hope it may profit you. But may I make one request, even if it sounds strange?"

"What is your request?"

"If, for any reason, you no longer want the commentary, or decide to get rid of it, you will let me have the first chance to buy it back."

"Sir? I don't understand. I have been searching for a book like this for years. I don't know how many miles I've driven. I will pay. You're right that this is more money than I could easily spare—and I am webmaster to a major advertising agency. I would have only done so for something I desired a great, great deal."

"Never mind that. If you decide to sell it, will you let me have the first chance?"

"Let's talk about something else. What text does it use?"

"It uses the *Revised Standard Version*. Please answer my question, sir."

"How could anyone prefer darkness to light, obscurity to illumination?"

"I don't know. Please answer my question."

"Yes, I will come to you first. Now will you sell it to me?"

The old man rung up the sale.

As Martin walked out the door, the shopkeeper muttered to himself, "Sold for the seventh time! Why doesn't anybody want to keep it?"

Martin walked through the door of his house, almost exhausted, and yet full of bliss. He sat in his favorite overstuffed armchair, one that had been reupholstered more than once since he sat in it as a boy. He relaxed, the heavy weight of the volume pressing into his lap like a loved one, and then opened the pages. He took a breath, and began reading.

INTRODUCTION

At the present time, most people believe the question of culture in relation to the Bible is a question of understanding the ancient cultures and accounting for their influence so as to be able to better understand Scripture. That is indeed a valuable field, but its benefits may only be reaped after addressing another concern, a concern that is rarely addressed by people eager to understand Ancient Near Eastern culture.

A part of the reader's culture is the implicit belief that he is not encumbered by culture: culture is what people live under long ago and far away. This is not true. As it turns out, the present culture has at least two beliefs which deeply influence and to some extent limit its ability to connect with the Bible. There is what scholars call 'period awareness', which is not content with the realization that we all live in a historical context, but places different times and places in sealed compartments, almost to the point of forgetting that people who live in the year 432, people who live in 1327, and people who live in 1987 are all human. Its partner in crime is the doctrine of progress, which says at heart that we are better, nobler, and wiser people than those who came before us, and our ideas are better, because ideas, like machines, grow rust and need to be replaced. This gives the reader the most extraordinary difficulties in believing that the Holy Spirit spoke through humans to address human problems in the Bible, and the answer speaks as much to us humans as it did to them. Invariably the reader believes that the Holy Spirit influenced a first century man trying to deal with first century problems, and a delicate work of extrication is needed before ancient texts can be adapted to turn-of-the-millennium concerns.

Martin shifted his position slightly, felt thirsty, almost decided to get

up and get a glass of water, then decided to continue reading. He turned a few pages in order to get into the real meat of the introduction, and resumed reading:

...is another example of this dark pattern.

In an abstracted sense, what occurs is as follows:

1. Scholars implicitly recognize that some passages in the Bible are less than congenial to whatever axe they're grinding.
2. They make a massive search, and subject all of the offending passages to a meticulous examination, an examination much more meticulous than orthodox scholars ever really need when they're trying to understand something.
3. In parallel, there is an exhaustive search of a passage's historical-cultural context. This search dredges up a certain kind of detail—in less flattering terms, it creates disinformation.
4. No matter what the passage says, no matter who's examining it, this story always has the same ending. It turns out that the passage in fact means something radically different from what it appears to mean, and in fact does not contradict the scholar at all.

This dark pattern has devastating effect on people from the reader's culture. They tend to believe that culture has almost any influence it is claimed to; in that regard, they are very gullible. It is almost unheard-of for someone to say, "I'm sorry, no; cultures can make people do a lot of things, but I don't believe a culture could have *that* influence."

It also creates a dangerous belief which is never spoken in so many words: "If a passage in the Bible appears to contradict what we believe today, that is because we do not adequately understand its cultural context."

Martin coughed. He closed the commentary slowly, reverently placed it on the table, and took a walk around the block to think.

Inside him was turmoil. It was like being at an illusionist show,

where impossible things happened. He recalled his freshman year of college, when his best friend Chaplain was a student from Liberia, and come winter, Chaplain was not only seared by cold, but looked betrayed as the icy ground became a traitor beneath his feet. Chaplain learned to keep his balance, but it was slow, and Martin could read the pain off Chaplain's face. How long would it take? He recalled the shopkeeper's words about returning the commentary, and banished them from his mind.

Martin stepped into his house and decided to have no more distractions. He wanted to begin reading commentary, now. He opened the book on the table and sat erect in his chair:

Genesis

- 1:1 In the beginning God created the heavens and the earth.
1:2 The earth was without form and void, and darkness was upon the face of the deep; and the Spirit of God was moving over the face of the waters.
1:3 And God said, "Let there be light"; and there was light.

The reader is now thinking about evolution. He is wondering whether Genesis 1 is right, and evolution is simply wrong, or whether evolution is right, and Genesis 1 is a myth that may be inspiring enough but does not actually tell how the world was created.

All of this is because of a culture phenomenally influenced by scientism and science. The theory of evolution is an attempt to map out, in terms appropriate to scientific dialogue, just what organisms occurred, when, and what mechanism led there to be new kinds of organisms that did not exist before. Therefore, nearly all Evangelicals assumed, Genesis 1 must be the Christian substitute for evolution. Its purpose must also be to map out what occurred when, to provide the same sort of mechanism. In short, if Genesis 1 is true, then it must be trying to answer the same question as evolution, only answering it differently.

Darwinian evolution is not a true answer to the question, "Why

is there life as we know it?" Evolution is on philosophical grounds *not* a true answer to that question, because it is not an answer to that question at all. Even if it is true, evolution is only an answer to the question, "*How* is there life as we know it?" If someone asks, "Why is there this life that we see?" and someone answers, "Evolution," it is like someone saying, "Why is the kitchen light on?" and someone else answering, "Because the switch is in the on position, thereby closing the electrical circuit and allowing current to flow through the bulb, which grows hot and produces light."

Where the reader only sees one question, an ancient reader saw at least two other questions that are invisible to the present reader. As well as the question of "How?" that evolution addresses, there is the question of "Why?" and "What function does it serve?" These two questions are very important, and are not even considered when people are only trying to work out the antagonism between creationism and evolutionism.

Martin took a deep breath. Was the text advocating a six-day creationism? That was hard to tell. He felt uncomfortable, in a much deeper way than if Bible-thumpers were preaching to him that evolutionists would burn in Hell.

He decided to see what it would have to say about a problem passage. He flipped to Ephesians 5:

- 5:21 Be subject to one another out of reverence for Christ.
- 5:22 Wives, be subject to your husbands, as to the Lord.
- 5:23 For the husband is the head of the wife as Christ is the head of the church, his body, and is himself its Savior.
- 5:24 As the church is subject to Christ, so let wives also be subject in everything to their husbands.
- 5:25 Husbands, love your wives, as Christ loved the church and gave himself up for her,
- 5:26 that he might sanctify her, having cleansed her by the washing of water with the word,
- 5:27 that he might present the church to himself in splendor, without spot or wrinkle or any such thing, that she might be holy

and without blemish.

5:28 Even so husbands should love their wives as their own bodies. He who loves his wife loves himself.

5:29 For no man ever hates his own flesh, but nourishes and cherishes it, as Christ does the church,

5:30 because we are members of his body.

5:31 "For this reason a man shall leave his father and mother and be joined to his wife, and the two shall become one flesh."

5:32 This mystery is a profound one, and I am saying that it refers to Christ and the church;

5:33 however, let each one of you love his wife as himself, and let the wife see that she respects her husband.

The reader is at this point pondering what to do with this problem passage. At the moment, he sees three major options: first, to explain it away so it doesn't actually give husbands authority; second, to chalk it up to misogynist Paul trying to rescind Jesus's progressive liberality; and third, to take this as an example of why the Bible can't really be trusted.

To explain why the reader perceives himself caught in this unfortunate choice, it is necessary to explain a powerful cultural force, one whose effect cannot be ignored: feminism. Feminism has such a powerful effect among the educated in his culture that the question one must ask of the reader is not "Is he a feminist?" but "What kind of feminist is he, and to what degree?"

Feminism flows out of a belief that it's a wonderful privilege to be a man, but it is tragic to be a woman. Like Christianity, feminism recognizes the value of lifelong penitence, even the purification that can come through guilt. It teaches men to repent in guilt of being men, and women to likewise repent of being women. The beatific vision in feminism is a condition of sexlessness, which feminists call 'androgyny'.

Martin stopped. "What kind of moron wrote this? Am I actually supposed to believe it?" Then he continued reading:

This is why feminism believes that everything which has

THIS IS WHY FEMINISM BELIEVES THAT EVERYTHING WHICH HAS belonged to men is a privilege which must be shared with women, and everything that has belonged to women is a burden which men must also shoulder. And so naturally, when Paul asserts a husband's authority, the feminist sees nothing but a privilege unfairly hoarded by men.

Martin's skin began to feel clammy.

The authority asserted here is not a domineering authority that uses power to serve oneself. Nowhere in the Bible does Paul tell husbands how to dominate their wives. Instead he follows Jesus's model of authority, one in which leadership is a form of servanthood. Paul doesn't just assume this; he explicitly tells the reader, "Husbands, love your wives, as Christ loved the church and gave himself up for her." The sigil of male headship and authority is not a crown of gold, but a crown of thorns.

Martin was beginning to wish that the commentary had said, "The Bible is misogynistic, and that's good!" He was beginning to feel a nagging doubt that what he called problem passages were in fact perfectly good passages that didn't look attractive if you had a problem interpretation. What was that remark in a theological debate that had gotten so much under his skin? He almost wanted not to remember it, and then—"Most of the time, when people say they simply cannot understand a particular passage of Scripture, *they understand the passage perfectly well*. What they don't understand is how to explain it away so it doesn't contradict them."

He paced back and forth, and after a time began to think, "The sword can't always cut against me, can it? I know some gay rights activists who believe that the Bible's prohibition of homosexual acts is nothing but taboo. Maybe the commentary on Romans will give me something else to answer them with." He opened the book again:

1:26 For this reason God gave them up to dishonorable passions. Their women exchanged natural relations for unnatural,

1:27 and the men likewise gave up natural relations with women

and were consumed with passion for one another, men committing shameless acts with men and receiving in their own persons the due penalty for their error.

The concept of 'taboo' in the reader's culture needs some explanation. When a person says, "That's taboo," what's being said is that there is an unthinking, irrational prejudice against it: one must not go against the prejudice because then people will be upset, but in some sense to call a restriction a taboo is de facto to show it unreasonable.

The term comes from Polynesia and other South Pacific islands, where it is used when people recognize there is a line which it is wiser not to cross. Thomas Aquinas said, "The peasant who does not murder because the law of God is deep in his bones is greater than the theologian who can derive, 'Thou shalt not kill' from first principles."

A taboo is a restriction so deep that most people cannot offer a ready explanation. A few can; apologists and moral philosophers make a point of being able to explain the rules. For most people, though, they know what is right and what is wrong, and it is so deeply a part of them that they cannot, like an apologist, start reasoning with first principles and say an hour and a half later, "and this is why homosexual acts are wrong."

What goes with the term 'taboo' is an assumption that if you can't articulate your reasons on the drop of a hat, that must mean that you don't have any good reasons, and are acting only from benighted prejudice. Paradoxically, the term 'taboo' is itself a taboo: there is a taboo against holding other taboos, and this one is less praiseworthy than other taboos...

Martin walked away and sat in another chair, a high wooden stool. What was it that he had been thinking about before going to buy the commentary? A usability study had been done on his website, and he needed to think about the results. Designing advertising material was different from other areas of the web; the focus was not just on a smooth

user experience but also something that would grab attention, even from a hostile audience. Those two goals were inherently contradictory, like mixing oil and water. His mind began to wander; he thought about the drive to buy the commentary, and began to daydream about a beautiful woman clad only in—

What did the commentary have to say about lust? Jesus said it was equivalent to adultery; the commentary probably went further and made it unforgiveable. He tried to think about work, but an almost morbid curiosity filled him. Finally, he looked up the Sermon on the Mount, and opened to Matthew:

5:27 "You have heard that it was said, 'You shall not commit adultery.'

5:28 But I say to you that every one who looks at a woman lustfully has already committed adultery with her in his heart.

There is a principle here that was once assumed and now requires some explanation. Jesus condemned lust because it was doing in the heart what was sinful to do in the hands. There is a principle that is forgotten in centuries of people saying, "I can do whatever I want as long as it doesn't harm you," or to speak more precisely, "I can do whatever I want as long as I don't see how it harms you." Suddenly purity was no longer a matter of the heart and hands, but a matter of the hands alone. Where captains in a fleet of ships once tried both to avoid collisions and to keep shipshape inside, now captains believe that it's OK to ignore mechanical problems inside as long as you try not to hit other ships—and if you steer the wheel as hard as you can and your ship still collides with another, you're not to blame. Heinrich Heine wrote:

Should ever that taming talisman break—the Cross—then will come roaring back the wild madness of the ancient warriors, with all their insane, Berserker rage, of whom our Nordic poets speak and sing. That talisman is now already crumbling, and the day is not far off when it shall break apart entirely. On that day, the old stone gods will rise from their long forgotten wreckage and rub from their eyes the dust of a thousand years' sleep. At

long last leaping to life, Thor with his giant hammer will crush the gothic cathedrals. And laugh not at my forebodings, the advice of a dreamer who warns you away from the . . .

Naturphilosophen. No, laugh not at the visionary who knows that in the realm of phenomena comes soon the revolution that has already taken place in the realm of spirit. For thought goes before deed as lightning before thunder. There will be played in Germany a play compared to which the French Revolution was but an innocent idyll.

Heinrich Heine was a German Jewish poet who lived a century before Thor's hammer would crush six million of his kinsmen.

The ancient world knew that thought goes before deed as lightning before thunder. They knew that purity is an affair of the heart as well as the hands. Now there is grudging acknowledgment that lust is wrong, a crumbling acceptance that has little place in the culture's impoverished view, but this acknowledgment is like a tree whose soil is taken away. For one example of what goes with that tree, I would like to look at advertising.

Porn uses enticing pictures of women to arouse sexual lust, and can set a chain of events in motion that leads to rape. Advertising uses enticing pictures of chattels to arouse covetous lust, and exists for the sole reason of setting a chain of events in motion that lead people to waste resources by buying things they don't need. The fruit is less bitter, but the vine is the same. Both operate by arousing impure desires that do not lead to a righteous fulfillment. Both porn and advertising are powerfully unreal, and bite those that embrace them. A man that uses porn will have a warped view of women and be slowly separated from healthy relations. Advertising manipulates people to seek a fulfillment in things that things can never provide: buying one more product can never satisfy that deep craving, any more than looking at one more picture can. Bruce Marshall said, "...the young man who rings at the door of a brothel is unconsciously looking for God." Advertisers know that none of their products give a profound good, nothing like what people search for deep down inside, and so they falsely present products as things that are

transcendent, and bring family togetherness or racial harmony.

It has been asked, "Was the Sabbath made for man, or was man made for the Sabbath?" Now the question should be asked, "Was economic wealth made for man, or was man made for economic wealth?" The resounding answer of advertising is, "Man was made for economic wealth." Every ad that is sent out bears the unspoken message, "You, the customer, exist for me, the corporation."

Martin sat in his chair, completely stunned.

After a long time, he padded off to bed, slept fitfully, and was interrupted by nightmares.

The scenic view only made the drive bleaker. Martin stole guiltily into the shop, and laid the book on the counter. The shopkeeper looked at him, and he at the shopkeeper.

"Didn't you ask who could prefer darkness to light, obscurity to illumination?"

Martin's face was filled with anguish. "How can I live without my darkness?"

Two Decisive Moments

In the name of the Father, and of the Son, and of the Holy Ghost.
Amen.

There is a classic Monty Python "game show": the moderator asks one of the contestants the second question: "In what year did Coventry City last win the English Cup?" The contestant looks at him with a blank stare, and then he opens the question up to the other contestants: "Anyone? In what year did Coventry City last win the English Cup?" And there is dead silence, until the moderator says, "Now, I'm not surprised that none of you got that. It is in fact a trick question. Coventry City has *never* won the English Cup."

I'd like to dig into another trick question: "When was the world created: 13.7 billion years ago, or about six thousand years ago?" The answer in fact is "Neither," but it takes some explaining to get to the point of realizing that the world was created 3:00 PM, March 25, 28 AD.

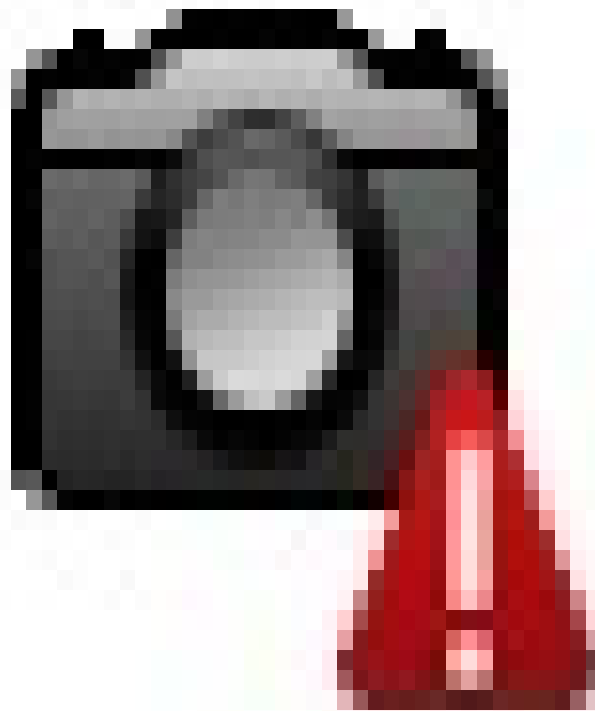
Adam fell and dragged down the whole realm of nature. God had and has every authority to repudiate Adam, to destroy him, but in fact God did something different. He called Noah, Abraham, Moses, and Elijah, and in the fullness of time he didn't just call a prophet; he sent his Son to become a prophet and more.

It's possible to say something that means more than you realize. Caiaphas, the high priest, did this when he said, "It is better that one man be killed than that the whole nation perish." (John 11:50) This also

happened when Pilate sent Christ out, flogged, clothed in a purple robe, and said, "*Behold the man!*"

What does this mean? It means more than Pilate could have possibly dreamed of, and "Adam" means "man": *Behold the man! Behold Adam, but not the Adam who sinned against God and dragged down the Creation in his rebellion, but the second Adam, the new Adam, the last Adam, who obeyed God and exalted the whole Creation in his rising. Behold the man, Adam as he was meant to be. Behold the New Adam who is even now transforming the Old Adam's failure into glory!*

Behold the man! Behold the first-born of the dead. Behold, as in the icon of the Resurrection, the man who descends to reach Adam and Eve and raise them up in his ascent. Behold the man who will enter the realm of the dead and forever crush death's power to keep people down.



An icon of the Resurrection.

*Behold the man and behold the firstborn of many brothers! You may know the great chapter on faith, chapter 11 of the book of Hebrews, and it is with good reason one of the most-loved chapters in the Bible, but it is not the only thing in Hebrews. The book of Hebrews looks at things people were caught up in, from the glory of angels to sacrifices and the Mosaic Law, and underscores how much more the Son excels above them. A little before the passage we read above, we see, "To which of the angels did he ever say, 'You are my son; today I have begotten you?'" (Hebrews 1:5) And yet in John's prologue we read, "To those who received him and believed in his name, he gave the authority to become the children of God." (John 1:9) We also read today, "To which of the angels did he ever say, 'Sit at my right hand until I have made your enemies a footstool under your feet?'" (Hebrews 1:13) And yet Paul encourages us: "The God of peace will shortly crush Satan under your feet," (Romans 16:20) and elsewhere asks bickering Christians, "Do you not know that we will judge angels?" (I Corinthians 6:3) *Behold the man! Behold the firstborn of many brothers, the Son of God who became a man so that men might become the Sons of God. Behold the One who became what we are that we might by grace become what he is. Behold the supreme exemplar of what it means to be Christian.**

Behold the man and behold the first-born of all Creation, through whom and by whom all things were made! Behold the Uncreated Son of God who has entered the Creation and forever transformed what it means to be a creature! Behold the Saviour of the whole Creation, the Victor who will return to Heaven bearing as trophies not merely his transfigured saints but the whole Creation! Behold the One by whom and through whom all things were created! Behold the man!

Pontius Pilate spoke words that were deeper than he could have **possibly** imagined. And Christ continued walking the fateful journey before him, continued walking to the place of the Skull, Golgotha, and finally struggled to breathe, his arms stretched out as far as love would go, and barely gasped out, "It is finished."

Then and there, the entire work of Creation, which we read about from Genesis onwards, was *complete*. There and no other place the world was created, at 3:00 PM, March 25, 28 AD. *Then* the world was created.

That is a decisive moment, but decisive moments are not some kind of special exception to Christian life. Christian history and the Christian spiritual walk alike take their pace from decisive moments. I would like to look at the decisive moment in the Gospel reading.

In that reading, the people who have gathered to listen to Jesus went beyond a "standing room only" crowd to being so packed you couldn't get near the door. Some very faithful friends of a paralytic did the only thing they could have done. They climbed on the roof and started digging through it. I suspect that the homeowner didn't like the idea. But they dug in, and lowered him, hoping this teacher will heal him.

Jesus saw *their* faith and said, "Your sins are forgiven." And people were shocked—there was a very good reason for this! If I have two friends, and one owes the other money, I can't tell the first one, "Your debt is forgiven. It's wiped clean." *That's not my place*. Sin is not a debt, or a crime, or even a disease. *It's worse*. And Christ told a man who owed an infinite debt to God that his slate was wiped clean and his sins were forgiven. And the reason people were saying, "This man blasphemes! Who can forgive sins but God alone?" was that they understood exactly how significant it was for Jesus to say, "Your sins are forgiven." Maybe they failed to recognize Christ as God (it is very rare that anyone but the demons identified him as the Son of God), but they were absolutely right when they said that Jesus was saying something that only God had the authority to say.

They were murmuring, and Christ knew why. So he asked them, "Which is easier: to say, 'Your sins are forgiven,' or to say, 'Arise. Take up your mat and walk.'" Everybody knew the answer, that forgiving sins was an infinitely weightier matter, but Jesus was about to give a lesser demonstration of the exact same authority by which he said, "Your sins are forgiven." He said to the paralytic, "Arise. Take up your mat and walk." And the paralytic did exactly that.

That is authority. That is the authority that commands the blind to gaze on the light of the Transfiguration, the deaf to listen to the song of angels, the mute to sing with God's angels, the lame to dance for joy, and what is greater than all of these, command you and me, sinners, to be freed from our sins.

Great and rare as the restoration of one paralytic may be, everybody knew that that was less important than the forgiveness of his sins. The story of that healing is a decisive moment.

But it's not the only decisive moment, and there is another decisive moment that may be much less rare, much less something we want to write home about, but is profoundly important, especially in Lent. I am talking about repentance.

When the Holy Spirit convicts me of my sin, there are two responses I give, both of which I ought to be ashamed of. The first response is to tell God that he doesn't know what he's talking about. Now of course I am not blunt enough to tell God, "You don't know what you're doing." (Perhaps it would be better if I did.) What I say instead is something like, "I can see where you're coming from, and I can see that you have a point. But I've given it a little thought and I'd like you to consider a suggestion that is much better for everyone involved. Would you consider this consolation prize?" Now again, perhaps it would be better if I were honest enough to simply tell God, "You don't know what you're doing." Not only is it not good that I do that, but it is spurning the grace of God.

When a mother takes a knife or a sharp pair of scissors from a little boy, this is not because the mother wants a pair of scissors and is too lazy or inconsiderate to go get her own pair: her motivation is entirely for the child's welfare. God doesn't need our repentance or our sin. When he commands us through his Spirit to let go of our sin, is this for our sake or for his need? It is entirely for our own benefit, and not something God was lacking, that we are commanded to repent from sin. And this has a deeper implication. If God convicts us from our sin and asks our surrender to him in the unconditional surrender for repentance, then that is how we will be healed from our sin: it is the best medicine chosen by the Great Physician, *and it is out of his mercy that the Great Physician*

refuses all of our consolation prizes that will cut us off from his healing love. Repentance is terrifying at times; it is letting go of the one thing we least want to give over to God, and it is only once we have let go that our eyes are opened and we realize, "I was holding on to a piece of Hell!" The more we understand repentance the more we understand that it is a decisive moment when God is at work.

The second response I give to the Holy Spirit is even more an affront to the decisive *now* in which the Lord meets me. I say, "Well, I think you're right, and I need to repent of it, only now isn't the best time for me. I'd like to deal with it at another time." Here, also, things might be better if I were at least honest enough to acknowledge I was telling God, "Your timing is far from perfect." God lives outside of time, and yet he has all the time there is. There is never reason for him to say with a sheepish grin, "I know this really isn't the best time for you, but I only have two minutes right now, and I'm going to ask for you to deal with this now even though this isn't the best time." When he comes and tells us to repent, now, the reason for that is not that some point later on we may feel more like repenting and that is a better time; the reason is that by the time I am struggling against God's Spirit I have already entered the decisive moment when I can choose either to be cleansed and freed of my sin, or keep on fumbling for the snooze button while God tells me, "Enough sleep! It is time for you to arise!"

Let us repent, in the name of the Father, and of the Son, and of the Holy Ghost. Amen.

The Evolution of a Perspective on Creation and Origins

Adapted from a mailing list post. I've still left it as clunky as when it was first written.

In the interests of providing a fuller picture, and perhaps letting other list members understand *why* I hold a perspective that seems hard to explain in someone who has given thought to the question, I have decided to give an account of how I came to my present position. A serious attempt at representing the cases for and against different perspectives — even the case for my own perspective — is beyond the scope of this letter; I intend to state, without tracing out in detail, my present perspective, but not to give arguments beyond a scant number without which the plot would be diminished. That stated, I *am* attempting, to the best of my ability, to write with the kind of honesty Feynman describes in "Cargo Cult Science" [in his memoirs *Surely You're Joking, Mr. Feynman*]— not a selective account of facts designed to optimize persuasive effect, but (after combing through my memory) as comprehensive an explanation as I can provide without reproducing arguments, one that includes details that will hurt my persuasive impact every bit as much as those that would advance whatever facade I might expect to hold the most compelling influence. I am attempting to place chronological events in chronological order, explicitly noting the exceptions. If there are relevant details ('relevant' from the perspective of any side of the debate, not just my own) that are not reproduced here, it's

because I couldn't find them after looking for them.

My earliest remembered belief, from childhood, was of a six day young-earth creationist view. I read from the Bible, and I think I read some conservative Christian children's material, although I can't remember what; I don't remember it explicitly arguing for a young-earth view so much as assuming it, and warning readers about hostile science teachers when it came to evolution. My father (who holds a doctorate in physics and teaches computer science at Wheaton College) believes in an old earth, but has not (so far as I know) committed to details of theories of the origin of life in a sense that would interest a biologist; in a discussion a year or two ago, I remember him responding to Wheaton's President's perspective that some origins questions are purely exegetical by saying, "Science is a *human* discipline; theology is a *human* discipline." (I would not put things that way exactly, but I am providing it as an example of the situation I grew up in.) I don't specifically remember my mother saying anything about origins questions. The only time during my childhood I can recall a Christian adult trying to influence my thought about origins-related questions was when I looked at my Bible, which had a timeline of different figures and events in the Jewish lineage, with estimated years for different people, and then at the far left had the Creation, the Fall, and some other event (I think the Flood or the Tower of Babel), for which no estimated date was given. Assuming a linear relationship between position on the timeline and time, I extrapolated a date for Creation, and my Sunday School teacher tried to explain to me that I couldn't do that, that that wasn't using the figure properly. I don't know what she believed about origins questions, just that she tried to dissuade me from misreading a timeline. At any rate, my beliefs congealed after I had enough mental maturity to understand the details of the Genesis 1 account, and before I had serious contact with scientific findings or with the Biblical-theological case that the natural order is subject to legitimate exploration and discovery.

Sometime in middle to late childhood — I think before eighth grade, but I'm not positively sure — I read a long *Christianity Today* article about origins questions, following a "four views" format. I remember that theistic evolution was included, and that one of the respondents was

Pattle Pun, a biologist at Wheaton; I have vague, inconclusive rememberances that one perspective was progressive creation, and that one of them might have been six day, young-earth creationism, but I'm not sure on either of the last two accounts. After reading it, my beliefs began to shift. I don't remember exactly what I believed when the process of shifting was going on; to fast forward a bit, I do remember the resting point they came to and stayed for quite a while. It was a theistic evolution account, drawing on quantum uncertainty and chaos theory, and intermittently including a belief in distinctly supernatural punctuations to equilibrium. Ok, end of fast-forward; back to chronological order.

In eighth grade (I was attending Avery Coonley School, a private magnet school for the gifted), the yearlong biology course was taught by Dr. John A. Rhodes, a biologist and the school headmaster, a man for whom I hold fond memories. Early in the course, Dr. Rhodes made a very emphatic point that we should tell people at prospective high schools that we were taught from BSCS Blue, which was widely recognized as *the* best biology text to be taught from (I believe it to have probably been a high school text; math, at least, was broken into one year advanced and two years advanced). I don't have independent confirmation on this claim, and perhaps a teacher who wanted to de-emphasize molecular biology in favor of other branches of biology might have preferred another text, but he was very emphatic that the text was what I would call the biological equivalent of an O'Reilly technical book.

When it came to the beginning of the chapter on evolution, Dr. Rhodes commented that he was always interested in hearing new theories on questions of origins, and I wrote him a letter stating what I believed at the time. He thanked me, and a couple of class periods later told me that he'd enjoyed reading it. I was preparing for a battle of wills, and found nothing of the sort; I doubt if he believed anything similar to what I believed (before or after), but he provided an open atmosphere and encouraged inquiry.

Some time (I have difficulty dating this as well, but it appears to have been after I was first exposed to serious arguments for believing in something besides young-earth creationism, probably after eighth grade biology, and before my beliefs came to a theistic evolution attractor in

high school) I was browsing at the library — not looking for anything specific, just trying to find something interesting and stimulating to read. I found a book from the Creation Research Institute, and read with interest the back cover, which stated that it explained powerful scientific evidence that showed that the world was created in six days, a few thousand years ago. This was *exactly* what I was looking for. I checked it out and started reading it.

I didn't get a quarter of the way through.

I was disgusted by what the book presented as arguments and evidence; however much I might have liked to have something I could claim scientific evidence for my young-earth beliefs, I didn't want it *that* badly. (Reading that book was part of why I had no reservations in putting Creation Science in front of my "If it has 'science' in its name, it probably isn't" list.)

I skipped freshman year, and entered the Illinois Mathematics and Science Academy as a sophomore. (For those of you not familiar with IMSA, it's a high-powered magnet school; a master's degree is required to teach, and several times the senior class has gotten the highest average ACT score in the nation. When I went to Wheaton, I was able without difficulty to start off in 300-400 level courses, and I was puzzled as to why so many people had warned me about college being tougher than high school.) There was a lecture by Dr. Pine (staff scientist; didn't teach any classes) on science and pseudo-science, one that was abrasively naturalistic, and began by saying "It's OK not to be a scientist; George Washington wasn't a scientist," but later parts of which would only make sense under an assumption that science has a monopoly on legitimate inquiry into those questions it concerns itself with (or something equivalent for discussion purposes). His name was a symbol of arrogant scientism even among those who weren't familiar with the scientism/science distinction, and I remember (when talking about the lecture with an acquaintance) my friend commenting that there were a lot of people offended by that lecture. The lecture wasn't focally concerned with origins questions, Dr. Pine having focused more of his attack on things like ESP, but I wanted to include this in the record.

Senior year, we had university biology; it wasn't an AP course in that it wasn't geared towards the AP tests, but it was a college-level course. I don't remember the text for this one, but (under the circumstances) I think it was about as competently taught, by people who knew what they were talking about, as one could reasonably guess. (This was after my belief had settled.)

At Wheaton, my Old Testament class covered a few exegetical theories on interpreting the beginning of Genesis (i.e. the gap theory, which says that the Genesis chronologies are accounts with significant gaps), albeit not in a manner that would be interesting to a biologist; they would be equally compatible (or incompatible) with Darwinian and Lamarckian evolution. I remember in particular the time given to the Ten Plagues in Israel's deliverance from Egypt; massive energy was given to a forced interpretation that would reconcile the Biblical account with an explanation that a materialist could easily swallow (i.e. the water turned to blood was an explosive bloom of some sort of reddish colored micro-organism in the waterways), and I would rather that the teacher have said, "The ten miraculous plagues are too much for me to swallow," than "I will rescue the ten miraculous plagues by explaining how they were ten ordinary disasters that weren't miraculous at all." (Readers may perceive a degree of intellectual dishonesty in my own version of theistic evolution; such an accusation probably has some degree of truth to it, but I will not try to address it here.) This, and the other two classes mentioned below for completeness, did not alter my perspective so far as I remember.

I took an environmental science elective, and the course material made sporadic reference to evolution (for that matter, one video began with a beautiful quotation from a Biblical psalm about the wonder of the natural order), but neither the teacher nor the texts made a serious attempt to address origins questions, being much more concerned with explaining (part of) how the environment works, and how to be a responsible citizen minimizing unnecessary environmental degradation.

The last class I am mentioning for the sake of completeness of record is my philosophy of science class. Evolution was discussed in so far as the history of scientists accepting the theory is interesting to a philosopher of

science; there were no arguments made for or against it, apart from a brief comment in a discussion where one student used the acceptance of Darwinian evolution as an example of a good decision on the part of the scientific community.

To wrap up this part of the discussion, I transferred out of Wheaton for reasons of conscience, and finished up my bachelor's at Calvin, and did a master's in applied mathematics at the University of Illinois. I did not have occasion to revise my beliefs concerning origins questions until some time later, and to properly explain exactly what opened up the question again, I need to give a little more background.

There was one Saturday Night Live where the news announcer said, "Michael Bolton just came out with his new Christmas album. [Pause] Happy birthday, baby Jesus! I hope you like *crap!*"

Being somewhat aloof from pop culture, it took me the longest time to get it through my head that Michael Bolton was *not* a Christian artist. By that point, I had written in my dictionary:

Christian Contemporary Music, *n.* A genre of song designed primarily to impart sound teaching, such as the doctrine that we are sanctified by faith and not by good taste in music.

One thing that has distressed me to no end is that much of today's Christian culture (popular sense, not anthropological sense) is garbage. What Dante and Handel produced is cherished on artistic merits by people openly hostile to their beliefs; the same cannot be said for the contents of John's Christian Bookstore. I don't want to analyze historical causes or implications, but it is something I find to be quite embarrassing — and one of the reasons I spend so much time on writing, namely to be one person who produces Christian art that is not trash.

At any rate, there was one point where I was browsing the web, searching for provoking Christian musings — and wading through one banal, syrupy, intellectually juvenile posting after another. I was quite bored, and kept searching long after I should have given up — and then read an article entitled, "Abortion: A Failure to Communicate", and sat there stunned

more, stunned.

The article made an argument why, from a pro-life perspective, it is not helpful to say "Save the children!", argue that a foetus is a child rather than unwanted tissue, or erect a place called "New Life Adoption Center". The particular argument (or even issue) is not why I was stunned. I was stunned because the article represented an intellectually mature, nuanced, and insightful perspective, and raised points that made sense but which were not at all obvious trivialities. Once I got over being stunned, I poked around and found out a bit more about the site hosting it — an anthology site called Leadership University at www.leaderu.com. In the following days, I looked around and found a number of stimulating articles.

After reading a while — and enjoying it thoroughly — I paid attention to something I had not previously looked at, that the site had a science section. That seemed somewhat strange; I wasn't surprised at sections for humanities disciplines, as thinking Christianly makes a big difference in the humanities, but why science? My Dad shared both faith and enjoyment of heavily mathematical disciplines (math, computer science, physics) with me, but he had never hinted at what e.g. "Christian physics" would mean — nor had anyone else I knew of — so I clicked on the link to find out what on earth the site listed as a distinctively Christian way to think about science.

My estimation of the site dropped by about ten notches when I saw a list of titles attacking Darwinism. So this otherwise serious and intellectually responsible site had stooped to host Creation Science. I left the computer in disgust.

Some time after that, I began to experience quiet, nagging doubts — doubts that I was not being fair to Leadership University or even to those articles by dismissing them (and assessing penalty points) without consideration. I could see no justification for stooping to Creation Science, for trying to rehash a battle that was decided and over, but at the same time, there was no other point at which I had looked at the site and regretted taking the time to read an article. If a friend (whom I had hitherto known to be trustworthy) were to say something I found hard to believe, wouldn't I consider him to have earned the benefit of the doubt?

So I went back to the computer, expecting to read more Creation Research Institute-style materials, and met with yet another surprise.

I expected to see an attack on Darwinism. I hoped (but did not expect) to instead see something that would live up to Leadership University article standards. What I found was an attack on Darwinism that lived up to Leadership University article standards, and it produced a *lot* of cognitive dissonance in me.

Some years before, I might have jumped at an argument that Darwinism was seriously flawed. Not now. Darwinian evolution was a part of my education, and (if I did not go into naturalism) an argument that Darwinism was much more flawed than I had been led to believe, affected me as would an argument that any other major scientific theory was much more flawed than I had been led to believe — it had some very troubling implications. So I looked through several articles, hoping to find a fatal flaw — and the hope waned.

I was not open to resolving the question based on the online articles, but the articles disturbed me enough that I very distinctly believed that there was a question in need of resolution. So, not too much longer, I poked around until I found Philip Johnson's *Darwin on Trial* and, a bit later, Michael Behe's *Darwin's Black Box*, hoping to find justification to persist in my previous belief, but even more hoping to resolve the inner tension between believing (and wanting to believe) one thing, and seeing evidence that appeared to suggest another.

Reading *Darwin on Trial* fleshed out what was sketched in the articles. (*Darwin on Trial* took me an afternoon to read, and I am probably not a fast reader by Megalist standards; *Darwin's Black Box* took me a day.) The articles, at least at Leadership University, do not provide what I would consider a basis to decide; they outline the argument, but the length restriction makes it hard to make an argument without holes. The book, on the other hand, had the room to argue systematically and carefully. Its arguments were sufficient to dislodge me from the resting place I had found, and the best metaphor I can use to describe the subsequent sifting of thoughts is a loss of faith.

In a conservative Catholic family, perhaps pre-Vatican II, a child grows up to believe that if the priests say it, speaking officially, it is true — perhaps there is room for miscommunication and the like, but there is a basic faith that the mouth of a priest is the mouth of an oracle. In a contemporary scientific schooling context, a student is taught to believe that if the science teachers say it, it is a *bona fide* attempt to convey the truth as best understood by the scientific enterprise. There are any number of basic nuances — miscommunication, error, intentional simplification for any of several obvious reasons, the teacher articulating the views of one position in a controversy — but, as with the Catholic family, there is a basic faith (even if it's not put that way, a mistrust of faith and authority being one of the items on the catechism) that the teacher represents the best science can offer, and so (for instance) if evolution is portrayed as an established theory that explains reasonably well everything one would expect it to explain, then that must be true.

It is that faith which I lost.

There is one example that particularly sticks in my mind. I am not going to call it 'typical', with the accompanying implication that I could easily pull half a dozen other examples that serve my point equally well; there are a number of other examples, and this is the one made the most forceful impression on me.

One example that occurred in both my textbooks — as best I recall, they both had photographs to illustrate camouflage effects — concerns pepper moths in England. Before the Industrial Revolution, the majority of pepper moths were white, with a significant minority that were black. Come the Industrial Revolution, when everything was blackened by soot, the proportions shifted, so that the majority of pepper moths were black, with a significant minority that were white. Then, after the Industrial Revolution had run its course and things were no longer covered with soot, the proportions again shifted, so that the majority of pepper moths were white, with a significant minority of black moths. This is given as a supporting example of "evolution".

Johnson does not treat "evolution" as one amorphous mass; he regards the distinction between microevolution and macroevolution as

significant, including that evidence of one is not necessarily evidence of the other. Neither he nor anyone else I've read challenge microevolution (or the existence of natural selection as an influence on what survives — though he suggests that natural selection is a conservative force). What is specifically challenged is macroevolution, and whether natural selection constitutes a generative force that is responsible for the diversity of life now on this planet.

The pepper moth example shows natural selection in action; what it does not show is that natural selection is a creative force that causes new kinds of organisms to appear. If black pepper moths were unknown before the Industrial Revolution, and then (once the smoke started billowing) a mutation (one that hadn't occurred, or at least hadn't survived, before) introduced a black gene into a previously all-white pool, and the new kind of moth started to take over for as long as trees were covered with soot — then this would constitute a small-scale instance of evolution as a generative force. As it is, both kinds of moths existed before, during, and after the Industrial Revolution, in significant numbers — nothing even went extinct (at least in the pepper moth population). This provides evidence of natural selection in some form, but to present it as evidence of "evolution" is presenting evidence of one claim as evidence of two or more distinct claims, at least one of which is not supported by the evidence — a practice that is, at best, sloppy, and at worst, deceitful.

(This one claim, by itself, is not fatal; it would be in principle possible to present a collection of examples so that natural selection, microevolution, and macroevolution all have their corresponding support; I am not presenting it to establish a case so much as to illustrate a picture.)

My disappointment at my teachers' presentation of undue optimism about macroevolution was not nearly as significant as my own disappointment at myself, and my having believed it. Perhaps it would have been easier to merely be angry at my teachers, but I was not angry; my chief disappointment was with myself.

After I had to some extent regained my bearings, I read *Darwin's*

Black Box, which provided one major new concept not addressed by *Darwin on Trial*, and several examples of that concept (irreducible complexity), and started talking about it on IMSA alumni notesfile forums.

What I saw there was, for the most part, shock and outrage that anyone dare question Darwin's truth — most ridiculed what I was saying without providing counter-argument; one person, when I discussed the Cambrian explosion, suggested that it could have been caused by mutagen exposure. Mutagen exposure is a hypothesis I'm willing to entertain (stranger things have happened), but when I started doing some Feynman calculations to show how astronomically low the odds are of mutagen exposure producing Cambrian explosion effects, after first saying, "Suppose I claim to be able to predict lottery numbers, and suppose for the sake of argument you can rule out charlatan trickery on my part. After one success, I have your attention. After two successes, you say, 'What a bizarre coincidence!' Is there any number of successful guesses (subject to one guess per minute and an assumption of my death in fifty years) that will lead you to believe that you may not know how I'm doing it, but it's not luck?" — and he said that at most a dozen would suffice, and then I showed how much lower the chances of raw mutagen exposure producing the Cambrian explosion would be than the chance of successfully guessing twelve consecutive lottery numbers — at which point he backed up and said, "There are some things we can never know."

The one exception was a microbiology graduate student. He read the arguments I drew from the other sources, and commented that I seemed well-read and that the arguments seemed plausible. Part of that is being diplomatic, but I don't think it was diplomatic politeness covering disrespect or distaste — he didn't want to commit to a position without first taking an unhurried investigation of the question (which I didn't want to do either — the web articles didn't convince me of any conclusion besides that I should read the unabridged take on them).

What is my present position? Let me list a few things that I presently hold, subject to revision if and when I encounter further evidence or indications that my past analysis is less valid than I thought:

- Old earth/universe.
- Microevolution as a consistent force in our time and probably at ages past, probably a conservative force.
- Sudden appearance and disappearance of species, such as has not been accounted for in evolutionary theory so far as I know (perhaps acknowledged in punctuated equilibrium, but not accounted for — saying that changes happen off camera in 100,000 year geological eyeblinks, without explaining why, doesn't constitute a valid theory).
- Irreducible complexity in living organisms due to intelligent design, and in many cases not explained by any known plausible evolutionary scenario.

This is not a scientific theory so much as a framework, a partial specification; it represents a move away from naturalistic evolution as the complete answer and does not represent a fully detailed alternative — I think other people should work on that; I just haven't invested in it myself. It is like, after having long believed a story about an event, coming to believe that the story is false — another explanatory story does not automatically spring up, although in a scientific community the rejection of one theory as flawed leads to the appearance of other theories to take its place, perhaps involving a shift in framework — witness the ultraviolet catastrophe. If I were a biologist working on a theory of origins, I would try to take this framework and extend it to the point of being a falsifiable theory — *Darwin's Black Box* at the end addresses some issues towards constructing falsifiable theories, suggesting the sort of questions to ask in the process. There might be material to be mined in cryptanalysis; a codebreaker who sees a pattern is constantly asking whether the pattern represents a step towards cracking the code, or is only fool's gold. The concept of p-values may be relevant.

[Remaining specific point, responding to other post, deleted for privacy concerns.]

-Jonathan

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Why Young Earthers Aren't Completely Crazy

This post was a followup to [The Evolution of a Personal Perspective on Creation and Origins](#), which should be read before this article. It was written for the same mailing list. This post has been edited slightly for clarity and privacy concerns. But I've still left it rather clunky.

When I was talking with some Wheaton science professors about origins questions and Wheaton's hint of an inquisition, in which there are four stated views (two of which are deemed acceptable), and they were complaining about the President thinking that everything fits into four neat pigeonholes: everybody must believe position one, two, three, or four. (So far as I know, *none* of the science faculty believe *any* of those positions — I don't.) Then one of them stated, for the sake of fairness, that Wheaton at least allowed four views, while the media only allowed two: either you're a young earth creationist, or you believe in Darwinian evolution, and that's the end of that. I had hoped that the Megalist at least would be above this misconception, and it was with some sadness that I found this hope disappointed in the posts I've read (I'm offline; most recent post was one about a \$1M donation to a young-earth museum).

[The following paragraph describes a perspective on Thomas Aquinas. This is *not* my own perspective; it is one I am describing in accounting for other people's beliefs.]

I have stated (or, more properly, implied) that young earth

creationism is a marginal position among Evangelical scholars (I will not speak for Catholics or mainline Protestants, beyond to say that I expect them to be less inclined to young earth belief than Evangelicals).

Augustine, who is portrayed by some Evangelicals as the good example of a solid Bible-believing pre-Protestant theologian, as contrasted to Aquinas's dilution of Biblical faith with Aristotelian and humanist doctrine, did not have access to scientific inquiry concerning the age of the universe or the origins of life. His beliefs concerning origins were as far in technical detail from a young-earth story as would be a theistic evolutionary perspective. At Darwin's time, Evangelicals were not generally young-earthers; a young earth perspective gained prominence for reasons to be discussed, but the old earth implied by evolutionary theory was not a surprising claim. I believe in an old earth; Johnson believes in an old earth; Behe believes in an old earth; Kenyon believes in an old earth. For that matter, the Scopes monkey trial's Bryan, who was a member of the American Academy for the Advancement of Sciences, was not a Biblical literalist and did not believe in a young earth.

That stated, I would like to give a fair treatment and (in some sense) explanation of young earth creationism, including its popularity among some devout Christians. This is not, and is not intended as, argument concerning origins questions, and readers who are looking for germane material that will inform considerations of origins questions can safely skip this note. It is intended as painting a fuller and fairer picture, of there being something to these people's beliefs besides a vulgar belligerence towards science.

In the following argument, I will make multiple Biblical references; these references are not here intended as appeal to religious authority, but as historical documents giving insight into how a particular people thought.

Among those cultures that permit eating meat, there can be dietary codes concerning what meat is and is not permitted. The term 'dietary code' is often associated with Judaism, with abstinence from pork holding a symbolic meaning of ethnic and religious identity, but this is neither the only dietary code, nor the only meaning a dietary code can have.

Contemporary American culture has a dietary code, albeit an unwritten one (beyond general health practices, and health code regulations about serving food). To give three examples of these unwritten rules: most Americans will not eat much of anything with a head on it or other visible reminders that the food is in fact the carcass of a slaughtered animal, will not eat much of any of the animals that are used as pets, and will not eat much of anything land-based with an exoskeleton. There are occasional exceptions to these rules — sardines, goldfish swallowing, and chocolate covered ants — but the exceptions are in fact occasional exceptions to general rules.

These dietary restrictions are not thought of consciously, and when an American travelling abroad sees people eating meat in violation of such rules, his first reaction is not likely to be to think about how American he is by abstaining from such food, but more likely disgust that people are eating such sickening food.

The quality of this perspective is representative of the most ancient Jewish attitude towards certain foods. The *Torah* lists a number of animals and tells people that they are to regard these animals as "unclean and detestable", and are not to eat them (and someone who did became temporarily unclean). Uncleanness was not the same as moral defilement, and there were certain (albeit few) contexts (albeit not munching) in which texts reflect a social and religious permission to make oneself unclean. To eat unclean food was something you shouldn't be doing, but it wasn't something that had the particular meaning of treachery to Judaism, moreso than stealing — probably less; the injunction against stealing made the big 10.

In *Judges*, one of the older post-*Torah* books, one that narrates the social and moral chaos before there was a king, the Nazirite Samson eats honey from the carcass of an unclean lion — maybe something a Jew shouldn't be doing in general, but quite particularly something a Nazirite shouldn't be doing at all. This action forms part of the story of a morally flawed, intermittently obedient hero, but it is not interpreted as being particularly goyish, not moreso than the other actions he took that broke God's law.

In Daniel, one of the latter additions to the Jewish canon, three sharp young Jews are brought to the palace of the king and make a big deal of not eating any meat at all, instead of eating the palace's unclean food. On the evidence of the text alone, it is ambiguous whether eating unclean foods has acquired the symbolic meaning of goyishness, or whether it's a matter that these three men were so devout that in a foreign land they would not compromise on even the issue of food.

In IV Maccabees (not canonical to Jews or most Christians, but an ancient Jewish document that sheds light on the community), a Greek persecutor is trying to forcibly convert Jews to Hellenistic life, and inflicts gruesome tortures on Jews who refuse to eat pork. Here abstinence from unclean foods has very clearly become a (perhaps *the*) symbol of Jewish faith, and it holds this crystallized meaning to Jewish martyr and Greek persecutor alike.

The near-total investment of dietary code with symbolic significance was not universal; one Jewish teacher said both "I have come not to abolish but fulfill the *Tanakh*," and "What makes a man unclean is not what goes into him, but what comes out;" his disciples did not perceive any puzzling contradiction, and the movement he ignited from within Judaism is in numerous ways very Jewish to this day, but does not retain the dietary code.

This has conditioned subsequent history; not all Jews today keep the dietary code, but there are some who are atheistic or agnostic and still keep kosher — which is to say that they are making a symbolic act that means much more than just a choice in food, that means an identity that they do not wish to disappear.

The choices of the Jews in IV Maccabees do not exactly represent a claim that temporary ceremonial uncleanness from eating pork is literally a fate worse than death — a claim which is (at very least) hard to justify from the *Torah*. They rather recognized the literal act as the tip of the iceberg — and dug in, full force.

Young earth creationism is not what it appears to be on the surface, namely a mere benighted refusal to open in the light of science. If it is

viewed in isolation, on simply scientific grounds — including the \$1M gift to a young earth museum — it will necessarily appear more than a little looney, as is the choice of being tortured to death instead of eating a few bites of foreign food. *But it's not that at all.* It is a symbolic act, one that is so thoroughly a part of these people that it would not occur to most of them to call it symbolic. They may have chosen the wrong literal point at which to dig in — I believe so, pending scientific support for a young earth besides records of bizarre ways to fool scientific dating techniques — and that is to their discredit. What I am much more hesitant to criticize them on is why they are digging in.

S.J. Gould paints a Pollyana-ish picture of the interaction between science and religion in his claim of non-overlapping magesterial areas — so that no scientific claim need have threatening implications for religion. To give a hint as to why this isn't the case...

Suppose (for the sake of argument) that mathematics is required to hold as axiomatic that pi is equal to $22/7$. It might be possible to pay lip service, claim pi to be $22/7$ in certain circumstances, and otherwise get back to do serious mathematics. If that option were not taken, then the result would be a contradiction, from which anything would be provable (at least in certain fields of mathematics), from which point mathematics as we know it would be dead. Perhaps it might be possible to find some axiomatic revision of geometry that would produce a very different kind of mathematics in which there was something called a circle with a circumference:diameter ratio always equal to exactly 22:7. The point I'm getting at is that holding pi to be $22/7$ might work for some not-seriously-mathematical purposes — you have to use *some* approximation for most numerical calculations — but the change would have far more disruptive implications for mathematics itself than might be obvious to someone looking in from the outside.

Darwinian evolution is not just a theory concerning the origins of life, in the sense of something that has little significant implication to other areas. William B. Provine, historian of science and evolutionary adherent, comments, "prominent evolutionists have joined with equally prominent theologians and religious leaders to sweep under the rug the incompatibilities of evolution and religion." Darwinism is on some

accounts the cutting edge of the sword wielded by naturalism, and when young earthers dig in over the ostensible issue of origins, they are digging in out of concern for much larger issues. I will not here argue the case that Darwinism bears the implications it is believed to, but I will say that when these people assert a young earth, they are standing not only against the claim of an old earth but against the naturalism that hides behind "We're just teaching a well-established scientific theory." and its implication of "This is a neutral claim whose truth does not threaten your beliefs at all."

There was one point when I was talking with an astronomy professor at Wheaton, and he mentioned a student who had been threatened by the old universe perspective of the class (until he explained that students were not required to believe in an old universe, although the class would be taught from that perspective), and I suggested talking on the first day about the grounds on which Darwinian evolution may be challenged — so that the young earth/old earth question is not the fully symbolic question of divine creation versus mindless forces alone, but only the question of whether the universe is thousands or billions of years old. He liked my suggestion.

I have tried to give a sympathetic and respectful account of young earth creationists, not to persuade people that they are correct on the particular point they have chosen to dig in, but to suggest how something besides an insane aversion to listening to science might lie behind their choice. Having stated that, I would also like to state quite specifically that I disagree with their position, and regard it as unfortunate. For those wishing a further account (and something that provides a historical description instead of an analogy designed to convey a basic insight), I would recommend Wheaton College Professor Mark Noll's *The Scandal of the Evangelical Mind*, which traces the reactive movement you have encountered. For historical-cultural reasons Noll traces, Evangelicalism does not always share in the Christian tradition's richer mental life, and among those who do not pursue the life of the mind, young-earth creationism seems a good way to assert God's creation against teachings that life is the meaningless by-product of an uncaring universe. Among those Evangelicals and other Christians who do pursue the life of the

mind, it is quite rare.

For this reason, I would request that, when I bring up what Kenyon, or Johnson, or Behe, has said, and ask what your justifications for dismissing it are, please don't post a rebuttal to six-day, young earth creationism. A comparable response on my part, to back up a statement that evolution is flawed, would be to post an attack on [very passé] Lamarckian evolution and consider myself to have discredited "evolution". A non sequitur of that magnitude, on my part, could possibly destroy any chances I had of being taken seriously. Perhaps I am alone in looking at the question this way, but I want to respect my fellow Megalist members in this discussion, and it is awfully hard for me to maintain that respect when I see posts like some of the traffic in the recent past.

-Jonathan

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"Religion and Science" Is Not Just Intelligent Design vs. Evolution

A rude awakening

Early in one systematic theology PhD course at Fordham, the text assigned as theology opened by saying, "Theologians are scientists, and they are every bit as much scientists as people in the so-called 'hard sciences' like physics." Not content with this striking claim, the author announced that she was going to use "a term from science," *thought experiment*, which was never used to mean a *Gedanken* experiment as in physics, but instead meant: if we have an idea for how a society should run, we have to experimentally try out this thought and live with it for a while, because if we don't, we will never know what would have happened. ("*Stick your neck out! What have you got to lose?*"—"Your head?") The clumsiness in this use of "a term from science" was on par with saying that you are going to use "an expression from American English", namely *rabbit food*, and subsequently use "rabbit food" as obviously a term meaning food made with rabbit meat.

In this one article were already two things that were fingernails on a chalkboard to my ears. Empirical sciences are today's prestige disciplines, like philosophy / theology / law in bygone eras, and the claim to be a science seems to inevitably be *how to mediate prestige to oneself and one's own discipline*. When I had earlier run into claims of, "Anthropologists are scientists, and they are every bit as much scientists

as people in the so-called 'hard sciences,' like physics," I had winced because the claim struck me as not only annoying and untrue, but self-demeaning. But it simply had not occurred to me that theologians would make such a claim, and when they did, I was not only shocked but embarrassed: why should theology, once acclaimed the queen of scholarly disciplines, now seek prestige by parroting the claim to be every-bit-as-much-a-science-as-the-so-called-"hard-sciences"-like-physics (where "so-called" seemed to always be part of the claim, along with the scare quotes around "hard sciences")? To make my point clearer, I drew what was meant to be a shocking analogy: the claim that theologians are "scientists, and every bit as much as people in the so-called 'hard sciences' like physics" was like trying to defend the dignity of being a woman by saying, "Women are male, and they are just as much male as people who can sire a child."

This "physics envy" looks particularly strange next to the medieval Great Chain of Being as it moved from the highest to the lowest: "God, Angels, Man, Animals, Plants, Rocks, Nothing". Theology is the study of God and Man; no discipline is given a more noble field. And however much other disciplines may have "physics envy", no other discipline looks lower than physics, the science that studies Rocks and Nothing. There may be something pathetic about an anthropologist trying to step up on the pecking order by claiming to be "just as much scientists as people in the so-called 'hard sciences' like physics." Yet on the lips of a theologian, it bears a faint hint of a CEO absurdly saying, "CEOs are janitors, and they are every bit as much janitors as the people responsible for cleaning wastebaskets."

Furthermore, the endemic claim I saw to introduce a "term from science" was, so far as I could remember:

- *Rarely if ever used in any correct fashion.*

The *one* exception I can remember being Wolfhart Pannenberg's illustration of a point by talking about fields such as one finds in the study of electricity and magnetism: the non-scientist theologians in the room said they were having real trouble understanding the illustration conceptually, which would make it seem somewhat

dubious as an *illustration* to help get a point across.

- *Always reflect an effort to claim some of science's prestige.*

I remember the "you're being quaint" smiles I got when I suggested that a point that Pannenberg was trying to make by comparing something to a field as defined in physics, seemed in fact to be a point that could have been much better made by a comparison to the Force from *Star Wars*.

Why the patronizing smiles? The job of the example from physics was to mediate prestige as well as to illustrate a concept that could have been better explained without involving a particularly slippery concept from physics.

A first response

Examples of this kind of "science" abounded, and I was perhaps not wise enough to realize that my clumsy attempts to clarify various misrepresentations of science were perhaps not well received because I was stepping on the Dark and Shameful Secret of Not Being Scientific Enough, and reminding them of an inferiority they were trying hard to dodge. And my attempts to explain "Not being a scientist does not make you inferior" seemed to have no soil in which to grow. In an attempt to start an online discussion, I wrote a piece called "Rumor Science":

I really wish the theology students I knew would either know a lot more about science, or a lot less, and I really wouldn't consider "a lot less" to be disappointing.

Let me explain why. When I was working on my master's in math, there was one passage in particular that struck me from Ann Wilson Schaef's *Women's Reality: An Emerging Female System*. Perhaps predictably given my being a mathematician in training, it was a remark about numbers, or rather about how people interact with numbers.

The author broke people down into more or less three groups of people. The first—she mentioned artists—was people that can't count to twenty without taking off their shoes. She didn't quite say **that**, but she emphasized artists and other people where math and numbers simply aren't part of their consciousness. They don't buy into the mystique. And they can say, and sincerely mean, that numbers don't measure everything. They aren't seriously tempted to believe otherwise.

The second group—she mentioned business people—consists of people for whom math works. Even if they're not mathematicians, math works for them and does useful things, and they may say that numbers don't measure anything, but it is well nigh impossible to believe—saying and meaning that numbers don't measure everything is like saying that cars are nice but they can't get you places.

And the third group in the progression? She mentioned scientists, but what she said was that they know math in and out and know it so well that they know its limitations and therefore they can say and mean that numbers don't measure everything. And in the end, even though the "scientist" and the "artist" represent opposite extremes of mathematical competence, they both know there are things numbers can't measure while the second, middle group for mathematical competence are in a position where they expect numbers to do things that numbers can't do.

I was flattered, but I really think it stuck with me for more reasons than just the fact that she included me in one of the "good" groups. There is a sort of *Karate Kid* observation—"Karate is like a road. Know karate, safe. Don't know karate, safe. In the middle, *squash*, like a grape!"—that is relevant to theology and science. It has to do with, among other things, Gödel's Incompleteness Theorem, the question of evolution, and the like (perhaps I should mention the second law of thermodynamics). My point in this is not that there is an obligation to "know karate", that theologians need to earn degrees in the sciences before they are qualified to work as theologians, but that there is something perfectly respectable about "don't know karate."

I'd like to start by talking about Gödel's Incompleteness Theorem. Now a lot of people have heard about Gödel's Incompleteness Theorem. Not many major mathematical theorems have had a Pulitzer prize-winning book written around them (and by the way, *Gödel, Escher, Bach* has been one of my favorite books). Nor do many theorems get summarized in Newsweek as an important theorem which demonstrates that mathematical "proofs" are not certain, but mathematical knowledge is as relative as any other knowledge.

Which is a crass error. The theological equivalent would be to say that Karl Barth's unflattering remarks about "religion" are anti-Christian, or that liberation theology's preferential option for the

poor means that special concern for the poor is optional and to be dealt with according to personal preference. And saying that about liberation theology is a theological "squash like a grape," because it is better to not know liberation theology and know you don't know than believe that you understand liberation theology and "know" that the word "option" implies "optional." **It's not what you don't know that hurts you, but what you know that ain't so.**

For the record, what Gödel's Incompleteness Theorem means is that for a certain branch of mathematics, there are things that can be neither proven nor disproven—which made his theorem a shocker when there was a Tower of Babel effort to prove or disprove pretty much anything. It proves that some things can never be proven within certain systems. And it has other implications. But it does *not* mean that things that are proven in mathematics are uncertain, or that mathematical knowledge is relative. It says you can't prove everything a mathematician would want to prove. But there are still lots and lots and lots of interesting things that can be proven, and Gödel's Incompleteness Theorem does not touch these proofs, nor does it mean that mathematical knowledge is merely relative in humanities fashion.

And I'd like to mention what happens when I mention Gödel's **Completeness** Theorem:

Dead silence.

The same great mathematical logician proved another theorem, which does not have a Pulitzer prize winning book, which says that in one other branch of mathematics, besides the branch that Gödel's Incompleteness Theorem speaks to, you can have pretty much what Gödel's Incompleteness Theorem says you can't have in the other branch. In other words, you can—mechanically, for that matter, which is a big mathematical achievement—either prove or disprove every single statement. I'm not sure it's as important as Gödel's Incompleteness Theorem, but it's a major theorem from the same mathematician and no one's heard of it.

There would seem to be obvious non-mathematical reasons for why people would want to be informed about the first theorem and not want to mention the second. I consider it telling (about non-mathematical culture). I know it may be considered a mark of sophistication to mention Gödel's Incompleteness Theorem and share how it's informed your epistemology. But it hasn't informed my epistemology and I really can't tell how my theology would be different if I hadn't heard of it. And my understanding is that other mathematicians tend not to have the highest view of people who are trying to take account of scientific discoveries that an educated person "should" know. There are other reasons for this, including goofy apologetics that make the famous theorem a proof for God. But I at least would rather talk with someone who simply hadn't heard of the theorem than a theologian who had tried to make a "responsible" effort to learn from the discovery.

And my main example is one I'm less sure how to comment on, and not only because I know less biology than math. There was one almost flippant moment in England when the curate asked if anybody had questions about the upcoming Student Evolution conference that everybody was being urged to attend. I asked, "Is this 'Student Evolution' more of a gradual process, or more a matter of 'punk eek'?" (That question brought down the house.)

Punctuated equilibrium, irreverently abbreviated 'punk eek', is a very interesting modification of Darwinian theory. Darwinian *evolution* in its early forms posits and implies a gradual process of very slow changes—almost constant over very long ("geological") time frames. And that is a beautiful theory that flatly contracts almost all known data.

As explained by my Illinois Mathematics and Science Academy biology teacher, "Evolution is like baseball. It has long stretches of boring time interrupted by brief periods of intense excitement." That's punk eek in a nutshell, and what interests me most is that it's the mirror image of saying "God created the world—through evolution!" It says, "Evolution occurred—through punctuated equilibrium!"

That's not the only problem; evolution appears to be, in Kuhnian terms (Structure of Scientific Revolutions), a theory "in crisis", which is the Kuhnian term for when a scientific theory is having serious difficulties accounting for currently given data and may well be on its way out the door. There are several ways people are trying to cope with this—preserving some semblance of a materialist explanation; there was the same kind of resistance going on before science acknowledged the Big Bang, because scientists who want a universe without cause and without beginning or creator heard something that sounded too much like "Let there be light!" They're very interesting, and intellectually dishonest.

Now I need to clarify; people seem to think you have to either be a young earth creationist or else admit evolution of some stripe. I believe in 13 billion years as the rough age of the universe, not six thousand years; I also believe in natural selection and something called "micro-evolution." (By the way, JPII's "more than a hypothesis" was in the original French "*plus qu'un hypothèse*", alternately translatable as "more than one hypothesis", and the official Vatican translation takes this reading. One can say that micro-evolution is one of the hypothesis gathered under the heading of evolution.)

I wince when I see theologians trying their dutiful best to work out an obligation to take evolution into account as a proven fact: squash, like a grape. It's not just that science doesn't trade in proof and evolution is being treated like a revelation, as if a Pope had consulted the Pontifical Academy of the Sciences and canonized *The Origin of the Species* as a book of the Bible. Or maybe that's putting it too strongly. It would also be strong language to say that many theologians are adopting a carefully critical attitude to classic Church claims and part of their being critical means placing an embarrassingly blind faith in evolution. But that's truer than I'd want to admit.

What about the second law of thermodynamics?

I don't know what the first and third laws of thermodynamics

say, and I can't say that I'm missing anything. I don't feel obligated to make the second law, which I am familiar with, a feature of my theology, but if I did, I would try to understand the first and third laws of thermodynamics, and treat it as physics in which those three laws and presumably other things fit into a system that needs to be treated as a whole. I don't know how I would incorporate that in my theology, but I'm supposing for the sake of argument that I would. I would rather avoid treating it the way people usually seem to treat it when they treat that as one of the things that educated people "should" know.

I guess that my point in all of this is that some people think there's a duty to know science and be scientific in theology, but this is a duty better shirked. My theology is—or I would like it to be—closer to that of someone who doesn't understand science, period, than that of people who try to improve their theology by incorporating what they can grasp of difficult scientific concepts that the scientists themselves learned with difficulty.

Rumor science is worse than no science, and an ascientific theology is not a handicap. When I say that I would rather see theologians know either much more or much less science, I'm not hoping that theologians will therefore get scientific degrees. The chief merit for a theologian to know science is that it can be a source of liberation that frees people from thinking "We live in a scientific age so it would be better for theology to be scientific." I'm not sure I would be able to question that assumption if I knew much less science. *But what I believe that buys me is not a better theology than someone scientifically innocent but freedom from the perceived need to "take science into account" in my theology so I can do the same kind of theology as someone scientifically innocent.*

I'm not as sure what to say about ecological theology; I wrote [Hymn to the Creator of Heaven and Earth](#) at without scientific reference that I remember, and I believe there are other human ways of knowing Creation besides science. But an ecological theologian who draws on scientific studies is not trying to honor a duty to understand things an educated person should know, but pursuing

something materially relevant. Science has some place; religion and science boundary issues are legitimate, and I don't know I can dissuade people who think it's progressive to try to make a scientific theology—although I really wish people with that interest would get letters after their name from a science discipline, or some other form of genuinely proper scientific credentials appropriate to a genuinely scientific theology.

There are probably other exceptions, and science is interesting. But there is no obligation to go from safely on one side of the road to a position in the middle because it is "closer" to a proper understanding of science. Perhaps liberation theologians want people to understand their cause, but it is better not to pretend to know liberation theology than to approach it in a way that leaves you "knowing" that the preferential option is optional. *It isn't what you know that hurts you, but what you know that ain't so*—and rumor science, with its accepted list of important scientific knowledge that scholars need to take into account, is one way to learn from what ain't so.

Science is the prestige discipline(s) today; you see psychology wishing for its Newton to lead it into the promised land of being a science in the fullest sense of the term. You don't see psychology pining for a Shakespeare to lead it into the promised land of being a humanity in the fullest sense of the term. And the social disciplines—I intentionally do not say social **sciences** because they are legitimate academic disciplines but not sciences—are constantly insisting that their members are scientists, but *the claim that theologians are scientists annoys me as a scientist and almost offends me as a theologian*. It should be offensive for much the same reason that it should be offensive to insist on female dignity by claiming that women are really male, and that they are just as much male as people who can sire a child.

It would be an interesting theological work to analyze today's cultural assumptions surrounding science, which are quite important and not dictated by scientific knowledge itself, and then come to almost the same freedom as someone innocent of science.

"My theology," *ewwww*. (While I was at it, why didn't I discuss plans for my own private sun and moon? I'm *not* proud of proudly discussing "my theology".) I know the text has a wart or two.

But the piece contains a suggestion: "rumor science" may be a red flag to a real problem in the place we give science.

Pondering Einstein, or at least dropping his name

That work left out the crowning jewel of scientific theories to ponder in "rumor science": Einstein's "theory of relativity." Some time later, in my science fiction short story / Socratic dialogue, [The Steel Orb](#), I wrote in fiction something that picked up what I had left out:

Art sat back. "I'd be surprised if you're not a real scientist. I imagine that in your world you know things that our scientists will not know for centuries."

Oinos sat back and sat still for a time, closing his eyes. Then he opened his eyes and said, "What have you learned from science?"

"I've spent a lot of time lately, wondering what Einstein's theory of relativity means for us today: even the 'hard' sciences are relative, and what 'reality' is, depends greatly on your own perspective. Even in the hardest sciences, it is fundamentally mistaken to be looking for absolute truth."

Oinos leaned forward, paused, and then tapped the table four different places. In front of Art appeared a gridlike object which Art recognized with a start as a scientific calculator like his son's. "Very well. Let me ask you a question. Relative to your frame of reference, an object of one kilogram rest mass is moving away from you at a speed of one tenth the speed of light. What, from your present frame of reference, is its effective mass?"

Art hesitated, and began to sit up.

Oinos said, "If you'd prefer, the table can be set to function as any major brand of calculator you're familiar with. Or would you prefer a computer with Matlab or Mathematica? The remainder of the table's surface can be used to browse the appropriate manuals."

Art shrunk slightly towards his chair.

Oinos said, "I'll give you hints. In the theory of relativity, objects can have an effective mass of above their rest mass, but never below it. Furthermore, most calculations of this type tend to have anything that changes, change by a factor of the inverse of the square root of the quantity: one minus the square of the object's speed divided by the square of the speed of light. Do you need me to explain the buttons on the calculator?"

Art shrunk into his chair. "I don't know all of those technical details, but I have spent a lot of time thinking about relativity."

Oinos said, "If you are unable to answer that question before I started dropping hints, let alone after I gave hints, you should not pose as having contemplated what relativity means for us today. I'm not trying to humiliate you. But the first question I asked is the kind of question a teacher would put on a quiz to see if students were awake and not playing video games for most of the first lecture. I know it's fashionable in your world to drop Einstein's name as someone you have deeply pondered. It is also extraordinarily silly. I have noticed that scientists who have a good understanding of relativity often work without presenting themselves as having these deep ponderings about what Einstein means for them today. Trying to deeply ponder Einstein without learning even the basics of relativistic physics is like trying to write the next Nobel prize-winning German novel without being bothered to learn even the most rudimentary German vocabulary and grammar."

"But don't you think that relativity makes a big difference?"

"On a poetic level, I think it is an interesting development in your world's history for a breakthrough in science, Einstein's theory of relativity, to say that what is absolute is not time, but light. Space and time bend before light. There is a poetic beauty to Einstein making an unprecedented absolute out of light. But let us leave poetic appreciation of Einstein's theory aside.

"You might be interested to know that the differences predicted by Einstein's theory of relativity are so minute that decades passed

by Einstein's theory of relativity are so minute that decades passed between Einstein making the theory of relativity and people being able to use a sensitive enough clock to measure the microscopically small difference of the so-called 'twins paradox' by bringing an atomic clock on an airplane. The answer to the problem I gave you is that for a tenth the speed of light—which is faster than you can imagine, and well over a thousand times the top speed of the fastest supersonic vehicle your world will ever make—is one half of one percent. It's a disappointingly small increase for a rather astounding speed. If the supersonic Skylon is ever built, would you care to guess the increase in effective mass as it travels at an astounding Mach 5.5?"

"Um, I don't know..."

"Can you guess? Half its mass? The mass of a car? Or just the mass of a normal-sized adult?"

"Is this a trick question? Fifty pounds?"

"The effective mass increases above the rest mass, for that massive vehicle running at about five times the speed of sound and almost twice the top speed of the SR-71 Blackbird, is something like the mass of a mosquito."

"A *mosquito*? You're joking, right?"

"No. It's an underwhelming, *microscopic* difference for what relativity says when the rumor mill has it that Einstein taught us that hard sciences are as fuzzy as anything else... or that perhaps, in Star Wars terms, 'Luke, you're going to find that many of the truths we cling to depend greatly on your own point of view.' Under Einstein, you will in fact **not** find that many of the observations that we cling to, depend greatly on your own frame of reference. You have to be doing something pretty exotic to have relativity make any measurable difference from the older physics at all."

"Rumor science": The tip of an iceberg?

But I would like to get on to something that is of far greater concern than "rumor science" as it treats Gödel's Incompleteness Theorem, the second law of thermodynamics, relativity, evolution, and so on. If the only problem was making a bit of a hash of some scientific theories, that would be one thing. But "rumor science" may be the tip of an iceberg, a telling clue that something may be seriously amiss in how theology has been relating to science. There is another, far more serious boundary issue.

There is something about the nature of academic theology today that may become clearer if we ask questions about the nature of knowledge and line up academic theology with Orthodoxy on the one hand and modern science on the other. The table below lists a few questions connected with knowledge, and then a comparison between Orthodox Christianity, academic theology, and modern science in their own columns:

Question	Orthodox Christianity	Academic Theology	Modern Science
<i>What is knowledge like?</i>	"Adam knew Eve..." The primary word in the Old and New Testaments for sexual union is in fact 'know', and this is a significant clue about the intimate nature of knowledge. Knowledge is, at its core, the knowledge that drinks. It connects at a deepest level, and is cognate to how Orthodox say	Knowledge is <i>critical</i> , meaning <i>detached</i> : the privileged position is of the outsider who stands clear of a situation and looks into a window. The devout believer enjoys no real advantage in grasping his religion compared to the methodical	You can't know how stars age or the limitations of the ideal gas law from direct personal experience. Science stems from a rationalism cognate to the Enlightenment, and even if one rebels against the Enlightenment,

to how Orthodox say of the Holy Mysteries, "We have seen the true Light!": to receive the Eucharist is to know.

observer who remains detached —and the ordinary believer may be at a marked disadvantage.

it's awfully hard to know quarks and leptons solely by the intimacy of personal experience.

This may not be part of the standard Western picture, but the Orthodox, non-materialist

understanding of mind holds that there is a sort of "spiritual eye" which knows and which grasps spiritual realities as overflow to its central purpose of worshiping God.

The center of gravity for knowing is this spiritual eye, and it is the center of a whole and integrated person. Logical and other "discursive" reasoning may have a place, but the seat of this kind of reasoning is a moon next to the light of the sun which is the spiritual eye, the *nous*.

Good scholarship comes from putting all other aspects of the person in their place and enthroning the part of us that reasons logically and almost putting the logic bit on steroids.

Continental philosophy may rebel against this, but it rebels after starting from this point.

We have a slightly more rigorous use of primarily logical reasoning and a subject domain that allows this reasoning to shine.

What aspect of yourself do you know with?

They should train

They should train students to

What should teachers cultivate in their students? Teachers should induce students into *discipleship* and should be exemplary disciples themselves. students who will not be content with their teachers' interpretations but push past to their own takes on the matter. develop experiments and theories to carefully challenge the "present working picture" in their field.

What is tradition, and how does your tradition relate to knowing? One may be not so much *under Tradition as in Tradition*: Tradition is like one's culture or language, if a culture and language breathed on by the Holy Spirit of God. Though the matrix of Tradition need not be viewed with legalistic fundamentalism, it is missing something important to fail to love and revere Tradition as something of a Something of the attitude is captured in what followed the telling of an anecdote about a New Testament Greek class where the professor had difficulties telling how to read a short text, until a classics student looked and suggested that the difficulty would evaporate if the text were read with a different set of accents from what scholars traditionally assigned it. The Greek professor's response ("Accents are not inspired!") was presented by the academic theologian As Nobel prize-winning physicist Richard Feynman observed, "You get to be part of the establishment by blowing up part of the establishment."

mother.

theologian
retelling this story

as full warrant to
suggest that
scholars should
not view
themselves as
bound by *tradition*
with its blind
spots.

*How much
emphasis
do you
place on
creativity?*

It reflects some
degree of
fundamental
confusion to
measure the value of
what someone says
by how original it is.
That which is true is
not original, and that
which is original is
not true. Perhaps
people may uncover
new layers of
meaning, but to
measure someone by
how many ideas he
can claim as "mine"
is a strange measure.

Publish something
original, or perish.
Better to say
something original
but not true than
not have any ideas
to claim as "mine."
If need be,
rehabilitate Arius
or Nestorius. (Or,
if you are
Orthodox, meet
current fashions
halfway and show
that St. Augustine
need not be a
whipping boy.)

Continue to push
the envelope. Are
you an
experimental
physicist? If you
cannot observe
anything new by
the layman's
means of
observation,
pioneer new
equipment or a
clever experiment
to push the
envelope of what
can be observed.
Publish
something
original or perish.

There is a very real
sense of empiricism,
albeit a sense that
has very little
directly to do with
empirical science.
Knowledge is what

~~Theologians are
just as empirical as
physicists, whether~~

As much as
theology's
empiricism is the
empiricism of a
knowledge of the
"spiritual eye" and
the whole person,
our empiricism is

Where does your discipline place its empiricism?

you know through the "spiritual eye" and it is a knowledge that can only be realized through direct participation. An "idle word" may be a word of that which you do not have this knowledge of, and this sin would appear to be foundational to the empiricism of science. We really do have an empiricism, but it might be better not to engender pointless confusion by claiming to be empirical when the empiricism known to the academy is pre-eminently that of empirical science, whether it is either actual or aspiring science.

~~physicists, whether or not they know basic statistics.~~ We have such quasi-scientific empiricism as can be had for the human and divine domain we cover; there is a great deal of diversity, and some of us do not place much emphasis on the empiricism of science, but some of us have enough of scientific empiricism to do history work that stands its ground when judged by secular history's standards.

an empiricism of detached, careful, methodical, reasoned investigation—the investigation of the reasoning faculty on steroids. Our science exhibits professionalism and a particular vision of intellectual virtue. Our empiricism corresponds to this vision, and no one has pushed this empiricism of the reasoning faculty further, and the unique technology founded on science is a testament to how far we have pushed this kind of empiricism.

When they are lined up, academic theology appears to have a great many continuities with science and a real disconnect with Orthodox Christianity. Could academic theologians feel an inferiority complex about Not Being Scientific Enough? Absolutely. But the actual problem may be that they are entirely *too* scientific. I am less concerned that their theology is not sufficiently scientific than that it is not sufficiently *theological*.

Origins questions: can we dig deeper?

It is along those lines that I have taken something of the track of "join the enemy's camp to show its weaknesses from within" in exposing the blind spots of Darwinism, for instance. In the theologically driven short story [The Commentary](#), the issue is not really whether Darwinism is correct at all. The question is not whether we should be content with Darwinian answers, but whether we should be content with Darwinian *questions*.

Martin stepped into his house and decided to have no more distractions. He wanted to begin reading commentary, now. He opened the book on the table and sat erect in his chair:

Genesis

1:1 In the beginning God created the heavens and the earth.

1:2 The earth was without form and void, and darkness was upon the face of the deep; and the Spirit of God was moving over the face of the waters.

1:3 And God said, "Let there be light"; and there was light.

The reader is now thinking about evolution. He is wondering whether Genesis 1 is right, and evolution is simply wrong, or whether evolution is right, and Genesis 1 is a myth that may be inspiring enough but does not actually tell how the world was created.

All of this is because of a culture phenomenally influenced by scientism and science. The theory of evolution is an attempt to map out, in terms appropriate to scientific dialogue, just what organisms occurred, when, and what mechanism led there to be new kinds of organisms that did not exist before. Therefore, nearly all Evangelicals assumed, Genesis 1 must be the Christian substitute for evolution. Its purpose must also be to map out what occurred when, to provide the same sort of mechanism. In

short, if Genesis 1 is true, then it must be trying to answer the same question as evolution, only answering it differently.

Darwinian evolution is not a true answer to the question, "Why is there life as we know it?" Evolution is on philosophical grounds *not* a true answer to that question, because it is not an answer to that question at all. Even if it is true, evolution is only an answer to the question, "*How* is there life as we know it?" If someone asks, "Why is there this life that we see?" and someone answers, "Evolution," it is like someone saying, "Why is the kitchen light on?" and someone else answering, "Because the switch is in the on position, thereby closing the electrical circuit and allowing current to flow through the bulb, which grows hot and produces light."

Where the reader only sees one question, an ancient reader saw at least two other questions that are invisible to the present reader. As well as the question of "How?" that evolution addresses, there is the question of "Why?" and "What function does it serve?" These two questions are very important, and are not even considered when people are only trying to work out the antagonism between creationism and evolutionism.

Martin took a deep breath. Was the text advocating a six-day creationism? That was hard to tell. He felt uncomfortable, in a much deeper way than if Bible-thumpers were preaching to him that evolutionists would burn in Hell.

There is a hint here of why some people who do not believe in a young earth are no less concerned about young earth creationism: the concern is not exactly that it is junk science, but precisely that it is *too* scientific, assuming many of evolutionary theory's blindnesses even as it asserts the full literal truth of the Bible in answering questions on the terms of what science asks of an origins theory.

There is an Dilbert strip which goes as follows:

Pointy-haired boss: I'm sending you to Elbonia to teach a

class on Cobol on Thursday.

Dilbert: But I don't know Cobol. Can't you ask Wally? He knows Cobol!

Pointy-haired boss: I already checked, and he's busy on Thursday.

Dilbert: Can't you reschedule?

Pointy-haired boss: Ok, are you free on Tuesday?

Dilbert: You're answering the wrong question!

Dilbert's mortified, "You're answering the wrong question!" has some slight relevance the issues of religion and science: in my homily, [Two Decisive Moments](#) I tried to ask people to look, and aim, *higher*:

In the name of the Father, and of the Son, and of the Holy Ghost. Amen.

There is a classic Monty Python "game show": the moderator asks one of the contestants the second question: "In what year did Coventry City last win the English Cup?" The contestant looks at him with a blank stare, and then he opens the question up to the other contestants: "Anyone? In what year did Coventry City last win the English Cup?" And there is dead silence, until the moderator says, "Now, I'm not surprised that none of you got that. It is in fact a trick question. Coventry City has *never* won the English Cup."

I'd like to dig into another trick question: "When was the world created: 13.7 billion years ago, or about six thousand years ago?" The answer in fact is "Neither," but it takes some explaining to get to the point of realizing that the world was created 3:00 PM, March 25, 28 AD.

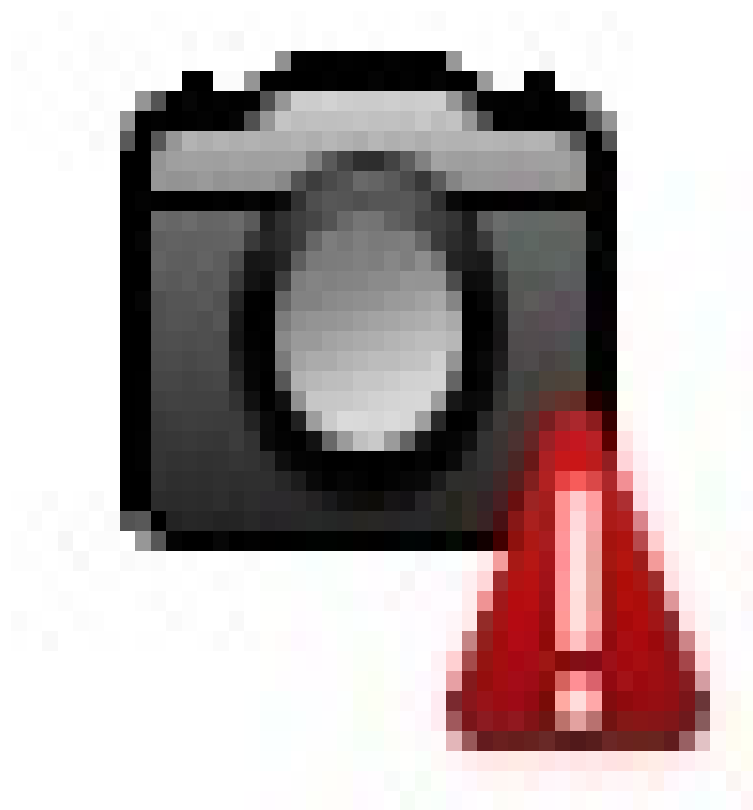
Adam fell and dragged down the whole realm of nature. God had and has every authority to repudiate Adam, to destroy him, but in fact God did something different. He called Noah, Abraham,

Moses, and Elijah, and in the fullness of time he didn't just call a prophet; he sent his Son to become a prophet and more.

It's possible to say something that means more than you realize. Caiaphas, the high priest, did this when he said, "It is better that one man be killed than that the whole nation perish." (John 11:50) This also happened when Pilate sent Christ out, flogged, clothed in a purple robe, and said, "*Behold the man!*"

What does this mean? It means more than Pilate could have possibly dreamed of, and "Adam" means "man": *Behold the man! Behold Adam, but not the Adam who sinned against God and dragged down the Creation in his rebellion, but the second Adam, the new Adam, the last Adam, who obeyed God and exalted the whole Creation in his rising. Behold the man, Adam as he was meant to be. Behold the New Adam who is even now transforming the Old Adam's failure into glory!*

Behold the man! Behold the first-born of the dead. Behold, as in the icon of the Resurrection, the man who descends to reach Adam and Eve and raise them up in his ascent. Behold the man who will enter the realm of the dead and forever crush death's power to keep people down.



An icon of the Resurrection.

Behold the man and behold the firstborn of many brothers! You may know the great chapter on faith, chapter 11 of the book of Hebrews, and it is with good reason one of the most-loved chapters in the Bible, but it is not the only thing in Hebrews. The book of Hebrews looks at things people were caught up in, from the glory of angels to sacrifices and the Mosaic Law, and underscores how much more the Son excels above them. A little before the passage we read above, we see, "To which of the angels did he ever say, 'You are my son; today I have begotten you'?" (Hebrews 1:5) And yet in John's prologue we read, "To those who received him and believed in his name, he gave the authority to become the children of God." (John 1:9) We also read today, "To which of the angels did he ever say, 'Sit at my right hand until I have made your enemies a footstool under your feet?'" (Hebrews 1:13) And yet Paul encourages us: "The God of

peace will shortly crush Satan under your feet," (Romans 16:20) and elsewhere asks bickering Christians, "Do you not know that we will judge angels?" (I Corinthians 6:3) *Behold the man! Behold the firstborn of many brothers, the Son of God who became a man so that men might become the Sons of God. Behold the One who became what we are that we might by grace become what he is. Behold the supreme exemplar of what it means to be Christian.*

Behold the man and behold the first-born of all Creation, through whom and by whom all things were made! Behold the Uncreated Son of God who has entered the Creation and forever transformed what it means to be a creature! Behold the Saviour of the whole Creation, the Victor who will return to Heaven bearing as trophies not merely his transfigured saints but the whole Creation! Behold the One by whom and through whom all things were created! Behold the man!

Pontius Pilate spoke words that were deeper than he could have **possibly** imagined. And Christ continued walking the fateful journey before him, continued walking to the place of the Skull, Golgotha, and finally struggled to breathe, his arms stretched out as far as love would go, and barely gasped out, "It is finished."

Then and there, the entire work of Creation, which we read about from Genesis onwards, was *complete*. There and no other place the world was created, at 3:00 PM, March 25, 28 AD. *Then* the world was created.

I wince at the idea that for theologians "boundary issues" are mostly about demonstrating the compatibility of timeless revealed truths to the day's state of flux in scientific speculation. I wince that theologians so often assume that the biggest contribution they can give to the dialogue between theology and science is the rubber stamp of perennially agreeing with science. I would decisively prefer that when theologians "approach religion and science boundary issues," we do so as boundaries are understood in pop psychology—and more specifically *bad* pop psychology—which is all about you cannot meaningfully say "Yes" until it is your practice to say "No" when you should say "No": what theology needs in its

boundaries with science is not primarily a question of what else we should seek to embrace, but of where theology has ingested things toxic to its constitution.

What gets lost when theology loses track (by which I do not mean primarily rumor science, but the three columns where theology seemed a colony of science that had lost touch with Orthodox faith) is that when theology assumes the character of science, it loses the character of theology.

The research for my diploma thesis at Cambridge had me read a lot of historical-critical commentary on a relevant passage; I read everything I could find on the topic in Tyndale House's specialized library, and something became painfully obvious. When a good Protestant sermon uses historical or cultural context to illuminate a passage from Scripture, the preacher has sifted through pearls amidst sand, and the impression that cultural context offers a motherlode of gold to enrich our understanding of the Bible is quite contrary to the historical-critical commentaries I read, which read almost like phone books in their records of details I'd have to stretch to use to illuminate the passage. The pastor's discussion of context in a sermon is something like an archivist who goes into a scholar's office, pulls an unexpected book, shows that it is surprisingly careworn and dog-eared, and discusses how the three longest underlined passage illuminate the scholar's output. But the historical-critical commentary itself is like an archivist who describes in excruciating detail the furniture and ornaments in the author's office and the statistics about the size and weight among books the scholar owned in reams of (largely uninterpreted) detail.

And what is lost in this careful scholarship? Perhaps what is lost is why we have Bible scholarship in the first place: it is a divinely given book and a support to life in Christ. If historical-critical scholarship is your (quasi-scientific) approach to theology, you won't seek in your scholarship what I sought in writing my (non-scientific) [Doxology](#):

How shall I praise thee, O Lord?
For naught that I might say,
Nor aught that I may do,

Compareth to thy worth.

Thou art the Father for whom every fatherhood in Heaven and on earth is named,

The Glory for whom all glory is named,

The Treasure for whom treasures are named,

The Light for whom all light is named,

The Love for whom all love is named,

The Eternal by whom all may glimpse eternity,

The Being by whom all beings exist,

יהוה,

Ο ΩΝ.

The King of Kings and Lord of Lords,

Who art eternally praised,

Who art all that thou canst be,

Greater than aught else that may be thought,

Greater than can be thought.

In thee is light,

In thee is honour,

In thee is mercy,

In thee is wisdom, and praise, and every good thing.

For good itself is named after thee,

God immeasurable, immortal, eternal, ever glorious, and humble.

What mighteth compare to thee?

What praise equalleth thee?

If I be fearfully and wonderfully made,

Only can it be,

Wherewith thou art fearful and wonderful,

And ten thousand things besides,

Thou who art One,

Eternally beyond time,

So wholly One,

That thou mayest be called infinite,

Timeless beyond time thou art,

The One who is greater than infinity art thou.

Father, Son, and Holy Spirit,

The Three who are One,

No more bound by numbers than by word,

And yet the Son is called Ο ΛΟΓΟΣ,
The Word,
Divine ordering Reason,
Eternal Light and Cosmic Word,
Way pre-eminent of all things,
Beyond all, and infinitesimally close,
Thou transcendest transcendence itself,
The Creator entered into his Creation,
Sharing with us humble glory,
Lowered by love,
Raised to the highest,
The Suffering Servant known,
The King of Glory,
Ο ΩΝ.

What tongue mighteth sing of thee?
What noetic heart mighteth know thee,
With the knowledge that drinketh,
The drinking that knoweth,
Of the νοϋς,
The loving, enlightened spiritual eye,
By which we may share the knowing,
Of divinised men joining rank on rank of angel.

Thou art,
The Hidden Transcendent God who transcendest transcendence
itself,
The One God who transfigurest Creation,
The Son of God became a Man that men might become the sons of
God,
The divine became man that man mighteth become divine.

Monty Python and Christian theology

I would like to start winding down with a less uplifting note. A few years back, I visited a friend who was a Christian and a big Monty Python fan and played for me a Monty Python clip:

God: Arthur! Arthur, King of the Britons! Oh, don't grovel! If there's one thing I can't stand, it's people groveling.

Arthur: Sorry—

God: And don't apologize. Every time I try to talk to someone it's 'sorry this' and 'forgive me that' and 'I'm not worthy'. What are you doing now!?

Arthur: I'm averting my eyes, O Lord.

God: Well, don't. It's like those miserable Psalms—they're so depressing. Now knock it off!

This is blasphemous, and I tried to keep my mouth shut about what my host had presented to me, I thought, for my rollicking laughter. But subsequent conversation showed I had misjudged his intent: he had not intended it to be shockingly funny.

He had, in fact, played the clip because it was something that he worried about: did God, in fact, want to give grumbling complaints about moments when my friend cried out to him in prayer? Does prayer annoy our Lord as an unwelcome intrusion from people who should have a little dignity and leave him alone or at least quit sniveling?

This is much more disturbing than merely playing the clip because you find it funny to imagine God bitterly kvetching when King Arthur tries to show him some respect. If it is actually taken as theology, Monty Python is really sad.

And it is not the best thing to be involved in Monty Python as theology

theology.

One can whimsically imagine an interlocutor encountering some of the theology I have seen and trying to generously receive it in the best of humor: "A book that promises scientific theology in its title and goes on for a thousand pages of trajectories for other people to follow before a conclusion that apologizes for not actually getting on to any theology? *You have a real sense of humor!* Try to avoid imposing Christianity on others and start from the common ground of what all traditions across the world have in common, that non-sectarian common ground being the Western tradition of analytic philosophy? *Roaringly funny!* Run a theological anthropology course that tells how liberationists, feminists, queer theorists, post-colonialists, and so on have to say to the Christian tradition and does not begin to investigate what the Christian tradition has to say to them? *You should have been a comedian!* Yoke St. Gregory of Nyssa together with a lesbian deconstructionist like Judith Butler to advance the feminist agenda of gender fluidity? *You're really giving Monty Python a run for their money!*" ... until it gradually dawns on our interlocutor that the lewd discussion of sexual theology is not in any sense meant as an attempt to eclipse Monty Python. (Would our interlocutor spend the night weeping for lost sheep without a shepherd?)

There are many more benign examples of academic theology; many of even the problems may be slightly less striking. But theology that gives the impression that it could be from Monty Python is a bit of a dead (coal miner's) canary.

Scientific theology does not appear to be blame for all of these, but it is not irrelevant. Problems that are not directly tied to (oxymoronic) scientific theology are usually a complication of (oxymoronic) secular theology, and scientific theology and secular theology are deeply enough intertwined.

The question of evolution is important, and it is no error that a figure like Philip Johnson gives neo-Darwinian evolution pride of place in assessing materialist attacks on religion. But it is not an adequate remedy to merely study intelligent design. Not enough by half.

If theology could, like bad pop psychology, conceive of its "boundary issues" not just in terms of saying "Yes" but of learning to stop saying "Yes" when it should say "No", this would be a great gain. So far as I have seen, the questions about boundaries with science are primarily not scientific ideas theology needs to assimilate, but ways theology has assimilated some very deep characteristics of science that are *not* to its advantage. The question is less about what more could be added, than what more could be taken away. And the best way to do this is less the Western cottage industry of worldview construction than a journey of repentance such as one still finds preached in Eastern Christianity and a good deal of Christianity in the West.

A journey of repentance

Repentance is Heaven's best-kept secret. Repentance has been called unconditional surrender, and it has been called the ultimate experience to fear. But when you surrender what you thought was your ornament and joy, you realize, "I was holding on to a piece of Hell!" And with letting go comes hands that are free to grasp joy you never thought to ask. Forgiveness is letting go of the other person and finding it is yourself you have set free; repentance is being terrified of letting go and then finding you have let go of needless pain. Repentance is indeed Heaven's best-kept secret; it opens doors.

I have doubt whether academic theology will open the door of repentance; it is a beginner's error to be the student who rushes in to single-handedly sort out what a number of devout Christian theologians see no way to fix. But as for theologians, the door of repentance is ever ready to open, and with it everything that the discipline of theology seeks in vain here using theories from the humanities, there trying to mediate prestige to itself science. Academic theologians who are, or who become, theologians in a more ancient sense find tremendous doors of beauty and joy open to them. The wondrous poetry of St. Ephrem the Syrian is ever open; the liturgy of the Church is open; the deifying rays of divine grace shine ever down upon those open to receiving them and upon those not yet open. The Western understanding is that the door to the Middle Ages has long since been closed and the age of the Church Fathers was closed much earlier; but Orthodox will let you become a Church Father, here now. Faithful people today submit as best they are able to the Fathers before them, as St. Maximus Confessor did ages ago. There may be problems with academic theology today, but the door to theology in the classic sense is never closed, as in the maxim that has rumbled through the ages, "A theologian is one who prays, and one who prays is a theologian." Perhaps academic theology is not the best place to be equipped to be a giant like the saintly theologians of ages past. But that does not mean that one cannot become a saintly theologian as in ages past. God can still work with us, here now.

To quote St. Dionysius (pseudo-Dionysius) in [The Mystical Theology](#),

Trinity! Higher than any being,
any divinity, any goodness!
Guide of Christians
in the wisdom of Heaven!
Lead us up beyond unknowing light,
up to the farthest, highest peak
of mystic scripture,
where the mysteries of God's Word
lie simple, absolute and unchangeable
in the brilliant darkness of a hidden silence.
Amid the deepest shadow
They pour overwhelming light
on what is most manifest.
Amid the wholly unsensed and unseen
They completely fill our sightless minds
with treasures beyond all beauty.

Let us ever seek the theology of living faith!

A Humanist Eye Looks at Evolution

One minor turning point, which I mention as an example of a type of humanist observation, was when I was in a doctor's office and read a forceful "MYTH vs. FACT" for the MMR vaccine. What struck me was, "*You're fighting awfully hard for someone who is running unopposed!*"

Earlier, after a hostile reception on a mailing list, I wrote, [The Evolution of a Perspective on Creation and Origins](#), and shortly after [Why Young Earthers Aren't Completely Crazy](#) which suggests that young earth creationism drew an unfortunate line in the sand, but they were not wrong to draw a line. Origins questions have been periodically addressed in these pages; it is a very good thing if you don't have the background to get [Fr. Cherubim \(Jones\) Anathematized by the Canonical Autonomous True Orthodox Synod in Dissent, of the Dregs of the Dregs of Rubbish Outside of Rubbish Bins \(RORB\)](#), which discusses a polarizing thinker whose bellicose followers insist that the universe is only 7500 miles in size. (I neglected to develop a corresponding "Small World Science.") If there is one piece that I consider edifying of the lot, it is by far [Two Decisive Moments](#).

In terms of my education, I have an M.S. in math from UIUC and an M.Phil. in theology from Cambridge (plus doctoral coursework from Fordham). I had many evolution-centric biology courses before college, though I would really not paint myself as an expert in biology; I do, however, intend to be frank about the limitations of my biological study

and do my reader a basic courtesy of not presenting guesses as facts. As an undergraduate, I had a couple of advanced courses in probability and statistics; however this does not matter terribly much as the statistics I use are driven by concepts that should be reasonably presented in Statistics 101.

While I would downplay the significance of my scientific knowledge here and I wouldn't want to overemphasize my quite limited knowledge of biology (for instance, I don't know what are the standard lines of arguments to put the phyla of the Cambrian explosion in an orderly evolutionary sequence rather than all at once), I do not wish to downplay the status I have as an unemployed humanities scholar. One wonderful Roman priest I knew, who was conservative and could every bit say Rome's Creed without crossing his fingers, listened to me wanting to study theology and he explained that his spiritual father wanted him to study under "the best bad guys," and the bishop overrode his decision because a more conservative school would happen to get him graduating faster and be back in ecclesiastical action. His point in mentioning this was not in any sense that he wanted me to go liberal; he was asking me to consider, not trying to find a school that was sufficiently conservative, but that I should actively choose to study under "the best bad guys."

My first thesis in theology, [Dark Patterns / Anti-Patterns and Cultural Context Study of Scriptural Texts: A Case Study in Craig Keener's "Paul, Women, and Wives: Marriage and Women's Ministry in the Letters of Paul"](#), was part and parcel a study of shady argument. I rightly or wrongly brought in the context of a pattern as it originated in architecture and then object-oriented computer programmers, and offered a framework to classify bad arguments. And in this study, I continued to grow some sensitivities that I had already started earlier: sensitivities to what is clean argument, and what is dirty argument. The difference matters quite a lot; clean argument is only convincing if you're somewhere near the truth, where dirty argument "includes the gift of making any color appear white," if I may quote Ambrose Bierce. I can count on one finger the number of times I was given dirty argument that told a truth I would have done well to heed.

I might call myself a "dislodged intelligent design member", meaning

that I don't know how much intelligent design I accept, but evolutionary apologetics push me away.

For one example, that has happened a couple of times, the evolutionary apologist denies Darwin's original picture of a slow evolution, but articulates a "punctuated equilibrium" (formally "punctuated equilibrium") scenario where when things are stable, they will probably be stable for a long time, but when things are chaotic, there is a much greater incentive to make big changes quickly, until equilibrium is restored. And what I failed completely to communicate is that there might have been a much greater *incentive* to make big changes quickly, there is no explanation offered, or at least none that would not embarrass a statistician, to say that there is an *ability* for a breeding population to acquire and sustain a large number of beneficial changes quickly.

The earliest and perhaps most striking example I remember was, wet behind the ears, I brought up intelligent design in a forum with alumni from the Illinois Mathematics and Science Academy. Before presenting a conclusion, I asked a question: suppose that I claim to be able to predict lottery numbers in advance. I do it once, and you think it's an odd coincidence. I do it twice, and you think it's a really odd coincidence. If I continue, and we suppose for the sake of argument that I can make at most one prediction per minute, I can only predict for a forty hour workweek, and I will die of old age at 70 if nothing else gets me sooner, is there any way I could predict enough lottery tickets to convince you that I can genuinely predict lottery tickets? I was answered that yes, I could be taken to predict lottery tickets with "no more than a dozen" predictions. I then proceeded to show that at very least the production of new Cambrian life forms by mutagen exposure (I had allowed for the possibility of mutagen exposure at least for the sake of argument) was much, much more improbable than correctly predicting a dozen lottery numbers in advance by mere chance. To this I was given a response of, "There may be some things we can never know;" closing out a theistic argument at the price of not having a valid explanation was better than acknowledging intelligent design as an apparent part of the explanation. Perhaps surprisingly, or not surprising at all given the humility of greatness, the one member of the entire discussion who did not try to jackhammer down intelligent design was a microbiology graduate

jackhammer down intelligent design was... a microbiology graduate student. He did not claim to be convinced, but he said, "You appear to be well-read," which is in one sense politeness, but I believe the non-committal tone was genuine, and I further believe that if he had seen a hole or an impossibility in the argument I presented, he would have said so politely but plainly. The microbiology graduate student was the one other person in the discussion who refrained from slamming me and saving naturalist evolution at any cost. I don't think I convinced him, but it was the one discussion partner who knew the most about neo-Darwinian evolution and dealt with it on most intimate terms who was most open to my statement that mutagen exposure does not account for the Cambrian explosion in any way that makes sense to a statistician.

If I may expose my ignorance of alchemy for a moment, rumor has it that alchemy was not originally just one more scheme to make money fast; it recalls a comment by Chesterton(?) that compared some desire to a spiritualist's desire to see a nymph's breasts, as opposed to the straightforward lecher's desire to see a nymph's breasts. In Western history, there has been extraordinarily strong *incentive* and desire to turn lead into gold, and while during some childhood some nuclear physicists whimsically made gold into lead by a few nuclei, even if their method were reversible the energy would be prohibitively expensive compared to old-fashioned gold mining. Today we are having a renaissance of renaissance alchemy, and we again have a very strong incentive to turn lead into gold; more broadly capitalistic economies would heavily reward, at least temporarily, someone who could turn cheaper materials into gold with revenues vastly exceeding expenses. For the transformation to happen, alchemy needs not only have *incentive*; it needs a *live possibility*, a possibility not known to exist under mainstream science.

What has been asserted to me, by naturalist evolutionists, is on statistical grounds the equivalent of there being long stretches of people steadily buying lottery tickets but rarely if ever does someone draw a winning lottery ticket, then somewhere *completely off the fossil record* a breeding population wins one lottery after another after another, and finally, after they have won enough lottery tickets, the environment stabilizes and the incentive to innovate recedes.

This is the assertion as it has been given to me. I knew two theistic evolutionists but I do not know their responses to such arguments (in this case, formulated after our last real conversation), because socially whenever I tried to make a point about intelligent design, they shut me down completely and prevented me from even *beginning* an argument. For the more forceful of the two, this was not his boilerplate behavior; when he was contradicted by someone and he knew he was right, he would let the other person fill out his argument completely, then allow the conversation to explain why the other person was wrong.

I have doubts about intelligent design as presented. I was dismayed to find out that one Orthodox brotherhood, in making a posthumous book on origins, had asked Philip Johnson to write the introduction, and the introduction reeked of having been written by a lawyer. It masterfully avoided treating the question of the age of the universe, so that young earth creationists and old earth creationists could read it and see their own reflection. However, the single, simple strongest reason to believe I was onto something in reading intelligent design materials was simply that it is the one topic of any short where I was always rudely shut down socially before I could begin to make my point. That is not the behavior of people who know they are right!

I am going to leave the example of the pepper moth itself at a brief mention. As far as the pepper moth goes, I have heard that Darwin's version of the pepper moth example is not the image that has been copied by many hands, and so what I read in intelligent design about the pepper moth example not being an example of natural selection creating or at least making some population extinct, I'm merely going to acknowledge that people have discussed the point from different angles.

What I do not wish to be silent on, because I have seen it in living discourse in my own time, is tuskless elephants. And what arguments Johnson gives for the pepper moth are relevant here. In the case of tuskless elephants, we do not have an example of a new feature being suddenly developed. We have an example of a feature being suddenly removed. Furthermore, the feature is not new. Historically, something like 3% of female elephants have been tuskless; the proportion of tuskless elements is "only" a major shift in which individuals within a genetic

population sport a feature (“phenotype”). The source I was read that ordinarily, tuskless males are unable to mate, but in these careful words it contained no assertion that tuskless males never appear. Among humans (and, for I know, elephants), until recent treatments hemophilia would make someone bleed to death, quite possibly well before reproductive age. (If untreated hemophilia allows patients to live long enough to successfully reproduce, substitute Tay-Sachs Disease.) Regarding Robert A. Heinlein’s eugenic comment that the only real cure for hemophilia is to let all hemophiliacs bleed to death, *H. sapiens sapiens* has been around, on some counts, 400,000 years, and hemophiliacs’ bleeding to death all that time has not removed them from the gene pool. Heinlein’s remark may be heartless, but that does not make it intelligent or show a perceptive grasp of biology: a breeding pool can and often will produce individuals with phenotypes that do not get to mate. There may be a few tuskless bull elephants; we are not told the frequency merely by a statement that tuskless males do not ordinarily get to mate.

The tuskless elephant example is brought as an example of the kind of change that powers Darwinism, and that it is not. It has suppressed what is normally a feature of elephantine anatomy; it has not created new or additional organs. We, or at least I, have never heard of pachyderms developing even stronger and tougher forms of skin that will repel poachers’ machine gun fire. “All” that has happened, as with pepper moths, is that two existing variations are being altered in their frequency, possibly permanently and possibly for a time as with pepper moths.

It used to be that Intelligent Design drew me by its apologetic arguments; it is now evolutionist apologetic arguments that repel me. I haven’t read anything new to me in intelligent design that was convincing; I have read evolutionary assertions that convincingly demonstrated flaws. I remember being the only person in a Ph.D. program to dissent from Darwinian evolution – and almost assuredly the only person in the Ph.D. program who could explain the difference between paleo-Darwinian evolution, the slow process, and neo-Darwinian evolution, the punk eek, or why, as I put it once before, “Darwin’s theory of evolution has been dead in the academy for so long that it no longer even smells bad.”

It used to be that naturalists would accuse theists of a “God of the gaps”, a God whose heavy lifting lies in the gaps of scientific knowledge. The allegation was meant to sting, but not by being impossible: in the set of all conceivable circumstances, we could have (for one non-biology example) God holding together the nuclei of all multi-proton atoms because the protons are all positive and electrically repel each other. The implication is more that you’re on the losing end of an argument if your God has to hide in the gaps of our knowledge. But now we are seeing a “natural selection of the gaps,” a natural selection that does most or all of its true heavy lifting in geological eyeblinks without direct remaining evidence of intermediate forms: it all hides in tiny areas where paleontology has nothing positive to tell us. And if tuskless elephants are given as an example of positive additions being made in a geological eyeblink, perhaps that is because evolutionary apologists do not know any better example to offer.

In addition, [C.S. Lewis, before intelligent design, played the self-referential incoherence card and explained why naturalist forms of evolution could not possibly be true.](#) The basic argument he gives is as follows: romantic love can be explained away as a biochemical state, but there’s a nasty backswing to that explanation: by the same stroke as it explains away romantic love, it also explains away all explanation, including the explanation of romantic love. If mental states, including holding scientific theories, are just permutations of matter, then it is a category error to assign truth or falsehood to such a permutation of matter. Mere physical states do not rise to the dignity of error. The theory of evolution may explain why we have brains good enough to recognize food and avoid natural dangers; it does not explain why we have brains good enough to formulate a theory of evolution, or for that matter any scientific theory ordinarily deemed worthy of provisional assent. Possibly theistic evolutionists have an option of saying that God did something special when humans came forth: I would want to understand a theistic theory of evolution better before deciding whether I would play a self-referential incoherence card. However, I have not heard of a way to deal with this from naturalist evolution, and I would note that it was a matter of great consternation to C.S. Lewis, not that people did not agree with his objection, but that few people were able to see what the objection was

at all. This one point is not one I've pulled from interactions with evolutionists, but it represents something similar in Lewis's own observations: not, specifically, that they failed to agree with his argument that evolution is an explanation that explains away all explanation, but that people were in most cases completely unable to see a serious philosophical objection to evolution producing brains that could produce a scientific theory of evolution. He wasn't upset that people rejected his point (they apparently didn't); he was upset that people didn't see what his point was in the first place.

Before intelligent design, I was a settled theistic evolutionist; afterwards, I was straightforwardly a member of intelligent design; now I am wary of intelligent design but on a humanist's eye can't see why evolution is true. But it is on increasingly humanist grounds that I look at a movement, I look at discourse, and I say that evolution is everywhere but it repeatedly fails to have the ring of truth. I regard neo-Darwinian (punk eek) evolution as a theory in crisis, and I stand, perhaps, as a churchman without a church.