

Session 4: Addressing Criticisms of Intelligent Design

Whatever position you take on any issue of debate you can be assured that some will take the exact opposite view! Be tolerant and open to their views as much as possible, because, if you continue to seek all truth you may one day, to your embarrassment agree with them!

Paul tells us in 2 Thessalonians 2: 9-11 that we must love the truth or risk losing our salvation..

2 Thess. 2:9-11 *“The coming of the lawless one will be in accordance with the work of Satan displayed in all kinds of counterfeit miracles, signs and wonders, and in every sort of evil that deceives those who are perishing. They perish because they refused to love the truth and so be saved. For this reason God sends them a powerful delusion so that they will believe the lie...”*

Clearly whether we believe in ID or not is not a matter of such importance as our salvation, but this verse does suggest an interesting possibility – in any area of life, if we are not truth seekers then it is easy to be deluded, even to the point that God may help blind us from the truth because our hearts do not seek after all truth.

As a believer in the Hebrew Messiah, Jesus of Nazareth, I believe we should desire to seek and know the truth in every area of our lives and endeavours – this is simply an act of obedience – we are called to love the truth and not lies, as Satan is the Father of lies.

So how do we discern truth? We need to learn to recognize some of the standard approaches used in debate to ‘win over’ others using ‘trick strategies’. These ‘logical fallacies’ mask the truth regardless of who or which side uses them.

Some common ‘trick strategies’ and Logical Fallacies:

These mask the truth regardless of which ‘side’ uses them & whether their use is intentional or not.

1) **The Genetic Fallacy:**

*The genetic fallacy is a type of argument in which an attempt is made to prove a conclusion false by condemning its source or genesis. Such arguments are misleading because **how an idea originated** is irrelevant to its **viability**. Eg. Finding fault with the proponents educational training, or beliefs/arguments in unrelated domains.*

In the end, the inherent intellectual merit of an idea or argument needs to be assessed independently of the credentials of the person who proposes the idea or makes the argument. Well-credentialed people can mess up even in their fields of expertise. Conversely, non-credentialed people can make valid points even outside their field of expertise.

Eg. Many may have originally demised the ‘theory of relativity’ because the guy who proposed it was only a Patents clerk!

2) **Ridicule by Association:**

*Eg. Professor Leonard Krishtalka, Evolutionary Biology, University of Kansas: **“Scientists aren’t threatened by Intelligent design, scientists are bored by intelligent design, much like scientists would be bored by notions of a flat Earth or by the stork theory of sex.”***

Here the Prof. tries to associate ID with flat earth & storks! Why, perhaps, because many evolutionists believe ID is a cover for YEC and their belief that the universe is less than 10,000 years old is as unbelievable in today's society as belief in a flat earth.

3) **Guilt by Association** (a variant of the genetic fallacy):

Evolutionists such as Barbara Forest, decry the religious and moral implications drawn from ID because they point to God. But what about those drawn by evolutionists from evolutionary theory? Consider the following:

ON RACISM AND GENOCIDE:

*"At some future period, not very distant as measured by centuries, the civilised races of man will almost certainly exterminate, and replace, the savage races throughout the world.... The break between man and his nearest allies will then be wider, for it will intervene between man in a more civilised state, as we may hope, even than the Caucasian, and some ape as low as a baboon, instead of as now between the negro or Australian and the gorilla." [Just so there is no doubt, the author in particular is claiming that whites will exterminate blacks.] —Charles Darwin, *The Descent of Man*, 1871, ch. 6.*

ON BESTIALITY:

Evolution teaches that "we are animals" so that "sex across the species barrier ceases to be an offence to our status and dignity as human beings." [Just so there is no doubt, "sex across the species barrier" is a euphemism for bestiality.] —Peter Singer, "Heavy Petting," 2001

ON RAPE:

Rape is "a natural, biological phenomenon that is a product of the human evolutionary heritage," akin to "the leopard's spots and the giraffe's elongated neck."—Randy Thornhill and Craig Palmer, "Why Men Rape," 2000

ON THE BASIS FOR MORALITY:

"As evolutionists, we see that no [ethical] justification of the traditional kind is possible. Morality, or more strictly our belief in morality, is merely an adaptation put in place to further our reproductive ends. Hence the basis of ethics does not lie in God's will.... In an important sense, ethics as we understand it is an illusion fobbed off on us by our genes to get us to cooperate. It is without external grounding."—E. O. Wilson and Michael Ruse, "The Evolution of Ethics," 1991

4) **Invalid Analogies:**

Miller argues that "evolutionary theory enjoys the same status as other well-tested explanations in science (such as Einstein's theory of general relativity), and there is no rational basis for suggesting that it, and it alone, should be mentioned in the context of doubt and scepticism"

This is an invalid analogy and just wishful thinking. Evolutionary biology, is a historical science — it's business is constructing historical narratives. The suggestion that evolutionary theory enjoys the same status as the theories of physics, for instance, is therefore absurd. Some biologists, such as Miller, claim that evolutionary theory is as well established as Einstein's theory of general relativity.

But as far as I am aware no physicist, to bolster Einstein's theory of general relativity, has claimed that it is as well established as evolutionary theory! Evolutionary theory does not enjoy the same status as the rigorous sciences. For this reason alone, it needs critical scrutiny.

5) Historical Fiction:

Speaking of historical narratives, it can be extremely difficult to ascertain truth in history. For example, it is the nature of mankind that those who win the battles in history tend to write the records of history to suit their viewpoint. That is, they may suppress or even destroy the writings and hence beliefs of those who opposed them, regardless of the merits of those beliefs. Because these historical figures were successful, does that make their views and beliefs correct?

[As a Christian I do not believe that success in this life or age is the criteria by which a man's life and hence his belief systems is judged, but that judgement will only occur when the new age is ushered in by the return of the Lord Jesus Christ.]

An example from history is found at Nag Hammadi – around 367 AD, Athanasius, the bishop of Egypt demanded that all writings that did not conform to his list of accepted writings be destroyed. Someone ignored him though and hid over 50 of these books which were found in 1945. These books ranged in content and theology, from Gnosticism to typical Hebraic inspired renderings.

Regardless of the truth, or lack of it, contained in these books, history was clearly distorted by this effort of Athanasius.

Also, when we look at historical accounts which are in conflict, how do we differentiate between them and try to discern the true historical record?

In trying to discover historical truth I would suggest there are at least 3 approaches we can take:

1. we can look for sources who at least appear not to be pushing a particular interpretation,
2. we can look for statements that both sides affirm, i.e commonality, and try to work from this position to find the truth which is consistent with this commonality
3. and we can look for illogical or contradictory comments and assume that the conclusions (supposed historical facts) from these are unlikely.

Eg Servetus – 2 websites say very different things yet commonality actually condemns Calvin.
– see Appendix (2)

4. Good scholarship is essential

Eg A Christian book responding to the errors in the *Da Vinci Code* by Dan Brown:
The authors response regarding Isaac Newton – claimed he was Arian – a common belief but especially with the discovery of a lot of his writings fairly recently, not likely – he appeared much more Socinian than Arian – the author of this book clearly had not studied his theology or writings in depth and/or misunderstood the concept of Arianism.

6) The Issue was settled in the year 1973 or 2001, etc.:

This is an interesting approach that tries to rule out all debate by arguing the debate was had and won in the past. That is, that there is no need to argue over the issue as it was contested during some court case or political campaign or referendum and the historical outcome is the only point of relevance, meaning that any new debate is not necessary and a waste of time.

A classic example and very recent was the use of this strategy in the RU486 debate in Parliament here in Australia. Proponents of the drug such as Senator Stott Despoja said the issue had been settled 30 years ago, when Abortion had been hotly debated in Politics, etc.

If it works, this is a brilliant strategy, as it requires no further study or time! Clearly, an unbiblical approach however, as it is the opposite of the worthy Berean's in Acts who daily searched the scriptures to see if what the Apostle Paul was saying was correct and consistent with the OT.

The Castles of Your Beliefs:

If we love & seek the truth then we should always be open to correction. That means we should be able to face our accusers, those who disagree with us, look openly and honestly at their arguments and criticisms of our beliefs and try to dispassionately seek adequate answers to these differences of opinion and perceived truth.

Let me try to paint a picture to help clarify this – one that I use with my own beliefs:

Think of each of your beliefs/understandings about some area of life or scientific theory or biblical doctrine as a castle. Your castles may come under attack from many different angles and approaches.

How do you defend your castle?

If you simply ignore these attacks by just ridiculing your opponents or by pretending that your 'castle' is impenetrable (i.e. – putting your head in the sand or building a sand castle or a 'castle in the air' – not really supported by reality!) you are not a lover of the truth but are easily deluded.

Obviously, when you allow these attacks on your castles you may be risking a lot.

Your castle may not be able to stand up to the attack, either because you don't have the skill/knowledge to defend it, or the time to defend it (regardless of its ultimate veracity), or even because you may find your castle cannot be defended. That is, some of your castles may still be truth, but not truth that you are capable of defending or they may even need to be dismantled.

Over time, perhaps many years, you will, with this truth seeking approach, build up some castles to be much stronger, but most probably, you may also have to give up some other castles.

Part of the challenge in defending a castle is to be clear when attacked if the attack is really an attack on the foundations of your castle or on some supplementary belief which is really like an out-house and therefore not an essential part of your castle – it may in fact, be a weakness or liability, that in giving up or removing you actually strengthen your main foundations.

Be open and try to even enjoy attacks on your castles, as in defending them you should grow in knowledge, in understanding, in wisdom and if you end up having to leave a castle which is destroyed, you may also grow in humility and tolerance!

Scientific Truth:

What about scientific truth? Firstly, many scientists would argue that science is not concerned with truth anyway!

To quote Prof. Philip Johnson in 'Darwin of Trial':

Scientific knowledge is by definition the closest approximation to absolute truth available to us. To ask whether this knowledge is true is therefore to miss the point and to betray a misunderstanding of "how science works."

The correct use of words or 'correct words' used – sometimes called semantics is very powerful. It is perhaps no more obvious than in the pro-life debate where terms like 'termination of pregnancy' – a term that may be technically correct in describing the killing of an unborn child, but which is used to try to hide this truth and lessen the emotional response, and 'euthanasia' (meaning a painless or good death) which is also used to describe the killing of elderly or handicapped human beings.

Truth as such is not a particularly important concept in naturalistic philosophy. The reason for this is that "truth" suggests an unchanging absolute, whereas scientific knowledge is a dynamic concept.

What was knowledge in the past is not knowledge today, and the knowledge of the future will surely be far superior to what we have now.

According to Naturalism, only naturalism itself and the unique validity of science as the path to knowledge are absolutes.

There can be no criterion for truth outside of scientific knowledge, no mind of God to which we have access.

So to Intelligent Design:

Like any truly scientific explanation, ID needs to create a model to represent the areas of life it studies. It then needs to use this model to make predictions about events and the empirical discoveries from further research. Over time, each conflicting model can be compared by the number of accurate predictions it successfully made. Ideally, this method should be very successful and clear. The reality is somewhat less satisfactory.

To help appreciate why, we need to ask, who are the opponents of ID?

It would appear the main opponents are:

- firstly, those who believe in Darwinism, especially those for whom Darwinism is their faith,
- some Christian groups such as those who believe in Young Earth Creationism (YEC),
- and those who believe in theistic evolution.

When these groups are combined together it would appear the opposition in terms of numbers is very large.

So how do each of these disparate groups attack ID?

One argument is that ID has produced no new data (implying that any true scientific theory will produce new data):

Consider the case of Albert Einstein. He wrote his seminal paper on relativity theory in 1905 as a patent clerk in Switzerland. As a patent clerk, he had no access to laboratories, experimental apparatus, or other ways of generating novel data. His breakthrough came not by, as Forrest would insist, "producing original data to support" relativity theory. Quite the contrary. All the data were already in place and known for years. Einstein's genius was to look at those data differently and see new patterns and possibilities that had eluded other scientists. No wonder that Hermann Minkowski, Einstein's former mathematics professor, remarked: "Oh, that Einstein, always missing lectures — I really would not have believed him capable of it!" Not an illustrious student, relegated to a patent office, with no access to "original data," Einstein nonetheless did great science.

Nobel laureate William Lawrence Bragg (an Aussie!) gave the following insight into the nature of science: "The important thing in science is not so much to obtain new facts [or data] as to discover new ways of thinking about them."

Einstein did just that as a patent clerk in Switzerland. Intelligent design is attempting to do that for biology—discovering fruitful ways of thinking about and interpreting well-established facts of science that pertain to biological complexity and diversity.

The Charge of Creationism:

Despite intelligent design's clear linkage, both methodologically and in content, with existing sciences that sift the effects of intelligence from undirected natural forces, critics of intelligent design often label it a form of creationism (meaning YEC). Not only is this label misleading, but in academic and scientific circles it has sadly become a term of abuse to censor ideas before they can be fairly discussed.

To see that the creationist label is misleading, consider that one can advocate intelligent design without advocating YEC or any Christian version of creationism.

Creationism typically (in the view on many in mainstream Christian denominations) denotes a literal interpretation (6 days only approx. 10000 years ago) of the first chapters of Genesis as well as an attempt to harmonize science with this interpretation.

It can also denote the view common to theists that a personal transcendent God created the world, a view taught by Judaism, Christianity, and Islam.

In either case, however, creationism presupposes that the world came into being through a creative power separate from the world.

Intelligent design, by contrast, places no such requirement on any designing intelligence responsible for cosmological fine-tuning or biological complexity. It primarily argues that certain finite material objects exhibit patterns that convincingly point to an intelligent cause.

But the nature of that cause—whether it is one or many, whether it is a part of or separate from the world, and even whether it is good or evil—simply do not fall within intelligent design's purview.

Consistent with this statement, Aristotle, who held to an eternal uncreated world and to a purposiveness built into the world, would today hold to intelligent design but not to creationism.

The same is true for Antony Flew, who until recently was the English speaking world's most prominent atheist. He now repudiates atheism because he sees intelligent design as necessary to explain the origin of life.

Yet, in embracing an intelligence behind biological complexity, he does not hold to creationism.

Despite its constant repetition, the charge that intelligent design is a form of creationism is false.

Two opponents of ID, Robert Pennock and Barbara Forrest, for instance, repeat this charge in virtually all of their writings that criticize intelligent design. Yet, as trained philosophers, they know that intelligent design is consistent with philosophical positions that hold to no doctrine of creation. Why, then, do they insist that intelligent design is creationism? The reason is that in the world understanding creationism (more precisely YEC) has been discredited in the courts and among the scientific and academic elite.

Thus, if the label can be made to stick, intelligent design will be defeated without the need to investigate its actual claims. (Thus, an example of Guilt by Association, regardless of the merits or otherwise of the association.)

Mainstream physics is now quite comfortable with design in cosmology. Take the following remark by Arno Penzias, Nobel laureate and co-discoverer of the cosmic background radiation:

“Astronomy leads us to a unique event, a universe which was created out of nothing, one with the very delicate balance needed to provide exactly the conditions required to permit life, and one which has an underlying (one might say ‘supernatural’) plan.”

Or consider the following insight by well-known astrophysicist and science writer Paul Davies: “There is for me powerful evidence that there is something going on behind it all.... It seems as though somebody has fine-tuned nature’s numbers to make the Universe.... The impression of design is overwhelming.” Elsewhere Davies adds: “The laws [of physics] ... seem to be the product of exceedingly ingenious design.... The universe must have a purpose.”

Remarks like this by prominent physicists and cosmologists are now widespread.

Why should inferring design from the evidence of cosmology be scientifically respectable, but inferring design from the evidence of biology be scientifically disreputable, issuing in the charge of creationism?

Clearly, a double standard is at work here. Design theorists argue that the evidence of biology confirms a design inference. But even if that confirmation were eventually overturned by new evidence, such a failure would constitute a failure of intelligent design as a scientific theory and not a failure of intelligent design to qualify as a scientific theory, much less to deserve the label creationism.

Misuse of Probability Theory:

Prof Stenger: “If we properly compute, based on our actual knowledge rather than speculation, the probability for the universe’s existing with human life, the result is unity! We have only one datum, our universe, and it has human life.”

If human life is so easy to make, why can’t we make the simplest life in the lab? Can we build a credible hypothesis for how life developed at the molecular level? Are we to believe that life does not really depend on 26 finely tuned parameters for life (based on Dr Hugh Ross’s lists); that some other form of advanced life would have arisen anyway? Instead of postulating how these 26 parameters may have all been met without a designer, Professor Stenger states that:

“...almost all combinations of physical constants lead to universes, albeit some strange ones, that would live long enough for some type of complexity to likely to form...”

No evidence is provided for how life could develop in any of these 100 random universes.

This argument is pure speculation – it has no evidence to support it. The concept of ‘many universes’ similarly has no evidence as by definition we cannot observe other universes.

Finally, Professor Stenger attempts to discredit the concept of a designer by leading the reader down the rabbit hole. He postulates that the universe is eternal, not by invoking a steady state cosmology, but by inventing a cosmology where time proceeds from the big bang in both directions.

In his own words, "... if I can demonstrate that the universe had no beginning, then Ross, Craig, and other theists ... will be hoisted on their own petard and forced to admit that the universe required no cause and so was not necessarily created..."

This ludicrous strategy not only contradicts accepted theories of physical reality, but also demonstrates how far some will go to eliminate the Creator of the universe from their thinking.

Scientific Fact:

Consider the following example from geology. In the nineteenth century the geosynclinal theory was proposed to account for how mountain ranges originate. This theory hypothesized that large trough-like depressions, known as geosynclines, filled with sediment, gradually became unstable, and then, when crushed and heated by the earth, elevated to form mountain ranges.

To the question 'What happened when?' geologists as late as 1960 confidently asserted that the geosynclinal theory provided the answer:

"The geosynclinal theory is one of the great unifying principles in geology. In many ways its role in geology is similar to that of the theory of evolution, which serves to integrate the many branches of the biological sciences.... just as the doctrine of evolution is universally accepted among biologists, so also the geosynclinal origin of the major mountain systems is an established principle in geology."

Whatever became of the geosynclinal theory? Within ten years of this statement, the theory of plate tectonics, which explained mountain formation through continental drift and sea-floor spreading, had decisively replaced the geosynclinal theory. The history of science is filled with such overthrows of previously held scientific 'facts'.

The geosynclinal theory was completely wrong. Thus, when the theory of plate tectonics came along, the geosynclinal theory was overthrown. Often, however, theories are not completely wrong. Instead, they offer some legitimate insights. Nevertheless, upon further investigation, they need to be revised. Frequently, such revision takes the form of a contraction. The problem is that when theories are first proposed, their originators try to push them to account for as much as possible-indeed, for too much. Only later do the limitations of the theory become evident.

It is always a temptation in science to think that one's theory encompasses a far bigger domain than it actually does.

This happened with Newtonian mechanics: physicists thought that Newton's laws provided a total account of the constitution and dynamics of the universe.

James Maxwell, Albert Einstein and Werner Heisenberg each showed that the proper domain of Newtonian mechanics was far more constricted.

ID is part of God's general revelation. Consequently, it can be understood apart from the Bible. Just about anyone who is not wedded to a pure materialism agrees that some sort of design or purpose underlies nature. Intelligent design not only gives a voice to these people, but also gives them the tools to dismantle materialism.

Dismantling scientific naturalism/methodological materialism is a good thing.

Not only does intelligent design rid us of this ideology, which seems to suffocate the human spirit, but I think that it opens the path for people to come to Christ.

Indeed, once materialism is no longer an option, Christianity again becomes an option.

True, there are then also other options.

But Christianity is more than able to hold its own once it is seen as a live option. The problem with scientific naturalism is that it rules out Christianity so completely that it is not even a live option. Thus, in its relation to Christianity, Intelligent Design should be viewed as a ground-clearing operation that gets rid of the intellectual rubbish that for generations has kept Christianity from receiving serious consideration.

Thomas Kuhn, in his Structure of Scientific Revolutions, clearly taught us that the old guard is not going to change its mind. By being wedded to a failing paradigm, they suffer from the misconceptions, blindspots, and prejudices that invariably accrue to a dying system of thought.

Intelligent design is forcefully pointing up those failures.

Michael Behe : *"As I testified, the ID argument is an induction, not an analogy. Inductions do not depend on the degree of similarity of examples within the induction. Examples only have to share one or a subset of relevant properties. For example, the induction that, ceteris paribus, black objects become warm in the sunlight holds for a wide range of dissimilar objects. A black automobile and a black rock become warm in the sunlight, even though they have many dissimilarities. The induction holds because they share a similar relevant property, their blackness. The induction that many fragments rushing away from each other indicates a past explosion holds for both firecrackers and the universe (in the Big Bang theory), even though firecrackers and the universe have many, many dissimilarities. Cellular machines and machines in our everyday world share a relevant property — their functional complexity, born of a purposeful arrangement of parts — and so inductive conclusions to design can be drawn on the basis of that shared property. To call an induction into*

doubt one has to show that dissimilarities make a relevant difference to the property one wishes to explain." ("Whether Intelligent Design is Science A Response to the Opinion of the Court in Kitzmiller vs Dover Area School District," by Michael Behe) (at <http://www.discovery.org/scripts/viewDB/filesDBdownload.php?command=download&id=697>)

A Practical Exercise:

Which of the 6 'trick strategies or logical fallacies' have been used here:

In a commencement address at the Johns Hopkins University School of Medicine in Baltimore, New York City Mayor Michael Bloomberg had this to say about the sometimes-contentious relationship between science and religion in the public square:

...it boggles the mind that nearly two centuries after Darwin, and 80 years after John Scopes was put on trial, this country is still debating the validity of evolution. In Kansas, Mississippi and elsewhere, school districts are now proposing to teach "intelligent design" — which is really just creationism by another name — in science classes alongside evolution.

Think about it! This not only devalues science, it cheapens theology. As well as condemning these students to an inferior education, it ultimately hurts their professional opportunities.

Hopkins' motto is Veritas vos liberabit — "the truth shall set you free" — not that "you shall be free to set the truth." I've always wondered which science those legislators who create their own truths pick when their families need lifesaving medical treatment.

There's no question: Science — the very core of what you have been living and breathing these past several years — is being sorely tested.

[Possible Answers: 'Decided in 19??' – scopes trial; 'guilt by association; 'ridicule by association' and emotional blackmail.]

SUMMARY:

The fundamental claim of intelligent design is straightforward and easily intelligible: namely, there are natural systems that cannot be adequately explained in terms of **undirected natural forces** and that exhibit features which in **any other circumstance we would attribute to intelligence**.

Intelligent Design is the science that studies the signs of intelligence.

Intelligent design does not try to get into the mind of a designer and figure out what a designer is thinking.

The designer's thought processes lie outside the scope of Intelligent Design. As a scientific research program, **intelligent Design investigates the effects of intelligence** and not the intelligence as such.

In considering whether ID is science there are three points that should be kept in mind:

- (1) Science is not decided by majority vote.
- (2) Just because an idea has religious, philosophical, or political implications does not make it unscientific.
- (3) To call some area of inquiry "not science" or "unscientific" or to label it "religion" or "myth" is within contemporary western culture a common manoeuvre for discrediting an idea.

Predictions of Design

ID's main prediction is that nature is overflowing with examples of specified complexity and therefore there are numerous pointers to design.

Some examples:

- (1) High information content machine-like irreducibly complex structures will be found.
- (2) Forms will be found in the fossil record that appear suddenly and without any precursors.
- (3) Genes and functional parts will be re-used in different unrelated organisms.
- (4) The genetic code will NOT contain much discarded genetic baggage code or functionless "junk DNA".
- (5) Stenography

ID also predicts certain patterns such as:

- Sudden emergence
- Convergence to local optima
- Extinction

Biology:

Darwinianism is a theory about process.

A certain type of process took organisms of type A and transformed them into organisms of type B. The Darwinian process occurs in discrete steps (the finest level of resolution of those steps being the generation of one organism from another in reproduction). Darwinism is committed to a sequence of manageable steps that gradually transforms A into B.

Intelligent design, in contrast to Darwinism, is not a theory about process but about creative innovation. Now creative innovation is not a process. Creative innovation is not reducible to a causal chain where one step "causes" the next.

Intelligences are free. In the act of creation they violate expectations. They create as they choose to create. There's nothing that required Mozart to compose his Jupiter Symphony or Bell to invent the telephone or Shakespeare to write King Lear.

The Anthropic Principle:

"A preponderance of physical evidence points to humanity as the central theme of the cosmos."

This principle extends the scope of ID, thus in a sense it is not necessarily a core part of ID as it points to specifics about the Designer.

Conclusion:

As stated a number of times ID is not a religious doctrine; it does not presuppose a belief in the God of the Jews; the God of the Christians or the God of Muslims, or the Gods of the Hindus, etc.

If Christians desire to look into this issue further though and look for a Biblical Model of creation that is consistent with both ID and the Bible, then I would suggest that the best model seen to date in the RTB model (find at www.reasons.org).

While, I personally believe this model has some minor Biblical errors and I believe there is a better explanation w.r.t the 'six days' issue, I do believe this model is the best approximation to date that fits both God's natural and written revelations.

The beauty of proper Scientific Models is that they can be evaluated against the latest scientific research on a regular basis and their 'fit' to the empirical data measured. In the area of creationism, I believe that the RTB model has continued to go from strength to strength in this regard. Let us check in again in 12 months!

Paul Herring July 2006

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Appendix:Calvin & Servetus:

It certainly can be challenging to discern truth even within the Christian community when opposing camps give different renditions of some historical event.

In trying to discover historical truth I would suggest there are at least 3 approaches we can take:

5. We can look for sources who at least appear not to be pushing a particular interpretation,
6. we can look for statements that both sides affirm, i.e commonality
7. and we can look for illogical or contradictory comments and assume that the conclusions (supposed historical facts) from these are unlikely.

The debate regarding Calvin and the burning at the stake of Servetus is an example. Using approach 1, look at the following Encyclopedia comment:

The Columbia Electronic Encyclopedia, 6th ed. Copyright © 2005, Columbia University Press. (All rights reserved.)
 Servetus, Michael , 1511–53, Spanish theologian and physician. His name in Spanish was Miguel Serveto. In his early years he came in contact with some of the leading reformers in Germany and Switzerland—Johannes Oecolampadius, Martin Bucer, Wolfgang Fabricius Capito, and probably Martin Luther. But he held views, concerning the Trinity in particular, that brought condemnation from the theologians of the Reformation as well as from those of the Roman Catholic Church. When he published *De trinitatis erroribus* (1531) and *De trinitate* (1532), the feeling of opposition was so strong that he assumed the name of Michel de Villeneuve, from the family home, Villanueva, and spent some time in Lyons, working on an edition of Ptolemy's geography and other scientific works, then in Paris studying medicine. There he is said to have seen John Calvin. He became well-known for his ability in dissection and had unusual success as a physician; he discovered that some of the blood circulates through the lungs. From 1541 to 1553 he lived in the palace of the archbishop of Vienne as his confidential physician. When (1553) he had a work setting forth his ideas of Christianity secretly printed, investigation was begun by the Inquisition. Servetus, arrested, tried, and condemned, escaped from prison. Several months later, while making his way to Italy, he was seized in Geneva by Calvin's order. There, after a long trial, in which Calvin's condemnation was a stern factor, he was burned on Oct. 27, 1553. See biographies by R. H. Bainton (1953) and J. F. Fulton (1954).

This encyclopedia comment, along with the following excerpts from a pro-Servetus site suggest it is fair to consider him to have had a great intellect and to stand for his principles.

From http://www.socinian.org/michael_servetus.html

"... At the same ceremony, professor of philosophy Otto Karmin said: "Amidst the most inhuman sufferings, he affirmed the principles of free thought which has triumphed since and the principle of free belief which became the Magna Carta of the Unitarian Protestants and of the liberal churches. These churches live by the doctrines for which Servetus sacrificed his life." ... José Barón Fernández, who emphasized the contribution of Servetus to medicine, which alone would guarantee him immortality, called him one of the brightest geniuses through whom Spain contributed to universal culture: "The profound knowledge of any of the disciplines on which he discoursed manifests the depth of his erudition combined with the rigor and honesty of the inquiry."

Now look at a Calvinistic site: <http://www.challies.com/archives/001318.php>

Michael Servetus was a Spanish theologian and physician who lived from 1511-1553. In his early years he came into contact with many leading Reformers and while he broke with the Roman Catholic Church and became at least nominally Protestant, he adopted a particularly heretical belief, denying that **Jesus Christ was the Son of God. He also denied paedobaptism**, a belief which further alienated him from Protestant and Catholic alike. . .

Quoting Calvin: "Servetus wrote to me a short time ago, and sent a huge volume of his dreamings and pompous triflings with his letter. I was to find among them wonderful things, and such as I had never before seen; and if I wished, he would himself come. But I am by no means inclined to be responsible for him; and if he come, **I will never allow him, supposing my influence worth anything, to depart alive.**"

When Servetus, at last, arrived in the city, Calvin was left with the unenviable position of having to decide whether to allow the heretic to continue his teaching in Geneva, which would inevitably lead people to believe that the Reformed church was lenient towards heresy (softer even than the Roman Catholic Church that had already condemned this man to death), or to attempt to take action ...

In this pro-Calvin reference the statement is made that Servetus did not believe Jesus was the Son of God!

It is a staggering statement to suggest that any theologian reading the Bible could come to this conclusion, as there are many scriptures that declare explicitly and directly that Jesus said he was the Son of God, as did the apostles, etc. This would certainly appear to be an illogical, erroneous conclusion.

What the Socinian (pro-Servetus) site states on this issue is much more illuminating and believable:

During the process at Geneva in the debate with Calvin he was ready to modify his views provided that his opponent's arguments were extracted from the biblical text. After he was condemned to death, Servetus with humility asked Calvin, who was directly responsible for his unjust martyrdom, for forgiveness. To be saved from the stake he only had to state "**Jesus Christ the eternal Son of God.**" Instead, his last words were: "**Jesus Christ, Son of the eternal God.**" He was convinced of the correctness of his reading of the scripture, which he revered, and died defending not his life but his doctrines Also from http://www.socinian.org/michael_servetus.html

There is absolutely no question that the Bible tells us that God is eternal; there is also no doubt that Jesus is the 'Son of God'. Where there is doubt is whether Jesus was pre-existent before His conception. Thus, Calvin was clearly trying to coerce Servetus to agree with his belief in Jesus as 'God, the Son' or some other pre-existence dogma, such as Athanasius or Arian positions.

Note also that the pro-Calvin site implicitly labels child (paedo)-baptism as a biblical doctrine. Also note, that the pro-Calvin site agrees that Calvin desired Servetus's death! (An example of commonality).

In summary, we can see that the the pro-Calvin (Challies) site clearly contains some significant historical error as well as totally denying the error of Calvin in desiring Servetus' death, regardless of his apparent heresy! This can not be excused away by arguing it was the culture of the day – these were theologians who studied the Holy Scriptures! They have no excuse for believing it is acceptable to murder someone!

Regardless on the merit or otherwise of Calvinism and the TULIP doctrine, Calvin was unquestionably, and by his own words, to some significant degree culpable in the murder of a man who sought to seek the whole truth of God.