

APOLOGETICS: GIVING A REASON FOR OUR HOPE

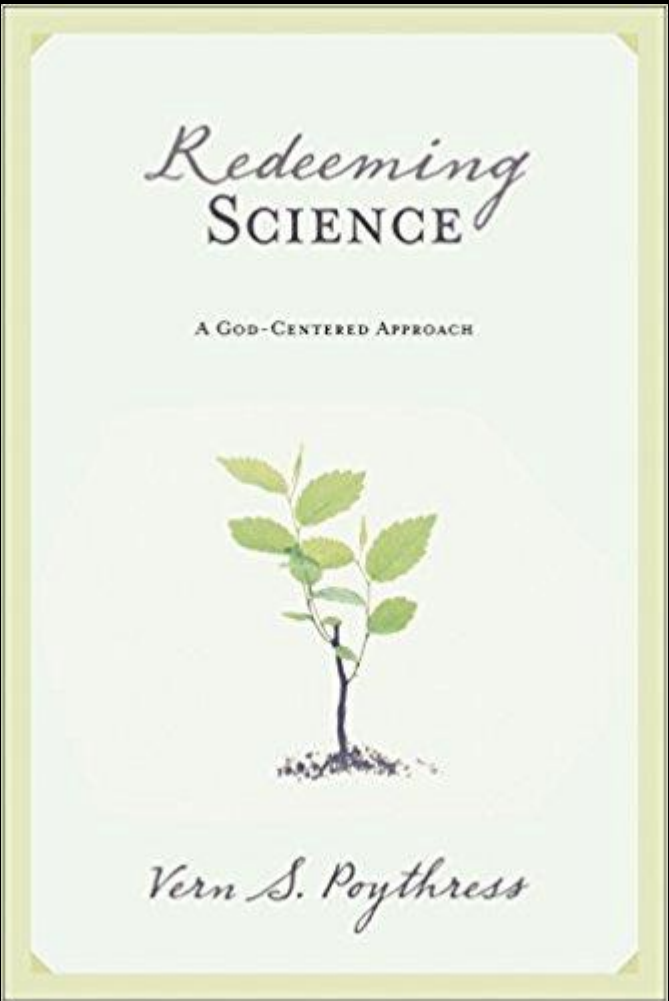
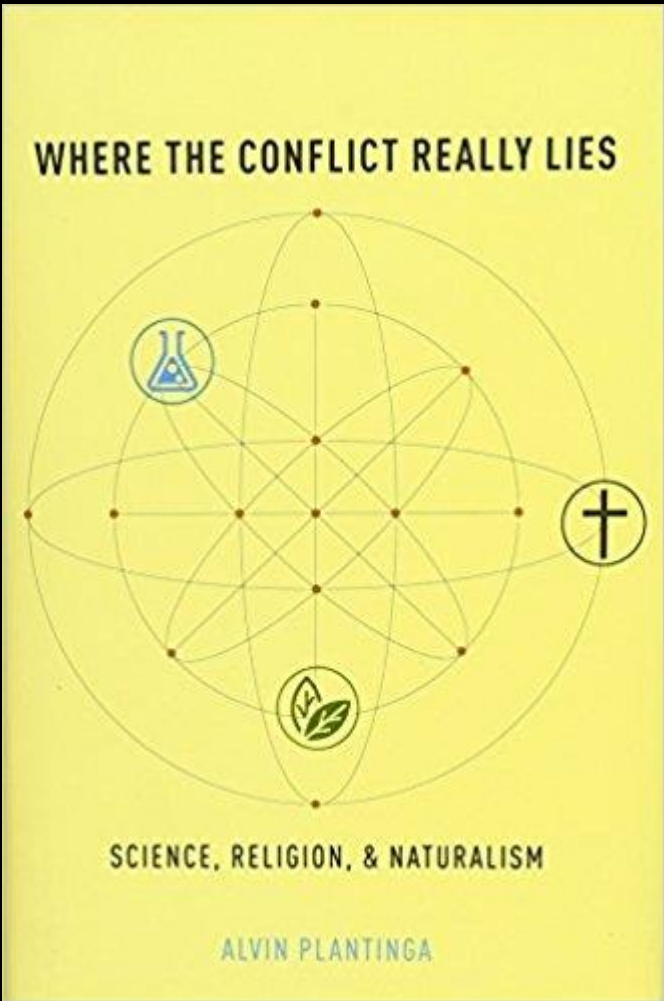
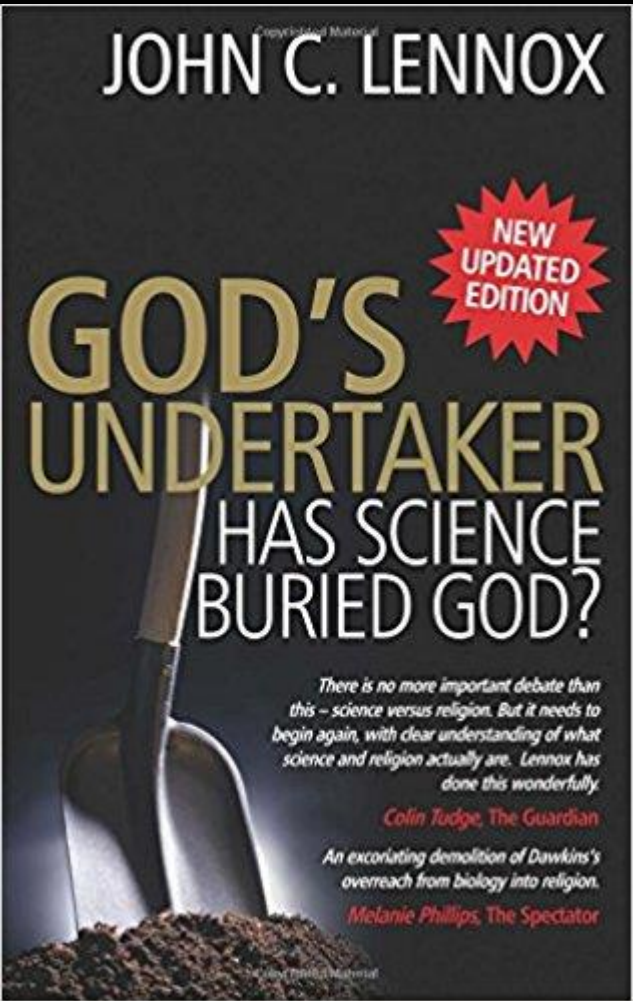
TRINITY PRESBYTERIAN CHURCH (PCA)

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PREVIEW

- Science and Scripture
 - Does science support the Christian worldview or does it present evidence against the Christian worldview?
 - The foundations of science
- Outline
 - Proof: Science relies on a certain worldview.
 - Defense: Responding to Darwinian arguments against Christianity.
 - Offense: Darwinism fails by its own (scientific) standards and Darwinism as a worldview undermines morality and rationality.

BOOK RECOMMENDATIONS



PROOF: AN ARGUMENT FOR GOD FROM SCIENCE

- Basic idea: the practice of science depends on assumptions that can only be accounted for within a Christian worldview (science is only possible because Christianity is true).
 - Science relies on a certain worldview
 - Science is not worldview independent or worldview neutral: a certain worldview supports science, other worldviews undermine it.
 - If you can show that science depends on the Christian worldview, then no scientific theory could in principle disprove Christianity; if science itself is founded on a Christian worldview, then you can't use science to disprove that worldview.
 - Science isn't self-justifying
 - It's rarely recognized that the practice of science rests on a whole host of assumptions about the universe and human beings that science itself cannot justify.
 - Science cannot justify these assumptions because they are not scientific theories; they are prior assumptions that must be true otherwise science would be futile.

PROOF: AN ARGUMENT FOR GOD FROM SCIENCE

- What are the assumptions undergirding science? (Which worldview accounts for those assumptions?)

(1) Science assumes the existence of a real, mind-independent, external world

- Science assumes there is a world out there, independent of us. It's real, it's objective.
- There have been worldviews that deny that assumption (Solipsism).

(2) Science assumes the orderly nature of the external world

- The world is not chaotic, irrational, utterly disorderly; if it was, there would be nothing to learn from it.
- Science does not prove the orderly nature of the world; it assumes it and seeks to discern that order. Science could never happen without that prior orderliness.

(3) Science takes for granted the knowability of the external world.

- You have to assume that our minds are equipped to gain knowledge from the external world.

(4) Science assumes the existence of truth.

- If there's no such thing as truth, then why would one scientific theory be any better than another?

PROOF: AN ARGUMENT FOR GOD FROM SCIENCE

- What are the assumptions undergirding science? (Which worldview accounts for those assumptions?)

(5) Science presupposes the laws of logic.

- Science uses deductions, inferences; it applies rules of reasoning.
- But if there are no laws of logic, how could science ever get off the ground?

(6) Science assumes the reliability of our senses and cognitive faculties.

- It presupposes that our senses give us a reliable picture of the world.
- It presupposes that our minds are equipped to process that picture in a way that delivers truth.

(7) Science assumes the adequacy of language to describe the world.

- Science is futile unless it can describe its research.
- But why do we have this thing called language that we can use to express truths about the world?

PROOF: AN ARGUMENT FOR GOD FROM SCIENCE

- What are the assumptions undergirding science? (Which worldview accounts for those assumptions?)

(8) Science presupposes moral values

- When a scientist publishes research, people expect honesty (Climate Gate Scandal).
- Scientists expect each other to be honest in their published research.
- Scientists assume a moral value: science is to help people, not hurt people.

(9) Science assumes the uniformity of nature.

- Scientists assume that observations they make about nature apply everywhere else in nature.
- Science requires this assumption, but how do you rationally justify this crucial assumption of uniformity?

(10) The existence of numbers (mathematical objects)

- If numbers aren't real, how could mathematical claims be about anything?
- Numbers are not physical things, but they are real (abstract objects)
- Mathematics presupposes the existence of numbers, and science relies on mathematics.

PROOF: AN ARGUMENT FOR GOD FROM SCIENCE

- How many of these assumptions can be accounted for by the Christian worldview?
 - Short answer: All of them!
 - The Christian worldview provides firm foundation for science: If the universe is the creation of a personal, rational, and orderly God, and if he made us in his image with minds designed and equipped to discover truth about the world, then it makes perfect sense to pursue science.
- How many of these assumptions can be accounted for by an atheistic, naturalist worldview?
 - If the universe is an accident with no rational mind directing or governing it, why should we assume that it is conducive to science? And why we should we think that our minds are equipped to accurately perceive and understand it?
 - In particular: (2) The orderly nature of the world (3) The knowability of the external world (why think that our minds are equipped to give us real knowledge?) (4) The adequacy of language to describe the world (5) Laws of logic – how do you get such laws in a mindless universe? (8) Moral values (9) Truth and numbers are not material things.

PROOF: AN ARGUMENT FOR GOD FROM SCIENCE

- Summary

- Science has a host of assumptions ungrounding it.
- The Christian worldview can account for those assumptions; the naturalist (“scientific”) worldview cannot.
- Most people have not critically thought through the foundations of science, even though they claim to have reason and science on their side.
- What this means: Atheists who rely on science take the assumptions of science from a worldview other than their own. Their “philosophical checks” are bouncing, so they have to borrow funds from a worldview that can actually supply what they need.

PROOF: SCIENTIFIC EVIDENCE FOR CHRISTIANITY

- Scientific evidence confirming the Christian worldview
 - Arguments from a temporally finite universe (background radiation points to a beginning of the universe)
 - Argument from the fine-tuning of the universe for both life and scientific observation
 - The Goldilocks Planet – just right to support our existence.
 - Guillermo Gonzalez and Jay W. Richards, *The Privileged Planet* (Regnery, 2004).
 - Argument from irreducible complexity in biological systems
 - Biological systems are constructed in such a way that if you take one part out, they stop working altogether.
 - Why is that a problem? Darwinian evolution rests on the assumption on gradual modifications over time.
 - Michael J. Behe, *Darwin's Black Box*, 2nd ed. (Free Press, 2006)
 - Argument from information in biological systems (DNA)
 - DNA carries complex coded information analogous to computer software.
 - Information can only be generated by intelligent sources, not mindless processes. How do you get software without a programmer?

PROOF: SCIENTIFIC EVIDENCE FOR CHRISTIANITY

- Scientific evidence confirming the Christian worldview
 - Argument from the natural limits of speciation.
 - Even though natural selection can bring about variations within species, what can't occur is development from a single-celled organism to a platypus.
 - Genesis: God created plants and animals "according to its kind."
 - Argument from paleontology (the scientific study of fossils)
 - Darwinian evolution: if true, there would be a traceable line in the fossil record from pre-human hominids to present day humans.
 - There is an increasing recognition among scientists that the fossil record isn't what we would expect if the theory of evolution were true. The problem has only become more pronounced.

PROOF: SCIENTIFIC EVIDENCE FOR CHRISTIANITY

- Charles Darwin, *The Origin of Species*: “The number of intermediate varieties, which have formerly existed on the earth, [should] be truly enormous. Why then is not every geological formation and every stratum full of such intermediate links? Geology assuredly does not reveal any such graduated organic chain; and this, perhaps is the most obvious and gravest objection which can be urged against my theory.”

PROOF: SCIENTIFIC EVIDENCE FOR CHRISTIANITY

- Summary

- Remember the role our worldview plays in the interpretation of evidence.
- Atheists have promoted a narrative of conflict between science and Christianity, but the conflict lies elsewhere. The real conflict lies between science and disbelief in God.
 - Atheist worldviews cannot account for why science is reasonable, reliable or successful because they can't provide any justification for the foundational assumptions of science.
 - They unwittingly depend on a radically different worldview – a God-centered worldview – when they engage in scientific work.
 - There is compelling scientific evidence for a Christian worldview.

DEFENSE: RESPONDING TO ATHEIST ARGUMENTS FROM SCIENCE

- The Darwinian Theory of Evolution
 - Objection: “There is overwhelming scientific evidence today in support of Darwin’s theory of evolution, which states that all life on earth is the product of natural evolutionary forces. But the Bible claims that all life on earth was specially created by God, so Christianity is incompatible with modern science.”

DEFENSE: RESPONDING TO ATHEIST ARGUMENTS FROM SCIENCE

- What are the different responses a Christian can offer to Darwinian evolution?
 - (1) “Evolution” is frequently understood in different ways, and evidence for evolution in one sense isn’t necessarily evidence for evolution in the other senses.
 - Three different understandings of evolution we need to distinguish
 - (i) Evolution as changes over time due to natural selection (Darwin’s finches).
 - (ii) Evolution as descent with modification (common ancestry thesis).
 - All life on earth is descended from a common, single-celled organism.
 - (iii) Evolution as *undirected* descent with modification due to natural selection operating on random genetic mutations (neo-Darwinism).
 - In addition to common ancestry, this definition adds that evolution is *undirected* and that it operates through *random genetic mutations* with natural selection acting on them to bring about the development and increased complexity over time.

DEFENSE: RESPONDING TO ATHEIST ARGUMENTS FROM SCIENCE

- Things to note
 - No one disputes microevolution (first definition)
 - Very often people point to evidence for the first type of evolution and then use it as evidence for the two stronger forms of evolution.
 - Most of the evidence that people give for evolution in the second and third understandings is no more than evidence for the first understanding (Darwin's finches, bacterial resistance to antibiotics peppered moths)
 - The rest of the evidence offered (supposed transitional forms in the fossil record, junk DNA) is at best evidence for the second definition of evolution, but not the third (full-fledged neo-Darwinism).
 - The third definition (Neo-Darwinism) makes the strongest claims, but it has the least amount of evidence in its favor.
 - There is no good evidence that natural selection and random mutations are sufficient to explain the diversity and complexity that exists today.

DEFENSE: RESPONDING TO ATHEIST ARGUMENTS FROM SCIENCE

- What are the different responses a Christian can offer to Darwinian evolution?
 - (2) The supposed evidence for Darwinian evolution can also be accommodated by non-Darwinian alternatives.
 - *Example:* homology as evidence for “common ancestry” or “common design”
 - Bone structure of humans repeated in apes. But couldn't this point to common design rather than common ancestry? The similar structure does not demand common descent. Why couldn't a designer use similar structures in different species?
 - Just because a truck and sports car have similar structural elements doesn't mean that one descended from the other. It just means there are common design principles they share.

DEFENSE: RESPONDING TO ATHEIST ARGUMENTS FROM SCIENCE

- What are the different responses a Christian can offer to Darwinian evolution?
 - (3) The supposed evidence for Darwinian evolution is only compelling to those who have a prior commitment to *methodological naturalism* (i.e., the view that science can only appeal to naturalistic causes and explanations).
 - People who find the evidence for Darwinian evolution compelling do so only because they have a prior worldview commitment that says science cannot allow for any supernatural explanations or causes.
 - If you define science in such a way that you can only appeal to natural causes, then you are going to have to end up with something like Darwinian evolution.
 - If you're a naturalist, something like Darwinian materialism is the only game in town.

DEFENSE: RESPONDING TO ATHEIST ARGUMENTS FROM SCIENCE

- What are the different responses a Christian can offer to Darwinian evolution?

(4) Our approach to scientific theorizing and our interpretation of scientific evidence is not *worldview-neutral* but rather *worldview-conditioned*. Christians have excellent independent reasons for holding a biblical worldview (as argued earlier) and for evaluating scientific theories and evidences in terms of that worldview.

- The scientific theory that seems most reasonable to a person depends on their underlying worldview commitments.
- The objection that Darwinian evolution disproves Christianity puts the cart before the horse by suggesting that a scientific theory can refute a worldview.
- Scientific theories are not self-justifying, they require a certain worldview for their own justification.

DEFENSE: RESPONDING TO ATHEIST ARGUMENTS FROM SCIENCE

- **Objection:** “The vast majority of scientists today accept Darwin’s theory of evolution. But the theory of evolution is incompatible with the Bible, so Christians are clearly at odds with modern science.”

(1) What exactly does a scientific consensus prove?

- Scientific consensus in the past has been mistaken
 - Examples: theory of geocentrism, Newtonian physics refuted by Einstein

(2) We have reason to be skeptical of a scientific consensus when that consensus has significant ethical, political, or religious implications.

- Scientists are no more neutral, unbiased than anyone else.
- There are intense pressures on scientists to support the current scientific orthodoxy.
 - Example: the movie *Expelled*, a documentary about scientists who began to question evolution.
 - Example: The Climategate Scandal (2009), fabricated data to reinforce support for climate change

OFFENSE: REFUTING DARWINISM

- Basic idea: Darwinism as a scientific theory fails by its own (scientific) standards and Darwinism as a worldview undermines morality and rationality.
 - Darwinism fails on its own terms because it fails to explain the totality of our observational evidence.
 - There are numerous unresolved (or irresolvable) problems for the modern theory of Darwinian evolution.
- Scientific arguments against Darwinism
 - (1) The lack of a viable mechanism for developing complex specified information in DNA
 - DNA has complex, specified information (similar to a computer code), but there's no naturalistic explanation for how you can get information out of nothing. Information always comes from intelligent minds.
 - Darwinism doesn't give any viable explanation for how you can get information simply from random processes and laws.
 - There is simply no evidence that random genetic mutation and natural selection alone can produce the kind of biological information we find in DNA (information for complex body organs).

OFFENSE: REFUTING DARWINISM

- Scientific arguments against Darwinism

(2) The origin of life (abiogenesis)

- The theory of Darwinism cannot explain the origin of life; Darwinism assumes that life came from non-life or the life in some form has always existed.
- Natural selection is part of the theory of evolution, but natural selection can only kick in once you have life.
- How can mere chance and physical laws (which must be assumed) produce even the most basic single-celled organism with the ability to reproduce and vary?

OFFENSE: REFUTING DARWINISM

- Scientific arguments against Darwinism

(3) The origin of genetic code (DNA)

- DNA contains coded information that specifies how a living organism is structured and functions.
 - DNA is like the software
- The problem for Darwinism: explaining where that information came from in the first place. How do you get information from non-information? How do you information from mindless, undirected, natural processes?
- Chicken or egg scenario: Which came first with DNA? DNA exists in cells, and it gets copied and modified within cells. But the living cells themselves are specified with DNA. So DNA depends on cells which depends on DNA. So which comes first? How do you get both simultaneously without an intelligent designer bringing things together?
- Stephen C. Meyer, *Signature in the Cell: DNA and the Evidence for Intelligent Design* (HarperOne, 2009).

OFFENSE: REFUTING DARWINISM

- Scientific arguments against Darwinism

- (4) The origin of multi-celled organisms

- Multi-celled organisms are organisms that consist of different cells and the cells have different functions (we have skin cells, brain cells, blood cells).
 - How do you get a multi-celled organism from a single-celled organism?
 - Why would a single-celled organism reproduce into a multi-celled organism? Single-celled organisms are some of the most persistent cells (bacteria survive well and produce more quickly than multi-celled organisms)

OFFENSE: REFUTING DARWINISM

- Scientific arguments against Darwinism

(5) The origin of sexuality

- Species that have male and female and require both for reproduction.
- What this requires with Darwinism: organisms that developed complimentary sexual organs in parallel. You need a male organ and female organ evolving in tandem and the organs have to be useful/functional all along in order to be preserved by natural selection.
 - You can't evolve a male sex organ and wait around for a female sex organ to evolve. You need to have both at the same time for reproduction to take place.
- It makes no sense why you would have asexual organisms that developed over time sexual differentiation because that actually makes survival harder!

OFFENSE: REFUTING DARWINISM

- Scientific arguments against Darwinism

- (6) The lack of transitional forms in the fossil record

- Darwinists are quick to point out the existence of transitional fossils.
 - Many turn out to be bogus
 - Example: Archaeopteryx (a supposed part-bird, part-reptile animal), but this has been debunked because bird fossils have been found earlier in the fossil record than Archaeopteryx.
 - The Smithsonian Museum (Washington) still has Archaeopteryx on display as a transitional fossil even though paleontology has shown otherwise.
 - If Darwinism were true, we would expect the fossil record to be teeming with transitional forms. We wouldn't expect to see any gaps at all, a traceable line of descent.
 - What we actually see are explosions of life forms in the fossil record.

OFFENSE: REFUTING DARWINISM

- Scientific arguments against Darwinism

(7) The absence of transitional organs in living organisms ('nascent' and 'vestigial')

OFFENSE: REFUTING DARWINISM

- Scientific arguments against Darwinism

- (8) The “Cambrian explosion” (rapid appearance of major animal groups)

- Refers to the sudden appearance in the fossil record of most major groups of complex animals (dated around 530 million years ago)
 - This explosion of complex life comes out of the blue with no evidence of a gradual evolution from earlier life forms.
 - The problem for Darwinism: either there were no prior transition forms (incompatible with Darwinism) or they have to say that evolution occurred so quickly that there were no transitional forms left over (evolution in fast forward)
 - But by definition, Darwinian evolution happens slowly because its undirected, messy, and random.
 - Darwin recognized the Cambrian explosion as significant evidence against his theory
 - He thought optimistically, the problem would be solved by the discover of transitional fossils, but 150 years later the problem has become even more pronounced.
 - Stephen C. Meyer, *Darwin's Doubt: The Explosive Origin of Animal Life and the Case for Intelligent Design* (HarperOne, 2013).

OFFENSE: REFUTING DARWINISM

- Scientific arguments against Darwinism

- (9) The development of complex organ systems

- (10) The development of irreducibly complex molecular machines (e.g., bacterial flagellum)

- At the biological level, there are structures that are like engineered machines.
 - The argument: you need all of the components together or it doesn't work at all. But that's inconsistent with a Darwinian explanation that builds things step by step. Each step has to be function and useful otherwise it doesn't survive.
 - Michael Behe, *Darwin's Black Box*

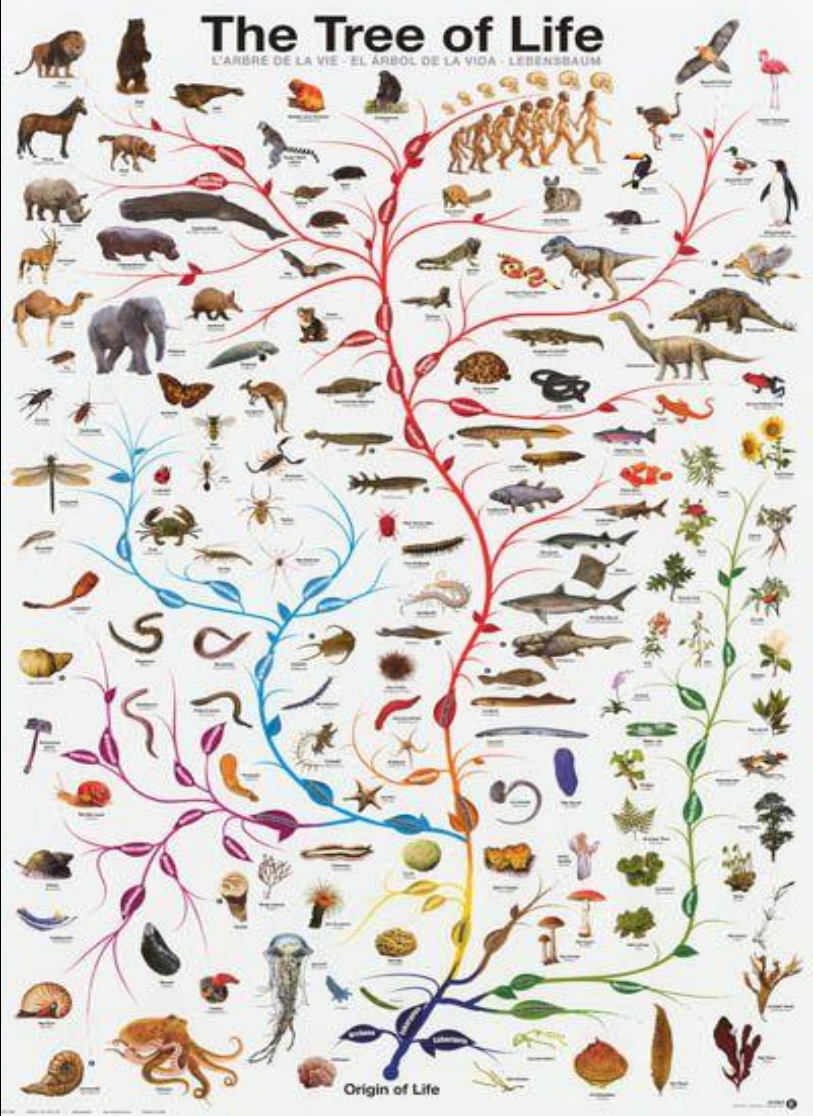
OFFENSE: REFUTING DARWINISM

- Scientific arguments against Darwinism

- (11) The conflicting reconstructions of the “Tree of Life”

- According to Darwinism, all living organisms on earth are related by descent from a single-celled common ancestor.
 - If the theory is correct, it should be possible to reconstruct this tree of life and to show all of the evolutionary relationships between species.
 - How does a Darwinist try to reconstruct the Tree of Life?
 - Morphology – shared body structures
 - Fossil record – tries to trace ancestry through fossils
 - DNA – humans and chimps are similar in DNA so they’re ancestry must be related
 - The problem for Darwinism: All of these methods produce radically different versions of the Tree of Life. You would not expect this if evolution were true; you would expect the varying methods to complement one another.

DEFENSE: RESPONDING TO ATHEIST ARGUMENTS FROM SCIENCE



OFFENSE: REFUTING DARWINISM

- Summary of arguments against Darwinism
 - Since all of these issues are highly improbable or difficult to explain if Darwinism is true, they constitute significant evidence against Darwinism.
 - The problems raise questions about the whole framework of Darwinism.

OFFENSE: REFUTING DARWINISM

- Argument against non-theistic Darwinism (NTD) from *morality*:
 - (1) If NTD is true, then we are the product of impersonal, non-moral, undirected, natural evolutionary processes.
 - (2) If we are the product of impersonal, non-moral, undirected, natural evolutionary processes, then we have no moral obligations and no moral responsibility.
 - (3) We do have moral obligations and moral responsibility.
 - (4) Therefore, NTD is false.

OFFENSE: REFUTING DARWINISM

- Argument against non-theistic Darwinism (NTD) from *rationality*:

(1) If NTD is true, then we are the product of impersonal, non-rational, undirected, natural evolutionary processes.

(2) If we are the product of impersonal, non-rational, undirected, natural evolutionary processes, then we have no reason to believe that our cognitive faculties are geared toward truth and rational thought.

(3) If we have no reason to believe that our cognitive faculties are geared toward truth and rational thought, then we should doubt all our beliefs, including the belief that NTD is true.

(4) Therefore, NTD cannot be rationally believed.

OFFENSE: REFUTING DARWINISM

- Argument against non-theistic Darwinism (NTD) from *rationality*:

“With me the horrid doubt always arises whether the convictions of man’s mind, which has been developed from the mind of the lower animals, are of any value or at all trustworthy. Would any one trust in the convictions of a monkey’s mind, if there are any convictions in such a mind?”

(Charles Darwin, *Letter to W. Graham*)

“Natural selection does not care about truth; it cares only about reproductive success.” (Stephen Stich, *The Fragmentation of Reason*)

“The idea that one species of organism is, unlike all the others, oriented not just toward its own increased prosperity but toward Truth, is as un-Darwinian as the idea that every human being has a built-in moral compass—a conscience that swings free of both social history and individual luck.” (Richard Rorty, “Untruth and Consequences,” *The New Republic*)