A Philosophical Critique of Theistic Evolution

Dr. Ray Bohlin provides an overview of some philosophical problems with theistic evolution, particularly methodological naturalism.

Methodological Naturalism as a Ground Rule of Science

In this article I review the philosophical critique of theistic evolution from the book *Theistic Evolution: A Scientific, Philosophical, and Theological Critique.*{1} I'm starting with the chapter in this section by Steve Meyer and Paul Nelson titled, "Should Theistic Evolution Depend on Methodological Naturalism?" Now I admit that's quite a mouthful. What is methodological naturalism?

Well, if you simply break the word down, you can see that it is first about a method, therefore "methodological." The second word is "naturalism." The philosophy of naturalism maintains that only nature exists. There is no supernatural, no spirit or spirits, only matter and energy.

Therefore, methodological naturalism is a method that only considers matter and energy. This refers for many to science. So methodological naturalism is a method of science that only considers natural explanations. As Meyer and Nelson put it, "Methodological naturalism asserts that, to qualify as science, a theory must explain by strictly physical or material—that is, non-intelligent or non-purposive—causes."

Theistic evolutionists collectively assert that this is how science must be done. No purpose or intelligence allowed. Strangely though, Meyer and Nelson quote atheist Sean Carroll saying, "Science should be about determining truth, whatever

truth that may be—natural, supernatural, or otherwise." In addition, they quote theistic evolutionist Darrell Falk admitting that natural selection and mutation do not explain the origin of animal form. Yet he also affirms there is a natural explanation waiting out there. Why?

Meyer and Nelson explain, "Because of his commitment to methodological naturalism, Darrell Falk will not consider any theory (such as intelligent design) that invokes 'creative intelligence.'" Instead, he waits for an adequate and fully naturalistic theory of evolution. But is this reasonable?

This is my third article critiquing Theistic Evolution. You can find the first two here and here. I simply ask that our brothers and sisters who accept Theistic Evolution, look again with unbiased eyes.

Why Methodological Naturalism?

Above, I said that science should be about determining truth, wherever the evidence leads. Methodological naturalism limits that search for truth in science to only natural explanations. So why this restriction?

Some theistic evolutionists like Nancy Murphy are quoted as saying that, "For better or worse, we have inherited a view of science as methodologically atheistic." This limit by history over the last 150 years hardly seems adequate. Others, however, insist that methodological naturalism is supported by independent and objective criteria. These are often referred to as Demarcation criteria, such as:

1. Must be based on observable data and/or
2. Must be testable or falsifiable and/or
3. Must offer explanations based on natural law.

These criteria will be able to distinguish genuine science from pseudoscience, metaphysics, or religion.

I’m going to need to examine these criteria to see if they provide what is needed—basically a principled philosophical or methodological reason for supporting methodological naturalism. Can these criteria enable scientists or philosophers to do science in a normative way? Do the criteria justifiably exclude, *a priori*, some theories as unscientific or pseudoscientific, despite what the evidence may show? If so, then it may be perfectly justifiable to exclude from scientific consideration theories of the origin and development of life that invoke creative intelligence, and it may also be justifiable to require that theories refer only to materialistic causes or natural processes just as many theistic evolutionists assume.

BUT—and this is a big BUT—what if these demarcation criteria are neither independent nor objective? Is there already an inherent bias in these criteria and are they applicable in all situations? The answer is a resounding NO!

Demarcation Criteria Work, Except When They Don’t

Earlier, I discussed if methodological naturalism is necessary for science, and most evolutionists and theistic evolutionists think that it is. There are what are called demarcation criteria that are supposed to distinguish science from pseudoscience and religious theories.

There was a significant and famous federal court case challenging a new law passed in Arkansas back in 1980, that required creationism to be taught alongside evolution in public schools. Federal Judge William Overton struck down the Arkansas law and used many of these demarcation criteria as his reasoning. His reasoning was that creationism was not science based on these criteria.

First, he said, virtually verbatim from the brief submitted

from the ACLU, creationism was not guided by natural law. Second, it was not explained by reference to natural law. Third, creationism was not testable against the empirical world. And fourth, Creationism was not falsifiable. On the surface judge Overton's decision was reasonable.

Therefore, despite whatever scientific evidence creationists were able to offer for their claims, it simply wasn't science. No matter what the evidence!

But within months of the ruling being issued, it was blistered by philosophers of science. They explained that many theories throughout science in the past and present would not qualify as science according to Overton's decision.

But as Meyer and Nelson point out, Newton and Galileo posed no natural law to govern gravitational phenomena. Yet, Newton's universal law of gravitation described and predicted gravity precisely, but according to the criteria, it's not science. Even Darwin's theory of natural selection knew nothing of the genetics it would eventually refer to. Were both Newton and Darwin unscientific? No one would claim that today. So, judge Overton greatly
overreached.

Demarcation Criteria Could Exclude Both ID and Evolution

In the previous section I began discussing what are called demarcation criteria that are supposed to distinguish between science and non-science. I showed that Newton's gravitational ideas were not based on scientific law. He had no idea what caused gravity. Another criterion is that science must be testable. But as philosopher of science Larry Laudan showed after the trial, creationists routinely offered geological tests for their catastrophic flood geology.

Another major criterion was that a scientific hypothesis must be observable. When discussing intelligent design, of course, the designer is not observable. So, ID is not science. Meyer and Nelson point out however, that this is applying the criterion far too rigidly. After all, we still cannot see gravitational waves, we have never observed an electron, we have never observed a mammalian carnivore evolving into a wolf or a lion, or anything even remotely this close in relationship.

But evolutionists can suggest evolutionary events that could give rise to the wolf and the lion, and we can very precisely predict and describe gravitational fields even though we can't observe gravity itself, only the results.

Appropriately, while we may not observe the designing mind behind the information rich content of living things, we are very acquainted with the results of intelligence. Our only model today for the origin of complex specified information (or language) is the mind. Our minds interpret and produce language every hour of our waking day; even in our sleep, we dream—again information.

So, if we use the criterion of observability too rigidly, then both evolution and ID are not science, but if we apply the criterion more realistically, then both materialistic and non-materialistic theories can qualify as science.

Why Methodological Naturalism Sinks Theistic Evolution

I will now close my discussion of the philosophical objections to theistic evolution by discussing an intriguingly-titled chapter, How to Lose a Battleship: Why Methodological Naturalism Sinks Theistic Evolution.

Remember that Methodological Naturalism is defined by

asserting that science, properly understood, can only suggest natural causes. Author Stephen Dilley reminds us of what has been known for decades; that Darwin's *Origin of Species* was written as a scientific answer to its main competitor, special creation. However, in the fourth edition, Darwin also claimed that special creation is not science.

But if you use scientific evidence to discredit a theory as false, it must be science, otherwise, scientific evidence is useless. But when Darwin also claimed that special creation was not science, then his scientific arguments against special creation should have been taken out of what he called "the long argument."

But even modern-day theistic evolutionists do much the same thing. On the one hand, they use methodological naturalism to contend that ID is not science, but then they offer scientific evidence that ID is false using scientific arguments. If ID is not science, then scientific evidence is useless; if it is science, then use scientific evidence to demonstrate that it is incorrect science.

Francis Collins is perhaps the most recognizable proponent of theistic evolution. In his book, *The Language of God*, he uses theological language to show evolution as being true and ID as false. Basically, he reasons that the design of the mammalian eye is less than ideal. That is what you would expect, he says, from evolution, but not design. Evolution will cobble something together that works, whereas you would expect the Designer to design it perfectly. This argument has been around for some time and simply is not true, but you can see that Collins uses theological language to exclude design.

If evolution is science, then why resort to what we think God would do, to argue in favor of evolution? Either way, Dilley shows, theistic evolutionists would be wise to discard methodological naturalism. I agree.

Notes

1. *Theistic Evolution: A Scientific, Philosophical, and Theological Critique* by J. P. Moreland, Stephen C. Meyer et al. (Wheaton, IL: Crossway, 2017).

Mere Creation: Science, Faith and Intelligent Design

An unprecedented intellectual event occurred in Los Angeles on November 14-17, 1996. Under sponsorship of Christian Leadership Ministries, Biola University hosted a major research conference bringing together scientists and scholars who reject naturalism as an adequate framework for doing science and who seek a common vision of creation united under the rubric of intelligent design. The two hundred participants, primarily academics, formed a nonhomogeneous group. Most had never met each other. Yet virtually all the participants questioned the reigning paradigm of biologynamely, that natural selection and mutation can account for the origin and diversity of all living things.{1}

So said Dr. Henry F. Schaefer III, professor of chemistry at the University of Georgia, author of over 750 scientific publications, director of over fifty successful doctoral students, and five-time Nobel nominee, in his foreword to the 1998 book, *Mere Creation: Science, Faith and Intelligent Design.*{2} I was privileged to be one of the two hundred participants at this historic conference which, along with the subsequent book, form the backbone of future direction of the fledgling intelligent design movement.

I would like to highlight significant chapters from this book and provide additional resources to learn more about this important challenge to Darwinism. Along the way I hope you will gain a glimpse of how important this movement is to the future not just of biology, but of science education as a whole in this country and around the world.

Jonathan Wells is a post-doctoral research biologist in the department of molecular and cell biology at the University of California at Berkeley. His Ph.D. is from the same institution in developmental biology. In his chapter, "Unseating Naturalism,"{3} Wells lists several important insights from developmental biology that seriously challenge a purely naturalistic biologic science.

Since 1983, homeotic genes have been the rage in evolutionary developmental biology. First discovered in fruit flies, these genes appear to act as switches to turn on a series of genes important for sequential levels of development. Of interest to evolutionists, is the fact that many of the same genes found in fruit flies are also found in almost every other animal group, all acting as developmental switches. They are even frequently found on the same chromosome and in the same order from species to species. Such evidence seems quite a compelling argument for all life forms evolving from a common ancestor.

But Wells quickly points out that these genes do not control the same body structures from species to species, so an evolutionary explanation does not fit so well. "If the same gene can 'determine' structures as radically different as a fruit fly's leg and a mouse's brain or an insect's eyes and the eyes of humans and squids, then that gene is not determining much of anything."{4} There is no current mechanism to understand how a homeotic-switching gene can change from coding for one function to another in different organisms. Suddenly, this new great evidence of evolution is yet another problem for evolutionary biology. Wells goes on to

point out that intelligent design has no trouble incorporating similar switches in different organisms just as an engineer understands the use of similar ignition switches in different kinds of vehicles.

Wells concludes that, "A design paradigm can nurture the sort of formal and teleological thinking that will enable biologists to discover the laws of development that have so far eluded them."{5} The reason for the elusion is the shackles of Darwinism.

Redesigning Science

In taking a close look at the book, *Mere Creation*, edited by Bill Dembski, I would like to explore Dembski's own contribution to the volume, "Redesigning Science."{6} If the name Bill Dembski is unfamiliar to you, it won't be for long. Dembski is an extremely bright and articulate young man with earned doctorates in mathematics from the University of Chicago and philosophy from the University of Illinois at Chicago along with an M. Div. from Princeton Theological Seminary. Dembski is also the author of perhaps the most significant book to date in the intelligent design movement, *The Design Inference: Eliminating Chance through Small Probabilities*{7}, from the prestigious Cambridge University Press.

Bill is also confident. He is confident that intelligent design can thoroughly reshape the horizons of science in the next twenty years. He begins his chapter with a whimsical scenario recounting a "nightmare" potentially experienced by Harvard paleontologist and vocal anti-creationist, Stephen Jay Gould. The nightmare includes Gould no longer teaching at Harvard, relegated to leading field trips to the Galapagos Islands and the Burgess Shale in the Rocky Mountains of Canada, with Phil Johnson and cronies firmly in control of the National Science Foundation.{8} While Dembski admits that the nightmare is hopefully not realized in all its details, the

notion of design claiming primacy within science is clearly the objective.

In order for this objective to be realized, design must be specifically and rigorously defined. I'll allow Dembski to explain in his own words.

> *The key step is to delineate a method for detecting design. Such a method exists. We use it implicitly all the time. . . . The method takes the form of a three-stage explanatory filter. Given something we think might be designed, we submit it to the filter. If it successfully passes all three stages of the filter, then we are warranted asserting it is designed. Roughly speaking, the filter asks three questions, and in the following order: Does a law explain it? Does Chance explain it? Does design explain it?{9}*

In trying to classify an event as either due to natural law, chance, or design, we first try to assess if it is an event of high probability and therefore due to some recognizable natural law. A bullet firing when a gun's trigger is pulled or getting at least one head when a fair coin is tossed a hundred times are both high probability events due to natural law.

Rolling snake eyes with a pair of fair dice, or even winning a million dollar lottery when considering how many tickets are sold, constitute events of intermediate probability that are justly relegated to chance.

But let's say the same person wins that lottery three times in a row or even twice in a row. Suddenly we suspect that something more than chance is involved. Dembski's own example is Nicholas Caputo, the county clerk of Essex County, New Jersey. Caputo was responsible for determining the order in which candidates appeared on the ballots for elections. Caputo was a Democrat and 40 out of 41 times the Democrats were listed first, which everyone agrees, gave them a slight advantage. We intuitively use the explanatory filter to

classify these events as designed because they are of small probability and they conform to a pattern. Thus intelligent design combines small probability with what Dembski terms, "specified complexity."

Dembski and the other authors of *Mere Creation* believe we can apply the same test scientifically to physical, chemical, and biological events.

The Explanatory Power of Design

One of the critical questions for intelligent design is its ability to explain at least some natural phenomena more completely than naturalistic science. Stephen Meyer addresses this problem in his chapter, "The Explanatory Power of Design."{10} Steve Meyer is professor of philosophy at Whitworth College in Spokane, Washington, with a Ph.D. in the history of and philosophy of science from Cambridge University, England. As an example of design's explanatory power, Meyer chooses to explore the origin of information within living systems, specifically the origin of the genetic code. Meyer brings a scholarly appraisal to the subject since his Ph.D. dissertation concerned the history and status of origin of life research.

Meyer summarizes the extreme problems origin of life research has encountered in the last thirty years, highlighting along the way the important work by Charles Thaxton and Walter Bradley.{11} Following the euphoria of the famous experiment by Miller and Urey in 1953, the origin of life community has suffered setback after setback. Miller and Urey demonstrated that a mixture of methane, ammonia, water and hydrogen could be induced to produce, among many other organic compounds, a few amino acids, the building blocks of proteins. Subsequent work showed that this hypothetical atmosphere was pure mythology. So was the notion of a prebiotic soup of biochemical building blocks.{12}

Beyond the purely biochemical difficulties of origin of life research looms the immense problem of accounting for the origin of complex specified information contained in biomolecules, and specifically in DNA and the genetic code. In the computer age we are often amazed at the speed and storage capacity of modern personal computers, particularly the laptop variety with their 12 gig hard drives and 500 MHz speeds. We seldom realize, however, that "the information storage density of DNA, thanks largely to nucleosome spooling, is several trillion times that of the most advanced computer chips."{13} So not only is there real information stored in DNA, but it is stored at a density on a molecular level, we can't even approach with our best computers. So just where did this information come from?

Attempts to account for the origin of biological information by natural biochemical means have utterly failed. The odds of achieving even a small 100 amino acid protein are less than 1 in 10^{125}. Events of that small a probability just don't happen. Not only that, but researchers now realize that natural forces are incapable of achieving the formation of bio-information by any process. At first, some thought that maybe the amino acids and nucleotides had some natural affinity for each other to help account for the specific sequences of proteins and DNA. When that turned into a dead end, some hoped that some sort of natural selection of molecules might help. But natural selection requires reproducing cells. So-called "self-organization" processes only provide low level order, like ripples in the sand, not informational messages like "JOHN LOVES MARY" written in the sand.

Scientific laws will only describe ordered natural phenomena, like the structure of a crystal, which bear no relationship to the specified complexity within biomolecules. Instead, our experience with informational codes and languages indicates that they always come from an intelligent source. Therefore mind or intelligence stands as the only possible source for

the information in DNA, proteins and cells as a whole.{14}

Applying Design within Biology

Have you ever wondered how a baby is formed from a single cell in just nine months? You could ask the same question of just about any animal from wasps to caterpillars to frogs to clams. A fully functioning organism is a symphony of integrated parts performing in coordinated fashion to make beautiful music. But where did all the orchestra members (or proteins) come from? And who told them where to sit? And how do they know when and what to play? And what about tempo and volume and on and on? Well, you get the picture. Biological organisms are immensely complex, but they all start out as single cells. Somehow they turn into assemblages of different cells and tissues that all know their places and roles. Embryological development has long been a mystery and its secrets are only slowly being revealed. It has also turned into a potentially fruitful battleground between evolution and intelligent design.

Paul Nelson recently received his Ph.D. in philosophy from the University of Chicago and is currently doing post-doctoral work at the same university in evolutionary and developmental biology. The connection between embryological development and evolution is significant because, in order for organisms as diverse as hawks and starfish to evolve from a common ancestor, they must change not only their outward appearance but also the developmental process that starts as single cells for both. Nelson's "Applying Design within Biology" explores the connection and its inherent contradictions.{15}

A major observation of embryology has been that developmental mutations are usually harmful and often fatal. And the earlier in the developmental process the mutation occurs, the more likely the effect will be harmful. This led most embryologists to believe that evolutionary changes utilize mutations that appear relatively late in embryological development. Subsequently Darwinists predicted that the further back you go

in comparing two organisms' patterns of development, the more similar they will be. Unfortunately for evolution, this is not true. There is wide diversity of early cleavage patterns of cells in embryos from species that can actually be closely related. One author went so far as to refer to this as "intellectually disturbing."{16}

Such a dramatic reversal would, you would think, cause many or at least some developmental biologists to question the validity of Darwinism. But as I have indicated so many other times in other essays, Darwinism is assumed, not questioned. Biologists mainly concluded that change in early development is doable after all and quite common. But as Nelson aptly summarizes, "There is little if any experimental evidence that 'changes in early development are possible.'"{17}

While the diversity of pathways to similar ends in development is a problem for evolutionary developmental biology, it is an expectation of intelligent design. The sheer magnitude of instructions for embryological progress screams for a design perspective. Design is also found in the newly discovered redundancy of developmental pathways. Knocking out a seemingly essential gene can sometimes have no effect whatsoever. Built-in redundancy is a hallmark of *design*, not chance mutations and natural selection. Nelson basically believes that any element of an organism necessary for survival and reproduction in any environment is a strong candidate for design. This should help open up new research avenues for developmental biology which is exactly what new theories should do.

Basic Types of Life

Next time you are walking through a zoo, stop and think about what makes some animals different and others similar. For instance, if you are looking out over a large pond, you may see different species of ducks, geese, and swans. While they do appear different in some respects, there are also very tantalizing similarities. However, if there are also some

flamingos or sea gulls in the crowd of aquatic birds, you would not put them in the same category as ducks and geese. They seem different. Evolutionists, of course, would see sufficient similarities: they are birds, after all, with wings, feathers, and beaks. So evolutionists would say they all evolved from a common ancestor. Ducks and geese are more similar to each other than they are to flamingos so the ancestor of ducks and geese is more recent than the ancestor of ducks, geese, and flamingos.

But since intelligent design is calling into question many evidences and predictions of naturalistic evolution, it is reasonable to assume that all animals are not related back in time through a common ancestor. Perhaps all birds did not evolve from a single source. Maybe there are many different ancestors for the many groups of birds and other animals. Well, how would you know? How could you recognize groups of animals that do derive from a common ancestor and those that have arisen independently? Siegfried Scherer makes an attempt in his chapter titled, "Basic Types of Life." {18}

Dr. Scherer is a professor of microbial ecology and director of the Institute of Microbiology at the Technical University of Munich and has published numerous papers in international peer-reviewed journals. Scherer proposes that there is another unit of taxonomic classification that can be overlaid on current taxonomy, the idea of basic types.{19} A basic type is a group of organisms or species that are capable of hybridizing. These hybrids don't necessarily have to be fertile themselves. Simply producing a coherent functioning organism from sperm and eggs of different species is sufficient.{20} Numerous successful attempts to hybridize different species of ducks, swans, and geese have convinced Scherer that they belong to a single basic type. This would mean that all 148 species are descended from a single common ancestor.{21}

The distinct differences mentioned earlier, between ducks and

flamingos, would result from them being of different basic types. This observation leads Scherer to suggest that microevolution can now be defined as evolution within one basic type and macroevolution as evolution between basic types. The current evidence suggests that macroevolution is an undocumented process both from the fossil record and the biology of basic types.

The plethora of species within a basic type like the ducks and geese also suggests that there was a great deal of variation built into each basic type to allow many distinct species to form through speciation. This prediction would be consistent with intelligent design but not evolution. There would be no reason for evolution to suggest that some species would have more variation than others would. This is corroborated by the observation that hybrids between two species frequently resemble a third species. This indicates that the genetic combination of the third species was hidden between the two species used to form the hybrid.{22}

Scherer summarizes that evidence of individual ancestors for each basic type, fossil and biological gaps between basic types, similar or convergent characters in different basic types, and odd features, such as slightly differing genetic codes now found in a few organisms would also be evidence of design over evolution. The possibilities for further research are everywhere. Intelligent design becomes an extremely fruitful paradigm for research.

Notes

1. Henry F. Schaefer III, “Foreword,” in *Mere Creation: Science, Faith and Intelligent Design*, William A. Dembski, Ed. (Downers Grove, Ill.: InterVarsity Press, 1998), 9.

2. Ibid., 475.

3. Ibid.,, 51-70.

4. Ibid., 56.

5. Ibid., 68.

6. Ibid., 93-112.

7. William A. Dembski, *The Design Inference: Eliminating Chance through Small Probabilities* (Cambridge: Cambridge University Press, 1998), 243.

8. Dembski, *Mere Creation*, 93.

9. Ibid., 94.

10. Ibid., p. 113-147.

11. Charles Thaxton, Walter Bradley and Roger Olsen, *The Mystery of Life's Origin: Reassessing Current Theories* (Dallas: Lewis and Stanley, 1984), 228.

12. *Mere Creation*, 118-119.

13. Ibid., 120.

14. Ibid., 136-137.

15. *Mere Creation*, 148-174.

16. Eric Davidson, quoted in *Mere Creation*, 155.

17. Ibid.

18. Ibid., 195-211.

19. Scherer does at least mention a competing idea, baramin, initially proposed by creationist Frank Marsh (*Fundamental Biology*, 1940, Lincoln Neb., n.p., *Variation and Fixity in Nature*, Mountain View, Calif.: Pacific Press) and further explicated by Kurt Wise (K. Wise, Baraminology: "A Young Earth Creation Biosystematic Method, in *Proceedings of the Second International Conference on Creationism*, R.E. Walsh and C.L. Brooks, eds. (Creation Science Fellowship, Pittsburgh, PA,

1990, Vol. 2, 345-360 and K. Wise, “Practical Baraminology,” *Creation Ex Nihilo Technical Journal*, 1991, 6(2): 122-137). Scherer chooses not to mention another attempt in fleshing out this concept, the prototype, proposed by Lane P. Lester and Raymond G. Bohlin in *The Natural Limits to Biological Change* (Dallas: Probe Books, 1984), 161-172.

20. *Mere Creation*, 197-199.

21. Ibid., 200.

22. Ibid., 203-204.