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Origins and Biological Science

A Christian Response to a Secular Challenge

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Origins and the Challenge to the Christian Faith

The secular view of nature poses a challenge for those who hold to the biblical view of creation (Gen. 1). Efforts by secular thinkers to strip God of His role as Creator can weaken the foundations for both the belief in God and adherence to the Christian faith in the minds and hearts of believers. God's creation is one of His crowning achievements and is a clear demonstration of His omnipotence. Scripture speaks of God's ruling over nature and creating as examples of His power (Psalm 18: 7-15, Job 38-41). The attack on God as Creator is most evident when one examines the anti-biblical nature of the assumptions underlying the secular perspective on nature and its origins. The attack can also take a more subtle form which requires some discernment in teasing apart complex issues. Four issues will be used as examples to show the conflicts between the secular and biblical views on origins. The four topics are 1) assumptions related to nature, 2) experimental design in biology, 3) origins as science, and 4) the origin of information and complex traits. Throughout these topics, the philosophical, methodological, and biblical assumptions underlying the discipline will be examined. I will wrap up by addressing application of these ideas in the classroom and future directions of study.

Assumptions Underlying Secular and Biblical Perspectives on Creation

A secular perspective on nature includes the following assumptions:

1. All that exists is matter in motion.
 - a. There is no God and no designer
 - b. Anyone with an opposing point of view is in error.
2. Nature has the capacity to create and improve itself.
 - a. Nature is not designed. It is a result of blind law and chance.
3. Nature has the capacity to regulate and sustain itself

The view that “all that exists is matter in motion” can be referred to as naturalism or philosophical naturalism. According to this view there is no supernatural, no God, and no designer. If there is no God or Creator, then how does one explain the existence of the universe and the existence of life? There are a range of answers to this question but basically it comes down to the idea that nature has the capacity to create and improve itself. There is no need for a god and no need for a designer. Everything occurs through chance (accidental and unguided) and necessity, or natural law (unguided). Why does matter behave the way it does and why does it continue to exist? The secular assumption would be that nature has the capacity to regulate and sustain itself. In other words, these properties are built into nature. In the secular view we see that God’s role as Creator and Sustainer is negated, or at least made irrelevant. It is fair to say that the secular view of the physical world is founded upon anti-biblical assumptions.

The biblical view is significantly different and contrasts with the secular view. In the biblical view God *is* the Creator and Sustainer of all things (Col. 1:16-17). The Bible is bookended with Creation at the beginning (Gen 1) and renewal of all things, the New Creation (Rev. 21) at the end. These are absolutely essential ideas of the Christian faith and without them the Christian faith is greatly undermined. A Christian view of science begins with God as Creator and Sustainer. Exactly how will we unpack and apply these

ideas to science? This is one of the goals of this paper. This is important because the challenges presented to the Christian academic are significant and must be addressed.

Experimental Design in Biology: Methodological Presuppositions in Secular Science

How does one go about doing science? In doing science, observations can lead to questions on some aspect of the natural world. Theories are then proposed and tested using experimentation. Putting an experiment together so that it will appropriately address the question at hand is experimental design. A well-designed and executed experiment will either support or refute the theory being tested. On first glance one might consider that this would be a neutral and esoteric topic. In fact, one can find anti-biblical assumptions built into the fabric of experimental design. These anti-biblical assumptions, backed by the success of biological enterprise, are then used as a club against the biblical viewpoint. This section will address assumptions found within experimental design, evaluate those assumptions, and consider alternatives.

In biology many experiments are designed in ways that resemble studies in engineering. Both biology and engineering explore entities that have the following features: they are composed of individual parts; the parts have a role; and the parts work together to accomplish the function of the larger system. We can ask questions such as 1) What does this part do? 2) How does the function of this part relate to the overall function? and 3) If the entity is not doing what it is supposed to, is it missing a part, is a part not working, or is a part working when it should not? All of these

questions seem to make sense and help us to understand the systems we are studying, both in biology and in engineering.

There are no problems conceptually with the engineering approach. A designer originally conceives of an invention, builds and assembles parts, and puts them together. He works on it until the invention performs the function it was designed to do. Of course, there may be problems along the way, but this is the basic approach in engineering. Because this is the approach, one can study the parts of the invention so that we may understand 1) how it works 2) how to fix it and 3) how to improve it. These are the methodological assumptions used in studying engineering.

But can the same kinds of assumptions be applied to biology? They should *not* be applied, but in fact they are. What is the problem in using the same assumptions in both engineering and biology? From a secular perspective, biology is *not* the result of design but is due to accident (chance) and unguided forces (natural law). How can we consider the function of the overall entity or of any of the parts if they were not planned? How can we ask what a system is “supposed” to do when it was produced by unguided mechanisms? The questions in the previous paragraph on how parts work do not make sense under these circumstances. Designing a biological experiment which asks those questions is fraught with problems. In other words, a serious category error is built into the experimental methods of biology. (See Appendix A for illustrations related to non-designed systems and function and further support of these ideas.)

If questions about how parts work do not make sense in Biology, why are they used and why is this methodology applied? Biologists have no choice. If they

abandoned this methodology it would leave the entire discipline senseless and disconnected. So biologists are applying a flawed methodology in experimental design. But does that hinder progress in biology? It is difficult to know how biology would progress if it had a better methodology, but it seems biological research is quite robust.

Can the foundations of the scientific enterprise be improved upon? They can, in fact, be improved upon, and it is even a quick fix. If one acknowledges that the parts in biology were fashioned to do what they do by a designer, then that solves the problem. There are a few loose ends, but it is essentially a coherent view. This is the field of intelligent design. Intelligent design is the view that the order in nature is produced by an intelligent agent rather than by unguided natural processes. An engineered entity can be examined and studied because the parts are put in place by a designer. In the same way in biology, research can make sense if a designer is involved. While not explicitly a Christian view, this is compatible with a Christian view.

The secular person does not want to give up on the unguided aspect of natural processes, so he solves this troubling issue by tweaking the definition of science. In the new definition, science is explicitly limited to naturalistic explanations. This is a reactionary view meant to squelch any opportunity for a religious explanation to enter into the discussion.

The secular thinker has additional problems with intelligent design. He claims that a designer adds nothing to the understanding of the subject matter and needlessly multiplies explanatory entities, which is considered poor or bad science. But in fact, the arguments presented here support the view that the entire biological scientific

enterprise is already built on design assumptions and design theory. Therefore the designer ties together the entire enterprise and provides the order that allows it to make sense. Far from being unnecessary, the designer is essential.

The secular person might respond to this kind of challenge by saying that these arguments are irrelevant. He says, "Science is working fine and great discoveries are being made the way things are done now, so leave well enough alone." This is a pragmatic reply, but it does not negate the fact that design-related thinking contributes to science. To deny this fact does not make it go away. And admitting to design-related thinking may lead to opportunities to improve science.

Origins as Science: Philosophical and Methodological Assumptions

The issue of whether origins is in the category of science or whether it also falls within other fields is an important matter to determine. To get at this question it will be necessary to examine philosophical and biblical assumptions about the physical world. In addition, one of the main examples of origins science — evolution — is presented by secular scientists as one of the best proven theories in all of science. This claim will be evaluated looking at both philosophical and methodological assumptions.

Secular scientists understand that science alone provides a complete explanation of the physical world. This view can be referred to as scientism. It states that science is our gateway to truth, and if something is not found within science, it is not in the realm of truth. There are a number of problems with this position. The first problem is its foundation: What is the basis for asserting that science is the only way to truth? This

philosophical assumption has not been established. Nevertheless, secular scientists have accepted this as an established fact.

Another way to critique scientism is to just look at what science is and how it is done. Science is a systematic way of studying and understanding the world around us. It is based upon the scientific method, which ties in with experimental design as was discussed earlier. That is, observations are made, theories are generated, and experiments are designed to test those theories. The experiment will either support or refute the theory. Science does not rule out all options, it presents one, or a few, options backed up by a body of evidence. Such a method is inconsistent with the exclusive claims of truth (scientism) posited by secular thinkers. Secular thinkers cannot rely upon the scientific method to defend scientism. Not only does scientism run counter to reason and rationality, it also runs counter to the Bible, which is the source of truth for the Christian faith and for life (2 Tim 3:16). And according to the Bible, God is the source of truth (Prov. 1:7, John 14:6). There is a place for a further challenge of scientism, but that goes beyond the scope of this paper.

Because scientism is the accepted view among secular thinkers, they naturally apply this view to the subject of origins and exclude any role for either a metaphysical/philosophical view or a religious view. Science would be considered dominant and none of the other views could tell us anything real about origins. Of course, secular thinkers would acknowledge imaginary or mythical views, but these have no teeth and would have no bearing on how we truly understand the world. With regard to the question of origins, scientism places evolution in a privileged or protected

position. Evolution is essentially a foregone conclusion with or without evidence, because it is the only way that things could exist. In other words, if there is no God and no Creator, then some form of evolution must be the explanation for origins. Secular scientists will not openly admit that. They claim to make their stand completely on the evidence. This is worthy of a challenge and some have attempted this, as Philip Johnson did. (See the Johnson-Provine debate - Access Research Network 1994).

When dealing with evolution, there is a need to carefully dissect arguments, acknowledge what seems reasonable, and then challenge what seems problematic. What is complicated about evolution is that at first glance, it fits within the basic concept of a legitimate theory in science. In a general theory, multiple small bits of evidence accumulate and add weight to the theory. The basic theories of physics, chemistry, and biology are widely accepted and applied by the secularist and the Christian alike. Therefore, the evolutionist accuses the critic of rejecting all of modern science if evolution were rejected. The fact is that one *can* reject evolution without rejecting all of modern science, but one has to do it by understanding the nature of scientific theories and teasing apart some tricky issues.

One can begin by examining the specific strengths and weaknesses of the theory of evolution? One of its strengths is that there *is* a body of evidence supporting it. (Critics might say that the evidence does not support it, it only supports a part of it. But for proponents, if the evidence supports part of a theory, it supports the entire theory.) Granted, the evidence could be considered circumstantial because it is almost completely related to common descent, which is the study of the comparison and

similarity of structures between diverse organisms. However, common descent provides no account of the origin of complicated systems and information, and that is a weakness. To critics, this deficit relegates evolution to the status of a second-rate theory at best. Secular scientists, however, are not bothered by this lack of evidence and believe its absence is no threat to the theory. According to their methodology, the theory is justified. In fact, they view evolution as having a high level of certainty because of the volume of evidence related to common descent. Both their methodology and their view of evolution need to be challenged.

What then can be a basis for challenging evolution? The main weakness is that there is no evidence that evolution can generate complex traits and new information. Until that can be proven, the theory must remain tentative. And evolution can be disputed while still holding to the other sciences. Biology represents a level of complexity far beyond that seen in physics and chemistry and the burden of proof is on the biologist to explain it. This is a unique problem not seen in the other sciences and therefore can justify a separate rejection of evolution while still accepting physics and chemistry.

Though this is not a strong challenge to evolution, I believe it is solid. The advantage is that it avoids a number of defeaters that evolutionists use to counter Creation and intelligent design. It may not convince the secular person, but it can plant a seed. And it shows him that those who hold a different view oppose it for reasons related to the truth of the matter (and not some hidden religious agenda). Additional ideas on interacting with secular individuals will be presented in the following section.

Engagement with the Culture: The Origin of Information and Complex Traits

So how do we influence those with a secular viewpoint? One might think that in an open and tolerant society which espouses acceptance of alternate views, one would have a willing audience. But as it turns out, openness and tolerance appear to be applied selectively because the Christian viewpoint is considered to be an anti-viewpoint, or no viewpoint at all. It is based on things that are outside of science and therefore is myth or irrational. In other words, *if* the Christian viewpoint exists at all, it has no teeth; it has no claim on reality. So when Christians interact with secular folks there will be *many* communication problems.

One approach for communication is to present one's ideas in a nonreligious context and allow those ideas to stand or fall. Over the course of years, secular individuals figured out that the best counterstrategy is to declare your opponent's position to be "Christian" or "religious", even if you are sticking purely to science and not mentioning faith at all. By doing this they believe they have *de facto* won the argument. Notice what is going on here: instead of focusing on the substance of the argument, they are bypassing it and dismissing its foundation. There are two battles to be fought here. The first is related to the specific ideas you are presenting in the context of science. The second is the unfair and unfounded dismissal of the Christian viewpoint. To address the second is a much larger issue that goes far beyond the scope of biology and this paper, although it can be addressed. I will limit myself to the first point related to specific ideas within science.

To give a case study of such an interaction, let us consider a portion of the Dover trial held in the fall of 2005 (Kitzmiller vs. Dover). This trial was a test case for intelligent design and whether it should be taught in the public schools. (see Appendix B for more detail.) During the testimony, Michael Behe was challenged on his claim that evolution cannot explain the origin of the immune system. Behe's main thesis was that there was no explanation related to how the individual parts 1) formed 2) assembled together in the right way and 3) worked together to defend the body against infection. He was correct in his assessment, even though he got skewered during the trial and in the press. The prosecution did this more by theatrics than substantive argument. In fact, they could *not* have done it by substantive argument because Behe really had the truth on his side. What the prosecution did was pile up a bunch of books and articles by eminent scientists on the evolution of the immune system as a kind of smokescreen to confound the issue. We again see a clash in the methodologies used to justify a theory.

Behe's objection related to the absence of evidence for the origin of information and complex traits. And the secular response was that this objection, while it may be true, did not provide a serious obstacle to acceptance of the evolution of the immune system. And the reason is because they have so much other evidence for another part of the theory, common descent of the immune system, that it is reasonable to accept the whole.

Did Behe do anything wrong? He made a lot of good points. He was engaging the culture and challenging entrenched ideas and biases. He was addressing the same point discussed in the previous section of this paper, the origin of information and

complex traits. What he failed to do was to establish the justification of his challenge against evolution, which is the argument made in the previous section. In addition, one could try the following thought experiment further justify his challenge. Again let us consider an engineering analogy and how this builds on some of the thoughts presented in the previous sections. Let us say someone claimed that an engine came together through some natural process. What proof would be required to establish that claim? The following would need to be established:

1. The parts formed in the right size, shape, and material by themselves and that the processes were shown to be able to do that.
2. The parts of the engine were assembled together in the right sequence and manner and that the processes were shown to be able to do that
3. The engine worked and did the function which it is “supposed” to carry out.

If they could demonstrate the factors mentioned above, one would be compelled to give strong consideration to their claim that an engine come about by natural processes. But if they *cannot* demonstrate these factors, why should anyone accept their conclusion? If we apply this to biological systems, the same question arises. Why should anyone be compelled to accept that these systems arose by natural processes when there is no evidence for it? This argument ties in with the argument made earlier that biologists must account for the order present in the biological world. And such arguments should stand over and above the arguments in defense of evolution.

Often a position is defended not because it is true, but because it has acquired mass appeal. The same kind of mass or group thinking on these issues is reflected in the

classic work *The Crowd* by Gustave LeBon as well as the more recent book *Demonic* by Ann Coulter. One should understand this and point out just because a large group asserts something strongly doesn't mean that their positions are justified. An occasional head-on collision with the culture is still valuable, even if we come out on the short end. It demonstrates that those who hold our view are still a force to be reckoned with and that the culture should not get too comfortable in its views. And during these skirmishes we never know who will be influenced for good and may be won over. We should never give up on the truth. There are always those in the culture who may be on the fence.

Secular folks are darkened in their understanding (2 Cor 4:4). While we must deal with them with compassion and continue to reason with them, at the same time they control the reins of power. And they wield it harshly and completely. We should stand on the truth no matter what, even if this means going underground at some point. But while we can, we need to challenge the secular establishment and trust God to use truth for His glory.

Presenting issues to students.

I have many opportunities to present these and other issues in biology to my students. Biology, as I have already stated, has many parallels to engineering in that there is an almost limitless amount of information on the relationship between structure and function. This is an ideal opportunity to bring up issues of biological function and its foundation of design-related thinking. Evolution is a theme that comes up in biology

classes and this is an opportunity to go over the evidences and to critique them. One of the main ways I have students critique evolutionary arguments is to just have them look at them in detail and see if they make sense. In the majority of cases the arguments fall apart when examined closely. While there may be a kernel of real evidence, the overall claims for evolution will be grossly overstated. On issues which do not give as easily, I do not try to dismiss them but present them as views held in tension, acknowledging that a scientific theory requires a critical mass of information and that a few isolated facts in and of themselves do not substantiate a theory. Sometimes we just have to live with unresolved ambiguity for a period of time until things get sorted out.

I have had opportunities to bring students to presentations I am making before secular and somewhat hostile audiences and then deal with the barrage of questions challenging my position. Seeing their professor under attack has a way of focusing their minds on the issues. When I teach I try to make the point that even though some ideas by themselves appear dry and esoteric, there is intensity and hostility leveled against them when presented to the secular audience. There have been a few limited opportunities in my classes for students themselves to interact with secular academics and I have been surprised (and a bit proud) at how they presented themselves and their arguments to their critics.

Areas for Growth and Development

I would like to continue my studies in intelligent design, including reading books such as the following: *Genetic Entropy and the Mystery of the Genome* by J.C. Sanford; *Designer Universe* by Jimmy Davis and Harry Poe, and *Science and Faith* by

Harry Poe and Jimmy Davis. I would like to further develop my understanding of the Christian Worldview by reading books such as the following: *Shaping a Christian Worldview* by David Dockery and Gregory Thornbury and *Worldview* by David Naugle. I would like to read some books on apologetics and the defense of the truth, including *The Reason for God* by Tim Keller and *Total Truth* by Nancy Pearcey. I would like to do some writing on intelligent design and some of the delicate issues related to critiquing evolution. I would also like to investigate more thoroughly the nature of design, including design related to other disciplines, to provide potential insight into intelligent design. I would like to package this into a course.

Conclusion

The study of origins in the secular culture has served to undermine the Christian view of creation. We have seen in this paper how, through experimental design and origins research, the role of God as Creator is disregarded and disputed in secular academia. Having presented all these arguments, I do not want to neglect that which is most important, namely, that this is a spiritual battle for minds and hearts. Though the the role of reason and solid argumentation should not be diminished, we need to depend upon the Holy Spirit and prayer to prepare individuals to receive truth (including our students). We need to be humble, recognizing that we were once blind but now we see. At the same time we need to arms ourselves for battle, because the world is ever so happy to fight; and the world fights to win!

Appendix A

Consider a falling meteor. A meteor can fall from the sky and smash a house. It is not the function of the meteor to smash the house, even though it did it. The laws of gravity were directing its fall, and the fact that it fell the time and place it did was a matter of chance. And therefore we would not speak of the meteor having a function. Even if meteors fell with some regularity and smashed houses again and again, they would still not be assigned function. Why can we not assign a meteor a function? Is not function just what something does? It *is* true that function relates to what something does, but it is not a complete explanation. So what more is needed? A designer is needed.

Consider the crude example of a pile of rocks placed on the edge of a mountain trail. Let us say that these rocks were placed there by a park service employee to keep people from falling. If your child asked "Why are those rocks there?" You would likely answer, "They were placed there to keep people from falling." That would be the function of that pile. On the other hand, if the rocks had fallen into that position as a result of a rockslide, we do not speak of them as having function. Why not? The answer is because they were not intentionally placed there. In both cases you have a pile of rocks. However the one placed there has function and the other one does not because it was there by accident. Things that are due to accident do not have function. Function implies that entities are supposed to do something. If they do not do what they are supposed to they are faulty. How can an accident be supposed to do something? It does not make sense; it is a category error.

Appendix B

A video of a reenactment of Michael Behe's testimony at the Dover trial can be found at <http://www.youtube.com/watch?v=Id7PyZQMU00> The transcript of this testimony can be found at (<http://www.talkorigins.org/faqs/dover/day12pm.html>)

In this exchange, the prosecutor acquires textbooks and articles on the "Evolution of the Immune system" and piles them in front of Michael Behe to make the point that there is extensive scientific literature and publication on this topic. In the prosecutor's mind the physical weight of the evidence was an expression of the certitude of the view he held. In the midst of all this "weighty" evidence, Michael Behe continued to assert (correctly) that there is no detailed step-by-step pathway which explains the existence or evolution of the immune system. The majority of the evidence found in those books and articles involves similarities in components of the immune system across a variety of species. This is essentially evidence for common descent. But in addition to that, there is an interesting development related to the mechanism by which lymphocytes, a white blood cell, rearrange their DNA in order to defend against diverse pathogens. Basically some evolutionary connections were theorized between lymphocytes and bacteria. Behe still objected because even if mechanism for rearranging DNA were true, it would still only be one small component of a much larger and complex immune system. Behe's position is dismissed as unreasonable because he is holding to too high a standard. This is discussed in the following article and the associated blog

<http://www.nature.com/ni/journal/v7/n5/full/ni0506-433.html>

http://www.pandasthumb.org/archives/2005/06/behes_meaningle.html .

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