

Science and Religion.

I've finally found some time to write about something that has been brewing in my mind for quite a while now. I have wanted to write about the relationship of science and religion, but I think my thoughts are still somewhat dynamic on the topic, as I'm sure they (like other thoughts and ideas) will continue to be as growth and maturity continues on. However, if I had to wait until I had a rock solid, unmovable thesis on everything that pertained to the complex relationship of science and religion, then I probably would never write about it (or I would get to the point where I have refused to continue learning, which would be unwise). The point of this post is not to clear up any confusion and have a neat little bow to tie around every answer and argument. The point is to encourage a deeper understanding and conversation about the interplay between science and religion, and to make a case for why the controversy surrounding this topic is overblown (by both sides). I hope you follow with me as I put forth some thoughts from the perspective of a Christian who is a scientist.

A mini biography

Before we get to the main section of the post, I feel it necessary to explain a little bit about my background which should demonstrate why I would write a post like this (I won't be offended if you skip this section, especially if you already know me). I have a bachelor's degree in biochemistry from the University of Tennessee at Chattanooga and am currently in a Ph.D. program focusing in interdisciplinary biomedical sciences at the University of Arkansas for Medical Sciences. Science has been a huge part of my life from a young age. I have always been encouraged by the Christians around me (contrary to popular belief about Christianity) to study science, as the discipline is focused on observing and explaining what Christians would call the handiwork of God. Actually, most of my most influential science teachers were Christians (though certainly not all). I didn't really struggle much with the apparent disconnect between science and religion until I was halfway through college- and even then not for the reasons you would expect.

Many things changed during my sophomore year of college, as different beliefs that I had held for a long time were challenged- challenged in ways that I couldn't just dismiss them or disprove them using bible. It was then that I truly had to take Christianity as my own and figure out what I believed and why I believed it. Ironically, both science and the restoration movement of which my fellowship is a part of placed a high emphasis on reason, and it was this that I think really drove me forward to studying. Though I don't have an official degree in theology, I have done a lot of self-study over the years. These challenges in college almost forced me to, and I continue to do so (hopefully for as long as I live). I don't say this to indicate that I'm anything special, just to demonstrate that I do have substantial experience in both areas that I am writing about today. Whether or not you think I am musing along the right lines, I'll let you decide.

My transition/reconsideration about the issues of science and religion began just a little later (in my junior year, I had to wrestle with some doctrines and theology first) and I think still continues today. I was given a book to read by Francis Collins entitled *The Language of God*, which really began to challenge my positions about science and Christianity. At the time, I followed very conservative apologetics (such as Apologetics Press) and was thoroughly in the young earth creationist camp. However, though books like *The Language of God*, further examination of the claims of YEC and other voices/objections, I began to see that this position didn't really make much sense. Though they claimed to use science and reason to back up their positions, most of them were not scientists, and I don't

believe they had a firm grasp on scientific concepts, especially since most of the articles and books they would reference as part of the scientific through were from the 80's. A lot has changed since the 80's. To be fair, there are people in this organization that hold PhD's in scientific fields, but those who are most outspoken and dogmatic did not hold any scientific degree whatsoever. What really solidified my break with these apologetics is a debate I went to between Kyle Butt and Bart Ehrman (which I wrote about at length [here](#)). The debate wasn't even on science, but Kyle fell off the pedestal I had him on due to how he handled the debate. It doesn't matter if you win a debate, if in doing so you don't act in a Christ-like manner. Anyway, as I moved further, I began to see that it was intellectually dishonest to simply dismiss the evidences of science on issues that we perceived as antagonistic to our faith without a fair trial. John Walton's book *The Lost World of Genesis One* further made it clear that the bible is not meant to be a scientific textbook. Actually, this truly shows the wisdom of God (more on this later). Over the past couple of years I have been learning about the culture that produced the bible, the ancient near east (ANE), and I have gain a profound admiration for the process and the word in doing so. Dr. Michael Heiser has opened my eyes to things that are in the bible that make so much sense in the ANE culture, yet in our modern culture we just skip right over because we don't understand these "difficult passages." I must say that as I mature in my thoughts about both science and the bible, I only continue to gain a deeper appreciation and awe of both. It is in this post that I would like to try to explain why.

Understanding the scope of science

I believe the discussion about science and religion must first begin with a misunderstanding that both sides have about the scope of science. We actually pay lip service to this scope that is inherent in the very definition of science by saying things like "science can neither affirm nor deny the existence of God," yet then both sides go on to try to use "science" to either affirm or deny the existence of God. I guess we do that in a lot of aspects in life (hypocrisy), but this doesn't give us an excuse to do so. What we must understand is that science simply operates by observations of the measurable universe around us. If it can be measured, it can be studied by science. God by his very nature is not measurable (see Colossians 1:15-16, I Timothy 1:17 and Hebrews 11:27). Even in Romans 1 affirms that God's attributes are invisible (see verse 20), and then goes on to make a philosophical argument for the existence of God- not a scientific one. Here we can begin to see why there could be confusion about the scope of science. Though we would like to think we can separate our empirical observations from our metaphysical biases, it is much harder than we think. I want to stress here that both sides (atheists and Christians alike) use claim science in ways that it cannot be used. Christians must admit that an argument from design is by nature metaphysical and atheist must likewise admit that an argument for dysteleology (the argument for no purpose to life) is also by nature metaphysical. Both sides extrapolate their position from true scientific evidences and presupposition. Science by its very nature is silent about teleology (the study of purpose), a point that Walton details at length in *The Lost World of Genesis One*.

It is important to note here that metaphysical arguments are not bad or "lesser" than science. It is just a different discipline, specifically suited to study the nature of the unseen/unmeasurable. These are questions that still need to be explored and answered; all I am trying to clarify is that science does not have the tools to explore or answer these questions. Nor should it. Science is perfectly tailored to study the observable universe, and that is what we use the tools of science for. However, in our modern time

of reason¹, we all like to pull the objective findings of science as evidence for our own metaphysical position, because we tend to value science above philosophy. This is our own mistake, not a mistake of the disciplines. Science is suited to answer the question of “How?”² To answer the question of “Why?” which is arguably more important, we must turn to philosophy and religion. This is not a perfect distinction, but I think it will do for now.

So the question is, if science is necessarily silent on matters of metaphysics, why is there such a controversy that pits science and religion against one another?

Modern Biblical Literalism and Philosophical Naturalism

I believe two of the main factors that drive the wedge between science and religion are modern biblical literalism and philosophical naturalism. Obviously, one of these philosophies comes from each side of the controversy, and I will deal with each in turn.

I used the term “modern biblical literalism” for a reason. Much of the problem that we have when we approach the bible today comes from the way we try to force our modern conception of reality on to the ancient writings of scripture. In turn, we then define “literalism” as a straightforward (modern) reading of the text. Let me first say before I go on, I understand the attitudes and reasons that people hold to this perspective- in a way it is commendable. In the circles I run in, we tend to hold a high view of scripture as the authoritative word of God. This leads to the logical conclusion that we must defend the word and ideas presented therein. I agree that we should have a high view of scripture and that we shouldn't sacrifice biblical convictions under cultural pressure. The problem, however, is that when we look at the words of Scripture through modern lenses, often our interpretation of scripture is anything but literal.³

Let me give an example. A modern literal reading of Genesis 1:6 we take to mean that God created a distinction between the atmosphere above and the land below, in material terms by his spoken word. However, the actual literal meaning of the verse (as confirmed through study of the ANE) would be that there is a literal firmament (a hard, glasslike dome) that separates the “waters above” from the “waters below.” That is actually what the text says, and is the most straightforward, literal reading of it. Yet, since we know (through science) that this is not literally the case, we (unconsciously probably) treat the verse as metaphorical and put it in our own cosmological terms. We call this a literal reading of the text because we believe emphasizing that this verse is about a material creation in the face of science is literal compare to the alternative of “well, Genesis one is just figurative language and creation didn't really happen that way.” Actually, much of our definition of literalism is more of a response to an alternative view than actual prospective thought about what a literal reading should be.

¹ I am aware that the modern age of thinking seems to be in the process of being replaced by postmodern thinking, which casts doubts on both science and religion alike. A discussion tailored toward postmodern thinking would warrant a separate discussion and attention.

² Note here that our language is often confusing here, which makes it unclear that science only deals with the “How?” questions. For example, we might say “Why do patients with cancer die?” when what we are actually trying to figure out is “How does cancer kill patients?” or “What are the mechanisms through which cancer causes death?”

³ By “literal” here, I mean not reducing the words of scripture to “vague, spiritual lessons that have nothing to do with actual history.” Bible literalists do not have a problem interpreting sections of scripture figuratively. We will get into this later.

To be clear, I'm not saying that we shouldn't take the literal reading of scripture and just pretend like the whole of the bible is a metaphor. What I'm saying is this position, especially in conservative apologetics, places unnecessary strife between religion and science. Even if a modern literal reading of scripture give an interpretation that is in complete accordance with science as we know it today, I do not believe that this would be the most faithful, literal reading of the text. It has nothing to do with whether or not the bible affirms science, but rather has everything to do with if the message we get from scripture is the actual intended message that the original audience could have grasped. Yet our modern lenses cause us to come to certain conclusions about the material universe that seem to go against the conclusions of modern science, and thus we reach an ultimatum of which side to choose. I do not believe this ultimatum truly exists. I will develop this further in a later section.

Before we go on, however, I must also address the mistake on the other side as well. Too often in our modern world do we assume that empirical science and philosophical naturalism (the idea that the natural world is all that there is) go hand in hand. Many believe they are two sides of the same coin. This is not true. Science can tell us nothing about purpose or meaning in life- it is not designed to do this. All science can comment on is the measurable/observable universe. Even extrapolation to previous times when observation is not possible is bordering on the edges of science. Further, interpretation of the evidence/observances should not be equated with the "truth" of science. All interpretation is just that- interpretation. To be fair, there are different degrees of interpretation (based on how direct the evidence is to the interpretation). Yet part of the problem is that interpretation has often been equated with the observation itself. I think this is in part due to the metaphysical framework that many bring to science. If you have a philosophical naturalistic mindset, you will tend to interpret scientific observations within that frame work, and assign meaning (or rather, non-meaning) that the observations themselves say nothing about. This is just as much a misstep as assigning religious meaning to scientific observations. There is a time and a place to discuss the findings in relevance to metaphysical interpretation, to be sure. That time and place, however, is not in the science classroom or textbook. The time and place would be in philosophy and religious courses.

Let me be clear: both theists and atheist look at the same scientific evidences and interpret them metaphysically in different ways. This is not wrong. It is simply not to be confused with science.

At this point, you may be thinking, "Okay, but what about when science does clearly contradict the bible? Don't we have to choose a side then?" I think we must gain a deeper understanding of how God communicates to us, and why He would it this way.

Biblical Perspectives

We have already discussed why science is necessary silent about religion and the nature of God. The metaphysical is outside the scope of science, and should not be coupled with any philosophical presuppositions, whether that be creationism or philosophical naturalism. However, it is clear that there are prescientific statements in the bible that are evidentially not true in a literal sense (recall the example of the firmament). At this point we must consider the question of why this would be so, and what are the implications of these apparent contradictions.

I would like to demonstrate why I believe God has chosen to communicate in the way He has by way of a hypothetical situation. Let's say that instead of making Himself manifest to the Israelites thousands of years ago, He decided that He was going to come directly to us and tell us about Himself, His creation

and the truths of the world around us. When He describes creation to us, we might expect Him to tell us about making DNA, laying down geological strata over long periods of time and the inflation model of the expanding universe. If we got to ask Him questions, we might expect answers to the equations that unite quantum and macro physics, and to give us a deeper understanding of black holes and gravity. Maybe we would expect a detailed explanation of the immune system and the mechanisms that drive evolution. However, if God came to us and told us the ultimate truth about how He created the universe and the physical mechanisms that drive it, we would likely not hear any of these things. His answer would be so far above our current understanding of the universe that we likely wouldn't even comprehend it.

See, it is chronological arrogance that leads us to believe that our current model of the universe is the "truth" about reality. But as history has proven time and time again, science in 100 years will look quite different than the science is now. Take for instance the revolution of quantum mechanics. Before the 20th century, the concepts we teach in physics now would be laughable (and not really comprehensible). The laws of physics had been set for thousands of years- until 1925.⁴ Now, we look back two or three hundred years at the science that was back then and see how erroneous it was. Sure, broad concepts have carried over, and some things have certainly held true, but not everything. And not everything that we currently believe today will still hold the consensus of being correct in 1,000 years. That's just not how science works. The very nature of science is that it is dynamic, and changes with new data and interpretations. Let's take a step further. If this world continues on for another 10,000 years (which is longer than recorded human history), do you really believe that science in that day and age will look identical to our concepts now? Of course not. Science does not hold claim on absolute truth. Science merely holds the *best current model* of reality. Models come and go as the data dictate.

Think about God appearing to Abraham, long before any inkling of modern science, and trying to explain astrophysics and epigenetics to him. The majority of people on earth today wouldn't be able to readily understand what He was talking about, much less a man who lived in a time when there was no modern scientific basis for any of the molecular mechanism of physics or biology. It would be utter nonsense to him. This is where the wisdom of God comes in.

We must ask ourselves, what is the point of scripture? Is it not communication? God used a group of people living in a specific time and culture to communicate to them and the rest of us who He is and what His divine purposes are. The goal of effective communication is understanding. Thus, when God speaks to Abraham, Joseph or Moses, He doesn't communicate to the by laying out astrophysics. He works within their own cultural context to communicate ultimate truths about Himself. It is these truths that have survived time and cultures to be still relevant today. We cannot let the ancient cultural context (or our own modern context) obscure the communication that God is putting forth.

When you think about it, you can really see the wisdom in this. If the communication of God was focused on a material cosmology that was the absolute truth of His creation, then His communication would only be effective in one specific setting. The communication would be lost in any culture that did not share the cosmology of that one culture. Yet, if God communicates truths about Himself and His divine purpose that are not bound to a cultures understanding of reality, then He can communication to

⁴ I'm speaking anthropomorphically here; in reality, the laws of physics are "set" by our understanding of what they are. The just are, and we seek to better understand them.

the whole world through any given culture. We cannot expect God to be limited by the cosmology that the people He is talking to hold. Does God know there isn't a physical hard dome that separates the waters below from the waters above? Of course He does! He created the universe! But did the Israelites know? No. It was deeply a part of their ANE culture. It would be similar to God coming to us and telling us that gravity didn't exist, but was rather just a perception that we have. That would be non-comprehensible to us. But truth is truth, right? So, if that was the truth, why wouldn't He just tell us? Because we wouldn't understand, and He wouldn't be able to effectively communicate with us.

In thinking about this, what we have to realize is that the ANE culture was so completely different than our own modern culture. They just thought differently. They cared about different things. They asked different questions. This is where Michael Heiser and John Walton, two biblical Hebrew scholars who focus on ANE culture and language, have helped me tremendously. The more I see the bible in its ANE and II Temple Judaism culture, the deeper appreciation and awe I gain for it. What we have missed is that our framework for interpreting the bible has been our modern lens instead of the lens of the people who actually produced the bible. And it is this misconception that has driven the controversy between science and religion, because we have felt the need to defend interpretations of the bible that the bible never asks us to defend. This post is not the place to get into the specifics of the worldview of the biblical writers, but I would suggest books such as *The Lost World of Genesis One* by John Walton and *The Unseen Realm* by Michael Heiser as a start into this worldview.

The bible certainly affirms that God is creator of all, as well as sustainer (see [this post](#) for more on that). But the bible was never intended to be a science textbook- for good reason. God gave us our rational minds and intellect to discover and study His creation (see Ecclesiastes 3:9-11). I do not believe that He expects us to deny all reason and evidence as soon as it doesn't fit into our view of scripture, nor do I believe that He expects us to conform scripture to modern scientific understanding. Else we would have to constantly change our ideas about God and the bible to fit the ever changing models of science. I believe we need to have a bit of intellectual honesty in this realm.

Intellectual Honesty

One of the concepts in Francis Collins' book *The Language of God* that challenged me the most and has stuck with me was a section in his book labeled: "God as the Great Deceiver?" In this section, he makes the point that if we are expected to deny the reason and intellect that God gave us when we see the evidence for topics such as an old earth and evolution, then it would seem that in some sense, God would be a deceiver. If He put dinosaur bones in the ground simply as a test of faith (to see that we would deny what we see with our eyes in favor of our view of Him), how would he be acting as a fair/just God? This section had a profound influence on my thinking, even if at the time I wasn't ready to accept it. What Collins is doing is calling for intellectual honesty. God gave us reason, and He expects us to use it. Remember the greatest command? We are to love God with all our heart, soul and *mind*.

This is where I believe an understanding of the ancient mindset becomes very helpful. In our modern world, we have two categories of the world: natural and supernatural. This seems very basic to us, to the point where we wouldn't even question this understanding. However, in the ancient world, this was not so. There was no such distinction between the "natural" and "supernatural". It was all seen as one in the same. This distinction came to be through different lines of thought, such as Epicureanism and the enlightenment. In the ancient world, the divine realm and the human realm overlapped. As Paul quotes about God on the Areopagus, "In him we live and move and have our being." (Acts 17:28a) We have

distinctions that they did not have, because we have a discipline (science) that studies the “natural” world and inherently not say anything about the “supernatural” world. Let me use one of the examples that Walton uses to illustrate why understanding that we have this distinction that was foreign to the biblical writers matters.

In Psalm 139:13 we read, “For you formed my inward parts; you knitted me together in my mother’s womb.” Here we have a clear affirmation that God is directly involved in the process of a developing child in utero. Every Christian I have talked to about this matter truly believes this. Yet, no Christian that I know would deny the science of embryology. Just because we have a discipline that explains the “natural” processes that go on in the womb before birth does not take God’s hand out of the process in our minds. Nor do we hold to a “literal” meaning of this verse, feverously defending that we were actually physically knitted together in the womb. We all understand what God is communicating through this verse, and see that the “natural” and “supernatural” processes do not contradict one another. They overlap, and the distinction could even go away.

Why do we not treat other concepts in science the same way? I think it has to do with what I discussed above about modern biblical literalism. It is my proposal here (though I am certainly not the originator of this proposal) that the bible and science simply operate on two different planes. Science deals with the measurable universe. The bible deals with teleology. I think we are called to have intellectual honesty when it comes to the evidence that we can observe from the universe. God is not trying to trick us. It is simply out limited knowledge that is the reason that He has communicated to us in the way that He has. There is no distinction between the “natural” and “supernatural” world in reality. Every law we discover, every physical phenomenon we describe- it is the work of God. Just because we can understand how it works does not remove the source or sustainer of the process. Science informs us about the measurable aspects of the universe. The word of God tells about the One who put it all there.

Who do you listen to?

The call to intellectual honesty does not rest with theists alone. Just as much as theists shouldn’t deny the evidences that science uncovers, neither should atheists claim science to further metaphysical positions. Science does not tell us there is no God. Science does not tell us there is no purpose. Science does not tell us there is no design. Science only describes what it can measure. Metaphysical questions are on a different plane. This can be most easily shown in the famous voices in science.

In our modern age, it is easy to get caught up in the coupling of philosophical naturalism and empirical science. This is because some of the loudest voices equate the two without warrant. Figures such as Neil deGrasse Tyson, Richard Dawkins and Bill Nye are known atheists who use their scientific credentials to mix science and metaphysics. And who are the lay people to believe? When an authority figure tells you something about a subject that you might not know all that much about, of course you are going to tend to believe them. However, just because they are loud does not mean they are the only voices from scientists. If you were going to find one of the most credentialed people to speak about evolution, Francis Collins would be at the top of the list. His academic career is astounding. He was head of the human genome project. He has lead breakthroughs in genomic sciences. He even currently serves as the director of the National Institutes of Health. Compare his credentials to Nye or Dawkins, and there would be little contest (Tyson is in a different field). And yes, he completely affirms the process of evolution based on the evidence. However, Francis Collins is a Christian. In fact, he came to faith though the very work he was doing in science. In graduate school he considered himself an atheist. It wasn’t

until his work on the human genome that he came to believe that there must be a God. It was through science that he was led to faith. Note that this is still a philosophical path, science itself is still silent on the matter. Collins is certainly not the only Christian in the science field. Thus, we must see that if scientists are found to be both atheists and theists, then it must not be the actual observations of science that lead one way or another, but rather an interpretation of those evidences through the discipline of philosophy.

Contrary to the popular message of the day, it is not anti-intellectual to believe in God. Nor is it anti-biblical to accept scientific observations. This could be developed further, but I'm afraid I have gone too long already.

Conclusion

In conclusion, I truly believe that science and religion are not mutually exclusive. Whatever science teaches us about the physical mechanisms of the cosmos, we as Christians must affirm that God is the originator and sustainer of these processes. Christianity has been one of the leading drivers of science in history, using the metaphysical framework of studying creation as the handiwork of God. Understanding the bible in its ANE culture does not disregard it as untrue. Rather, it is a more faithful reading of the text, and is more respecting of how God choose to communicate to mankind. We need not take God's choices lightly.

At this point I would like to say just a few words about apologetics then. Christianity is not based on a particular scientific belief of a particular time and culture. Christianity is based on a historical person and a historical event ([click here](#) for more on that). This is why the study of history, along with science and philosophy, is so important. Each discipline brings its truths and helps us make sense of the world. We would be totally lost (or at the very least, completely off base) if we only had one discipline. At some point we must all admit that we all have an agenda and presuppositions. We use all the disciplines to lead us to what we believe as truth. If faith was merely an act of the intellect, then I honestly believe that all would come to faith- there is so much evidence for it in the one we call Jesus. But faith is more than a question of the intellect. It is not only about reason, but also about our emotions and philosophical stances. These need not be confused with science. God is a God of reason (Isaiah 1:18) and of evidence (John 10:37-38). Yet He also a God of compassion, justice and mercy. If you have not experienced this God, I pray that you come to know him. Let the scientists hash out the material world. Come to the One who made it all.

Suggested Reading: Psalm 19, John 1, Romans 1-3, Colossians 1.

"Come now, let us reason together..."

-Walt