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Dissolving the Conflict: Why the Church Should Be More Open to Evolution

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SENIOR THESIS APPROVAL

This Honors thesis entitled

Dissolving the Conflict: Why the Church Should Be More Open to Evolution

written by

Kyle Hargis

and submitted in partial fulfillment of the requirements for completion of the Carl Goodson Honors Program meets the criteria for acceptance and has been approved by the undersigned readers.

Dr. Tully Borland, thesis director

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Dr. Barbara Pemberton, Honors Program director

April 20, 2015

Introduction

First and foremost, I just wanted to express my motivation for writing my thesis over this topic. Evolution can be very controversial, but I don't think that this needs to be the case. Having grown up in the South, in a Southern Baptist church, I saw that evolution was always viewed as anti-theistic and treated like a trick from the devil. Many of the people that I went to church with believed that the world was only six thousand years old and would defend that opinion wholeheartedly, but my parents taught us that the world was very old. They were not strictly evolutionists but they believed that it very well could have happened if God chose to use that method, so from an early age I felt this tension between science (what my parents had taught me about it) and the beliefs of my church.

As I got older, I started to learn more about evolution from my school textbooks. Even though evolution was not something we talked about in class, I often caught myself reading them in my spare time. It was also during this time that I attended a church camp where we were taught how to defend what we believed about various parts of the Bible to atheists and people from other religions. One of the topics we were taught to defend against was evolution. I was torn and confused; unsure of what was right anymore, I began to study the subject more. I talked with my older brother—who was then in college as a biology major—about this subject quite a bit. I finally settled, somewhat unsurely, on a vague theistic evolutionary view on creation, a "God in the gaps"-type model.

I didn't think about the topic much again until the summer after my senior year while I was again at church camp. The leaders had developed a similar curriculum for us as the one that I had heard when I was younger, but this one was meant to be more detailed since they were trying to prepare us for when we went off to college. After a few days of hearing that evolution was a trick, I was really unsure of where I stood anymore. Thankfully, I was already planning on attending Ouachita Baptist University. I knew that while I was there I would be able to ask the biology and Bible professors questions and be able to figure out what was right.

At Ouachita, I received the general impression from my Bible professors that Genesis was not meant to be taken as a literal seven days, and at the time that was enough for me to stick with my earlier theistic evolutionary beliefs. It was during my junior year that the topic piqued my interest again. I was in a philosophy of religion class and found that many of my classmates rejected evolution. After learning this, I was talking to my roommate about it and I found out that not only did he reject evolution, he also thought that Genesis must be interpreted literally. This really shocked me, especially since he wanted to be a pastor. These experiences led me to do my Honors directed study on evolution with Dr. Joe Jeffers. During this directed study I read numerous books on evolution. Some of these books looked at it from a religious perspective and others looked at it from a scientific one, but the uniting factor among them as was that they were all well over 100 pages, and many of them would have been very difficult to understand without a decent amount of scientific background knowledge. Because of these things, I decided that for my senior thesis, I would continue my research and try to produce a short, but yet concise explanation of evolution and how a Christian can still believe both the Bible and evolutionary theory.

1. Genesis and Evolution

"In the beginning, God created the heavens and the earth."¹ Until the past 200 years, this verse was rarely doubted, but as science has advanced people have become more and more skeptical about it. Some of the reasons behind this skepticism are due to theories in physics that doubt there was really a beginning to the universe and others are due to the theory of evolution. In fact, evolutionary biologist Richard Dawkins has gone so far to say that evolution makes it possible for one to be an intellectually fulfilled atheist,² and it is statements like this that have caused so many people in the church to reject it completely.

As a premed student, I have a great respect for science because it has allowed us to understand the human body and how to treat it. Science has helped us better understand the world and has also made our world much easier to survive with modern technology. In fact, I would not be able to write this paper nearly as easily if it were not for the science behind batteries, LCD displays, keyboards, touch sensing tracking pads, and the other countless pieces of technology that make up my laptop. But as much as I respect science, I do not think that it has all of the answers. What can science tell us about our ultimate purpose in life?

As a Christian, I admire the wisdom that I can obtain from the Bible. I see it as God's word, and I do not think that it should be taken lightly. From the Bible, we are able to learn about the creation of man, man's falling away from God, and His great story of redemption through His son. There is a lot of truth and moral goodness that we can gain by studying it, but even the Bible does not teach us everything. The Bible was not written to be a science textbook. That leads me to the question, *What should we do when science and the Bible appear to be in*

¹ Genesis 1:1.

² Plantinga.

conflict? There are many cases in the Bible that seemingly conflict with science: Balaam's donkey speaking to him, the virgin birth of Jesus, Lazarus being revived from death, and, most importantly, Christ's resurrection. These are just some of the things that Christians have accepted as miracles. Other areas are not so easily explained—especially in light of large amounts of scientific evidence—like the creation story in Genesis, and this will be the area that I focus on to answer this question.

The tension between science and religion has grown taut since the publishing of Darwin's On the Origin of Species in 1859. Numerous court cases have taken place due to the teaching of evolution in schools in the past one hundred years. Recently, the debate has changed from trying to bar evolution from schools to requiring that creationism be given equitable attention. Early last year (February 2014), Ken Ham, founder of Answers in Genesis, and Bill Nye, the Science Guy, had a debate on whether or not Young Earth Creationism (YEC) was a viable theory of origins. It was clear that a large portion of the viewers thought Ken Ham was a complete joke, and some consequently started to view Christianity in the same light. His viewpoint of Genesis 1—that it had to be literal and was completely scientific—was the root of his problem. When presented with evidence that conflicted with his ideas, he would dogmatically dismiss the facts and point to the Bible as the ultimate truth no matter what. To be fair, I agree with him on this point, but I would add a disclaimer that says, "When properly interpreted."

While most Christians can agree that a person's salvation is not dependent upon his view of Genesis 1—albeit there are some who are so dogmatic that they would deny the salvation of their opponents—proper interpretation of Genesis can be a salvation issue. It is not an issue for those who have already come to know Christ, but to those who are not yet saved it can be a major stumbling block. Augustine, although he was alive long before the discovery of evolution, issued a warning to Christians about interpreting the Bible in such a way that it conflicts with science: "Reckless and incompetent expounders of Holy Scripture bring untold trouble and sorrow on their wiser brethren when they are caught in one of their mischievous false opinions and are taken to task by those who are not bound by the authority of our sacred books."³ John H. Walton, Old Testament professor at Wheaton College, also warns that when Christians present views-based on bad interpretation-which conflict with science, the non-believer will end up dismissing both them and the Bible.⁴ In both ancient and contemporary times, Christian scholars realized the dangers to non-believers about interpreting the Bible in a manner that it is in conflict with science, which causes us to arrive at these questions: What does science tell us about the age of the earth and creation, and how are we to view Genesis 1 in light of this? Are there any good arguments against evolution? What does the Genesis 1 story of creation mean in proper context? Is there a conflict between these two issues in light of proper interpretation of both sides? If there is a conflict how might it be resolved? In the remainder of my paper, I plan to answer these questions by looking at evolution and its supporting evidence. I will then look to see if there are any good arguments or evidence against it. Lastly I will look at the meaning of Genesis 1 in light of proper interpretation.

³ Miller (1999) 256.

⁴ Walton 110.

2. Scientific Evidence for Evolution

The theory of evolution, as it turns out, is not a single theory but a bundle of many of Darwin's theories. To be able to adequately approach it then we must first look at its main components. There are five main theories that compile what is commonly referred to as the Theory of Evolution:

- 1. Ancient Earth Thesis-the world is very old, perhaps billions of years old.
- 2. *Progress Thesis*—life has progressed from relatively simple to relatively complex forms.
- 3. Common Ancestry Thesis—life originated at only one place on earth.
- Darwinism—there is a naturalistic explanation of this development of life from simple to complex forms, natural selection.
- Naturalistic Origins Thesis—life itself developed from non-living matter without any special creative activity of God and just by virtue of the ordinary laws of physics and chemistry.⁵

Keeping in mind that when people refer to evolution they are typically referring to one or all of the theories above, then we can talk about it more clearly. I will briefly discuss some of the evidences for each of these, but as the most controversial of these theses are common ancestry and the naturalistic origins, I will spend some more time on them.

The Ancient Earth Thesis

The age of the earth is widely accepted around by scientists to be 4.5 billion years old, and this figure is usually only disputed by those that hold to young earth creationism (YEC).

⁵ Plantinga.

This age was not determined randomly. There were many different ages of the earth speculated to be correct before this was determined. The failed methods of determining age are not as important as the one that does work, which is radiometric dating. Radiometric dating allows us to measure the amounts of different radioactive isotopes present in a rock sample, and by seeing the isotopes that make up it we can then determine what was initially present. We know that radioactive isotopes decay in certain manners at a constant rate, called a half-

| Type of radiation | Nuclide | Half-life |
|-------------------|--------------------------------------|--------------------|
| | uranium-238 | 4.47 billion years |
| | thorium-234 | 24.1 days |
| P Ŏ | protactinium-234 | 1.17 minutes |
| β 🛔 | uranium-234 | 245000 years |
| α | thorium-230 | 8000 years |
| αĮ | radium-226 | 1600 years |
| α | radon-222 | 3.823 days |
| α | polonium-218 | 3.05 minutes |
| α | land 244 | 26.9 minutos |
| βΥ | lead-214 | 20.8 minutes |
| β | bismuth-214 | 19.7 minutes |
| α | polonium-214 | 0.000164 seconds |
| β | lead-210 | 22.3 years |
| βŶ | bismuth-210 | 5.01 days |
| a • | polonium-210 | 138.4 days |
| Ö | lead-206 Source: Cain, Universe 7 | stable |

Uranium 238 (U238) Radioactive Decay

life. The half-life of a material is the time that it takes for half of the material to decay. As can be seen in the inserted chart, uranium-238 eventually decays into lead-206. There are several isotopes of lead, each of which appears at a different but consistent frequency in areas where lead is found in the earth, except areas where uranium-238 is/was present. In those cases, lead-206 occurs at a much higher frequency than normal. By measuring the amount of uranium-238 left and the extra lead-206, calculations can then be made to determine the age of the earth. The age of the earth was not determined from one rock—which could have had a higher

concentration of lead-206; this figure was determined by measuring numerous rock samples from around the world and then normalizing the data to determine the best approximate age. ⁶

The Progress Thesis

The idea that life has increased from relatively simple to increasingly complex is evident when viewing the fossil record. When observing the fossil record, it can be seen that in the oldest layers of rock there are only single-celled organisms present. Above these are multicellular organisms. The multicellular organisms become increasingly complex, and eventually we see the fish as the first vertebrates in the fossil record. In rocks older than 370 million years, there are no land animals present, as it was after this that the first amphibians evolved. Next appeared reptiles, and after them came mammals and eventually birds. It is clear, after observing the fossil record that life began very simply and has increased vastly to produce all the variety that is present today.⁷



© 2005 Encyclopædia Britannica, Inc.

This image shows the increasing complexity of life that exists in the fossil record. It can be seen that in the oldest fossils only relatively simple life forms exist. In the younger rocks there are more complicated forms of life. Source: Encyclopedia Britannica, Inc.

The Common Ancestry Thesis

Speciation is a process in which one species changes into a different species over time. Many opponents of evolution claim that the fossil record shows no evidence of one species

⁶ Cain.

⁷ Falk 83-84.

changing into another, but this idea is false. There are some rare cases where an almost complete fossil record shows the split of a species, and one example of this the diatom *Rhizolenia*. The empirical data from this case fits with Darwin's ideas of common ancestry and the divergence of species. The split of a single species into two distinct species (*R. praebergonii* and *R. bergonii*) is evident by the change in the hyaline area of the cell wall of the organism. The speciation event is first detectable about 3.05 million years ago and took about 200,000 years to complete.⁸

Many people are willing to accept the notion of common decent when it is in reference to other animals besides humans, but, because the creation story specifically references the creation of man, many people think that man is different from all other creatures. While it is true that man is different in his ability to relate to God, this does not mean humans did not come about by means of evolution.

Before I continue with some examples of human evolution, however, consider the following story: A professor is sitting in his class during a final exam. In the back of the room he notices two young men eyeing each other's tests. After watching them for a while, the professor is pretty sure that the students are cheating but he cannot be positive. While grading the tests his suspicions are confirmed that they had, in fact, been cheating. They were very clever in hiding the fact that they had been by writing different sections of the essay in different orders. When confronted by the professor, the students reply that they are roommates who studied together so it only makes sense that their papers are very similar. Upon hearing this, the professor hands them back their tests and circled in red are numerous words that they both spelled incorrectly.

⁸ Miller (1999) 45.

The issue was not that they spelled the same words wrong, but that they had spelled the same words wrong, the exact same way. The students knew that they were caught.9

There is only one correct spelling of a word, but there are countless ways that it can be spelled incorrectly, and it is highly unlikely the same exact mistake would be made numerous times unless the errors were from a common source. This example about misspelled words is very similar to the shared DNA mutations between humans and apes that code for the synthesis of vitamin C. Most people realize that humans need vitamin C to survive. But this trait is not common among all mammals; many have enzymes that can convert common sugars into vitamin C. Some of our closest evolutionary relatives-chimps, gorillas, and orangutans-all lack the same enzyme necessary to convert sugars into vitamin C and thus require it in their diets. More distantly related primates, however, do not have a dietary need for vitamin C. It is not some mere coincidence that humans and apes lack the ability to produce the enzymes that catalyze for vitamin C, quite the contrary. Upon further examination of the human and great ape genomes reveals that not only do we have the same deficiency, it is due to the same mutation.¹⁰

People's genes are inherited from their parents on chromosomes. Humans have 46 chromosomes or 23 pairs of chromosomes. Great apes have 48 chromosomes or 24 pairs. A possible explanation for the reduction of chromosomes in humans could be due to the fusion of two chromosomes pairs; if this were to happen, though, it would leave distinctive marks. Chromosomes consist of certain DNA sequences on their ends called telomeres and on their centers called centromeres. If it were the case that chromosomes joined together, we would expect to find a human chromosome with telomere DNA sequencing in the middle and on each end; additionally we would expect to find two areas with centromere DNA sequencing. Human

⁹ Miller (2008) 99-100. ¹⁰ Miller (2008) 97-99.

chromosome number 2 fits such a description. After analyzing the centromere sequencing, scientists have determined that ape chromosomes 12 and 13 fused to form this chromosome.¹¹



This picture shows the alignment of chimpanzee chromosomes 12 and 13 (commonly referred to as 2p and 2q because of this fusion) and human chromosome 2. Source: Venema, *BioLogos*.

<u>Darwinism</u>

Natural selection is the mechanism that allows progress, and thus evolution, to occur. This mechanism seems to be one of the most obvious points on evolution as it can easily be seen within a given group at any time. For instance, imagine that there is a group of bugs that live in the dirt. This group of bugs is normally green so that they can blend in with the grass, but some are born brown and are usually eaten. After a terrible drought, the grass dies; this year the brown bugs are the ones to survive. Assuming that brown is a recessive trait, then all subsequent generations of the bug will be brown. In numerous examples like this one, it can be seen that natural selection can cause some traits to appear and others to disappear.

The Naturalistic Origins Thesis

The theory of naturalistic origins of life is probably the weakest point of evolution. Christian philosopher, Peter van Inwagen has said, "Owing to the fact that the origin of life is at present wholly mysterious, wise [evolutionists] will probably only want to say that life arose by *some* natural process."¹² One of the theories regarding this natural process involves deep-sea alkaline hydrothermal vents. These are sources of free energy in the ocean, and the organisms that live around them depend on the energy from them to survive. The theory regarding the

¹¹ Ibid. 105-107.

¹² Van Inwagen 110.

formation of life at these vents has to do with the fact that the hydrothermal vents produce small cells that have a lower concentration of H+ in them than in the surrounding ocean water. This concentration gradient is very similar to the way that bacteria and other prokaryotic cells produce energy. This energy is called Proton Motive Force (PMF) and can be used to produce motion and ATP, the most common form of energy storage in the cell. The hydrothermal vents can also produce reduced carbon molecules, which are necessary for the formation of larger organic molecules like RNA, which is used to carry genetic information, and acetyl CoA, an important compound in metabolism. Because the hydrothermal vents are able to do these things, it seems likely that the origins of life could have occurred here. Since the hydrothermal vents are able to produce PMF and the necessary components for RNA and other organic molecules, it seems plausible that over time RNA could have been synthesized and integrated into the cell.¹³ This is just one of a few prevailing theories for naturalistic origins. There are others, but I find this one to be the best, due to the fact that as of now, these theories have little evidence when compared to other parts of evolution. Seeing as they try to explain something that has only happened once-the beginning of life-it has been next to impossible this far to duplicate the results and it may always be one of the great scientific mysteries.

Nonetheless, as Christians, we can be open to the possibility that God allowed life to originate in these hydrothermal vents. In fact, there are some theories regarding the origins of life that say that extraterrestrials planted the first living cells on our planet—called panspermia.¹⁴ While these theories are not widely accepted, they are essentially the same as saying God created the first cell. Ultimately, this is the least crucial part to the puzzle as there is so much controversy

¹³ Plymale. 14 Joshi.

and mystery surrounding it, but I did feel as though it was important to cover as it is part of what is typically considered to be the theory of evolution.

3. Arguments Against Evolution

There are many arguments for the rejection of evolution, and they vary greatly in their effectiveness. Some are complicated metaphysical arguments like that of Hud Hudson, and then there are more scientific ones like Michael Behe's idea of irreducible complexity I will only discuss the latter, as the former is too complex to introduce here. Others refer to Biblical literalism like Ken Ham's YEC and some simply reject the theses (3) and (5) of evolution like the old earth creationist (OEC) view. I will begin by discussing the YEC view because I believe that it is the root of a lot of the tension between the scientific and religious communities today; then I will move to the OEC view; and lastly I will briefly discuss irreducible complexity.

Young Earth Creationism

Although the age of the earth in the Bible is not given explicitly, Wayne Spencer-a major advocate for YEC-explains that by taking scripture at face value then the age can accurately be derived. By compiling the ages associated with the genealogical data presented in Genesis 5 and 11, James Ussher (in 1654¹⁵) determined that the date of creation was roughly 4004 BC.¹⁶ Spencer goes on to claim that the Bible speaks authoritatively to us on historical events, and if we accept OEC then we are rejecting the other truths of the Bible as well.¹⁷ He then talks about the limitations of science and how even the most well-designed experiments cannot give us certainty about what happened in the past because we would need a reliable eye witness for that. He claims that God gave the words of Genesis to the author and that he would

¹⁵ James Ussher. ¹⁶ Spencer.

¹⁷ Ibid.

obviously have been a reliable witness.¹⁸ This idea not only presents certain problems for the most commonly accepted theories of Biblical interpretation, but it also directly conflicts with the views of Dr. Marvin Pate, chair of the theology department at Ouachita Baptist University. Dr. Pate says that he thinks the reason that the author of Genesis decided to go with a six-day creation and a seventh day Sabbath was to legitimate them following a seven-day model for their calendar, which the early Israelites had actually borrowed from the Babylonians.¹⁹ Van Inwagen also supports this view. He explains that very few parts of the Bible were dictated from God directly. God merely inspired a particular message in the authors, which they were then able to convey in their own style. The creation story in Genesis would have been similar enough to the other creation stories of the time that the early Israelites would easily understand it, but it differed greatly by placing God over everything—even the stars and moon, nature itself, and kings—since in the creation stories of neighboring peoples these are the things that would have been placed on top.²⁰

In a similar article Dr. Terry Mortenson, claims that

If the idea of millions of years of earth and cosmic history is really true, as many teach, then

- 1. it destroys the Bible's teaching on death.
- 2. it assaults the character of God.
- 3. it contradicts what Jesus believed and taught about the age of the earth, thereby undermining faith in Him for salvation. If Jesus was wrong about the age of the earth, what other errors did He make in His teaching?

¹⁸ Ibid.

¹⁹ Pate.

²⁰ Van Inwagen 106-108.

- 4. it undermines faith in the gospel by undermining faith in the Bible that contains the gospel.
- 5. it nullifies the authority of Scripture.
- 6. it therefore weakens the Church and its gospel witness in the world.²¹

Not only are his claims guite strong, but also they are completely unwarranted and create a slippery slope. Dr. Mortenson's claims can all (except for 3) be refuted by realizing that God's purpose in Genesis 1 was not to present the people of Israel with a scientifically accurate view of the world (mainly because there is no way they would have understood it), but it was to present them with the idea that He was in charge, and He alone was worthy of their worship. The true parts of Genesis are much more important than those that are not true. For example, a true part is that God is the ultimately the creator, while a false part is that birds and fish appeared on the same day. It is easy to see the vast discrepancy in the importance of these two things.²² So the Genesis 1 story not being completely factual plays no role in weakening the rest of the Bible's message as it sets up the rest of the story with its most crucial parts. As for Mortenson's third point, there is no evidence in the Bible that Jesus believed that the world was only 4000 years old.

Old Earth Creationism

Alvin Plantinga-another distinguished Christian philosopher-holds to an OEC view, and he discusses the problems with evolution from a much more intellectual standpoint than the YEC model, rejecting it more on philosophical grounds than anything else. He presents three main points: the first is that evolution is not religiously neutral; second, he asks how Christians should think about evolution; and lastly, he remarks on how intellectual Christians can better

 ²¹ Mortenson (2008).
²² Van Inwagen 107.

serve the Christian community. Regarding his first point, he gives evidence of scientists who reject the idea of special creation and some who are arrogantly atheistic. This is what he uses as his evidence to show that evolution is anti-religion. For the second point, he concludes that while evolution is the best solution for naturalism, it is inadequate when we can invoke the idea of special creation. He does this by breaking apart evolution into five separate claims. He also rejects some evidences for evolution-the fossil record-while accepting others-the age of the earth. The final point that he makes is by far his shortest even though he seems to think it is the most important. He urges Christian intellectuals to press on in searching for evidence for Creation even though this may be a dismal career path.²³ Plantinga presents his argument clearly, but he does use some fallacious reasoning in it. His first point is somewhat of a straw man argument as he misrepresents evolution as atheistic. Yes, there are many pro-evolutionists that are atheists, but there are also many who claim that evolution has nothing at all to tell us about God. Plantinga just refers to some of the more adamant atheistic evolutionists and concludes that it is indeed anti-religious. The other major fallacy that Plantinga uses is his view on naturalism. Many scientists use naturalism because this makes it easier to account for what is actually happening in experiments. If one were to reject naturalism during an experiment then he would have an endless list of possibilities for what could have caused the results. But just be because science is committed to methodological naturalism, does not mean that all scientists are committed to naturalism as a definitive worldview like he presents it.

Irreducible Complexity

Michael Behe presents the theory of irreducible complexity in his book *Darwin's Black* Box: The Biochemical Challenge to Evolution. Behe believes in common decent and natural

²³ Plantinga.

selection but he refutes the idea of naturalistic origins. He also thinks that there were moments of intervention by God where he created whole systems. His ideology is a combination of theistic evolution and intelligent design. His theory is based on the idea that any complex structure cannot function without the sum of its parts. He uses a mousetrap to demonstrate this idea, but it seems that even if you had a mousetrap without all its parts then it could still form something else that would be functional. He also fails to realize that there are varying degrees of complexity to mousetraps and some have many more parts than others. He relates the mousetrap to the bacterial flagellum. He states that there is no way it could have evolved since it would not have been useful until it was fully formed. But like the mousetraps, there are varying degrees of complexity among bacterial flagellum. Behe ignores the fact that there are simpler forms (lacking certain *essential* proteins) of the flagellum that are completely functional. There are also other structures in the bacteria that are similar to the flagellum (having some of the same proteins) that have a completely separate function.²⁴ Based on these examples it is easy to see that Behe is off in his reasoning of irreducible complexity.

²⁴ Rennie.

4. The Conflict Between The Bible and Science

The real problem between the Bible and evolution stems from a misunderstanding of evolution, improper interpretation of Genesis, and overstepping of boundaries in regards to both science and religion. Some major misconceptions about evolution include:

- Evolution has never been observed.
- Evolution violates the second law of thermodynamics.
- There are no transitional fossils.
- The theory of evolution says that life originated, and evolution proceeds, by random chance.
- Evolution is only a theory; it hasn't been proved.²⁵

The most commonly quoted of these is the second one that involves the second law of thermodynamics, but this is not true because this law applies to a closed system. The earth is not a closed system as it is constantly receiving an input of energy from the sun.

Dr. Pate said, "I think that the conflict largely comes from misreading Genesis One. When we start trying to turn Genesis One into a science textbook that's when we get in trouble." We need to be careful on how we interpret the Bible in all areas, and in regards to origins we have to be careful how we look at the Bible.

The conflict also occurs from both science and religion overstepping their bounds. When science tries to make claims about God then it has overstepped, and the same goes for when religion tries to make claims about science. The conflict that has arisen between these two topics is a false dichotomy. Evolutionary biologist Stephen Jay Gould claims that because we tend to think of things in terms of "either/or" pairs, that when we approach science and religion we tend

²⁵ Isaak.

to think the same way.²⁶ Walton claims that all of the natural discoveries are part of a layer that is under the layer of God; therefore, anything that is discovered through science about the natural world is something more that we learn about God.²⁷ Gould proposes that to end the conflict that arises on the basis of our false dichotomy, we must accept the principle of NOMA (non-overlapping magisteria). This principle claims that there is no overlap between science and religion and because there is no overlap there shouldn't be any conflict.²⁸ In both of these areas of study we should remember to approach our ideas with wholesome intellectual humility.²⁹

- ²⁶ Gould, 50-51.
- ²⁷ Walton, 115.
- ²⁸ Gould, 5-7.
- ²⁹ Van Till, 173.

5. An Examination of Genesis One

In his book, *The Lost World of Genesis One*, John Walton presents an in-depth examination of Genesis 1 and the creation story. He proposes that the creation story from Genesis is ancient cosmology. By realizing that it is ancient cosmology, we can then interpret the story much more accurately. We also have to realize that the context of the story is much different from today's society. It is important that we do not try to impose our own cultural ideas on the text. By learning that we are not the original audience and determining how the text would have initially been interpreted, we are able to understand the literal meaning of the creation story.³⁰

Ancient cosmology is function-oriented.³¹ This means that the creation in Genesis One is not a materialistic one but is one that it is concerned with the function. Even more evidence can be given to this function-oriented creation when we look at the verb "create" that is used in Genesis 1. While *create* in English typically has to do with a material creation, if we go back to the Hebrew root word $b\bar{a}r\bar{a}$ ' and examine it, we will be able to determine better the meaning of *create* in context. The verb $b\bar{a}r\bar{a}$ ' is used about fifty times in the Old Testament. In every case deity is either the subject or implied subject. When compared to the other uses of the verb, it is evident that it should be interpreted as a functional creation.³²

Having established that the best interpretation for creation in Genesis 1 is a functional one, Walton says that the function achieved by this is the establishment of the cosmos as God's temple. In light of this view, the roles of the days are much less important. The most natural

³⁰ Walton 16-22.

³¹ Ibid. 23.

³² Ibid. 40-46.

reading of the Hebrew text implies a literal seven days, but because the creation is not materialistic the length of the days doesn't give any evidence to the age of the earth.³³

Walton's examination of Genesis 1 allows us to see that the literal interpretation of the text actually refers to a functional creation. This is how the Israelites would have understood the text, and seeing as they were the original audience, this is how we should view it as well. This interpretation alleviates the pressure of trying to make use an interpretation of the word *day* that doesn't refer to a twenty-four hour period of time. Because the creation story is functional and not materialistic, any materialistic theory of science is not automatically in conflict.

³³ Ibid. 98.

6. What We Can Do About It

There is a sufficient amount of evidence for evolution, of which I only presented a small amount. There are also some viable theories on how life could have come to be by a natural means. I have also shown that the arguments for a literal translation of Genesis are greatly flawed as they rely on fallacious reasoning and are used to support dogmatic ideologies. OEC presents some better arguments, but it has some areas of fallacious reasoning that mainly revolve around a lack of understanding of evolutionary theory. After examining the Biblical story of creation more, it is clear that evolutionary theory can be consistent with it. The problem of the false dichotomy is one that can be resolved in time, but we must start spreading the word.

I know that this paper may not have convinced you to accept evolutionary theism, but that was not my main goal. Van Till said, "The controversy [between science and religion] constitutes a regrettable mistake that must be repaired if the Christian church wishes to be effective in its presentation of the Gospel to a scientifically knowledgeable world in the centuries to come."³⁴ My goal is to help lessen the conflict. I beg that to those of you that have read this to take it to heart. Do not be so adamantly opposed to evolution. No, the theories do not have all the answers, but they do have plenty of support, enough that it will be very hard to refute. Do not try to tackle all the evidence because you will likely fail. Instead be open to the idea that God could have very easily worked through evolution guiding it as He went along or just allowing it to proceed by the system that He set up during creation or even some combination of the two. Remember that God did it because that is the most important part. "Theistic evolution doesn't need in anyway to harm [your] faith."³⁵

³⁴ Van Till, 161.

³⁵ Pate.

You have to remember that other people's faith is on the line, which leads me to the story that I will close with. I grew up in a very conservative church that was strongly YEC. We went to a church camp that proposed the same theology. They presented theirs views in the same manner as I presented them above. From their interpretation of Genesis, it seemed as though you had to choose between either faith or science, but you could not have both. I struggled with this because I have always had a deep admiration for science, and I eventually came to reject their false dichotomy. My best friend, however, could not see past the false dichotomy they had proposed and upon learning more about science and evolution, paired with a few other circumstances that he was going through at the time, he came to the point where he rejected his faith altogether. He now says that he is an atheist. Do not place other people in the same situation by rejecting science. People's eternity could hang in the balance and by dogmatically opposing science when there is no need for it, you could push them away from the love of Christ.

Dr. Pate said, "The God who gave us the Bible is the God who gave us science."³⁶ We need to remember this when we look at issues that involve both of them. So I will end here with a quote. A speaker at a conference on science and religion that Miller attended said it, and ever since I have read it, it seems like the most powerful way to describe evolution.

If you deny evolution, then the sort of God you have in mind is a bit like a pool player who can sink fifteen balls in a row, but only by taking fifteen separate shots. My God plays the game a little differently. He walks up to the table, takes one shot, and sinks all the balls. I ask you which pool player, which God, is more worthy of praise and worship?³⁷

³⁶ Ibid.

³⁷ Miller (1999) 283-284.

Bibliography

Falk, Darrel R. Coming to Peace with Science: Bridging the Worlds between Faith and Biology. Downers Grove, IL: InterVarsity, 2004.

Fossil Record. Digital image. Encyclopaedia Britannica. Web.

<http://www.britannica.com/EBchecked/media/1650/The-geologic-time-scale-from-650million-years-ago-to>.

Genesis. Holy Bible: English Standard Version. Wheaton, IL: Crossway Bibles, 2001. Print.

- Gould, Stephen Jay. *Rock of Ages: Science and Religion in the Fullness of Life*. New York: Ballantine, 1999.
- Isaak, Mark. "Five Major Misconceptions about Evolution." The Talk Origins Archive. N.p., 1 Oct. 2003. Web. 13 Nov. 2014 http://www.talkorigins.org/faqs/faq-misconceptions.html#observe>.
- "James Ussher." *Wikipedia*. Wikimedia Foundation, 12 Feb. 2014. Web. 4 Dec. 2014 http://en.wikipedia.org/wiki/James_Ussher>.
- Joshi, Sonali S. "Helix Magazine." Origin Of Life: The Panspermia Theory. Science in Society, 2 Dec. 2008. Web. 15 Mar. 2015 < https://helix.northwestern.edu/article/origin-lifepanspermia-theory>.
- Miller, Kenneth R. Finding Darwin's God: A Scientist's Search for Common Ground between God and Evolution. New York: Harper Perennial, 1999.
- ---. Only a Theory: Evolution and the Battle for America's Soul. New York: Viking Penguin, 2008.

- Mortenson, Terry. "Are We Wasting Our Time?" *Answers in Genesis*. N.p., 29 Feb. 2008. Web. 13 Nov. 2014 https://answersingenesis.org/why-does-creation-matter/are-we-wasting-our-time/.
- Pate, Marvin. Personal Interview. 24 Nov. 2014.
- Plantinga, Alvin. "When Faith and Reason Clash: Evolution and the Bible." *Dialogue. Christian Scholar's Review*, Sept. 1991. Web. 13 Nov. 2014 http://www.asa3.org/ASA/dialogues/Faith-reason/CRS9-91Plantinga1.html.

Plymale, Ruth. "Microbiology Class Notes." 22-29 Aug. 2014.

Radioactive Dating. Digital image. Universe Today. Web.

<http://www.universetoday.com/75805/how-old-is-the-earth/>.

- Rennie, John. "15 Answers to Creationist Nonsense." *Scientific American Global RSS*. N.p., 6 June 2002. Web. 30 Mar. 2015 http://www.scientificamerican.com/article/15-answers-to-creationist/>.
- Spencer, Wayne. "Why Recent Creation?" Answers in Genesis. N.p., 16 June 2009. Web. 13 Nov. 2014 https://answersingenesis.org/why-does-creation-matter/why-recent-creation/.
- Van Inwagen, Peter. "Genesis and Evolution." God Knowledge & Mystery: Essays in Philosophical Theology. Ithaca: Cornell UP, 1995. 93-126.
- Van Till, Howard J. "The Fully Gifted Creation." *Three Views on Creation and Evolution*. Grand Rapids: Zondervan Publishing, 1999. 161-218.
- Venema, Dennis. Chromosome Comparison. Digital image. *BioLogos*. Web. http://biologos.org/blog/evolution-basics-genomes-as-ancient-texts-part-3>.

Walton, John H. The Lost World of Genesis One: Ancient Cosmology and the Origins Debate.

Downers Grove, IL: IVP Academic, 2009.