

### Evolution and The Fall

Andrew Tate

Department of Biology; College of Arts and Sciences  
Abilene Christian University

**Within Christianity, there are a spectrum of beliefs regarding the function and mode of baptism, what constitutes original sin (or in what form it exists), modes of worship, gender roles (or if they even exist). I will argue here that despite varying dogmas and ideologies one consistent position over two millennia is that Jesus, as the Son of God, came to the earth, died on a cross, and was raised from the grave. Following this is the belief that in some way through these actions, either natural or supernatural, he has given humanity the opportunity to be redeemed. Through this sacrifice, hope, and love demonstrated by Jesus on the cross we may be forgiven of our sins and thus of the guilt associated with the same. This narration is entirely predicated on the stance that we as humans commit sin and require redemption. When we consider an evolutionary account of the ‘rise’ of man, some think it negates a fall and thus the need for redemption. Consequently, we need an account for how sin made its entrance to the worldly stage *even if* via evolutionary processes.**

With the story from Genesis, it is fairly easy to explain the state of sinful man. It varies but would sound something along the lines of “Adam and Eve were created perfect in the garden of Eden. There they lived in perfect communion with God. They lacked the knowledge of good and evil and, therefore, could do no wrong. Their only command from God was to not eat the fruit from the tree of the knowledge of good and evil. Then one day a serpent tempted the couple to eat of the fruit and instantly their higher level of moral judgment caused them to become ashamed of their nakedness. Knowing their guilt, they hid from God; they are eventually exiled from Eden. For the rest of their days, they must work hard for food and endure great pain during labor.”

From this point, the Genesis stories continue to depict human choice to fall farther from perfection and descend into a state of sin, or separation from God. From this viewpoint, it was the original disobedience of Adam and Eve that caused sin to enter the world and destroy what *was* a perfect paradise. It is because of this single

sin, that separation from God occurs; it also requires that Jesus’s life, death, and resurrection were needed to redeem us and allow the opportunity for communion once again.

When we consider an evolutionary account of the ‘rise’ of man, some think it negates a fall and thus the need for redemption. Consequently, we need an account for how sin made its entrance to the worldly stage *even if* via evolutionary processes. This paper will focus on evolution, discuss the impact it has on the traditional Christian fall doctrine, and propose a theory that provides for the compatibility of evolution, the fall of man, and a loving creator God.

#### **Darwinian Evolution and its Critics**

On November 24<sup>th</sup>, 1859, Charles Darwin published his book *On The Origin of Species by Means of Natural Selection*. Ever since, debates between science and religion on the origin and nature of man have occurred. On one side are some atheists who claim that evolution proves there is no god;

on the other are creationists who believe a literal interpretation of the Genesis story. In the middle you have believers who are trying to harmonize science and faith.

Even though the premise of this discussion is based upon accepting that evolution does in fact account for the origin of man, I feel it necessary to address and present an argument for the belief in Darwin's idea. I regard this as important because it will allow the reader to understand the weight of the topic and the immense impact it has on our beliefs as Christians.

Creationist Christians argue against the Theory of Evolution in many different ways. Some are more logical than other, some aren't arguments at all, but all result from a lack of knowledge or a misunderstanding of presented information.

### **Just a Theory?**

Let us start with one of the most prevalent arguments found today. "Evolution is just a theory." This statement tries to make the claim that evolution is on the same playing field as a guess or a hunch. It would have you believing that there's no more proof for evolution than there is for the Loch Ness monster or the yeti. It plays upon the idea that scientists weren't there so how could they possibly know what happened. This is a result from a complete lack of knowledge regarding how the word theory is used in the scientific community. The common definition is nothing more than a speculation while the scientific definition is talking about the fundamental principles underlying a science. Anyone who has tripped and fell or has dropped something must believe in the theory of gravity. If you didn't you would never be taken seriously. Anyone who has gotten sick after being in close proximity to an ill friend understands

the implication of germ theory. But no one would reject either of these based on his or her use of the word theory. Francis S. Collins, head of the human genome project says, "Theory is not intended to convey uncertainty; for that purpose a scientist would use the word hypothesis."<sup>1</sup> A theory, in the scientific sense, is a hypothesis that has been shown through an overwhelming amount of scientific data to be true. We have an overwhelming amount of evidence in the fossil record, in our DNA, and by comparative anatomy to prove that Darwin's hypothesis is, in fact, a valid and predictable theory. As Theodosius Dobzhansky, a leading 20<sup>th</sup>-century biologist and devout Christian, said, "Nothing in biology makes sense except in the light of evolution."<sup>2</sup>

### **The DNA Explanation**

One argument favoring the theory requires a lengthy but simplified explanation of how our DNA works. Deoxyribonucleic acid is made of a sugar and phosphate backbone with a variation of two pairs of complementary nucleic acid bases in the middle. The four bases are Adenine and Thymine, and Cytosine and Guanine.<sup>3</sup> You can picture a twisted ladder with sugar and phosphate groups for the sides and two complementary bases for the rungs. This genetic material is the blueprint for the production of proteins, which are long chains of amino acids. The DNA codes for specific amino acids in three base sequences called codons. For example, the codon TCA would code for one amino acid while AAG would code for another. With this three-letter code, there are sixty-four possible three-letter combinations but there are only twenty amino acids. This means that there is a redundancy within the code. For example, GAA would code for a specific amino acid, but so would GAG. An interesting fact is

---

<sup>1</sup> Collins, 2007, p.142

<sup>2</sup> Dobzhansky, 1973, p.125-127

<sup>3</sup> Saenger, 1984

that for all living organisms a specific three-letter code will always transcribe the same amino acid. In fact many organisms, especially closely related ones, share the same genes. Evolutionists claim that this is further proof of the theory of evolution showing the link between all organisms while creationists would say that God just used the same principles throughout creation. Looking plainly at both sides it would be tough to know whom to believe but if we look at DNA as a whole it becomes undoubtedly clear.

Our current understanding of DNA leads scientists to believe that only 1.5 percent of our over three billion base pairs are actually used to code for proteins.<sup>4</sup> This leaves us with a genome with long stretches of unused DNA and short bits of genes. Because mutation of DNA happens randomly we know that any part of the genome has an equal chance of receiving a mutation. The difference is that a mutation within the noncoding region of the genome would see no effect on the organism while a mutation within the coding region would have an effect. Also, mutations are more likely to have deleterious effects on an organism, and only a rare event will provide a selective advantage. Even though mutations are random we see a much greater frequency of changes within the noncoding portions of the genome compared to the coding portions.<sup>5</sup> This is exactly what you would expect. Because mutations are more likely to cause harm a change in the coding region would more often than not hurt the animal while a change in the noncoding sections would do nothing. This means that a mutation within the noncoding would be passed on while most mutation in the coding would not. In fact, if you remember talking about the redundancy of codons for amino acids, many of the mutations within the

coding portion are only a substitution for a letter that does not change the amino acid. This is called a silent mutation and is seen with the comparison of closely related species. It is clear from this evidence that our DNA itself holds the supporting material for Darwin's theory.

### **The Spectator Problem**

Some think a valid criticism against evolution is the uninformed claim that if evolution is real, we should still see species changing from one to the next. The simple answer is we do, but that it takes millions of years to occur. Our lives are incredibly short compared to the speed at which evolution works which leaves many doubting its validity. This is not a problem with evolution; this is a problem with the perspective of the spectator. You can also argue that we do see evolution occurring within the virus and bacteria population on earth. One of the scariest potential outcomes of our invention of antibiotics is that we will put too great a selective force on the microbe populations and increase the number of antibiotic resistant pathogens. Many creationists would believe this to be true but would only call it microevolution or incremental change within a species. What is not understood is that it is this incremental change over millions of years which brings forth what scientists would call macroevolution. "The distinction between macroevolution and microevolution is therefore seen to be rather arbitrary; larger changes that result in new species are a result of a succession of smaller incremental steps."<sup>6</sup>

### **Origin of Life**

The final large argument against evolution is that there is no proven mechanism for abiogenesis, the creation of a

---

<sup>4</sup> *op. cit.* ref. 1, p.124

<sup>5</sup> *op. cit.* ref. 1, p.130

<sup>6</sup> *op. cit.* ref. 1, p.132

self-replicating organism from non-living matter. While no scientist has been able to explain how life came from nonlife I would caution that this does not offer proof of God. First, this is not an argument against evolution; it's simply a 'God of the gaps' story of how we came to be. Second, throughout history we have used gap arguments to explain the unexplainable; the problem arises when an explanation is finally found. When the gap is filled in, God slowly disappears from the picture and believers who put their faith in these arguments have their world shaken at its core; the church looks more ignorant and unappealing in the eyes of society. Just like the sun revolving around the earth, or mankind coming from a garden, filling in currently unexplained scientific questions with God does no benefit to the Church, or the individuals in it.

Now that I have established that evolution is a reasonable base on which to build our worldview we need to look at its impact on the traditional biblical view of the fall.

### Fall Doctrine

What is the fall? For a working definition, we will describe it as the transition of the first human from a state of innocent obedience to God to a state of guilty disobedience. It is technically not named in the bible but finds its inspiration from Genesis chapter 3. As described above, it is the story of Adam and Eve knowingly disobeying God and being evicted from Eden.

Eastern and Western Orthodoxy have nuanced differences in thinking how fall doctrine is applied. Though seemingly different in terms of the natural state of man and relationship with God, they also have some similarities. Both see creation as being

perfect at the start and falling into depravity because of sin. Included in this would be death entering the world as a result of sin, man's separation with God, and man's need to be redeemed by God. Both would start with the image of the Garden of Eden, and have Adam and Eve falling into sin through arrogance and disobedience.<sup>7</sup>

Eastern orthodoxy begins to differ when we question the original state of man. In this doctrine, the original state of man is to be in God. In other words, man is not meant to be an autonomous being separate from God but that his ultimate nature is determined by his relationship with God. From this perspective, the fall is man's descent into slavery to his body and his world. In this state man's separation from God causes a subhuman autonomous existence void of his natural glory and his freedom. Sin in this context would not be considered the inheritance of guilt from Adam but as an unnatural condition of separation from God that causes human life that ends in death. The goal of man would be communion with God and deification.<sup>8</sup>

Western Orthodoxy differs from the East on the idea of sin, human nature, and the goal of man. Instead of sin being the deprivation of freedom, it is the inheritance of guilt. It is not considered the loss of freedom because human nature is seen as being autonomous from God from the beginning. The fall would be considered Adam's decision to disobey God and the entrance of sin into the world. The goal of man in the western view is justification or the act of receiving grace. In this belief, you could say that the nature of man is separate from grace and thus you must obtain it. Eastern thought would put the two together and say that community with God is the natural state of man.<sup>9</sup>

---

<sup>7</sup> Orthodox Information, 1996

<sup>8</sup> *ibid.*

<sup>9</sup> *ibid.*

### Fall Doctrine in Light of Darwin

So what happens when we look at these beliefs in the light of evolution? Anglican Bishop John Shelby Spong said, “Darwin... destroyed the primary myth by which we had told the Jesus story for centuries.”<sup>10</sup> It is obvious that many of the surface level ideas cannot be seen as viable any longer. Perfect creation is the first to go. The notion that there was a perfect garden without death is incompatible with the scientific data. Animals have been eating animals since the beginning of life. Immortality of humans and death as the consequence of guilt or separation with God does not seem to be reasonable anymore as well. All living things die and that has also been a rule on this planet since the beginning of life. The notion that man was created without sin and then was tempted by a snake and ate a fruit that granted them the knowledge of good and evil would be considered no longer viable. Also, no more obvious would be the belief that only two humans began humanity. Past these more superficial recounts of the story of Genesis, many of the deeper theological doctrines seem to be able to survive this drastic change in the origin of man.

But is a synthesis of Darwinism and Christian doctrine even possible? C.S. Lewis seemed to think so when he wrote, “I believe that Christianity can still be believed, even if evolution is true.”<sup>11</sup> Much of our ability to create a workable fall doctrine will depend on the view of creation of our new Adam and Eve.

### Is Denouement Possible?

So now that we have built our foundation of evolution and broken down the traditional account of the fall of man, it is now time to attempt to rebuild this fall with both in mind. Before we begin I would like to note that I will use the term “animal”

as that which does not have sin nor a chance at redemption and “man” or “human” as that which is capable of sin, redemption, and communion with God. I propose we start with the assertion that at one time there may have been an infant born within a population which met the qualifications of that which we would call human and whose parents were that which we would call animal. But what was the difference between the two?

As I see it there are two possible ways to view the solution of this question. The first is that God decided to step in and grant a soul to the animal making it man. The second is that evolution proceeded to a point where the animal to achieve the mental capacity to perceive the world in such a way as to deem it human. In the latter case, God could still ‘be involved’ just not in an ‘interventionist’ manner as the first requires.

Because the notion of a soul is such a hotly debated issue and because I do not think saying ‘the soul allowed it to perceive the world in a certain way’ and ‘evolution allowed it to perceive the world in a certain way’ are really different at all, I propose that the difference was a brain capable of understanding the world and perceiving God. Our rise as a species is completely attributed to evolution leading to a greater brain capacity and greater intelligence than other animals. This is abundantly clear when we begin comparing our physical abilities to that of animals around us. We are not fast, we are not strong, we do not have large teeth and a strong bite, and we do not have claws. What we do have is a brain capable of far superior critical thinking than that of other animals. At this point, I’m sure some are going to argue that animals are intelligent as well. This is true, some animals show signs of great intelligence, but I think it is obvious that humans have reached a far greater level of intelligence as a population and as individuals.

---

<sup>10</sup> Spong, 2012

<sup>11</sup> Lewis, 1944, p.633.

It is here where we can find an interesting connection between the Genesis account of the fall and human anthropology. In the story, we see Adam and Eve receive judgment for their actions after they receive the knowledge of good and evil from the fruit. If we take the position that an animal became human when their brains became capable of certain capabilities I believe we can say that an animal became man when they were able to grasp the knowledge of good and evil. When this happened God held them accountable for their actions. This would give us a new account of how sin, judgment and redemption could have entered the world. An easy opposition to this claim would be that animals know right and wrong as well. Someone may say, “even my dog knows right and wrong.” To that, I would argue that the dog does not actually know the difference in right and wrong. The dog only knows that if he does a certain action, maybe eating straight out of the dog food bag or drinking from the toilet, your response will be negative. Therefore, it shows signs of fear, remorse, or guilt. But this does not mean that the dog knows why it is wrong.

This is the distinction that I’m proposing for that which makes us human. The dog doesn’t understand the larger effects of overeating, spilling dog food, defecating on the rug, or running away from home. It can only respond to the response of its owner. We as humans can see the larger picture and are held accountable to knowingly committing a good or bad action. Our ‘new fall’ would be considered the first time God decided a human was capable of the discerning between good and evil and the man or woman willingly chose to do evil.

One of the problems with this position would be accounting for the knowledge of good and evil for every

individual of a population, which spans the entire globe. But when we take a look at the rise of *Homo sapiens* we see this quickly resolved. The earliest evidence of religious ceremonies within the human population is around 100,000<sup>12</sup> years ago while the common date that humans left Africa and began to migrate across the globe was only 80,000 years ago<sup>13</sup>. This means that there was a long span of time for every member of the human race within Africa to develop the intellectual capabilities we have proposed.

### **Assimilation into Traditional Orthodoxy?**

So what if we return to the Eastern and Western Orthodoxy doctrine of the fall with this new proposal? Eastern emphasizes that the original nature of man is to be with God and that the fall is the autonomous human who is a slave to natural desires. If you try to implement this idea in the new proposal it seems that you never have the perfect communion with God and the fall happens on the first day you are human. This basically leaves it useless as a principle from which to draw. It is interesting to think about the goal of the doctrine of community with God though. It would lead to us being called from our autonomous animal nature into a relationship with God, to a plain of higher moral judgment and greater love. I believe that this goal is a message that we can see throughout the bible. Lastly, from this perspective you would have to believe in original sin because we have all inherited an animal nature that is separate from God.

The Western view may be more compatible with this idea of the fall; instead of sin being the autonomous self that is separated from God, we see the human being regarded as autonomous from the start. Sin itself is seen as the receiving of guilt for committing evil. These both fit perfectly within our new fall proposal. From this view we could also say that the goal of

---

<sup>12</sup> Lieberman, 1991

<sup>13</sup> Gugliotta, 2008

man is to receive grace to pardon his sin. This would call humans to try to achieve a more pure life and deny the animal self; a theme we see throughout the bible. Original sin would not exist in this model for one would only sin once they are capable of discerning good or bad and choose evil. It seems like this thought would survive being placed in the light of evolution rather well.

### **A New Creation Story?**

Finally, I would like to explore an interesting view purely for entertainment purposes. From the traditional telling of the Genesis story, Adam and Eve disobey God and must leave the garden. After they leave they also receive a curse from God which basically says that they will have to work hard to get their food and that childbirth will be painful. So what if we take a look at the curse in light of evolution. I propose that both of the punishments can be explained using human anthropology. The first is we must labor to produce food. Humans began as a hunter-gatherer species. This is great for a small population with low population density but begins to exceed the carrying capacity of the land when density increases. I think it is safe to say that a contributing factor to human migration could have been attributed to the growing scarcity of resources and the need to find new food sources. So humans spread out and everything was good. But humans are smart, they're getting better at staying alive, and they're getting better at reproducing, so eventually they begin to exceed the carrying capacity again. This time they have nowhere to migrate and must develop the practice of farming to increase the land's carrying capacity to match that of their population. It seems as if the curse would still be true. Because we had reached a point in human intelligence to be able to discern good and evil, we also had the intellect to become a

dominant species capable of exceeding the carrying capacity of the land and therefore had to learn how to work to grow our food. Thus, we have the curse of toiling and sweating over the land. But what allowed our intelligence to reach such a great point? That would be attributed to our larger brain to body ratio compared to other animals perhaps itself driven by the need for more cognition in a complex social environment. The consequence of our large brain is that we have to walk the line between developing as much as possible within the womb and still being able to fit through our mother's birth canal.<sup>14</sup> This causes incredibly intense pregnancies rarely found throughout the rest of the animal kingdom. The intelligence of humans and the difficulty in childbearing would have seemingly developed together, but I still see this as a result of our intelligence.

### **Conclusion**

In closing, it seems that our greatest curse and our greatest reward is that we are capable of a level of intelligence that allows rational judgment and logical thinking. It is our greatest curse because it is a possible explanation of the fall of mankind and our greatest reward because it also allows individual communion with God and the opportunity of redemption. I do not believe this is a perfect theory and I know that it would come up against many critiques, but I do think that it is a proposal which brings us one step closer to the synthesis of evolution and the fall of man. This 'new fall' accounts for the transition from animal to man, gives us a workable definition of sin, and leaves the door open for the viability of multiple theories of atonement. It seems as though we have been given our intelligence so that we may rise above the beastly nature of our genes and approach communion with God as a holy and sanctified being.

---

<sup>14</sup> Shipman, 2014

### Literature Cited

- Collins, F. (2006). Deciphering God's Instruction Book. In *The language of God: A scientist presents evidence for belief* (pp. 109-142). New York: Free Press.
- Dobzhansky, T. (1973, January 1). Nothing in Biology Makes Sense Except in the Light of Evolution. *American Biology Teacher*, 125-129.
- Interview with Bishop John Shelby Spong, *Compass* [television program on ABC network in Australia], July 8, 2001, accessed May 18, 2012, <http://www.abc.net.au/compass/intervs/spong2001.htm>.
- Gugliotta, G. (2008, July 1). The Great Human Migration. *Smithsonian Magazine*.
- Lewis, C. (1994). Lewis to Bernard Acworth. In *Collected Letters* (Vol. II, p. 633).
- Lieberman, P. (1991). *Uniquely human: The evolution of speech, thought, and selfless behavior* (p. 163). Cambridge, Mass.: Harvard University Press.
- Saenger, W. (1984). *Principles of nucleic acid structure*. New York: Springer-Verlag.
- Shipman, P. (2013, November 1). Why is human childbirth so painful? *American Scientist*, 426-426.
- The Doctrine of the Orthodox Church: The Basic Doctrines. (1996, January 1). Retrieved April 29, 2015, from <http://orthodoxinfo.com/general/doctrine1.aspx#GOD AND>