

## From Whence I Came

by Brian Kohring

Imagine yourself standing alone in a lush forest under a tree. It is an old tree. The massive trunk soars to dizzying heights, terminating in a canopy of branches and leaves that seem to stretch to infinity. The broad, green leaves shelter you from the glaring sun. You reach out and touch the tree. The fissures in the rough bark swallow your fingers. You are startled by the snap of a twig and turn to find a deer staring back at you with large brown eyes located on either side of his head. His majestic visage is only enhanced by the projections of the antlers he wears like a crown. Relief floods in; deer have no sharp teeth or claws. With a snort and a flash of his white tail, he bounds into the underbrush and vanishes as quickly as he appeared. A ray of sunshine has fought its way through the leaves to illuminate a glittering object at your feet. Bending down, you pick up a beautiful gold pocket watch. Its cover is laced with intricately carved scrolls. As you open the cover, some questions come to mind. How did this forest and its creatures come to exist? Am I separate from nature and can do with it as I please, or am I a part of it? Why do deer have hooves instead of claws? What is this watch doing in this forest?

The beauty of nature often inspires feelings of awe and evokes questions such as these. However, depending on your beliefs, the answers may be radically different. Over the last few centuries, science and Christianity have become increasingly embroiled in conflict. This conflict has only intensified since 1859, when Charles Darwin published *On the Origin of Species*. Darwin's theory of natural selection poses an unparalleled threat to the core of Fundamentalist Christian beliefs. The debate centers on the origin of life. The theory of evolution states that species change, or evolve, gradually through the accumulation of random mutations over a long period of time. Natural selection is the mechanism through which this happens. These changes are not directed towards any end product. Fundamentalist Christians, or creationists, believe that the Earth and all life on it was divinely created in its present form, and that species, man in particular, do not change. So who is right? Was life created, or did it evolve? I will return to the forest with you and explain why I believe it evolved.

Let us look at that watch again. So, what is it doing in the forest? A watch does not belong here among all the plants and animals. It is an unwanted man-made intrusion into this beautiful natural setting. Well, the watch is in the forest because I dropped it there for you to find. It is an old watch that I borrowed from an eighteenth century theologian named William Paley. Paley used his watch in an attempt to prove the existence of God as evidenced in design. This "Argument from Design" has become one of the foundations of creationism. It states that the complexity found in nature is proof of the existence of God. As Paley explained,

[S]uppose I had found a watch upon the ground.... [T]he inference...is inevitable, that the watch must have had a maker; that there must have existed, at some time, and at some place or other, an artificer or artificers, who formed it for the purpose which we find it actually to answer; who comprehended its construction, and designed its use.... Every indication of contrivance, every manifestation of design, which existed in the watch, exists in the works of nature; with the difference, on the side of nature, of being greater or more, and that in a degree which exceeds all computation. (qtd. in Dawkins, *Blind* 4-5)

Paley is saying that when we look at the complex workings of a watch, it immediately becomes apparent that someone has designed and built it -- i.e., it has an intelligent creator. He then extends this idea to nature. Since nature is infinitely more complex than a watch, it, too, must have an intelligent Creator. Although written long before Darwin in 1802, Paley's "Argument from Design" has been adopted and expanded by Creationists to

refute Darwin's theory of Natural Selection. They argue that nature is far too complex to have arisen from random mutations. The watch was created the way it is and so were animals; neither one evolved.

Or did they? Surely this perfect, glittering watch we have before us was not the first one ever made. No, the first watch was a stick in the sand. It was not very complex, nor did it give any hint of intelligent design. Was someone trying to find out if it was lunchtime, or did a storm just pass? However, gradually over time changes were made. Someone added numbers, a second stick, gears and a housing. Eventually, step by step, we arrive back at our watch. Not all changes worked, and some had no effect. For instance, imagine an early watchmaker who filled his watches with water instead of gears, found it was silly, and stopped making watches altogether. Now imagine another watchmaker who always painted his stick before sticking it in the sand. It never affected the workings of the watch, but he kept on doing it. The point is that there is an easily imaginable continuum of increasing complexity between the stick and the pocket watch. Watches have evolved.

At first glance, this analogy appears to be a contradiction. Watches evolved through the conscious effort of the watchmakers. If both watches and animals evolve in the same way, then does this not point back to an intelligent Creator? In order to answer this question, and for the analogy to hold true, we must look at the mechanism of change. Although the evolution of watches was guided by intelligence, the first watchmaker had no concept of a pocket watch when first he stuck stick into sand. If he had, he would have made a pocket watch instead! Rather, each succeeding watchmaker laid his improvements upon the foundations of his predecessor. This is known as cumulative selection. Each improvement is used as the basis for the next. It is a powerful mechanism that forms the foundation of natural selection.

Before I explain how cumulative selection works, let me point out another apparent paradox in our analogy. As stated earlier, evolution is the accumulation of random mutations over time. Given this, our watchmakers are still not a good example of evolution. Although they have no concept of the pocket watch, their changes are directed towards improvement and are not random. The true power of cumulative selection is its ability to take random mutations and turn them into non-random changes. It is a process of trial and error that is identical to that used by the watchmakers. The vast majority of random mutations that can occur are detrimental to the organism. As the evolutionary biologist Richard Dawkins wrote, "however many ways there may be of being alive, it is certain that there are vastly more ways of being dead, or not alive" (*Blind 9*). Organisms with detrimental mutations do not survive to reproduce, so they leave no foundation upon which to build. If a mutation is beneficial, the organism reproduces and forms the foundation for the next successful mutation. Detrimental mutations are lost, and beneficial mutations are preserved in a non-random fashion.

I will use our watchmakers in another analogy to clarify this point. Let us take a puzzle and throw away the lid so that we have no idea what the picture is. Now, if we throw all the puzzle pieces onto the table, the chance that they will land and form a complete picture is incredibly small. So instead of doing that, we let our watchmakers go to work. Although they do not know the picture, they can consciously pick out and fit together the pieces until they form it. However, what happens if we blindfold them before they start? Now they are forced to randomly select puzzle pieces and attempt to fit them together. Pieces that do not fit are like deleterious mutations and are discarded back onto the pile. Pieces that fit are kept, and eventually the picture grows to form a whole, present day organism. It is the selection and retention of beneficial mutations from a myriad of possibilities that is the driving force behind evolution. Mutations are random; selection and retention are not.

All of this is terribly upsetting to the creationists and understandably so. After all, evolution is a theory based on randomness, on the chance that a beneficial mutation will arise. It leaves no room for a

Creator God as found in a literal interpretation of the Bible. The implications are enormous. If man arose through natural selection, what happens to his unique relationship with God? His dominion over nature? How could man have been made in God's image? Suddenly, the Ladder of Perfection has no rungs.

Man's unique relationship with God is the undercurrent of creationism. Since plants and animals do not have this relationship, it is fine for them to have arisen by natural selection. Man, however, was created in God's image, so he is special. Since he was given dominion over the animals, it is not possible that he is one. I think it is fair to say that if it could be proven that man was excluded from natural selection, most, if not all, creationists would be able to reconcile their beliefs with evolution. In fact, this is exactly what some of them have done.

So is this to say that science, and specifically the theory of evolution, denies the existence of God? Not at all. While evolution leaves little room for the fundamentalist Creator God, it is easily reconciled with Christianity. It is all in what role you envision God. For example: The universe was created by the Big Bang. What was there before the Bang? What made it? What made that? You get the idea.

In writing this, I have deliberately avoided a tedious discussion of the physical evidence as seen by both sides. Some of the issues under debate are: the age of the earth, evidence of the Great Flood, and lack of missing links in the fossil record. Each side feels that it has ample evidence to support its claims. For every piece proffered by one side, a counter interpretation is fielded by the other. It is a tug-of-war that is going nowhere. Instead, I have attempted to engage you in an interesting and thoughtful argument based on logic. My hope is that I have inspired you to take a closer look at evolution and to examine the evidence in a new light. I have provided you with the tools to interpret nature; take them with you on your next camping trip.

Let us look at our lush forest one last time. Is it any less beautiful if we remove the hand of a Creator God? I do not believe so. Seen in the light of evolution, I think nature becomes even more beautiful and awe inspiring. The incalculable complexities within, and between, living things forms an intricate web that is truly astonishing. Knowing that I am a part of this web fills me with an inner peace. It forges a bond between all living things, and allows us to share equally the wonders of life. I feel that it would be a sad thing, indeed, to have been created to be separate and apart from all this splendor. So when I die, please bury me in our lush forest, and return me to from whence I came.

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