RIVER BACK TO EDEN

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A JOURNEY FROM RICHARD DAWKINS' 'RIVER OUT OF EDEN'

"In Thy Light We See Light"

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An Overview of the Journey

Generally rivers flowing out of an area do not flow back into it. So it might strike the reader as somewhat fanciful that I propose a river flowing back to Eden, which Richard Dawkins has suggested flowed out of it. This would generally be conceded, but the river flowing out of the Eden of Dr. Dawkins' imagination is no ordinary river. Indeed, it is a quite extraordinary river, full of arbitrary turns and contradictory twists. Yet despite its apparent defects, River Out of Eden: A Darwinian View of Life has enjoyed widespread appeal and acceptance. The National Center for Science Education recommends it as an excellent source to understand evolutionist 'reality'. Book reviewers in the major newspapers and periodicals such as The New York Times, Nature and The Los Angeles Times have lauded it. To suggest such an extraordinary river can flow back to Eden is therefore not that surprising after all. Indeed, as we shall see, if we remove Dr. Dawkins' pre-suppositional bias against God and his word, and replace in its stead a pre-suppositional faith in God and the Bible, our river flows back to the historical Eden. What's more, our river back to Eden avoids the arbitrary turns and contradictory twists of Dr. Dawkins' river. It makes sense of what we experience in the real world, as opposed to the world of imagination. But let's first explore Dawkins' River Out of Eden, before we change course back to the historical Eden. We will examine the naturalistic mechanisms set forth as explanations of life, analyze his form of reductionism, explore Dawkins' response to relativist objections, and assess his naturalistic philosophy's overall ability to explain our experience along the journey.

My own personal journey from Dawkins' river is not simply a theoretical one. Like Dawkins, for many years I embraced the Darwinian view of life and its naturalistic philosophy. The theologian John Calvin in his *Institutes of the Christian Religion* describes the person without the Bible received in the mind and heart as being like a man with impaired vision:

"Just as old or bleary-eyed men and those with weak vision, if you thrust before them a most beautiful volume, even if they recognize it to be some sort of writing, yet can scarcely construe two words, but with the aid of spectacles will begin to read distinctly; so Scripture, gathering up the otherwise confused knowledge of God in our minds, having dispersed our dullness, clearly shows us the true God."

Like the man of Calvin's metaphor, I was bleary-eyed as well until I placed these spectacles before my eyes, and received the Bible and the Christ of the Bible. Without these spectacles, my view of the world was incoherent. But with these spectacles, my view of the world became coherent. I invite you to accompany me on my journey out of and back to Eden.

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¹ John Calvin, *Institutes of the Christian Religion* (Philadelphia: The Westminster Press, 1960), p. 70.

Naturalistic Mechanisms

"It is real ancestors, not supernatural gods, that hold the key to understanding life." ² With these words Professor Dawkins sets forth on the bold task of attempting to prove that life as we know it can be understood and explained by purely naturalistic mechanisms. He asserts that we do not need to look beyond the naturalistic mechanisms we experience everyday to explain life and the origins of life. Implicit within his conception that naturalistic mechanisms explain all life is the view that all life, including human life, is completely physical and material. As he explains, "life is just bytes and bytes and bytes of digital information." ³ As the singer Madonna coined in her popular song, "we are living in a material world, and I am a material girl." ⁴ Such a 'material world' only requires material mechanisms to explain it, according to the naturalist's theory. Hence, employing 'Occam's razor' that we should seek the simplest explanation in understanding what happens (what Dawkins describes as the 'utility function'), naturalistic mechanisms provide the sufficient and reasonable explanations to what we observe.

Dr. Dawkins' point about the naturalistic mechanisms of everyday experience needs to be emphasized. To his credit, Dawkins recognizes and readily admits that if the naturalistic mechanisms proposed as explanations are not observed by humans, then they are really not scientific explanations at all. It is for this reason that he chides zoologists that speak about "major groups of animals" arising "spontaneously and perfectly formed, like Athena from the head of Zeus." 5 He notes how one zoologist suggested that evolution during the Cambrian period must have been significantly different from the evolutionary process we observe today, for major groups of animals were coming into existence rapidly then. ⁶ Dawkins recognizes that such an admission is destructive of the entire framework of naturalistic mechanism. As Dawkins later points out, "without gradualness in these cases, we are back to miracle..." 7 The reason for this is clear: there is no observed naturalistic mechanism for widespread and spontaneous genesis of totally new life forms. So if such genesis occurred, then naturalistic mechanisms (that can be substantiated by human observation) are insufficient to explain them. Therefore, for Dawkins to prove evolutionary naturalism, he must show that the gradual naturalistic processes we observe today are sufficient to account for life as we observe it. Otherwise, he knows he must admit that proven naturalistic mechanisms indeed cannot account for life.

Since his Darwinian view of life is dependent on gradual naturalistic mechanisms, it is therefore contingent upon a significant expanse of time over which such mechanisms could operate. It is patently obvious that the naturalistic mechanisms we observe in everyday life do not produce entirely new life forms on a widespread basis in rapid order. So one of the assumptions of gradual naturalistic mechanisms as an explanation for life is time- and much of it. If the life forms we know today did not

² Richard Dawkins, *River Out of Eden: A Darwinian View of Life* (New York: BasicBooks, 1995), p. 1.

³ Ibid., p. 19.

⁴ We will explore this form of reductionism in the section entitled "The Reductionist Fallacy." Suffice it now to suggest that one condition of the sufficiency of naturalistic mechanisms to explain life is the assumption that all life can be reduced down to the physical alone, with no non-physical component.

⁵ *Ibid.*, p. 11.

⁶ *Ibid.*, p. 10.

⁷ *Ibid.*, p. 83.

exist say ten thousand years ago, then such gradual naturalistic mechanisms would be wholly inadequate to explain their appearance. But evolutionists such as Dawkins generally point to at least two evidences to bolster that this expanse of time is valid. First, there is our observation of distant astronomical bodies requiring presumably significant amounts of time for the light to reach us. Second, there is the data from various scientific dating methods. It may at first blush seem with such apparently solid evidence behind it that the assumption of time is reasonably certain.

Upon closer examination, however, the assumption of a significant expanse of time for life to evolve is far from certain. Regarding the first evidence for an expanse of time, it presumes- among other thingsa constant speed of light currently estimated at 186,000 miles per second. Einstein's theory of relativity asserts such a constant speed of light. If this speed of light were not constant, and sometimes or often traveled at considerably higher speeds, then an astronomical event that was estimated to occur a million years ago could have in fact occurred only yesterday- or in even less time! In such a case the light from the distant astronomical body would not require nearly as much time to reach us. Interestingly, evidence is starting to arise that light does indeed often travel at significantly higher speeds- traveling at great distances almost instantaneously. Dr. Lijun Wang of the NEC Research Institute in Princeton has conducted experiments measuring the speed of pulses of light in caesium gas showing it traveled at least 300 times the alleged 'speed of light'. 8 Physicists at the Italian National Research Council describe in a recently published paper how they have propagated microwaves at 25% above the same alleged 'speed of light'. And Dr. Raymond Chiao, professor of physics at the University of California at Berkeley, has conducted experiments in which photons- the particles of which light is made- appear to be able to jump between two points in zero time. 10 The latter effect, called 'tunneling', is actually being employed to make sensitive electron microscopes. Such mounting data regarding the speed of light is indeed eroding the argument of expansive time based upon astronomical observations. And a constant and slower speed of light is only one assumption of such astronomical "proof" for expansive time. There are additional assumptions about the curvature of space, the nature of the causation of light, etc. which bring this evidence into question.

Regarding the second evidence for an expansive time, the dating methods employed rely upon multitudinous assumptions and often yield contradictory conclusions about the timing of events. Within the very context of *River Out of Eden* we find one such contradictory conclusion. Researchers at Berkeley performed studies on mitochondrial DNA. Given current rates of mitochondrial DNA mutation, one thing they wanted to find out was how long it would take to go from what they believed was the one common ancestor of all present-day mankind to mankind today. Their study indicated 150,000 to 250,000 years. ¹¹ This would mean, if it were true, that all of mankind came from one woman in one location (they hypothesize Africa, which we will discuss later) who lived 150,000 to 250,000 years ago. The problem is, studies done by other biologists using various dating methods show hominids scattered across the earth by their calculation hundreds of thousands of years before this. ¹² Dawkins hypothesizes the unlikely 'solution' to this dating problem lies in the conclusion that none of the descendants of these scattered hominids survived to our present generation, but the descendants of our presumed mitochondrial DNA ancestor did. ¹³ Such *ad hoc* 'solutions' only serve to prove the adage: you can believe almost anything if you only try hard enough. The example with mitochondrial

⁸ Jonathan Leake, "Eureka! Scientists Break Speed of Light", *The Sunday Times* (London: June 4, 2000). ⁹ *Ibid*.

¹⁰ Ibid.

¹¹ River Out of Eden: A Darwinian View of Life, p. 53.

¹² *Ibid*.

¹³ *Ibid*.

DNA mutation is but one of numerous examples where dating methods yield different results. For example, a survey of dating methods of rocks in the Grand Canyon has revealed that "the various methods are usually strongly discordant." Furthermore, using various dating methods (K-Ar, Rb-Sr, Rb-Sr, Rb-Sr isochron, Pb-Pb isochron, K-Ar isochron, and Rb-Sr isochron) in the Grand Canyon have yielded the perverse result that layers of rock further below the surface show younger ages than strata closer to the surface. The most recent volcano in Arizona is Sunset Crater which erupted around 1065 AD, yet yields a K-Ar model age of .23 million years. And it should be noted that there are a number of possible dating methods which may suggest a considerably young earth, such as the salinity of the seas and the sedimentation in the oceans.

The reality that should be faced, rather than resorting to an abundance of ad hoc 'solutions' to explain the data, is that there are many assumptions implicit within dating methods. These assumptions include the condition of the object studied at its beginning; assumed rates of change, decay, or mutation; effects of environmental changes upon the object studied; the presumed ages of other objects often used to reference the age of the subject object; etc. Just to use the example of the mitochondrial DNA study, there were assumptions about which mitochondrial DNA really was the ancestor DNA, which rate of mutation was appropriate, etc. It should not be surprising that with so many underlying assumptions, different dating methods yield various and sundry results. ¹⁷ Perhaps most questionable of all is the uniformitarian assumption. As we will consider in another section, there is nothing inherent in the naturalistic philosophy to commend a uniformitarian assumption. A universe of random chance does not suggest such an assumption. And while the Christian conception of the universe with a superintending God can account for general uniformitarianism, nevertheless it also implies times without such uniformity of natural laws. If complete uniformity of physical laws is in question, this only raises additional doubts about current assumptions built in to dating methods. To be certain about length of time based upon such dating methods requires considerably more faith than is generally admitted. And perhaps the greater quandary is which dating method to place faith in given conflicting conclusions from the various methods.

Setting aside the time assumed for Darwinian mechanisms to operate, let's now focus on the naturalistic mechanisms themselves posited by Dawkins and other evolutionists. DNA is center stage in terms of naturalistic mechanism. Indeed, Dawkins says that "the river of my title is a river of DNA, and it flows through time, not space. It is a river of information..." ¹⁸ DNA contains the instructions which dictate physical structures of plants and animals. Like the computer code which may tell a robot what to do, DNA code tells physical structures of living organisms what to do. Dawkins asserts that the discovery of DNA "has dealt the final, killing blow to vitalism- the belief that living material is

¹⁴ Steve Austin, *Grand Canyon: Monument to Catastrophe* (Santee, CA: Institute for Creation Research, 1994), p. 127.

¹⁵ *Ibid*.

¹⁶ S.J. Reynolds, F.P. Florence, J.W. Welty, M.S. Roddy, D.A. Currier, A.V. Anderson, and S.B. Keith, "Compilation of Radiometric Age Determinations in Arizona," *Arizona Bureau of Geology and Mineral Technology Bulletin, 197* (1986): 1-258.

¹⁷ This is not to suggest that dating methods always yield inconsistent results. Indeed, models utilizing the dating methods can yield consistent findings and sometimes uncanny predictive results. But as we learned first with the Ptolemaic model, then the Newtonian model, and perhaps next with Einstein's model, scientific models can work within given parameters with stunning results- only to be proved wrong overall.

¹⁸ *Ibid.*, p. 4.

deeply distinct from nonliving material." ¹⁹ According to him, the various phenomena we observe with DNA- from the way it combines with other DNA to its relation to phenotypes to the way it can mutate-can explain how we have the various life forms today that were not present in the past.

The general contours of DNA activity can perhaps best be summarized in seven basic mechanisms, each of which we will briefly explain. These seven basic mechanisms are mentioned or described over the course of *River Out of Eden*, as well as in other biological literature:

- DNA replication
- DNA production of phenotypes
- Natural selection of best phenotypes produced by DNA, indirectly favoring the best DNA code
- Production of DNA variation from the mixing of parent DNA
- DNA mutation randomly yielding more complex life forms
- Variation promoted by geographic separation
- Inception of DNA/protein-based information technology

DNA replication describes the process by which DNA copies itself while preserving its instructional code. Unlike the binary code used in most computers (using 0 and 1 as the symbols to make a potentially infinite array of instructional communication), DNA utilizes a quaternary code of four symbols. With these four symbols an almost infinite array of instructional communication is also possible. The array of code "communicates" or "instructs" how the physical components of the organism are to form and accordingly behave. The DNA itself is in the form of a double helix of two strands- with each strand in a sense the mirror image of the other strand. It is the mirror image because each of the four symbols always attaches itself to a specific other symbol, forming a naturally attached pair. Therefore, when these two strands of the double helix separate, each "symbol" on an individual strand will attach itself to its paired "symbol", and thus form an exact replica of the original double helix. In this way, "pure information can be copied and, since it is digital information, the fidelity of the copying can be immense. DNA characters are copied with an accuracy that rivals anything modern engineers can do." ²⁰

DNA genes produce what are called phenotypes. Phenotypes are the physically causal consequences in organisms of the DNA code. Dawkins illustrates this in a Pacific island snail. "A particular gene in a species of Pacific Island snail determines whether the shell coils to the right or to the left." ²¹ In this illustration, the nature of the shell is the phenotype. Its nature has been causally determined by the DNA gene. The causal connection is through a "more or less complicated chain of intermediate events." ²² The DNA genes "tell" the proteins of the organism how to form in a complicated series of events. It should be noted that the DNA genes and their phenotypes reside in the same organism. So how a phenotype fares in terms of survival will determine how the DNA fares, being inextricably linked in the organism.

²⁰ *Ibid.*, p. 19.

¹⁹ *Ibid.*, p. 17.

²¹ *Ibid.*, p. 152.

²² *Ibid.*, p. 153.

Organisms consisting of multiple phenotypes must survive and compete with other organisms. Natural selection- otherwise described as "survival of the fittest"- weeds out those organisms that are not best suited to survive in the competitive environment. Those combinations of phenotypes contained in organisms which are most suited will survive. Since the phenotypes of an organism are inextricably linked to its DNA code, the "fittest" DNA code will fare best and thrive, whereas the "weakest" DNA code will not thrive and will potentially go extinct. Summarizing this, Dawkins writes: "Darwinism is now seen to be the survival of the survivors at the level of pure, digital code [DNA]." ²³

In order for natural selection to function, there must be variety of DNA to select from. One mechanism producing variety is the mixing of parent DNA. We see this, for instance, in human genetics and reproduction. "When a man makes a sperm cell, the chromosomes that he inherited from his father pair off with the chromosomes that he inherited from his mother, and great chunks of them change places. A child's chromosomes are an irretrievably scrambled mishmash of its grandparents' chromosomes and so on back to distant ancestors."²⁴

But the ordinary mixing of parent DNA to create child DNA does not create variety outside a certain limited range. For example, if there were only parent DNA that coded for blond hair and black hair, then one could by the mixing of parent DNA obtain a child of blond hair, black hair, or some shade or combination of the two. The mixing of such parent DNA would not yield a child's DNA coded for purple hair. But evolutionists need a mechanism to explain how one goes from simpler forms of life (like bacteria) to more complicated forms of life (like humans). So the mechanism which evolutionists turn to is genetic mutation. They regard these mutations opening up the possibility of change as produced by random chance and not design. "Genes do not improve in the using, they are just passed on, unchanged except for very rare random errors."²⁵ Describing this mechanism further, Dawkins writes that the DNA characters "are copied down the generations, with just enough occasional errors to introduce variety. Among this variety, those coded combinations that become more numerous in the world will obviously and automatically be the ones that, when decoded and obeyed inside bodies, make those bodies that take active steps to preserve and propagate those same DNA messages." ²⁶ It is these "discrete mutations" described by Dawkins that purportedly open up possibilities for DNA genes to move 'outside the box' of existing alternatives and he thinks were the mechanism bringing us more complex life forms from simpler ones.

The mechanism which enhances variety according to evolutionists is natural selection in geographically separated environments. "Why should two species divide? What initiates the long goodbye of their genes? What provokes a river to split and the two branches to drift apart, never to meet again? The details are controversial, but nobody doubts that the most important ingredient is accidental geographical separation." Of course, geographical separation as an impetus for variation made the Galapagos Islands of Charles Darwin famous. And Dawkins chooses to illustrate the mechanism in the case of gray and red squirrels. Red and gray squirrels cannot inter-breed, so should properly be considered as two separate species. Dawkins' describes their speciation thus: "Many

²³ *Ibid.*, p. 19.

²⁴ *Ibid.*, p. 41.

²⁵ *Ibid.*, p. 3.

²⁶ *Ibid.*, p. 19.

²⁷ *Ibid.*, p. 6.

generations ago, ancestors of gray squirrels and ancestors of red squirrels were one and the same individuals. But they became geographically separated-perhaps by a mountain range, perhaps by water, eventually by the Atlantic Ocean. And their genetic ensembles grew apart. Geographical separation bred a lack of compatibility." ²⁸ He asserts this ultimately led to speciation. And he asserts "the same story underlies the much earlier separation between, say, our ancestors and the ancestors of elephants." ²⁹ So in this way it is believed "accidental" geographic separation is the major ingredient for speciation of organisms throughout the world.

Having posited the basic mechanisms that evolutionists suggest explain in broad terms how life operates and has evolved from simple to complex, there remains the mechanism to explain the inception of life. What naturalistic mechanism explains how the DNA/protein-based information technology began? Dawkins himself concedes that the whole DNA/protein-based information technology is so sophisticated and high tech that one "can scarcely imagine it arising by luck, without some other self-replicating system as a fore-runner." ³⁰ Remember, Dawkins knows his explanation should be a mechanism which is observable and gradualistic, and not "like Athena from the head of Zeus". This is why he must grope for some simpler intermediate to DNA/protein-based life. He suggests it may have been RNA or some simple self-replicating molecules. ³¹ The chemist Graham Cairns-Smith has suggested that inorganic clay crystals may have been the intermediate replicator. ³² But Dawkins concedes that "we may never know for certain" the intermediate, and hence the mechanism. ³³

So how should we think of Dawkins' so called "river out of Eden"? Can these naturalistic mechanisms involving DNA account for life as we know it? It should be said at the outset that naturalistic mechanisms can only explain that which is material. So if at least some forms of life contain non-physical components, then naturalistic mechanisms are surely inadequate to account for them. But setting this issue aside until our section on reductionism, we still must ask whether these naturalistic mechanisms at least account for all physical components of life. It should also be noted that all seven basic mechanisms are necessary to substantiate the evolutionary framework. If some can be substantiated, but some cannot, then there is not a sufficient evidence to assert the case has been made or proved.

In terms of the seven basic mechanisms, it is interesting to note how different in evidential character the first four mechanisms are from the last three. DNA replication; DNA production of phenotypes; natural selection of best phenotypes produced by DNA; and production of DNA variation from the mixing of parent DNA to a great degree have been observed and tested in nature and/or in the laboratory. Even if aspects of these are sketchy, nevertheless they are coming together. But the last three mechanisms- DNA mutation leading to positive evolution on a wide-scale basis; variation promoted by geographic separation; and inception of DNA/protein-based information technology-have not been verified. Indeed, the trend line would indicate they each will not prove valid mechanisms towards the Darwinian view of life. The most that can be said is they are mere suppositions at this point. Let's consider each of them.

²⁸ *Ibid.*, p. 6.

²⁹ *Ibid*.

³⁰ *Ibid.*, p. 151.

³¹ *Ibid.*, p. 151.

³² Graham Cairns-Smith, *Seven Clues to the Origin of Life* (Cambridge: Cambridge University Press, 1985).

³³ River Out of Eden: A Darwinian View of Life, p. 151.

While evolutionists such as Dawkins have an observable mechanism in genetic mutation, it is quite the leap to argue that this explains widespread change of complex life forms from simple ones. We have indeed observed genetic mutations, but these have virtually always proved to be negative in effect. This is precisely why there are environmental and food regulations to reduce the presence of chemical mutagens. And this is also why people are advised to minimize their exposure to UV light. The mutations induced by such exposures quite often can lead to cancer. They are not regarded as opportunities for positive genetic evolution, but are instead regarded as carcinogens. There is no observed data where they resulted in consistently advancing change for a widespread group of organisms. Of course, evolutionists assert expansive time is the 'solution' to the matter. But if it is the 'solution', it is certainly not a scientifically observed solution; rather it is the extrapolation of an hypothesis. And it should be seen as another instance of the pre-suppositional faith of modern evolutionists.

Although Dawkins would like to claim that "nobody doubts" that "accidental geographical separation" is the "most important ingredient" to speciation, I am afraid we must inform him that there are yet a few remaining Doubting Thomases. The very illustration of red and gray squirrels he employs to 'show' speciation promoted by geographic separation rather serves a case in point to increase doubts. First, he himself admits that these red and gray squirrels now "overlap geographically in parts of Europe and, although they meet and probably confront one another over disputed nuts from time to time, they cannot mate to produce fertile offspring." ³⁴ He provided no concrete evidence that red and grey squirrels were at one time geographically separated- only mere conjecture. Second, he himself admits that there are gray squirrels in North America "separated by three thousand miles of ocean" from gray squirrels in North America, and these "would be capable of breeding...if they ever met." 35 So what we have in point of fact are two species that are not geographically separated and one species that is geographically separated-just the opposite scenario of what is trying to be proved! Now it is unquestionable that different environments geographically separated will tend to favor certain varieties in each of them, and so change the dominant characteristics in the population of each of them. The notable case of the black and white gypsy moths in England are but one example of how environmental conditions will tend to favor certain genetic characteristics over other genetic characteristics, and thus lead to changes in populational dominance. But this is a far cry from the proposition that geographic separation actually leads to speciation, and has been the major ingredient of it. Dawkins' admission that "the details [of this mechanism] are controversial" says a lot about the lack of concrete evidence for it. ³⁶ It only exemplifies again the pre-suppositional bias and faith present behind the assertions- even if they are not admitted by the evolutionary proponents.

It is no small matter that Dawkins can provide no observable, gradual mechanism for the genesis of the DNA/protein-based information technology. Never has it been observed that a simpler molecular structure becomes a DNA/protein-based system. Throwing out some possible intermediates is no substitute for showing an observable mechanism. The fact that self-replicating molecules exist does not provide an actual naturalistic mechanism to attain a DNA/protein-based system. Until and unless such an observable mechanism does present itself, Dawkins should admit that it is pre-suppositional

³⁴ *Ibid.*, p. 7.

³⁵ *Ibid.*, p. 6.

³⁶ Ibid.

faith which leads him to believe that such a naturalistic mechanism does exist and did occur. It is certainly not observed evidence.

It is interesting that after more than a century of scientific investigation a major challenge for Charles Darwin continues to haunt Richard Dawkins: the challenge of the eye. The challenge of the eye is how to explain the advent of such a complex apparatus with interdependent components in terms of gradual change. As even Dawkins admits, "in the case of an eye, lots of things have to go on in lots of different parts, in parallel" in order for the whole eye to function. ³⁷ So the challenge of the eye is summed up in the question: 'what is the use of half an eye?' Dawkins recounts how he received a letter from an atheist-turned-minister who, while an atheist, read a description of the intricate connection between certain orchids and wasps which require one another to survive, and whose anatomy and physiology are marvelously so designed. Yet major defects in the design of either would ruin the existence for both. This atheist came to believe in God, concluding that gradual evolution could not explain such complex and intricately connected handiwork.

But Dawkins argues the answer to the challenge of 'what is the use of half an eye?' is a simply answered one: "half an eye is just 1 percent better than 49 percent of an eye, which is already better than 48 percent, and the difference is significant." ³⁸ He here challenges the notion that there cannot be graduated steps to attain the currently functioning human eye. As an analogy, he compares the varying levels of acuity found in humans, especially during the aging process. At each stage of acuity, the eye is still useful, albeit not to the same degree. He also compares the acuity of the dragonfly to the human. "Dragonflies' eyes, though poor by our standards, are good by insect standards, and dragonflies can hawk for insects on the wing, a task about as difficult as hitting a tennis ball. Much poorer eyes could be used for the task of avoiding crashing into a wall or walking over the edge of a cliff or into a river." ³⁹ Dawkins concludes from such examples that "there is therefore no difficulty in understanding the gradual evolution of the eye, from primitive and crude beginnings, through a smooth continuum of intermediates, to the perfection we see in a hawk or in a young human." ⁴⁰ If we were to graphically illustrate this smooth continuum, it would appear something like this:

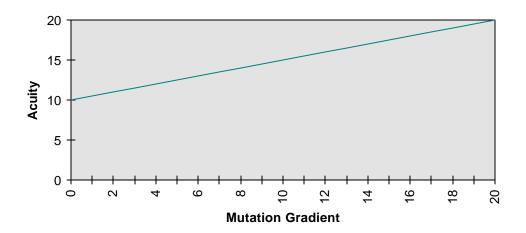
³⁷ *Ibid.*, p. 79.

³⁸ *Ibid.*, p. 77.

³⁹ *Ibid.*, p. 77.

⁴⁰ Ibid.

DAWKINS' MODEL OF EYE EVOLUTION



At the 0 level of the mutation gradient would be a simpler life form with an eye of lower acuity (10 for purposes of this illustration). At the 20 level of the mutation gradient would be a more complex life form with an eye of higher acuity (20 for purposes of this illustration). So after undergoing 20 levels or stages of mutation for purposes of this illustration, the simpler life form would have the eye acuity of the higher life form. It would have arrived there by smooth, gradual development of ever increasing acuity. This is the basic model that Dawkins would propose is possible through genetic mutation. Each mutation could bring with it a gradual improvement in eye acuity. With higher acuity, the mutated organism would enjoy naturally advantageous characteristics.

Daniel Nilsson and Susanne Pelger have simulated the development of the eye according to just this type of model, in order to estimate how long it would take the eye to evolve according to this model. They started with a flat retina atop a flat pigment layer and surmounted by a flat, protective transparent layer. The transparent layer was allowed to undergo mutation of its refractive index, constrained by the requirement that the change must be gradual and an improvement. Using this model, they showed how a camera-quality eye could have evolved. And employing their assumptions, they calculated the time to evolve a fish eye from flat skin would require four hundred thousand generations. Citing this study, Dawkins concludes: "assuming typical generation lengths for small animals, the time needed for the evolution of the eye, far from stretching credulity with its vastness, turns out to be too short for geologists to measure! It is a geological blink." 42

But does our experience confirm Dawkins' model of eye mutation? Is this really how mutation would most likely occur? Dawkins has suggested an analogy of the aging process and vision, so I would like to suggest another analogy: the level of shelter provided by a tree versus a wooden house. Clearly, a wooden house with a wooden roof on top affords more shelter than sitting under a tree, but both provide some measure of shelter. Consider the steps that are necessary to convert the tree into a wooden house. One first must cut some of the smaller limbs and branches of the tree off, then some of the larger limbs and branches, and later the trunk. Then one must cut these into planks to use to construct the house. Then one must build the walls of the house, before finally laying the roof on top.

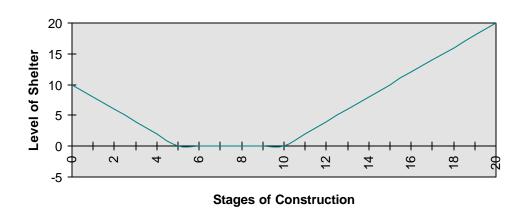
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⁴¹ Nilsson, Daniel E, and Susanne Pelger, "A Pessimistic Estimate of the Time Required for an Eye to Evolve," *Proceedings of the Royal Society of London,B* (1994).

⁴² River Out of Eden: A Darwinian View of Life, p. 83.

On a scale of 1 to 20, we might identify the shelter afforded when the tree was intact as a 10, and when the house was constructed as a 20. But in the intermediate stages there would be a period of decreasing shelter to no shelter. Only once the walls of the house were up and one could start laying the roof of the house would each change provide increasing shelter. If we were to graph the stages of development and the amount of shelter at each stage in going from a tree to a house it would look something like this:

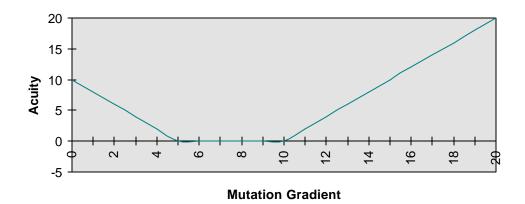
STAGES OF CONSTRUCTION OF HOUSE FROM TREE



I would suggest that the model of this analogy is closer to the reality of how change would occur in order to move from a simpler eye to a more complex eye with more acuity. This model would account for why all the observed mutations to a normally functioning eye result in less acuity than more acuity, even if they move one closer in certain respects to a more complex eye. It also takes into account what Dawkins himself admitted, that in the case of an eye lots of different things work together (the cornea, retina, optic nerve, etc.). A simultaneous change in all of them is hardly a gradual change. In order to move from a simpler eye to a more complex eye, there would likely be a significant number of mutations which would be negative in effect. A change to the cornea without a corresponding change to the retina would adversely affect vision. It is incredible to imagine mutations occurring to the various parts simultaneously. This serves as quite the hurdle for evolution of an eye. But after getting through this hurdle, each additional change could result in increasing acuity. So this alternative model

of change for the eye would appear as follows:

AN ALTERNATIVE MODEL OF STAGES FROM SIMPLE TO COMPLEX EYE



The Nilsson and Pelger study got around this hurdle by assuming each change would be a positive one in their model. But this is a dubious assumption, not borne out by the observed data. But if this alternative model is more accurate to reality than Dawkins' model, it displays the questionable nature of gradual evolution. Many stages necessary to move from a simple to a complex eye would be negative in effect, and thus adverse to natural selection. If such is the case, then it is less than plausible that it has occurred on a wide-scale basis and accounts for the genesis of ever more complex eyes. At the very least it reinforces the fact that the evolutionary model relies on a significant degree of pre-supposition now. After all of these naturalistic mechanisms are considered, we are brought to the conclusion that the Darwinian view of life is a pre-suppositional faith.

Reductionism

The goal of the Darwinian view of life espoused by Dawkins and many others goes beyond demonstrating that naturalistic mechanisms alone can account for all physical phenomena. Even this goal is bold (or perhaps audaciously foolish?), and as we have shown in the previous section, entails a considerable degree of faith and even implausibility. But their goal goes beyond this and seeks to show that naturalistic mechanisms account for ALL phenomena we observe and experience. There is a denial of what we often call spiritual reality. It is asserted that all of the phenomena we normally would place under the category of the spiritual- thoughts, ideas, feelings, consciousness, etc.- can all be reduced to and fully explained by physical phenomena. So a certain thought is not just considered as causally connected to certain chemical reactions in the neurons of the brain, but actually identified with them. It is conceived that there would be no such thoughts unless there were the chemical events in the brain, because they are identified with one another. They are conceived as just two sides of the same coin.

Dawkins strongly advocates this sort of naturalistic reductionism. He writes that "at the inception of the life explosion there were no minds, no creativity and no intention. There was only chemistry." ⁴³ Writing of the inception of DNA on the earth, he deduces it certainly "began as a chemical event." ⁴⁴ So what does Dawkins conceive chemistry consists of? "The players in chemistry are atoms and molecules." ⁴⁵ Dawkins' ontology is really just a modern version of the atomism of the Greek philosophers Leucippus and Democritus. In the 5th century B.C. these philosophers proposed that everything in the universe consisted of small, indivisible atoms and could be explained by the activity of these atoms. Since that time variations of this same basic philosophy have been propounded. And the basic idea that everything consists of physical atoms and can be explained in terms of their interactions is the philosophy of Dawkins and most (if not all) Darwinian evolutionists. It demands that all reality is ultimately physical in nature, and therefore we should believe only that exists which can be perceived directly or indirectly through the senses.

Much of the plausibility and appeal of naturalistic reductionism in our own time is owing to the success in the various fields of human science. New discoveries are made annually in biology, chemistry and physics which have helped us to understand physical structure and phenomena. Many things that in the past could not be explained have in the last few centuries been explained at the atomic and molecular levels. While we may argue that Dawkins has exaggerated the achievement of Crick and Watson in their discovery of the molecular structure of genes, we still must marvel at it and agree it has unlocked many doors in our understanding of biology and will continue to do so. Describing their achievement, Dawkins writes, "our whole understanding of life will go on being revolutionized again and again as a direct result of the change in thinking that those two young men initiated in 1953." ⁴⁶ Even many mental conditions have been causally linked to physical phenomena with significantly more precision. By concentrating on a study of physical phenomena, much has been

⁴³ *Ibid.*, p. 149.

⁴⁴ *Ibid.*, p. 138.

⁴⁵ Ibid.

⁴⁶ *Ibid.*, p. 16.

learned about the way things exist and work. It is easy in such a time as this, given the history of scientific success, to extrapolate its ability to explain reality ever upwards.

Nevertheless, there are several major reasons we should refrain from the sort of extravagant extrapolation that Dawkins and other reductionists engage in. Just because we can drive across the US in a car does not mean we can drive it around the world- even on water. There are some significant problems with this sort of reductionism of everything to the physical. First, it mistakes the relationship of causality with the relationship of identity. Consider telephone and auditory communication. Electrical pulses travel along telephone lines and into the phone which are then converted into sound waves. The sound waves enter the ear where they are converted into electrochemical signals traveling the auditory nerves to the brain. The mind is then conscious of various sounds and speech. Now in all of this phenomena there is a clear causal connection between the electrical pulses, the sound waves, the electro-chemical signals, and the sound heard by the person. But does this mean the sound waves are one and the same thing with the electrical pulses? Are the electro-chemical signals identical with sound waves? Is the sound which someone consciously hears identical with electro-chemical reactions in the nerves and brain? The answer to all of these is 'no' because a relationship of causality is not the same as a relationship of identity. To confuse the two is to make a significant mistake. The properties of electrons in electrical signals are different from the properties of moving particles of air in a sound wave, and thus are distinct. Similarly, the very nature of things that we associate with the mind or spirit - like thoughts, feelings, and even the sounds of our consciousness- have entirely different properties from physical entities like the electrons of an electrical current or moving particles of air. Therefore, we may rightly conclude they are distinct albeit causally connected. To pretend that the two are one simply because of a relationship of causality is a form of erroneous extrapolation. Even to assume one could not possibly exist apart from the other is an erroneous extrapolation, just as it would be erroneous to assume there was only one mechanism for causing sound waves.

Second, naturalistic reductionism is contrary to our language and thought. There are many things that exist and we speak of existing even though they cannot be sensed and reduced to the physical. For instance, there is the classic philosophical case of universals versus particulars.⁴⁷ Particulars are the actual physical entities which are the objects of our sense experience. Universals are everything that unite the particulars of our sense experience. A specific red barn is an instance of a particular; but 'redness' in general is a universal. We cannot point to a specific red object and say that is what 'redness' actually is; rather it is only an objective instance of 'redness'. We may argue that the particulars in this example are physical, but it is incredible to argue the universal is. 'Redness' is an idea, not a physical object. But if the naturalistic reductionist were correct, then only physical entities really exist. How could we even explain the universals which permeate our vocabulary? Such a conception makes them virtually meaningless. And many other aspects of our experience and vocabulary- albeit not our sense experience- entail such non-physical realities. It is not even possible for humans, including naturalistic reductions, to engage in discourse in a manner that is truly consistent with their philosophical conception. They must implicitly borrow aspects from a nonreductionist philosophy to engage in discourse as we know it. This is but a subtle form of syncretism, and points to the logical fallacy of their conception.

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⁴⁷ Dr. Greg Bahnsen references this universal-particular distinctive as well as the "nothing but brain tissue argument" against naturalism in his taped lecture series in Apologetics published by Covenant Media Foundation.

Third, naturalistic reductionism turns discussion and debate into a futile exercise. Dr. Greg Bahnsen calls this the "nothing but brain tissue argument." Dawkins conceives of atomic and molecular reactions occurring according to certain deterministic dictates described by their properties, but also incorporating an aspect of random chance. But if our thoughts and ideas are conceived as identical with the physical phenomena of brain tissue, then this means our thoughts and ideas change on the basis of deterministic physical laws (also incorporating random chance). Such a conception of thought drives one to conclude that discussion and debate are futile from the standpoint of true consideration of the issues. It would ultimately boil down to the deterministic electro-chemical reactions of the brain. In reality, even naturalistic reductionists do not treat discussion and debate in this way. They rather treat it as the exchange of ideas and consideration of minds that are non-physical in character. This again reveals the defect in reductionism and the subtle form of syncretism of reductionists.

Even if human science should be able to plumb the depths of understanding physical phenomena, the error of reductionism precludes understanding life and reality as comprehensively as Dawkins imagines. Much more exists than just physical phenomena. So to seek to explain all of life just in terms of physical phenomena implicitly denies much of what actually exists. It is a vain and erroneous hope of modern evolutionists to reduce all reality to the physical; it is a pre-supposition which cannot be coherently supported by human experience.

⁴⁸ *Ibid*.

Relativism

It seems that almost every age brings with it a new challenge to the old orthodoxy. The new philosophy in vogue- what Dawkins terms the 'fashionable salon philosophy'- is cultural relativism. It treats all philosophies and religions alike, arguing that none of them has more claim on truth than the others. Dawkins describes relativism this way: "The Jews had their Adam and Eve, the Sumerians their Marduk and Gilgamesh, the Greeks Zeus and the Olympians, the Norseman their Valhalla. What is evolution…but our modern equivalent of gods and epic heroes, neither better nor worse, neither truer nor falser?…Science has no more claim to truth than tribal myth…" ⁴⁹ Dawkins regards this new philosophy as "alarmingly common." ⁵⁰ It is a threat to his Darwinian philosophy, the old orthodoxy of mainstream 20^{th} century western intellectual thought.

Dawkins highlights his frustration with cultural relativism by describing an encounter he had with a certain anthropologist. This anthropologist was a full-fledged cultural relativist. One story he recounts of his frustration is of a certain anthropologist that has embraced the 'new' challenge of comprehensive relativism. Dawkins posed this question to the anthropologist: "Suppose there is a tribe...who believe that the moon is an old calabash tossed into the sky, hanging just out of reach above the treetops. Do you really claim that our scientific truth- that the moon is about a quarter of a million miles away and a quarter the diameter of the Earth- is no more true than the tribe's calabash?" True to his relativism, the anthropologist replied thus: "Yes...We are just brought up in a culture that sees the world in a scientific way. They are brought up to see the world in another way. Neither way is more true than the other." ⁵¹

But Dawkins rejects this form of cultural relativism which challenges modern evolutionary science. He has what he calls a "knock-down argument" against it. "Show me a cultural relativist at thirty thousand feet and I'll show you a hypocrite, "he writes. "Airplanes built according to scientific principles work. They stay aloft, and they get you to a chosen destination. Airplanes built to tribal or mythological specifications, such as the dummy planes of the cargo cults in jungle clearings or the beeswaxed wings of Icarus, don't." The methodology of argument he employs is to point out the internal contradiction within the cultural relativist's philosophy. He shows how the cultural relativist says all philosophies are alike, yet acts and often says things which contradict it. This is incoherent, so Dawkins argues it is wrong. As Dawkins goes on to point out, "western science, acting on good evidence that the moon orbits the Earth a quarter of a million miles away, using Western-designed computers and rockets, has succeeded in placing people on its surface. Tribal science, believing that the moon is just above the treetops, will never touch it outside of dreams." ⁵³

Dawkins has made a point about the philosophy of cultural relativism which the relativist cannot refute. People, whether relativists or not, act according to their beliefs; and their actions reveal they believe many things. They drink from a cup of water after pouring water into it, they drive to the airport to catch an airplane, and they fly in airplanes instead of trying to fly in taxicabs. If they were truly relativistic about everything, such actions are not only unreasonable, they are inexplicable. But

⁴⁹ River Out of Eden: A Darwinian View of Life, p. 31.

⁵⁰ *Ibid.*, p. 32.

⁵¹ *Ibid.*, p. 31.

⁵² *Ibid.*, p. 32.

⁵³ Ibid.

of course, the reality is that men are not and cannot be true relativists. They can at best deceive themselves into believing they are relativists, and say they are relativists. But their actions belie their words. Even self-professed relativists live and act as if truth does exist, and that men are capable of attaining truth. Furthermore, these self-professed relativists distinguish truth from falsehood every time they seek to fly from one place to another with airplanes instead of flapping their arms in the air.

Nevertheless, the relativistic anthropologist has made a point which Dawkins never adequately refutes either. The anthropologist has correctly identified the large degree of religious assumption and presuppositionalism in the evolutionary scientific worldview. Dawkins never properly responds to it because he denies that it is a valid contention. Dawkins denies his own pre-suppositional faith, along with the pre-suppositional faith of his evolutionist colleagues. He agrees that science explains many of the same things as religion, but he denies that it is built upon pre-suppositional faith. Here is how he compares the two: "Science shares with religion the claim that it answers deep questions about origins, the nature of life, and the cosmos. But there the resemblance ends. Scientific beliefs are supported by evidence, and they get results. Myths and faiths are not and do not." 54

A catalogue could be written of Dawkins' assertions of certainty about Darwinian evolution, without a hint of admission of pre-suppositional faith. In Dawkins' discussion of geographical separation as the ingredient for speciation of squirrels which we have previously consider, he writes: "something like this almost certainly lies behind the older separation between gray squirrels and red squirrels." 55 He expresses this almost complete certainty, but with a notable absence of admitting his assumptions. Another example is his discussion of the origins of cell life, in which he reports the theories of Dr. Lynn Margulis of the University of Massachusetts. He writes concerning this: "Not only is Dr. Margulis's theory of origins- the cell as an enclosed garden of bacteria- incomparably more inspiring, exciting and uplifting than the story of the Garden of Eden. It has the additional advantage of being almost certainly true." ⁵⁶ But at least in these two cases cited he somewhat more cautiously describes the scientific models as "almost certainly true." More often than not he simply asserts that they are true. To deny a supernatural design behind the dance of the honeybee, for example, he proposes a method by which it could have evolved in stages. This elaborate honeybee dance is utilized to communicate locations of food by honeybees. Summarizing his explanation, Dawkins writes: "The story as I have told it, based on von Frisch's ideas, may not actually be the right one. But something a bit like it surely did happen." ⁵⁷ So he dismisses all but the evolutionary view without even a hint of supposition.

But it is not true that every belief of the scientific evolutionists is supported by evidence and is free of questionable assumptions. In the previous sections we have exposed numerous assumptions of Dawkins and those following his example. We have exposed many of the assumptions embedded in the belief in an expansive time. We have demonstrated his faith when dating methods have yielded contrary results, as exhibited by Dawkins readiness to accept *ad hoc* solutions. We have evinced his assumptions regarding the inception of the DNA/protein technology, geographical separation as the major ingredient of speciation, and positive mutation on a wide-scale basis. We have seen a great

⁵⁴ *Ibid.*, p. 33.

⁵⁵ *Ibid.*, p. 7.

⁵⁶ *Ibid.*, p. 46.

⁵⁷ *Ibid.*, p. 91.

degree of implausible supposition in his naturalistic reductionism. We can witness his presuppositional faith in the manner he addresses gradual intermediates in the evolutionary chain. Dawkins admits that "the odds against" human eyes and wasp-pollinated orchids "spontaneously assembling by luck are odds too great to be borne in the real world." ⁵⁸ His solution is gradual evolution by small steps over time which is "lucky but not too lucky". So what happens if there are no such intermediates? Do we reduce the scope of our theory so that everything asserted is proved? Not according to Dawkins. According to him, "if our ingenuity fails, so much the worse for our ingenuity." He wants us to continue believing there are such gradual intermediates even if they cannot be conceived, much less proved. This sort of pre-suppositional bias and faith should be patently obvious, and Dawkins should admit its presence in his philosophical system. But as we have seen, in a reprehensible fashion he denies his reliance on pre-suppositional faith. Now I am not ridiculing pre-suppositional bias and faith *per se*, I am just ridiculing Dawkins' self-deception and denial of partaking of it.

Even in Dawkins' own argument to the anthropologist he overlooks the pre-suppositions that underlie it. Dawkins asserts that we know that scientific models are true because they work, but have not many scientific models worked for a time, only later to be found in error in part or in whole? Did not the Ptolemaic and Newtonian models work for a time and to a great degree, only later to be found in error? Were not the Egyptians able to accomplish great architectural feats with the pyramids, even if the religion that encouraged them in their work considered rivers and suns to be gods? So is there not still a certain pre-suppositional faith required even when what we do "works"? And even when it is said to "work", it certainly has not yet rid the world of many of mankind's greatest problems like suicide, war, disease, death, and the like. Man's finiteness and lingering problems should be ample proof that he must 'live by faith' to some degree or to some extent.

A coherent and realistic philosophy should admit the necessity of pre-suppositional faith and the reality of truth and falsehood and man's attainment of knowledge of truth in some measure. Both the relativist and the Darwinist philosophies are grounded by their defects in this regard. They have cast aside that which is necessary for true and certain knowledge. For man to have any knowledge requires the existence of a good, omniscient, and omnipotent being (God) who has revealed himself to man. Everything that a less-than-omniscient being thinks he knows can be negated by something he does not know. For instance, suppose you could see 50 yards in front of you a pool of water and a palm tree. Do the water and palm tree necessarily exist so you "know" they exist? As it turns out, no. As you get closer to them you realize they were but a mirage. And so lies the dilemma of the universe without an omniscient being; nothing is truly certain and true knowledge is never attainable. An omniscient being knows everything, so nothing he does not know can nullify what he knows. Furthermore, since he is omnipotent nothing can circumvent or alter what he knows. But he must also be good in order for man to be able to trust what he reveals to man. These are all the preconditions of man having any knowledge and for the existence of certain knowledge. Since evolutionists like Dawkins and relativists like our anthropologist friend deny the existence of such a God and his revelation to man, they are left with a philosophical system which cannot account for some of the most basic realities of human experience.

⁵⁸ *Ibid.*, p. 83-84.

⁵⁹ *Ibid.*, p. 83-84.

The Reality of Our Experience

The philosophical system of naturalists like Dawkins make many aspects of human experience unintelligible, as Dr. Greg Bahnsen was wont to point out. It simply cannot explain in a meaningful fashion not only how knowledge of truth is possible, but also ethics, logic, design and even the laws of science. In some respects Dawkins admits as much, and even claims that certain of these aspects of our human experience are only illusion. He writes: "the universe we observe has precisely the properties we should expect if there is, at bottom, no design, no purpose, no evil and no good, nothing but blind pitiless indifference." ⁶⁰

Let's consider the reasons the naturalistic worldview cannot account for ethics of absolute good and evil, laws of logic, universal design and even the laws of nature. Regarding the ethics of good and evil, the naturalist must fundamentally deny that moral absolutes really exist. If the totality of what really exists is physical phenomena, then nothing has real existence that is not physical. Since moral absolutes are not physical, then they must have no more real existence than a mirage. "Nature is neither kind nor unkind," as Dawkins explains. "She is neither against suffering nor for it." In such a world there is simply no room for good and evil. "Nature is not cruel, only pitilessly indifferent." This does not mean Dawkins and other naturalists deny men have thoughts about good and evil. (Of course, Dawkins believes even these thoughts can be reduced down to certain electro-chemical reactions of brains.) It simply means they have no more ontological reality than this according to Dawkins. Since they have no reality outside of being thoughts of men, then they are not absolutes, but only opinions and views of men.

Laws of logic must accordingly suffer the same fate as moral absolutes, if we follow the naturalist worldview to its logical conclusion. Laws of logic, like good and evil, are not physical. Since they are not physical, they are merely the thoughts of men which can ultimately be reduced down to certain electro-chemical reactions. Since they are merely the thoughts of men, and have no greater ontological reality, then we must conclude they are mere conventions of human thought.

Universal design also is a mis-conception according to the naturalist worldview. Dawkins writes of the "strong illusion of purposeful design."⁶⁴ There can be no real design- but only the illusion of designif the universe simply consists of the chance reactions of atoms and molecules. This is why no doubt on the cover of his book there is a picture of dice.

Finally, even the laws of science must succumb to the inevitable conclusion that they are mere human conventions if the naturalist's philosophy is consistently and logically followed. Like laws of logic, laws of natural science are not physical. But since they are not physical, then they must only exist as the thoughts of men trying to impose an order upon the chance reactions of atoms and molecules. According to the naturalistic conception, there is certainly no omniscient mind to fall back upon to say the way atoms and molecules behave in a particular space and time is universally the case. Therefore,

⁶⁰ *Ibid.*, p. 133.

⁶¹ Dr. Greg L. Bahnsen has provided the substance of the arguments regarding ethics, logic and the laws of science in his taped lectures on apologetics published by Covenant Media Foundation.

⁶² River Out of Eden: A Darwinian View of Life, p. 131.

⁶³ *Ibid.*, p. 96.

⁶⁴ *Ibid.*, p. 98.

such laws must be reduced to the conceptions of finite men. When many people become agreed that atoms and molecules react in certain ways in certain circumstances, then they are conventionally deemed to behave in this way. This would be the sum total of 'laws of science' reduced to their bare naturalistic reality.

Are good and evil, laws of logic, design and even the laws of natural science really just the illusions or conventions of the human mind? Dawkins has shot himself in the foot. He no more lives as if these are illusions or conventions than his relativistic anthropologist friend lives as if truth is an illusion. The same sword he thrusts into cultural relativism he falls upon himself. His very language betrays him. For example, Dawkins has asserted "the universe we observe has precisely the properties we should expect..." But such a statement is absurd if the naturalist were correct, for according to the naturalistic conception 'properties of the universe' have no objective reality. The term 'properties of the universe' is really just another way of speaking about the laws of natural science as they apply to objects in the universe. And as we have pointed out with the laws of natural science, what is not physical would not have objective reality. Therefore, 'properties of the universe' would really just be human conventional ways of thinking about the universe. It would be absurd to pretend the universe really has properties as Dawkins has asserted it does, any more than it has design or laws. So Dawkins' own way of describing the universe would be absurd and contradictory if he were correct that only naturalistic phenomena have objective reality. He cannot even explain what he is trying to say about his philosophy without contradicting himself. In a word, Dawkins' philosophy is incoherent.

The reality of our human experience informs us of the objective reality of moral absolutes, laws of logic, universal design and even the laws of nature, which is precisely a reason we know Dawkins' naturalistic philosophy must be fundamentally flawed. Dawkins may pretend these are not objective realities, but his own words and actions inform otherwise.

Dawkins appeals to moral absolutes throughout *River Out of Eden*. Take the moral absolute of the sanctity of truthful communication. Dawkins' primary appeal in *River Out of Eden* is that the Darwinian view of life yields truth and informs of truth. Describing a certain scientific theory, for instance, he writes: "it has the additional advantage of being almost certainly true." Dawkins derides what he calls 'origin myths' precisely because they are not telling the truth. And he "was provoked by an anthropologist colleague" because he was asserting a position that was untrue. He are no moral absolutes like the sanctity of truthful communication, then Dawkins' appeal is groundless and absurd, as well as his indignation at the telling of a lie. Should we really get provoked by what is a mere illusion? If there were no moral absolutes then the answer would be, 'no.' Neither would we refer to massacre as "a tragedy" like Dawkins does. Indeed, if there were no moral absolutes, there would be no basis for moral outrage at wanton murder, child molestation, outrageous lying, untoward cruelty and the like. But there are moral absolutes, which is exactly why Dawkins implicitly appeals to them. He appeals to them because they have objective reality outside the mere thoughts of men, and on the basis of their objective reality carry weight with men.

⁶⁵ *Ibid.*, p. 133.

⁶⁶ *Ibid.*, p. 46.

⁶⁷ *Ibid.*, p. 31.

⁶⁸ *Ibid.*, p. 64.

Materialists have played with moral absolutes like a political football. On the one hand they deride the notion of absolute good and evil as an objective reality (especially when it is asserted by Christians). During the 1980s President Ronald Reagan was mocked for referring to the communist Soviet Union as an 'evil empire', as if evil really existed. The 'religious right' is jeered for suggesting that sexual promiscuity is actually wrong. On the other hand, they implicitly appeal to moral absolutes throughout their propaganda. This is true of materialistic evolutionists of all stripes. Marxists have never been shy about proclaiming the wrongs of greedy capitalists (as if greed were an evil). Nazis were not quiet about the exploitative Jews (as if exploitation were an evil). And modern libertines do not fail in pointing out the cruelty endured by homosexuals (as if cruelty were an evil). Data that in one generation is used to support eugenics and racial superiority, is used in another to claim racial equality. For example, Dawkins cites a Berkeley study on human mitochondrial DNA which show the mitochondrial DNA of a large portion of the African population to be quite different from the DNA of people from other parts of the world. On the basis of this data the Berkeley scientists opined that the "grand ancestress of all of us lived in Africa." ⁶⁹ But this same type of data at various times has been used to argue for their racial segregation. The data is being interpreted and re-interpreted by materialists to serve various political and social agendas. On the one hand they argue that nature is indifferent, yet they often inconsistently imply that it is bad to oppose their agenda.

The laws of logic also have objective reality, and Dawkins implicitly evidences his assent by his use of them in the course of his book. He does not treat logical arguments like mere human conventions. Conventions have no persuasive appeal- they can as easily be not deployed as deployed. But objective laws of logic have an appeal to the rational mind, which is why Dawkins employs them.

Universal design serves as the very foundation of scientific enterprise. Scientific investigation is an effort to discover the 'properties of the universe' (or laws of natural science) built in to the universe-in other words, its design. Interestingly, Dawkins himself acknowledges this critical position of design in the scientific enterprise, even if he still clings to the notion it is an illusion. He writes: "the illusion of purpose is so strong that biologists themselves use the assumption of good design as a working tool." But rather than accept design (which he knows would ultimately lead him to concede a Designer), he rather chooses to embrace naturalism and the logical conclusion that would flow from it that his very profession of science is absurd. Scientific investigation would be absurd if there were no design, for it would be like the thirsty man chasing after a mirage of a desert oasis. But the reality is that the scientific enterprise is not irrational and absurd, so design and laws of natural science must be conceived as objective reality.

Facing the reality of our experience seems to have eluded Charles Darwin as well. Dawkins recounts a thought process of Darwin which was at least partially instrumental in his rejection of Christianity for a form of naturalism. He quotes Darwin as writing: "I cannot persuade myself...that a beneficent and omnipotent God would have designedly created the Ichneumonidae with the express intention of their feeding within the living bodies of Caterpillars." Dawkins comments that though the Ichneumode's behavior "sounds savagely cruel...nature is not cruel, only pitilessly indifferent. This is one of the hardest lessons for humans to learn. We cannot admit that things might be neither good nor evil, neither cruel nor kind, but simply callous- indifferent to all suffering, lacking all purpose." So Charles Darwin and Richard Dawkins have chosen to deny the objective reality of design and evil as a 'solution' to the puzzle.

⁷⁰ *Ibid.*, p. 133.

⁶⁹ *Ibid.*, p. 52.

⁷¹ *Ibid.*, p. 95-96.

The philosophical challenge they have cited is really only one example of the larger philosophical paradox that is often called the 'problem of evil'. It brings into question whether the existence of evil and the existence of a good and omnipotent God are compatible truths. It is argued by men like Darwin and Dawkins that a good God would not permit evil in the universe he controls. But it is rather easy to show why the 'solution' of Darwin and Dawkins is really no solution at all. This becomes more apparent if we put their argument in the form of a syllogism:

Premise 1: Cruel behavior (such as the Ichneumonidae feeding on the living bodies of caterpillars) is evil.

Premise 2: A beneficent and omnipotent God would not design such (evil) cruel behavior.

Conclusion: A beneficent and omnipotent God must not exist.

In order to arrive at the conclusion, both premises must be valid. But if premise 1 is true, then it must be the case that cruel behavior that is evil exists. If there were no evil, then premise 2 would not lead to the conclusion they have reached about God. Therefore, by their very argument they are conceding that evil must exist. So to suggest that the 'solution' is that evil does not exist is a contradiction of the original argument. Their 'solution' is thus self-contradictory and incoherent. The only element right in their argument is that evil does exist. The reality of human experience is testimony to the existence of evil.

Dr. Greg Bahnsen has suggested a solution to the problem of evil which is coherent and non-contradictory. He asserts that the solution to the paradox of evil and a good and omnipotent God lies in the proposition: "God has a morally sufficient reason for the evil which does exists." If this proposition is true, then it is possible for both evil and a good, omnipotent God to exist. Of course, our belief in this proposition ultimately comes down to whether we have a pre-suppositional faith or trust in God. It comes down to a trust that he has a good reason for the way he has designed the universe and for the way he is sovereign over it. If someone does not have such faith, then it is doubtful he will be very satisfied with the validity of the proposition. But he is still left with the reality of the existence of evil, as well as the other realities of human experience. The philosophy of Darwin and Dawkins cannot even coherently resolve these without numerous internal contradictions, but as we shall explore more the Christian faith of the Bible can. So ultimately this comes down to whether the evolutionist is willing to place pre-suppositional commitment in Christianity, or else place it in a philosophy which is incoherent.

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⁷² Greg Bahnsen, *Always Ready* (Atlanta: American Vision, 1996), p. 172.

Back to Eden

As we have previously shown, for intelligent creatures lacking omniscience such as ourselves, knowledge is only possible through pre-suppositional faith in the revelation of a good, omniscient and omnipotent being (God). Lack of omniscience demands pre-suppositionalism. When one is not omniscient, even those things one thinks one knows can potentially be negated by what one does not know. Therefore, to know anything requires assumptions (pre-suppositional faith) about what one does not know. Unless one is omniscient, there is no escaping pre-suppositional faith if anything is to be known. Augustine rightly identified this necessity in his famous dictum: "I believe in order to understand." It is along these same lines that the Bible teaches faith as pre-condition of spiritual understanding and "the fear of the Lord" as "the beginning of knowledge". 73 Not only is presuppositional faith a necessary ingredient of human knowledge, but the revelation to man of a good and omniscient God is also necessary. If there were no omniscient being in the universe, then there could be no certain knowledge because there would be no being that would know for certain what is the case. Again, with non-omniscient beings what is not known could potentially negate what is known. In order for men to attain even some of this knowledge of an omniscient God, it is necessary for man to have been revealed by God that knowledge is possible and what can be trusted as true. Finally, it is necessary that God be good and truthful, or else his revelation to man could be deceptive and false, and therefore not lead to knowledge for man. Therefore, we must conclude that the precondition for human knowledge is human pre-suppositional faith in the revelation of a good and omniscient God that actually exists.

The Bible attests to be the exclusive direct revelation of a good, omniscient and omnipotent God, and it is the only such self-attesting revelation worthy of pre-suppositional faith. As the Westminster Confession notes, "it [scripture] is to be received, because it is the word of God." The scripture provides many credible reasons to receive it as the infallible word of God. The Westminster Confession enumerates some of these: "the heavenliness of the matter, the efficacy of the doctrine, the majesty of the style, the consent of all the parts, the scope of the whole, (which is to give all glory to God,) the full discovery it makes of the only way of man's salvation, the many other incomparable excellencies, and the entire perfection thereof..." Only Biblical Christianity provides a coherent, internally consistent worldview which accounts for the realities of human experience. But even with all these reasons, it must yet be received in faith, because for a finite being all knowledge can only be attained through pre-suppositional faith.

One charge often leveled against the Biblical worldview is that it is not explanatory and predictive, and therefore not especially useful or verifiable. Dawkins made this claim when he asserted: "Science shares with religion the claim that it answers deep questions about origins, the nature of life, and the cosmos. But there the resemblance ends. Scientific beliefs are supported by evidence, and they get results. Myths and faiths are not and do not." 77

⁷³ Proverbs 1:7.

⁷⁴ Numerous portions of the Bible attests to its infallible authorship by God. Two examples are II Peter 1:21 and II Timothy 3:16. In II Peter 1:21 we read: "For the prophecy came not in old time by the will of man; but holy men of God spake as they were moved by the Holy Ghost." And in II Timothy 3:16 we read: "All scripture is given by inspiration of God…"

⁷⁵ Westminster Confession of Faith, chapter I, paragraph 4.

⁷⁶ Westminster Confession of Faith, chapter I, paragraph 5.

⁷⁷ *Ibid.*, p. 33.

But this charge is neither fair nor accurate. Here is but a partial list of explanations and predictions implied by scripture:

- All intelligent and moral creatures on the earth, having descended from one couple and being
 of one flesh (species), should be able to inter-breed. (This contrasts with the evolutionary
 conception, where it seems strange that no moral and intelligent life evolved on earth of a
 different species which cannot interbreed with humans.)
- The geological character of the earth, having been created in 6 days and endured a series of catastrophes like a world wide flood, should be explicable in terms of such catastrophes and such a time frame. (This contrasts with the evolutionary conception, which insists upon expansive time. It should be noted that for many years the scientific community of geologists insisted upon gradualism as an explanation, but discoveries from catastrophes like Mount St. Helens have brought catastrophism back more into vogue.)
- The cosmological character of the universe, having been created in 6 days and of a comparatively more recent time frame, should be explicable in terms of such a time frame. Given the proposed distances of various astronomical bodies, this would imply several possibilities: the speed of light is not always a constant 186,000 miles per second, the causation of light is different, the curvature of space is different, etc. (There is rising evidence that the speed of light can be much faster than previously thought.)
- The earth, having endured a world wide flood, should show evidence of a worldwide flood. (Evidence has been found on many of the highest mountain ranges of having been submerged under the ocean. Also, people from far-flung cultures and tribes have stories of such a world-wide flood.)
- The earth, having been created in 6 days and within a more recent time frame, should yield various dating methods which corroborate such a time frame. And those dating methods which indicate a different time frame should reveal various aspects of inconsistency and lack of correspondence. (It should be kept in mind that even wrong theories and methods can yield consistent, predictive, and corresponding results within given parameters, as evidenced by the Ptolemaic and Newtonian systems. But such theories and methods fail outside these parameters.)
- All human children born on earth should exhibit what the Bible describes as "sinful" character (such characteristics as covetousness, jealousy, etc.). Children should not be born according to the Biblical conception as mere blank slates which can be molded without sin.
 Furthermore, economic and social systems should work best which work assuming such character (like controlled capitalism), and not which work assuming such character can be fully eradicated (like communism).
- The creatures of the earth having been created *ex nihilo* according to Genesis 1, we should not expect to find intermediate level fossils and examples of them which might make gradual evolution of them more plausible.
- The Bible would imply that peoples from all over the earth should be able to comprehend the gospel message (of human depravity and culpability, of redemption by Christ, of judgment to come, etc.) when such a message is explained to them, their having been designed and rigged by God to be able to understand it and recognize its veracity.
- The Bible predicted a successive cycle of prosperity and fall for the nation of Israel and by certain conquering nations, including times of siege when the Israelites would even eat their own children. (During the Assyrian, Babylonian and Roman conquests and sieges these events occurred.)

- There existed kingdoms and tribes like the Davidic kingdom, the Solomonic kingdom, the Hittites, and the Assyrians, each with their own characteristics detailed in scripture. This would predict that some archaeological remains should be found for them.
- The Bible explains and predicts such aspects of experience as good/evil, logic, design, the ontology of physical and spiritual entities, and physical and spiritual laws. (The evolutionist conception, as previously noted, fails to account for these realities. Many of these aspects like design and physical laws are necessary foundations for scientific study and investigation by man.)
- The Bible predicted a messiah and Immanuel ('God with us'), born in Bethlehem but a Nazarene, who would be crucified, yet who would prevail, rule, and redeem.

These are just some of the numerous explanations and predictions of scripture. Far from not being useful, it provides the framework for all useful human experience, science, and social behavior.

Sadly, modern science as it has come to be predominantly practiced by the major universities and other research institutions effectively precludes Christianity. Such science is defined in such a way that natural phenomena cannot be explained by supernatural intervention within the bounds of science. Natural phenomena must therefore be explained in 'science' so defined by gradual, natural processes. Dawkins captures this pre-supposition of modern science when he writes: "Evolution is very possibly not, in actual fact, always gradual. But it must be gradual when it is being used to explain the coming into existence of complicated, apparently designed objects, like eyes. For if it is not gradual in these cases, it ceases to have any explanatory power at all. Without gradualness in these cases, we are back to miracle, which is simply a synonym for the total absence of explanation." ⁷⁸ Dawkins here reveals why the scientific models never could posit God and creation by God as an explanation and cause of a phenomenon: it is pre-suppositionally precluded. It is not regarded as a 'valid' explanation, so it cannot enter in to scientific models. Recently my two sons attended an oceanography course at a local public university. They were given an elaborate explanation of how the oceans supposedly came into existence over millions of years through rainstorms, etc. Such an explanation (contrary to the scriptural creation account) based on gradual, natural processes was pre-determined by the presuppositional commitment of standard modern science. Such 'scientific' models are not proof against Christianity, but rather the inevitable contrary conclusions of a philosophical system of presuppositions fundamentally at odds with the pre-suppositions of Christianity.

Typically other philosophical systems like naturalism get around their own defects by a hidden form of syncretism. We have shown how at major points Dawkins has betrayed the logic of his own naturalistic system by borrowing in arbitrary fashion aspects of the Christian worldview. He has assumed the existence of design to create scientific models, and he has assumed the propriety of truth and impropriety of falsehood in his appeal to readers for his views- even though he admits design and good/evil do not follow from a naturalistic philosophy. He has assumed and used the attainability of the knowledge of truth, yet not adequately explained how this is even possible in a universe made up entirely of finite beings. We witness this same feature in much of the western populace who seem to believe the Bible enough to personally believe in a God who will reward them with heaven, yet also assent to the Darwinian model enough to tolerate it to be taught in their public schools as fact. But this type of syncretism is truly unacceptable. First, it is logically inconsistent, internally contradictory, arbitrary, and incoherent, thus fundamentally undermining truth and rationality. Second, it is thoroughly unacceptable to the God who has revealed himself in divine writ. Ours is not the first age which has engaged in syncretism. The Israelites toyed with it when they borrowed aspects of the Canaanite religion. But God condemned their syncretism, just as he condemns ours today. It is an

⁷⁸ *Ibid.*, p. 83.

affront to God, displaying a lack of commitment and trust in his word. He informs us that "no man can serve two masters", but that we must choose which worldview we will trust and embrace. While it may be tempting to mix-and-match at times (especially at times when it is difficult to explain everything presented to us by the critics of Biblical revelation), it should be even more patently obvious that mixing-and-matching is not the answer.

Syncretists- whether implicit ones like we find with Dawkins or quite up front ones like we find with Christian theistic evolutionists- almost invariably expend their greatest energies where they are least required. The most problematic aspects of naturalistic evolution are not issues like how a bird evolved from a reptile or a man evolved from a common ancestor with the ape- although these are certainly problematic- but how its philosophical system even accounts for laws of nature and laws of logic which it seeks to discover and employ. Why should we think these laws are ontological realities in a universe of random chance and completely physical? And the most problematic aspect of Christian theistic evolution is not proving that the world is millions or billions of years old- although this is certainly a challenge- but reconciling two contrary worldviews into a coherent whole that does not rely on arbitrary distinctions. When I was at student at Princeton University, a professor from another university was invited on campus to present how Biblical Christianity and modern evolutionary science were both true and fully compatible. He spent approximately 55 minutes explaining how evolution is true, 5 minutes explaining that he still believed in God and the Bible, and 0 minutes in explaining how the two could fit into a coherent whole without internal contradiction and arbitrary selection. These are like tennis players who always try to stay on the far left side of the court so they will never have to hit a backhand. They forever seem to dwell on the strength of their forehanded shots.

But the Christian faith of the Bible needs not resort to subtle forms of syncretism to account for the realities of our experience. It accounts for the objective reality of moral absolutes, laws of logic, universal design and the laws of nature, as well as the reality of physical phenomena. It avoids a false reductionism which denies the objective reality of spiritual entities. Rather, it testifies to the objective reality of both the spiritual and the physical. It avoids the internal contradictions and inherent incoherence of other philosophies and religions. It accounts for the presence of evil in mankind and society, and presents the solution in the redemptive work of Jesus Christ. In so doing scripture provides the restorative means to a right relationship between man and God in eternity- a return to the relationship our first parents enjoyed in the historical Eden.