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Exploring the Paradox of Intelligent Design

Intelligent Design began as an attempt by religious people to elevate the importance of God and counter an increasingly naturalistic worldview propagated by the neo-Darwinian synthesis. With *Darwin's Black Box*, biologist Michael Behe placed the movement on scientific footing by examining the intricacy of several "irreducibly complex" biochemical processes. The publication of this book and other ID texts has stimulated intense debate and speculation, yet ID curiously remains a fringe movement with little support in scientific or religious circles. On the one hand are the lack of evolutionary explanations (investigated by Behe) and persuasive mathematical arguments such as the one offered by Granville Sewell in "A Mathematician's View of Evolution." Unfortunately, as Emily Bauman illustrates in "Outfacing Darwin: Intelligent Design and the case of Mount Rushmore," ID is plagued by its unwillingness to characterize or identify the designer that is responsible for such grandeur. This hesitation has alienated religious people from the idea of Intelligent Design and exposed the logical flaws in many of Behe's arguments.

The primary appeal of intelligent design stems from the fact that the scientific community has few answers regarding the origins of life and biochemical processes. In *Darwin's Black Box*, Behe conducts a survey of the *Journal of Molecular Evolution*, and finds that roughly a tenth of the journal is devoted to explanations for the origin of life. The scientists working on these experiments have contributed much to our understanding of the possible pathways to the genesis of life. Despite their clear scientific merit, unfortunately many of the studies make a naturalistic explanation more difficult to fathom, not less. For instance, in the years following the Miller-

Urey experiment, scientists embarked on a mission to synthesize other amino acids from similar chemical conditions. Alterations such as bombarding the hypothetical “primordial soup” with ultraviolet rays instead of electricity yielded different amino acids. However, the precise tinkering of the conditions in the laboratory and purification of the reactants casts doubt on the significance of these results. Moreover, even if amino acids may have been synthesized but a spark of energy, many scientists are at a loss to explain how amino acids could have joined together to form proteins on a young Earth. Water inhibits the linkage of amino acids, and presumably the early Earth was as dominated by water as the Earth is today. Because of its self-catalytic abilities, other scientists propose that RNA was the building block for the development of single-celled organisms. This theory comes under fire when considering the sublime complexity of the nucleotides that make up this extraordinary molecule. Although they can be synthesized in a laboratory with the guidance of an experienced chemist, if undirected the experiments produce nothing but “shapeless goop and undesired products” (Behe, 171). It is certainly possible that the conditions of the Earth were not uniform, and thus the probability increases that one of the successful chemical concoctions matches this environment at some point. Nevertheless, as Behe concludes, science has showed us that there is a substantial gap to bridge between the possible spontaneous formation of a few simple building blocks of life to the development of DNA, RNA, mitochondria, and the hundreds of complex biochemical processes which make up even the simplest single celled organisms.

Further examination of the *JME* reveals that the great majority of the journal is composed of papers about sequence comparisons between proteins or portions of DNA. Although sequence data can be used to illustrate relationships between components of biochemical processes, it “cannot be used to determine how such processes originated” (Behe, 180). The remainder of the

JME is devoted to mathematical models which attempt to explain how biochemical processes could have evolved. These models operate under the assumption that gradual change through random mutation is the proper mechanism for biochemical evolution. They cannot and do not even attempt to demonstrate this assumption. After searching other databases such as the *Proceedings of the National Academy of Sciences* and various introductory biochemistry textbooks, he finds that none of them give a “satisfactory, detailed model of how complex molecules were produced in a step by step fashion” (Behe, 176). Behe might be accused of making a straw man argument by attacking biochemistry textbooks because a textbook is meant to represent the areas of a subject that are well established and confirmed through repeated observations. Furthermore, it is possible that a naturalistic explanation outside the Darwinian realm is responsible for the beginning of life or the transition from primordial ooze to simple organisms. Because such a mechanism is almost impossible to comprehend, many people are intrigued by the idea of intelligent design after examining the gaps in scientific knowledge in this area.

The fields of mathematics and statistics have also garnered support for ID. In his article *A Mathematician's View of Evolution*, Mathematics professor Granville Sewell elaborates on this position through an analogy. He compares the development of the genetic code of life with the formation of a computer program. For instance, if an engineer tried to form the simplest structural analysis program by typing out random letters on a keyboard and testing for usable lines of code, it is almost impossible that he would ever “duplicate even a 20 line improvement.” Even if the engineer typed one character every second for 4.5 billion years (approximate age of the Earth), the odds of spontaneously generating any meaningful lines of code remains almost nil. The analogy, like all analogies, is limited because there is artificial selection of

“improvements” in the code by the hand of the engineer. Darwinian evolution by natural selection is traditionally meant to work on entities with a preexisting function. In this comparison, the engineer is attempting to create something out of nothing. Nevertheless, the argument regains its power when Sewell discusses a specific program that he designed. The PDE solver, or PDE2D, has improved steadily over the past twenty years. While at first it could only solve “a single linear, steady state, 2D equation,” later versions could solve “nonlinear, time-independent, and eigenvalue problems.” One can certainly point to similarities between two stepwise versions of the program, such as versions 1.0 and 2.0. Version 2.0 might only be able to solve one additional type of equation than version 1.0, yet such an adjustment to version 2 wouldn’t make sense without adding “hundreds of lines of code and planning far ahead.” This analogy builds upon Behe’s theory that certain biochemical mechanisms such as blood clotting and vision could not have been produced through slow, gradual changes. Sewell, like many mathematicians who investigate Darwin’s theory, fails to acknowledge other sources of evolution such as genetic drift and environmental factors. Nevertheless, many well educated, secular people are interested in ID because of the simple idea that the chance of random mutation and gentle change accounting for the astounding intricacy of life is extremely low.

Unfortunately for proponents of Intelligent Design such as Michael Behe, interest in the theory remains just that: A curiosity and desire to learn more about the theory only to discover its major flaws and logical shortcomings. In *Outfacing Darwin: Intelligent Design and the Case of Mount Rushmore*, Emily Bauman attributes ID’s failure to achieve widespread support to its own marketing strategy. Since its inception, ID has sold itself as a non-Creationist alternative that is based on positive scientific assertions rather than a default insertion of God wherever science has failed to provide sufficient explanation. While such an approach “avoids

Creationism's taboo dogmas," unfortunately it also "loses Creationism's positive faith" and makes the unknown designer come across as more disinterested than the forces of natural selection. Because the proponents of Intelligent Design are unwilling to put a name or an identity on their designer, they limit themselves to trying to disprove evolution while providing no explanation for why the designer did what it did. Without knowledge of who or what the designer is, ID's idea of a great designer transforms into somewhat of an "obsessed gadgeteer" who only creates these irreducibly complex systems so they can function as systems. Ultimately, ID loses sight of a question of utmost importance: What has life been designed for? By putting this question aside for theologians and spiritual laymen, proponents of ID lose support from a huge congregation of the greater population.

The Intelligent Design movement, although not rooted in the scientific tradition, is a serious attempt to address the weaknesses of the Darwinian theory of evolution. The substantial shortcomings of this theory, particularly in reference to the origin of certain biochemical processes, allows for great interest in ID. Sadly, ID's own self defeating advertising campaign prevents this interest from blossoming into any real support or belief. Today, it remains a fringe theory that is certainly less popular than Creationism.