

11/18/11
Science And Religion
Essay 3, Round 1

Theory Versus Faith

Historically, science has clashed with religion. Every radical scientific discovery is countered by an equally radical religious reaction. For example, Galileo's discovery of our sun-centered universe, Columbus's assertion that the Earth is round, and, more recently, Darwin's explanation for the variation of life on Earth. Since Darwin published his book *The Origin of Species*, religious and scientific groups have battled over the causes of diversity and true beginnings of life. The polar ends of the spectrum of beliefs and theories explaining life on Earth are Darwin's strictly scientific theory of evolution and extremely religious Creationism (the belief that the book of Genesis accurately and completely describes the beginning of life on Earth and the creation of species). Intelligent Design falls between these irreconcilable opposites. Michael Behe's book *Darwin's Black Box* characterizes Intelligent Design as a scientific rather than a religious theory. The court case *Kitzmiller vs Dover Area School District* fiercely opposes Behe's definition and instead defines Intelligent Design as a religious idea and therefore unteachable in secular American public schools. Despite Behe's best efforts in his writing and appeal in the court, he does not prove Intelligent Design is a concrete and viable scientific theory.

In *Darwin's Black Box*, Behe supports his argument for Intelligent Design by asserting its truth simply because there has been no evidence to prove otherwise. This claim is not solid basis for a scientific theory. By definition, theories must be testable by some controlled experiment or the conclusion of a set of indisputable,

factual data. The “data” that Behe uses are examples of supposed “irreducible complexity.” Irreducible complexity is a major tenet of Intelligent Design; it is the idea that some organic systems are too complicated to have simple origins that were modified by evolution into the present systems. Behe’s favorite example is the human eye. After eight exhausting pages explaining both the biochemical and anatomical features of vision, Behe brushes it off as “just a sketchy overview...of vision.”¹ His conclusion from his lengthy explanation is evolution could not have put all of these delicate and complex systems and chain reactions together without some sort of guidance. However, Behe fails to acknowledge the existence of simpler eyes in other modern day organisms. There exists a marine worm that has a type of “proto-eye” composed of only two cells: one sensitive to light, the other sensitive to pigment. While this worm cannot form images of its surroundings, the eyespots allow the worms to detect where light is coming from and thus navigate to find food.² With the discovery of this worm (shortly after Behe’s book was published) his claim about the impossibility of evolution leading to complex eyes loses all standing. This explanation of the eye’s complexity opens a major hole in Behe’s argument of irreducible complexity.

Famous scientist and proponent of compatibility between science and religion, Francis S. Collins finds other flaws with Intelligent Design in his book *The Language of God*. Collins points to the definition of a scientific theory as,

¹ Behe, Michael. *Darwin’s Black Box*. Free Press: New York, 1996. 22

² Jékely, Gáspár et al. “Mechanism of Phototaxis in Marine Zooplankton.” *Nature: International Journal of Weekly Science*.
<http://www.nature.com/nature/journal/v456/n7220/full/nature07590.html#B2>.
20 November, 2008.

“a framework for making sense of a body of experimental observations...[and a] viable scientific theory predicts other findings and suggests approaches for further experimental verification.”³ However, because Intelligent Design only occurred at the very origin of life, it cannot be verified, “outside the development of a time machine.”⁴ Collins also dismisses Intelligent Design’s tenet of irreducible complexity. Modern advances in science have suggested very plausible evolutionary pathways to complex systems such as the eye. Collins postulates that scientists subscribing to Intelligent Design “have made the mistake of confusing the unknown with the unknowable, or the unsolved with the unsolvable.”⁵

Intelligent Design was publicly brought under fire in the 2005 court case *Kitzmiller vs Dover Area School District*. The verdict of this case would decide whether Intelligent Design could be taught alongside evolution as part of biology courses in Pennsylvania public schools. In the closing arguments of the case, the plaintiffs’ lawyer, Eric J. Rothschild, declares, “The case for Intelligent Design as a religious proposition is overwhelming; the case for it as a scientific proposition, by contrast, is non-existent.”⁶ Rothschild continues to list the prestigious scientific organizations that have rejected Intelligent Design. He also points to the lack of further research done in support of the theory, casting further doubt on its standing as a theory at all. Intelligent Design fills our unanswered questions about the origins

³ Collins, Francis S.. *The Language of God*. Free Press: New York, 2006. 187.

⁴ *ibid.* 187.

⁵ *ibid.* 188.

⁶ Eric J. Rothschild’s Closing Arguments (11/4/05). Dover Trial Transcripts. ACLU, Pennsylvania.

<http://www.aclupa.org/legal/legaldocket/intelligentdesigncase/dovertrialtranscripts.htm>. 16 November 2011. 10.

of complex systems with the simple answer of “it must have been designed.” This claim does “nothing to advance scientific or medical knowledge, and [tells] future generations of scientists, don’t bother.”⁷ Intelligent Design would thus cause science to stagnate, especially if it were taught in schools. Those students would grow up with a stagnant scientific model. The lawyer exclaims, “How dare they stifle these children’s education? How dare they restrict their opportunities? How dare they place a ceiling on their aspirations, on their dreams?”⁸ The judge sided with passionate Rothschild and decisively ruled against Intelligent Design in schools. The case efficiently combined many scientific opinions on the matter of Intelligent Design and the overwhelming conclusion was that it is not a viable scientific theory.

It is impossible to know how life on Earth began. Darwin’s evolutionary theory explains the organisms we see today as products of billions of years of slight modification, variation, and divergence from a common ancestor. Extremely Christian explanations of the origins of life and species arise from Genesis in the Bible. Intelligent Design is a religious theory dressed up to appear scientific. Michael Behe does his best in his book *Darwin’s Black Box* and in his testimony in the Kitzmiller vs Dover Area School District trial but still fails to prove his theory is sound science.

⁷ Eric J. Rothschild’s Closing Arguments (11/4/05). Dover Trial Transcripts. ACLU, Pennsylvania.
<http://www.aclupa.org/legal/legaldocket/intelligentdesigncase/dovertrialtranscripts.htm>. 16 November 2011. 14.

⁸ Eric J. Rothschild’s Closing Arguments (11/4/05). Dover Trial Transcripts. ACLU, Pennsylvania.
<http://www.aclupa.org/legal/legaldocket/intelligentdesigncase/dovertrialtranscripts.htm>. 16 November 2011. 18.