

Intelligent Design – Creationism in Disguise

In his book *Darwin's Black Box*, Michael Behe argues that Intelligent Design (ID) is not only a plausible but also an ultimately better scientific theory to explain how life originated. Responses from both religious and scientific communities consider it quite the contrary. Is intelligent design a scientific alternative to Darwinism, or is it just creationism in disguise? Behe, unlike other supporters of intelligent design, claims that Intelligent Design is a mechanism of evolution. However, his argument is severely undermined by its strong “God of the Gap” implication. Even when assuming that intelligent design is compatible with the theory of evolution, the circumstances under which this mechanism take place are in conflict with science. Counterargument provided by Michael Shermer, the head of the nation’s leading skeptic organization, proves that intelligent design is creationism in nature.

The Intelligent Design movement first appeared in 1990s.¹ Although fossils compiled and cutting-edge researches strengthened common descent hypothesis, the rarity in transitioning biological evidence baffled many people, including some scientists. ID was generated in this situation. It directs people to consider the effect of an intelligent designer when researching the origin of life. The identity of the designer is unknown. Therefore, even among its supporters, it remains unclear whether ID is a theological approach adding to creationism, or a scientific theory.

Michael Behe is one of the handful scientists who recognize Intelligent Design as legitimate science. After *Darwin's Black Box*, he published a short article, called “Irreducible Complexity, Obstacle to Darwinian Evolution”, to summarize and further develop Intelligent

¹ Angus Menuge, “Who’s Afraid of ID?” *Debating Design* (2004), Cambridge University Press, pp. 32

Design in response to his opponents. As a scientist, Behe does not deny Darwinian evolution; instead, he assumes that Intelligent Design is a mechanism of evolution and is fundamentally compatible with the latter.²

One of the primary reasons that draw Behe to endorse Intelligent Design is the limited explanatory power of evolution. An important question he repeatedly asks in *Darwin's Black Box* is "what is the origin of life?" Darwinian evolution outlines the process of descent with modification using solid evidence. For example, studies on mammal bone structures prove that exceedingly different-looking organs, such as bat wings and human arms, are actually homological; thus they share a common descent. Such findings are abundant and all support microevolution. However, few, if any, evidence suggests a clear path in the grander picture: from inorganic compounds to single structures. Even organisms as simple as single cells require organic compounds that fold into specific and sophisticated structures to be fully functional, thus are much more complicated than nonliving things. Until this day, the best theory cannot give a satisfactory explanation on the subject, so Behe concludes that a designer must have created this link.

If Behe's claim is true, then this designer must act at the beginning of life to bridge the leap from inorganic to organic. This additional "mechanism" in no ways improves or alters Darwinian evolution. Biological evolution examines the mechanism of how life progresses from simple to complex forms. The mechanism itself does not exclude the possibility of a creator. In fact, some of the most prestigious scientists, like Francis Collins, believe that God created the initial life and set evolution as a means to diversify. Even when one, following what Behe instructed, ignores the identity of this designer despite the striking similarity between it and the

² Michael J. Behe, "Irreducible Complexity, Obstacle to Darwinian Evolution," *Debating Design* (2004), Cambridge University Press, pp. 356

ones in religious text, this claim at best failed to add or expand the theory of evolution as a mechanism.

Moreover, the methodology Behe utilized to deduce the conclusion is not scientific. Shermer, in his book *Why Darwin Matters*, highlights some important scientific methods. The convergence of evidence principle requires that “one must have more than one induction, more than a single generalization, drawn from scientific facts³” to prove a theory, which implies no single clue could prove conclusively. Another applicable way to prove a theory in historical science is “hypothetico-deductive method.⁴” If a conclusion or theory, deduced from observations and evidences, can successfully predict later-discovered phenomena, then this theory or conclusion is testified. Darwinian evolution, though cannot be examined in a controlled laboratory environment, can be demonstrated by ample evidence in different fields, ranging from paleontology to biochemistry. Intelligent Design, however, cannot be tested using either one of the above methods. ID advocates intend to prove the existence of a designer not by presenting convincing evidences, but by arguing the *lack* of data. It represents a typical God of the Gap fallacy, so problematic because the gaps in the undiscovered or unexplained realm may one day be filled.

Behe’s most famous argument in the Intelligent Design debate is the concept of irreducible complexity. According to Behe, the blood clotting system in human is an irreducibly complex structure⁵. In order for the system to work, a chain of complicated biochemical reactions will have to occur in a good number of locations, and often these reactions involve

³ Michael Shermer, “the Fact of Evolution,” *Why Darwin Matters: the Case Against Intelligent Design* (2006), Times Books, pp. 12

⁴ Michael Shermer, “the Fact of Evolution,” *Why Darwin Matters: the Case Against Intelligent Design* (2006), Times Books, pp. 21

⁵ Michael J. Behe, “Rube Goldberg in the Blood,” *Darwin’s Black Box* (1996), Free Press, pp. 74-91 (2006 Edition)

enzymes and interdependent signal chemicals to release. Removal of one physical structure or failure in one link in the chain would cause system failure. Because of the interdependent nature of these systems, Behe suggests the probability that they are developed under random mutation and natural selection is infinitesimally small. Anything intricately complex as such must be designed.

Shermer asked an interesting question about the notion of irreducible complexity: when and where does it occur? Whenever Intelligent Design advocates are asked to examine whether or not a structure is irreducibly complex, their definition of irreducible complexity changes. The concept is so blurry that even the creator is unable to give definite boundary.⁶ One important characteristic of science is refutability. When a concept cannot be attributed to a certain set of subjects, it is naturally irrefutable, therefore cannot be categorized as a scientific theory.

Furthermore, irreducible complexity implies that first-appeared but less advanced features could be evolved while more advanced ones are designed: a face without eyes would be nicely formed when the designer suddenly imposed a pair of delicate eyes upon it. It is counterintuitive and almost absurd to combine gradualism and design.

For the sake of the argument, now assume that Intelligent Design advocates have successfully qualified the condition under which design occurs. Then the designer, over the course of history, must intervene the process of evolution during “necessary” time period. The world is never stagnant and the environment continues to evolve. As science has revealed, organisms are moving towards more intricate structures and obtaining more advanced functions. Both indicate that the designer must be present to create the scene during this era. ID does not limit the identity of designer, so it could be natural or supernatural.

⁶ Michael Shermer, “Debating Intelligent Design,” *Why Darwin Matters: the Case Against Intelligent Design* (2006), Times Books, pp. 43-88

If the designer is natural, and cannot be located on the Earth, then it must be an extra-terrestrial being capable of controlling the events on earth remotely. The major weakness in Darwinism for Behe is that evolution only accounts for events after the formation of a sufficiently complicated structure (such as a cell). If this designer is an outer space intelligent, then the core question for Intelligent Design argument shifts to origin of that intelligent species. This loop contradicts with the initial purpose of Intelligent Design.

Then what if the designer is not extra-terrestrial? This designer can choose to or not to intervene with evolution at any given time; it is influencing the world human perceive today; it is capable of creating very sophisticated systems and structures, most of them exceeding human understanding; most importantly, it is not detectable. Judge Overton's summarization provides us a good criteria to qualify science practice: "it is guided by natural law; it has to be explanatory by reference to natural law; it is testable against the empirical world; its conclusions are tentative; it is falsifiable."⁷ Although ID supporters intentionally avoid identifying the designer, for ID to be a legitimate scientific theory, its subject must be investigated. None of the designer's primary characteristics is compatible with the definition of science practice. Its omnipresence and undetectable nature imply that it is supernatural. Science does not study phenomena outside the realm of natural world. Therefore, even though Behe emphasized that the designer's identity cannot be determined and is not important, the underlying assumption in Intelligent Design hypothesis is by default limits the designer as a supernatural being, and carries religious implications.

⁷ Michael Shermer, "Science under Attack," *Why Darwin Matters: the Case Against Intelligent Design* (2006), Times Books, pp. 95

Historically, Intelligent Design argument is deeply intertwined with creationism. Behe defended the *Kitzmiller vs. Dover Area School District* case, in which a group of parents sued Dover Area school district for including Intelligent Design as a part of science curriculum in this district public schools. No matter how strongly he believed that ID is scientific and should be taught as an alternative to evolution, the local school board certainly saw the religious impact in teaching Intelligent Design. From the story recounted by Shermer, the textbook the district recommended, *Of Pandas and People*, was the final version of *Creation Biology* published in 1983. Direct wording on creationism were either removed or replaced by Intelligent Design after the rise of the ID movement. The theme sentence of the book (“creationism means that the various forms of life began abruptly through the agency of an intelligent agency,”) Shermer quoted, simply switched the term “creationism” to “intelligent design.”⁸ The origin of Intelligent Design is creationism though few Intelligent Design publications explicitly state it. Behe mistakenly regarded the “science disguise” ID takes as its inherent feature.

Advocating Intelligent Design is not detrimental to our society. It developed during a time when Social Darwinism was so prevalent that it started to question and undervalue humanity. It intends to trigger discussions and reflections in a generation that has more exposure to evolutionary biology. Nevertheless, good intentions should not allure believers to disguise its religious implication in order to make way into public school education. Only by staying true to its original purpose and its creationistic nature can the discussion between design and evolution benefit mankind.

⁸ Michael Shermer, “Science under Attack,” *Why Darwin Matters: the Case Against Intelligent Design* (2006), Times Books, pp. 103