

Is intelligent design even a worthwhile consideration in the debate on the origin of species?

Intelligent design has developed as an opponent to Darwin's paradigm of gradual evolution. Michael Behe's 'Darwin's Black Box' has been labeled as the most successful literary demonstration of this alternative hypothesis. However, the success of the book is dependent on the opinion sought. There have been criticisms as well as praise in response to Behe's work. The focus of Behe's argument lies in irreducible complexity, which if proved accurate would undermine Darwin's paradigm. However, to the convenience, or anguish of intelligent design, irreducible complexity is an untestable theory. In other words, irreducible complexity cannot be proved or disproved at the scientific fields current technological capabilities. This should imply that the suggested paradigm of intelligent design is not scientifically based until a method is invented to observe the hypothesis. The shaky foundation of Behe's argument opened the door for a multitude of responses including books, essays and even court dates. His book generated all this publicity, yet failed to produce any more than that. Intelligent design has not caught on as a valid scientific theory as was Behe's original intentions. If directly asked, he would probably refer to the fear from the theological component of his argument that does not necessarily have to be coupled with his hypothesis. On the other hand, the lack of followers could also be attributed to the problems posed in his arguments. The scientific community simply did not accept what he was arguing because he relied on analogies that can be made ambiguous, ignored examples of possible intelligent design that have been tested and fallen under evolution, gave too much ground to Darwinian thinking, and used argument techniques that previously he had called out when used for evolution. To simply state it, if this book is the best intelligent design advocates

have to offer, then there is no hope for a successful movement to overthrow Darwinian evolution.

In Behe's '*Darwin's Black Box*', he makes a particular reference to a mechanical analogy as evidence of an irreducibly complex system. Behe references the mouse trap and poses the question, "Which part could be missing and still allow you to catch a mouse?" (Behe 42). He progresses to prove that all parts are required for function ability, phrasing his point as if the original question was rhetoric. However, the definition of evolution is gradual improvement over a long period of time. What happens if we add a component to a mousetrap? It can still perform the same task, the system that is functioning is just one component more complicated. Evolution simplified the system to the most efficient state. Evolution's improvements do not necessarily imply the systems have to develop in complexity, it can result in simplification. A parallel can be drawn to biological systems. Evolution could easily have created a working system with too many parts that it was inefficient, and then gradually removed unnecessary components until the most simplified is left, which like the mouse trap, is irreducibly complex. Behe focuses on the major component of his argument, ignoring other possibilities. Keith Robison references Behe's claim that a mousetrap's design implies no part can be removed without a malfunction in the system, "The wooden base can be discarded. Where do you put a mousetrap? On the floor. What if I assemble the mousetrap by pounding the staples *into the floor*? Would I have a fully functional mousetrap...Clearly it is inferior. But just as clearly, it is functional!" (talkorigins.org/faqs/behe/review.html). Behe would argue that the staples in the floor are simply a base, but it is an example of gradual improvement with evolution. If the base was originally staples, and developed into the wooden base used today then evolution would have impacted the 'designed' system. If evolution had an impact on the finalized product that it cannot

be intelligently designed, there has to be other designs of the system that are function able other than the currently known example. With this example, Behe's analogy of the mousetrap is proven to be flawed, or at the very least questionable. To present a convincing argument, the evidence used to support the claims you make should not have evident holes in their foundation, especially if the center of your argument relies on analogies similar to the mousetrap example. In addition, there is no law that forces a system to be functional at every stage of development. The eye could have started developing early within the common ancestor; a simple bacteria cell does not require vision so does not need the eye to be a functional system. Therefore, the eye does not need to function until, at the earliest, the organisms are complicated enough to support the eye.

Behe's major focus in his arguments is systems that cannot be proven to have developed through evolution and appear to be too complicated to have developed slowly must have been from the product of an intelligent designer. However, in his interview on the witness stand in the trial *Kitzmiller v. Dover Area School District* he states: "Scientific statements have to rely on physical evidence. They have to be backed up by studies. And simply saying that something is so does not make it so" (<http://www.talkorigins.org/faqs/dover/day11am.html>). By Behe's quote, for a theory to be considered scientific, it must have physical evidence to support the arguments and hypotheses made. But Behe's argument on irreducibly complexity is based off the principle that these systems are untestable. Behe references intelligent design as an "elephant in a roomful of scientists who are trying to explain the development of life" (Behe 193). Is that a scientific theory or an untestable statement trying to fill in the gaps that science is unable to answer? It seems more like an attempt to fill in a gap, which is contrast to his statement from his witness stand interview. He needs to find a suitable and believable method to test for irreducible complexity before the 'elephant' in the room is even worth noticing.

How many arguments include numerous instances of the architect conceding ground to the other side? Behe is a consistent believer in the evolutionary paradigm and only references specific cases to be labeled as products of an intelligent designer. He concedes that “almost half century and a half after Darwin proposed his theory; evolutionary biology has had much success in accounting for patterns of life we see around us” (Behe 4). This appears to be a statement in a case for evolution, not to attempt to loosen the control Darwinian thinking has over the argument for the origin of life. Furthermore, Behe is completely behind the hypothesis of a common ancestor. Which begs the question; at what point did this intelligent being step in and alter the evolutionary path with their designed systems? At the beginning there was no eye in single cell bacteria or blood clotting mechanisms, where did the eye suddenly appear and if a dramatic change in a biological system did occur, would there not be scientific evidence to visually see the designers hand in action. How can anything, other than a supernatural being, make significant changes to a planet’s life without any sort of physical trace, and even a supernatural being seemingly would have a difficult time in achieving something so influential. Assuming a supernatural being is capable of altering a species without leaving a trace, where does the arrow then point? It points almost directly to religion. God of the gaps seemingly fits as a label to this argument. Evolution cannot explain how these systems came into existence, therefore an intelligent designer must have implemented these systems into life, but only a supernatural being has the capabilities to achieve this without leaving a trace, therefore religion has an influence on the origin of the human race, that is, assuming science does not find the evidence to disprove Behe’s claim of intelligent design.

Science has had a habit of disproving religious theories. The three smallest bones reside in the human ear, they transfer vibrations through to what is known as the oval window, “This five component system fits Behe’s test of irreducible complexity perfectly – if any one of its parts are taken away or modified, hearing would be lost” (millerandlevine.com/km/evol/behe-review/index.html). However, this system, unlike the blood clotting or the eye, involves bone structures which can commonly survive in a fossil form. This is evident in the fact that there has been fossil evidence showing a gradual shift of these bones to the current system. In other words, a perfect example of an irreducibly complex system has evidence relating it back to Darwinian thinking. Intelligent design has been proven wrong when an example becomes testable. Behe’s examples are all untestable, so there is no guarantee that these systems are not similar to the system within the ear, and Behe’s entire argument supporting intelligent design rests on these untestable examples of irreducible complexity. And according to Behe, an untestable theory is not a scientific theory.

If a theory is unscientific, there is no argument for it to be taught in schools as an alternative, or addition to Darwinian evolution. Despite this theory, and the fundamental flaws in the intelligent design argument referenced above, this theory still circulates the mainstream. Inaccurate work written as scientific theory can lead to misconceptions within society and unintended consequences. Andrew Wakefield published a paper relating vaccinations to children with autism. This led to parents refusing to vaccinate their children and a major increase in unnecessary diseases, such as measles. The argument of intelligent design may not result in such serious consequences, but Wakefield never had intentions to cause serious harm. Neither does Behe, he is simply expressing his own opinion. Not knowing the possible consequences however

does not make it a worthwhile theory, and until there is testable and repeatable observations to couple the theory than it should be kept out of emotionally charged books.