

Intelligent Design is Falsifiable

Discovery Institute
Center for Science & Culture
© 2005

There is a belief among media commentators that intelligent design is unscientific because it is unfalsifiable or untestable: no empirical evidence can count against it. Though common, this charge is demonstrably false. Of course there's no way to falsify a mere assertion that a cosmic designer exists. This much we are agreed on. But contemporary design arguments focus not on such vague claims, but on detectable evidence for design in the natural world. Therefore, *the design arguments currently in play are falsifiable.*¹

Consider the argument that Michael Behe makes in his book *Darwin's Black Box*. There he proposes that *design is detectable* in many "molecular machines," including the bacterial flagellum. Behe argues that this tiny motor needs all its parts to function—it is "irreducibly complex." Such systems in our experience are a hallmark of designed systems, because they require the foresight that is the exclusive jurisdiction of intelligent agents. Darwin's mechanism of natural selection and random variations, in contrast, requires a functional system at each transition along the way. Natural selection can select for present but not for future function. Notice that Behe's argument rests not on ignorance, but on what we know about designed systems, the causal powers of intelligent agents, and on our growing knowledge of the cellular world and its many mechanisms.

How does one test and discredit Behe's argument? Describe a realistic, continuously functional Darwinian pathway from simple ancestor to present motor. Darwinists like Kenneth Miller point to the hope of future discoveries, and to the type III secretory system as a machine possibly co-opted on the evolutionary path to the flagellum. The argument is riddled with problems, but it shows that Miller, at least, understands perfectly well that Behe's argument is testable. Similarly, the Internet is filled with supposed refutations of contemporary design arguments, many written by scientists using information from the natural world to make their arguments. An argument can't be both open to falsifiability and unfalsifiable at the same time.

To move from biology to astronomy and cosmology, in *The Privileged Planet*, Guillermo Gonzalez and Jay Richards *describe how to falsify their design argument*. They argue that there is a correlation between the conditions needed for life and the conditions needed for diverse types of scientific discovery, and suggest that such a correlation, if true, points to intelligent design. They write:

¹Recent work in the philosophy of science has revealed the degree to which high level scientific theories tend to resist simple refutation. If it were applied consistently, in fact, every theory in science would be hastily rejected. As a result, Karl Popper's criterion of "falsifiability," which most commentators seem to presuppose, was rejected by most philosophers of science decades ago as a litmus test for science. Nevertheless, it's certainly a *virtue* of scientific proposals to be able to say what evidence would count against it.

The most decisive way to falsify our argument as a whole would be to find a distant and very different environment, which, while quite hostile to life, nevertheless offers a superior platform for making as many diverse scientific discoveries as does our local environment. The opposite of this would have the same effect—finding an extremely habitable and inhabited place that was a lousy platform for observation.

Less devastating but still relevant would be discoveries that contradict individual parts of our argument. Most such discoveries would also show that the conditions for habitability of complex life are much wider and more diverse than we claim. For instance, discovering intelligent life inside a gas giant with an opaque atmosphere, near an X-ray emitting star in the Galactic center, or on a planet without a dark night would do it serious damage. Or take a less extreme example. We suggested in Chapter 1 that conditions that produce perfect solar eclipses also contribute to the habitability of a planetary environment. Thus, if intelligent extraterrestrial beings exist, they probably enjoy good to perfect solar eclipses. However, if we find complex, intelligent, indigenous life on a planet without a largish natural satellite, this plank in our argument would collapse.

Our argument presupposes that all complex life, at least in this universe, will almost certainly be based on carbon. Find a non-carbon based life form, and one of our presuppositions collapses. It's clear that a number of discoveries would either directly or indirectly contradict our argument.

Similarly, there are future discoveries that would count in favor of it. Virtually any discovery in astrobiology is likely to bear on our argument one way or the other. If we find still more strict conditions that are important for habitability, this will strengthen our case.

So contemporary arguments for intelligent design in both biology and the physical sciences are not only testable; they're falsifiable. We have given only two examples here. There are other design arguments in origin-of-life studies and paleontology that are also falsifiable. Therefore, honest commentators should stop claiming that ID is unfalsifiable. The claim itself is falsifiable, and it has been falsified. It's time to move on to other and more pertinent aspects of the debate over intelligent design.