

“At its core, Intelligent Design is simply a scientific disagreement with Materialists who claim the apparent design of life is an illusion.”

INTELLIGENT DESIGN IS GOOD SCIENCE¹

John H. Calvert

There is a difference between science and materialism, John H. Calvert explains. Scientists who reject the idea that diversity must have a purely materialistic explanation are still acting as scientists. In fact, they are more open-minded and therefore more scientific than materialists. The evidence itself points as much to an intelligence behind the design as to random mutations. Materialists admit that creation seems to be designed, but decide this must be an illusion without really exploring the possibility of design. Instead, they should allow those who believe in the possibility of design to pursue that theory without accusing them of being anti-science, answering evidence with evidence.

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Police detectives are experts at detecting the cause of a fire or a death. They look for clues to decide if the event was caused by one of three possibilities: (1) intelligence - a mind acting for a purpose, (2) a natural or material cause like a bolt of lightning, or (3) an accident or chance occurrence.

Scientists do detective work as well. They ask questions like what caused life? Once life got started, what caused new forms of life? Many try to explain life as just the product of natural or material causes and accidents of nature. Material causes are causes attributable to *the properties of* matter, energy and the forces, like the forces of gravity, electromagnetism, and the nuclear forces. These causes nicely explain, rocks, rivers, wind, and rain, but do they adequately explain life? Scientists who explain origins events with material causes are called *Materialists*.

Other scientists believe material and accidental causes are not adequate to explain all the complexity of life. They think intelligence has played a role. Just as intelligence is needed to explain a bird's nest, they think intelligence is needed to explain the really complicated messages and “blueprints” found in DNA. These scientists are called *teleologists - or Intelligent Design theorists*. We will just call them *Design Theorists*.

Testing When Observation Is Not Possible

How do you test an explanation? Most scientists use direct observation and repeated experiments to test a proposed explanation for some phenomena. Why does an apple fall from a tree? Maybe it is blown down by wind or maybe it falls because of gravity. We can test the wind hypothesis with an experiment that sees if it falls when there is no wind. But experiment and direct observation often can not test an explanation about an unobserved series of events occurring many years ago that can't be duplicated in the lab. Here we are not asking why the apple presently falls or what is the apple made of. Instead we are asking where did the apple come from and where did the tree come from, and where did the seed come from that produced the tree, etc. Ultimately, where did first life come from? To answer these questions we have to use good old-fashioned detective work.

Detectives collect circumstantial evidence from which we can logically *infer* a past cause. The clues must do two things to allow us to reach an *inference to the best current explanation*: They must (a) rule in one possibility and also (b) rule out the others. A coroner that reports a homicide must have evidence that both implicates an intelligent cause and that rules out accidental and material/natural causes. If she comes back and reports death by heart attack but did not consider poison or accidental

¹ Robert Winters, Editor, *Intelligent Design is Good Science (Issues on Trial: Education*, p. 137-143, Greenhaven Press, 2008), reprinted from John Calvert, *Intelligent Design for Dummies*, August 2006.

cause, then her investigation is incomplete. Without ruling out competing possibilities, explanations about ancient unobserved causes of life become nothing more than speculations whose credibility diminishes the further one goes back in time.

Where ID and Materialism are Compatible

Materialists admit life looks designed - eyes are much more sophisticated than human designed digital cameras. But the materialist claims the appearance of design is just an *illusion*, much like the illusion of a rising sun in the morning. He claims the appearance of design can be explained by material causes without any intervening intelligence. The Design Theorist simply disagrees. At its core, *Intelligent Design* is simply a scientific disagreement with Materialists who claim the apparent design of life is an illusion.

Materialists make a powerful case for natural causes for *micro-evolution*. They can show how random mutations in replicating populations can produce many novel effects, like different varieties of dogs and cats and a variety of species of finches having different sizes of beaks. Disease causing bacteria become resistant to antibiotics due to random mutation and natural selection. No one has observed any outside intelligence intervening to cause these changes, so they argue that the mechanisms of random mutation and natural selection that operate at the micro level can also explain all *macro-evolutionary* changes beginning with the most primitive form of life. Just as we can trace our origin back to a series of human ancestors, all of life can be traced back to an original common ancestor in an unbroken chain of "descent with modification." The materialist shows an array of evidence consistent with his claim. All of life runs with the same kind of biological software that uses a common *genetic code*, the fossil record shows complexity increasing over time, and vertebrates have similar body plans.

Design Theorists argue that all of this evidence is also consistent with an intelligent cause. Antibiotic resistance appears to result from a system having an extraordinarily high mutation rate, perhaps that is a design feature of the system. Although the fossil record shows increasing complexity it also shows long periods of stasis, very sudden increases in complexity, the absence of many transitional forms, and many instances of novel systems arising repeatedly without any apparent common ancestor. All of these clues as well as common bio-software, implicate common design rather than unguided evolutionary change. Because the clues the *materialist* is using are consistent with both design and materialism, they prove neither. To show a material explanation as the "best" of the two, he must show positive evidence for his claim *and* show evidence that tends to rule out the evidence of design. In many respects his evidence does neither.

Where ID is Superior

The *Design Theorist*, claims she has evidence that both rules in design while ruling out material causes. To make a claim for design she must show (a) a pattern with an apparent purpose, goal or function, (b) no material cause that can explain the pattern and (c) that the pattern is not reasonably explained by random events.

Her evidence begins with the structure of the universe itself. Many cosmologists find the values assigned to the four fundamental forces of the universe, its initial conditions and many other constants that dictate its structure appear to be *finely tuned for life*. Thus, life itself appears to be a purpose of the universe. Secondly, these values all appear to be arbitrary and not dictated by any known material or natural cause. Thirdly, the combination of all the values being set by chance to precisely the settings necessary to achieve life is considered by many to be completely implausible. This combination of evidence tends to rule in design while ruling out material cause alone.

She then turns to the evidence of design for life itself. She starts with the genetic code, a language common to all of life. It works like the code developed by Samuel Morse to transmit messages in lineal sequences over telegraph wires using just two symbols - dots and dashes. The genetic code

works the same way. But, it uses four symbols instead of two to carry “messages” in lineal strands of DNA that are copied and then translated into proteins instead of words. The messages needed to get life started are thought to consist of about 1000 genes containing symbol sequences the length of a novel. The code itself was analyzed in late 1999 and found to be “eerily perfect,” the best of the one million other randomly selected possibilities. The code and messages in DNA necessary for life are powerful evidence for design and against materialism, because (a) they exhibit clear purpose, (b) the sequences of the symbols that make the messages are not dictated by physics, chemistry or any known material cause, and (c) statistical analyses rule out chance, even with a universe trillions and trillions of years old. Given the absence of any coherent materialistic explanation, design is an inference to the best current explanation for the origin of life itself.

If intelligence is required to start life, why postulate a material cause for its diversity? But even if we ignore that logic, material causes are still challenged to show how random mutations can assemble new irreducibly complex bio-systems that lack positive environmentally recognizable function until complete. A bacterial flagellum in the oldest form of life is an in-board motor “constructed” of thousands of subunits of many proteins. Even after its assembly it lacks function until it is hooked up to an energy source and an auto-pilot that directs the organism towards a food source or away from danger. Materialists show no detailed explanation as to how random mutations can incrementally build this machine where each step in the assembly produces no function until all have been taken. Natural selection is like a saboteur until beneficial function arises. Statistical analyses show that probability decreases *EXPONENTIALLY* as complexity increases so that even trillions of years of random tinkering appear insufficient to assemble sophisticated bio-machines. Furthermore, the patterns reflected by the fossil record and genetics cited by Materialists in support of their claim, are actually more consistent with a claim of common design than a claim of gradual descent with modification in the pattern of a branching tree. Thus, the evidence tends to rule in design as the best explanation for much of the diversity of life.

Choosing Ideology over Evidence

Recognizing these evidentiary problems, Materialists invoke a rule of procedure to make their case. They ordain that all the evidence of design will be suppressed because it *implies a supernatural* cause. One is reminded of a lawyer who invokes the hearsay rule to suppress a dying declaration implicating his client as the cause of death. The *Design Theorist* replies that science must ignore the implications of the evidence in seeking to explain where it leads. This is particularly necessary in a historical science that depends on competition rather than direct observation and experimentation to test subjective historical narratives that unavoidably impact beliefs about religion, ethics, morals and even government. If the evidence of design is not allowed on procedural grounds then there is no need to engage in the investigation at all. The answer to the question - where do we come from, has a pre-ordained answer - *only a material cause*. The explanation can never be credible because it is not the product of the evidence, rather it is the product of a decree. Rather than an explanation for the cause of life, it becomes an ideology used to support particular religious beliefs and world views.

For evolution to be science it must answer the challenge of design with evidence, not rhetoric and hidden preconceptions.