

## FAQ:

# Is ID merely a "God of the Gaps" type argument?

**The Short Answer:** Not at all. Intelligent design works off positive predictions about where experience tells us that intelligent design is the cause at work. Furthermore, the "gap" in Darwinian evolution is not a gap in knowledge, but a fundamental theoretical gap that represents an aspect of biology which Darwin's theory is simply incapable of bridging.

### The Long Answer:

Intelligent design begins with observations about the types of information produced by intelligent agents. Even the atheist zoologist Richard Dawkins says that intuitively, "[b]iology is the study of complicated things that give the appearance of having been designed for a purpose." Darwinists believe natural selection did the "designing" but intelligent design theorist Stephen C. Meyer notes, "in all cases where we know the causal origin of 'high information content,' experience has shown that intelligent design played a causal role." Meyer also emphasizes many of the positive predictions of intelligent design:

"Experience teaches that information-rich systems ... invariable result from intelligent causes, not naturalistic ones. Yet origin-of-life biology has artificially limited its explanatory search to the naturalistic nodes of causation ... chance and necessity. Finding the best explanation, however, requires invoking causes that have the power to produce the effect in question. When it comes to information, we know of only one such cause. For this reason, the biology of the information age now requires a new science of design.

(Stephen C. Meyer, *Mere Creation*, pg. 140).

"Indeed, in all cases where we know the causal origin of 'high information content,' experience has shown that intelligent design played a causal role."

(Stephen C. Meyer, *DNA and Other Designs*)

"Intelligent design provides a sufficient causal explanation for the origin of large amounts of information, since we have considerable experience of intelligent agents generating informational configurations of matter."

(Meyer S. C. et. al., "The Cambrian Explosion: Biology's Big Bang," in *Darwinism, Design, and Public Education*, edited by J. A. Campbell and S. C. Meyer (Michigan State University Press, 2003)

Thus intelligent design theory is not attempting to insert itself into some "gap" but rather it deserves a chance to be heard as a sufficient cause for the origin of complex and specified biological information. We can make positive predictions about how intelligent design theory works based upon our observations of how intelligent agents work:

### Table 1. Ways Designers Act When Designing (Observations):

- (1) Take many parts and arrange them in highly specified and complex patterns which perform a specific function.
- (2) Rapidly infuse any amounts of genetic information into the biosphere, including large amounts, such that at times rapid morphological or genetic changes could occur in populations.
- (3) 'Re-use parts' over-and-over in different types of organisms (design upon a common blueprint).
- (4) Be said to typically NOT create completely functionless objects or parts (although we may sometimes think something is functionless, but not realize its true function).

We can then use those observations to make predictions:

**Table 2. Predictions of Design (Hypothesis):**

- (1) High information content machine-like irreducibly complex structures will be found.
- (2) Forms will be found in the fossil record that appear suddenly and without any precursors.
- (3) Genes and functional parts will be re-used in different unrelated organisms.
- (4) The genetic code will NOT contain much discarded genetic baggage code or functionless "junk DNA".

These predictions can then be tested, giving us positive evidence of design:

**Table 3. Examining the Evidence (Experiment and Conclusion):**

Line of Evidence	Data (Experiment)	Prediction of Design Met? (Conclusion)
(1) Biochemical complexity / Laws of the Universe.	High information content machine-like irreducibly complex structures are commonly found. The bacterial flagellum is a prime example. Specified complexity found in the laws of the universe may be another.	Yes.
(2) Fossil Record	Biological complexity (i.e. new species) tend to appear in the fossil record suddenly and without any similar precursors. The Cambrian explosion is a prime example.	Yes.
(3) Distribution of Molecular and Morphological Characteristics	Similar parts found in different organisms. Many genes and functional parts not distributed in a manner predicted by ancestry, and are often found in clearly unrelated organisms. The "root" of the tree of life is a prime example.	Yes.
(4) DNA Biochemical and Biological Functionality	Increased knowledge of genetics has created a strong trend towards functionality for "junk-DNA." Examples include recently discovered functionality in some pseudogenes, microRNAs, introns, LINE and ALU elements. Examples of DNA of unknown function persist, but discovery of function may be expected (or lack of <i>current</i> function still explainable under a design paradigm).	Yes.

**What is the nature of the "Gap" in Darwinism?**

Intelligent design theory is saying that "irreducibly complex" structures cannot in principle be built by the Darwinian mechanism. The Darwinian mechanism requires that biological systems remain functional along every step of their evolution, else they get selected out. Irreducibly complex systems cannot be built up in a step-by-step manner, because any change in their organization destroys the function. Indeed, even Charles Darwin, in *The Origin of Species*, recognized this as a fundamental obstacle to his theory:

"If it could be demonstrated that any complex organ existed which could not possibly have been formed by numerous, successive, slight modifications, my theory would absolutely break down."

In evolution, natural selection only preserves those structures which confer some advantage for the organism. If a structure isn't functional, then it confers no advantage, is a waste of the organism's

resources, and will be selected out. Darwin says that there may exist structures for which functional intermediate stages would be impossible, i.e. the intermediates would not function. This is essentially the same challenge of irreducibly complex structures, where intermediate structures wouldn't be functional. Biochemist Michael Behe elaborates on this fact saying:

"A system which meets Darwin's criterion [listed in the above quote] is one which exhibits irreducible complexity. By irreducible complexity I mean a single system which is composed of several interacting parts that contribute to the basic function, and where the removal of any one of the parts causes the system to effectively cease functioning. An irreducibly complex system cannot be produced gradually by slight, successive modifications of a precursor system, since any precursor to an irreducibly complex system is by definition nonfunctional. Since natural selection requires a function to select, an irreducibly complex biological system, if there is such a thing, would have to arise as an integrated unit for natural selection to have anything to act on. It is almost universally conceded that such a sudden event would be irreconcilable with the gradualism Darwin envisioned."

Thus, intelligent design says that these irreducibly complex systems are in principle impossible to account for through the Darwinian mechanism. This is not a "gap" in the knowledge of evolutionary biologists. In fact, this is a theoretical proof that Darwinian evolution cannot create irreducible complexity. This is a gap that Darwin's theory is incapable of bridging. And we do not merely infer design because of the gap, but because of our understanding of the type of complexity created by intelligent agents when they act. We know that there is no natural mechanism capable of producing this form of complexity. Since we know that intelligent design is capable of producing this form of complexity, we are more than justified in inferring design for the origin of irreducible complexity.