Intelligent Design and Evolution Awareness Center

FAQ:

What is the Mechanism the Designer used to Design?

a.k.a. why did the designer design?, how did the designer assemble the object?, How or When Did the Designer Do the Designing?

The Short Answer: Intelligent design theory can only detect that which is empirically detectable via the scientific method. Epistemological theory limits the explanatory scope of any scientific theory. It may (or may not) be possible to determine the exact mechanism the designer used to do the designing--it just depends on what is theoretically possible to empirically determine. But we don't have to be able to answer these questions to know that the object in question was indeed designed.

The Long Answer:

Epistemology is the study of knowledge, or how we know what we know and involves investigating when a person is justified in holding a particular belief. Many of the objections and questions in this section relate to the specific claims that intelligent design theory makes, or supposedly ought to make. Implicit in many of these questions seems to be the belief that intelligent design is silent on certain issues *when it shouldn't be*.

A scientific theory makes claims about the natural world based upon observations of the natural world and employing empirically-based mechanisms to explain those observations. A scientific theory cannot make claims which go beyond things that are possible to observe and cannot employ mechanisms which in principle could not be empirically-justified.

Every theory therefore has empirical bounds and limitations. In other words, a theory can only explain those things which are possible to observe and explain using empirically-based mechanisms and the tools and technology available to us. Theories simply are not capable of explaining things beyond their empirical bounds and limitations.

A theory also cannot help the bounds that it has--those bounds are imposed upon it by the laws of physics, the nature of reality, and the ability of humans to innovate and empirically observe the natural world. The fact that a theory has bounds does not make it any less scientific, or any less potent within its empirical bounds; it just means that a theory is constrained by what it is possible to observe in the natural world.

For example, it would be foolish to ask the quantum physicist, "How does quantum tunneling explain how chlorophyll makes plants green?" or to ask the botanist, "What does our current understanding of mechanisms of photosynthesis tell us about fundamental particles that compose atoms?" Such questions extend beyond the empirical bounds and limitations of a theory and the tools used by the scientists in each respective field.

Intelligent design is a scientific theory that also has a particular scope. Intelligent design cannot be faulted if its scope is limited; nor can it be ignored or dismissed on answers it provides to questions within its scope simply because it fails to address a question we would prefer to lie within its scope, but doesn't. Asking intelligent design to answer questions outside of its scope is to make a category fallacy. It is like asking a bachelor to whom he is married, when a bachelor is by definition unmarried. To fault intelligent design theory for not explaining enough, when its empirically-based scope limits what it can explain, is to fall trap to the same mistake.

But what happens when questions are posed to the intelligent design theorist such as, "Why did the designer design?" or "How did the designer design?" The question must be asked, "What is the

explanatory scope of intelligent design theory?" or more specifically, "How much can intelligent design theory explain based upon observations which are possible from the natural world?"

Fundamental to intelligent design theory is the fact that the ways that intelligent agents act can be observed in the natural world and described. When observing intelligent agents, Intelligent design theorists find that when intelligent agents act, they tend to produce high levels of "complex-specified information." In our experience, complex-specified information is always the product of the action of intelligent design.

"Complex specified information" is basically a scenario, or a circumstance, which is unlikely to occur (making it *complex/high information*), and conforms to a specific pattern (making it *specified*). Both language and machines are good examples of things with high levels of complex-specified information. However, when we look at biology, similar complex machine-like entities exist, which must be exactly as they are, or they cease to function properly. They are specified, because they conform to a particular pattern of arrangement and organization which is necessary for them to function, and complex because they have an unlikely arrangement of many interacting parts.

The high level of complex-specified information in these biological machines makes them *irreducibly complex:* they have many interacting parts (making them complex) which must be *exactly* as they are in order for the machine to work properly (making them specified), and any change in the nature or arrangement of these parts would destroy their function, and make the machine stop working, thus making them irreducibly complex (they could not be any less complex and still function).

At this point, it is tough to answer questions, via the data, such as "what is the mechanism the designer used to design" or "how did the designer do the designing" or "when was it designed?" This could be something that we may be able to study in some limited instances, or perhaps study extensively in the future as new methods become available. But at the present time this is not a question which the scientific theory of intelligent design can address. That fact does not block the design inference.

It is possible to recognize that a computer is designed by knowing certain features about it (like that it is complex and carries information) and know that it had a designer. However, simply because one does not know how computer was assembled (did they put the resistors in the circuit before they put the inductors?) does not mean that one cannot infer to the best explanation that it was designed. One also need not know when the computer was designed to tell it was designed. Surely it would be a mistake to think that because one does not know all of the details of the design process that one cannot know that it is designed.

We may indeed one day be able to answer questions such as:

- why did the designer design?
- how did the designer assemble the object?
- when was it designed? (this question may be informed through sciences which study chronology, such as the geological sciences, or through other biological dating methods. But intelligent design theory does not answer this question.)

But intelligent design theory will always be limited to what we can infer from the data. Currently these questions which lies outside the scope of intelligent design theory, but that fact does not discredit the claims that intelligent design theory actually does make. Intelligent design merely claims to detect the presence of the design which took place in the past. At the present, to actually see how the design was inserted into the natural world would require a time-machine. Perhaps future theories of design may be able to address this question better, but currently this is not a question intelligent design claims to address. Suffice to say, "the design occurred."