

The Radar of Evolutionary Biology - An Odd Device to Use in Science

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Elliott Sober's July 2008 article titled *Evolution without Naturalism*, addresses concerns of Theistic Evolutionists.² Many have tried to reconcile God and evolution by thinking of evolution as a *guided* process - one in which God intervenes from time to time to guide it for a purpose. However, evolutionary theory is a materialistic theory of origins. It posits an *unguided* process, driven by random variations and natural "selection." The random interactions of the properties of matter, energy and the forces supposedly *account* for life, not the guiding mind of a creator. Sober suggests they can reconcile the conflict by believing in a "stealth God," whose non-detectable "interventions fly below the *radar* of evolutionary biology."

A guided process is one directed by a mind to achieve a goal conceived by the mind. The construction of a bird's nest is guided by the mind of a bird for a purpose - to incubate eggs. An unguided process is one not related to a mind. It merely reflects random interactions of the properties of matter, energy and the forces. Imagine a drop of rain falling onto the surface of a placid pond. The resulting perfect circle that appears on the surface of the pond is the product of an unguided process driven simply by the interactions of matter (the drop of rain) being pulled by the force of gravity into a substance having the properties of a liquid to impose a force on the liquid that results in a perfect circular ripple. The ripple is not due to a guiding mind. It just occurs due to a series of material causes for no purpose.

The Theistic Evolutionist has two concerns with life arising from an unguided process. An unguided process driven only by mindless material causes cannot result in a purposeful effect as purpose derives only from a mind. This is true even of a purposeless process set in motion by a mind. I can close my eyes and let my fingers randomly fly over the keys to make a pattern like this: 'i gf h h'[qgu vn It is one devoid of meaning, because the fingers were not guided by a mind to create one. They just flew randomly. If life is just an occurrence that results from an unguided purposeless process, then it has no inherent purpose, even if set in motion by a mind.

Furthermore, if all the relevant evidence reflects an unguided process, then faith in a stealth god who leaves behind no evidence of his work lacks a rational basis. In that case, we all have a clear "excuse" for non-belief. Any belief in a God is then based only on faith and not in part on a rational analysis of the available evidence. Such a faith is called *fideism*. This is a concern for the theist in her religious competition with non-theists over the mind of her son. Atheists and "Secular" Humanists will tell her son that Atheism/Humanism is evidence based and rational, while the theistic belief of his mother is not - it is based on faith and mythology.

Sober's response ignores the chief concern - that an unguided process produces purposeless effects. Instead, he first argues that in some respects evolution may be *directed* rather than random. But that is not helpful, because even a river is directed in the sense that the law of gravity directs it to flow into the sea. The issue is whether it is directed by a mind. If not, then the process is not *guided*.

He then finesses the point by arguing that the "theory does not entail" an unguided process. Hence, it does not "deny" God. It leaves room for a stealth God "whose interventions just fly under the radar of evolutionary biology:"

"Theistic evolutionists can of course be deists, holding that God starts the universe in motion and then forever after declines to intervene. But there is no contradiction in their embracing a more active God whose post Creation interventions *fly under the radar of evolutionary biology*. Divine intervention isn't part of science, but the theory of evolution does not entail that none occur."

The argument that evolution does not deny God is the same odd claim made by Judge Jones in *Kitzmiller v. Dover Area School District*. Can a theory ever “entail” or “require” any effect? Theories, unlike doctrines, don’t entail anything. Even rigorously tested theories invite challenge. The argument that the theory does not deny God, is a strawman. No one is arguing that the *theory* denies God. The question is whether, if true, it makes God irrelevant. If evolution does the work of God why believe in Him? Why not worship the world from which life arises, rather than an irrelevant non-detectable spirit?

Curiously, however, evolutionary theory *as applied*, does entail the impermissible effect - the denial of God. This is because the radar it uses is calibrated to never detect an intelligent cause. Hence, when confronted with the question: *Where do we come from?* its internal dogma will invariably yield only one answer: *Life arises from unguided material causes*. The radar does entail that a non-God answer be given to the mother’s impressionable young son.

Interestingly, the use of this kind of radar is not scientifically necessary. Today, science employs “radars” that do differentiate between patterns that have been *guided* by choices made by a mind -- “artifacts” -- against those that just arise from the random interactions of matter, energy and the forces. Jacques Monod, in *Chance and Necessity*,³ describes a mechanism that does that. His radar easily distinguishes artifacts produced by a *guided* process from physical objects like quartz crystals that just *occur* due to an unguided chemical process.

I mention Monod, because Sober’s article is inspired by Monod’s essay. Monod noted that the distinctive aspect of an artifact is its “purpose” or “structural teleonomy.” Since purpose derives only from a mind and cannot be produced just by mindless chemistry, physics and chance, Monod’s radar implicates mind when it detects “structural teleonomy,” function or purpose. The parts of an eye are related to the same function as the parts of a mind-produced camera. Science actually uses Monod’s radar in a number of its investigations. SETI scientists use it to distinguish between *guided and unguided* radio and light waves. Archeologists, anthropologists, coroners and arson investigators use similar “radars” to look for evidence that implicates the prior activity of a mind. Did the effect arise from mind or matter - from intelligent or natural causes? Monod’s radar gives off a loud signal when it scans the lengthy coded messages of living organisms that are translated into precisely integrated functional complexity.

However, the radar used by evolutionary biology has been modified to add an “on-off” switch. The switch turns off the radar’s ability to detect “structural teleonomy” or evidence showing that an effect might have been the product of a *guided* process. When the switch is “off” the radar will only collect evidence of *unguided* material causes. After noting that this creates a “profound epistemological contradiction,” Monod lumped the remaining explanatory causes into two categories - chance and necessity.

If the detector says one of the two causes is absent, then the other must be present. This is because chance and necessity provide the only two possible causal explanations for life. When Monod applied this modified radar to DNA with the switch off, it showed him that the nucleotide *sequences* that comprise the messages in DNA are not caused by chemistry - by necessity. This is because the four ACTG nucleotide symbols used to carry the coded messages are like four different colored clothes pins hanging on a sugar-phosphate clothesline - they can be hung in any order and therefore have no necessary physical or chemical relationship to one another. Their relationship is physically independent but functionally dependent. A given function depends on the correct sequence, not chemistry. Since the switched off radar rules out necessity, then it necessarily reports the sequences that account for life are just “random occurrences:”

“We call these [mutation] events accidental; we say that they are random *occurrences*. And since they constitute the *only* possible source of modifications in the genetic text, itself the sole repository of the organism’s hereditary structures, it necessarily follows that chance *alone* is at the *source of every innovation*, of all creation in the biosphere. Pure chance, absolutely free and blind, at the very root of the stupendous edifice of evolution: this central concept of modern biology is no longer one among other possible or even conceivable hypotheses. It is today the sole conceivable hypothesis, the only one that squares with *observed and tested fact*.”

But this is surely an odd test! A radar whose “structural teleonomy” switch has been flipped off does not test for the “source of innovation.” It tests for nothing, since it omits consideration of a hypothesis suggested by the evidence. It is a radar calibrated to advise that life arises from material causes. It then looks for the best of the available material cause explanations. Chance becomes the answer by default, when the machine fails to detect chemical necessity for the messages of life. One doesn’t even need to do a statistical analysis to test the plausibility of the chance conclusion. It can’t be wrong, because it is the only remaining causal explanation. Like Hollywood, natural selection, with lots of faith and imagination, no observation, experiment or statistical analysis and no permitted competitor, can weave any story needed to make the implausible appear plausible.

Sober uses the same sort of radar. He flips the switch off so that it won’t look for design or a *guided process* because:

“The problem is that we can’t assess what probability the ID hypothesis confers ... unless we have independently justified information about the goals and abilities the putative designer would have if there were such a being. And we have no such information (Sober 2008b, Chapter 2).”

His argument doesn’t follow. Even though we can’t know a particular mind, we do know generally how minds work and the kinds of patterns they manifest to produce desired functions. Minds integrate future events for intended functions. The existence of the prior intention is often manifested in the physical world through patterns of tightly integrated elements or symbols that have recognizable functions. Often the precise intention is obscure because the function is obscure. However, without knowing the precise intention, the probability that mind rather than chance and necessity were at work, can often be reasonably calculated. Coroners, arson investigators, archeologists, and SETI scientists reliably test patterns for mind. The activity of a mind at work is most clearly manifested by writings, whose very function is to reveal an intention of a mind. Before discovery of the Rosetta Stone, no one would deny the hieroglyphics on the temples at Luxor were the products of mind, even if the “goals and abilities of the putative” minds couldn’t be independently determined. The messages in DNA are like writings, except they are translated with a ribosome rather than a Rosetta Stone. Observed data allow us to attribute intelligence not only to humans, but to birds and animals. Even cellular systems like the immune system reveal a kind of intelligence at work.

So, why flip the switch to the off position when the question is *Where do we come from?* What is the scientific benefit of flipping the switch off and then telling the child there is no tested evidence of a mind that may have made his life possible?

Why not tell the child and the Theistic Evolutionist that there is an off switch on the radar? When it is flipped on, the way we use it in our day-to-day affairs, it reveals strong evidence that life comes from mind. When we flip it off to exclude evidence of mind, it shows no evidence that will support God, because it is designed to do exactly that.

What should be said to the child when he asks, “why not leave the switch on?” Why shouldn’t we know about evidence that implies that life comes from mind?

The standard answer is that we can't have "religion" in science. That seems absurd to the child's mom, because religion *dogmatically* relates human life to the world in which it is lived. When the switch is off, the radar *dogmatically* relates human life to matter, not mind. That conclusion is the foundation for many religions, including Atheism, and "Secular" Humanism. Hence, when the structural teleonomy switch is off, the radar produces a religious effect. It entails a non-God, material cause effect.

Interestingly, a truly scientific effect is achieved only with the switch on. When the switch is on, the radar is not required to relate life to any particular cause. It collects the data and analyzes it with an open mind, generating only probabilistic answers that may change over time as new data is analyzed. This open-minded calibration produces a scientific effect, not a dogmatic religious effect. The on switch removes religion from science, while the off switch inserts it.

The scientist who turns the radar off to remove "religion" from "science" incorrectly defines religion as only belief that life comes from God. Religion also includes beliefs that God is non-existent or irrelevant because life just arises "from unguided evolutionary change." This is the key tenet of the Humanist Manifesto. He also fails to recognize that the key distinction between science and religion is in their methods. Religion is dogmatic while science is supposed to be unbiased and open-minded. The radar used by Sober and Monod which entails a no-God conclusion, is not an instrument of science. It is a dogmatic instrument of materialistic religions.

The concerns of the Theistic Evolutionist are valid. We should study life science with the switch on so that we can test all the hypotheses suggested by the data. Science should not seek to limit theistic belief to an irrelevant stealth God that flies under a rigged radar. It should throw out the radar and use one calibrated to conduct a rigorously objective and open minded investigation of a question key to all religions. That kind of radar would achieve the goals of both religion and science.

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² Elliott Sober, *Evolution Without Naturalism* ("Evolution without Naturalism ." In J. Kvanvig (ed.), *Oxford Studies in Philosophy of Religion*, volume 3, forthcoming. <http://philosophy.wisc.edu:80/sober/recent.html>

³ Jacques Monod, *Chance and Necessity, an Essay on the Natural Philosophy of Modern Biology*, (Vintage Books, 1972).