



Arguing for Design

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Abstract: Theists and naturalists alike concern themselves with the complex appearance of design in the universe. In the attempt to explain how the universe exhibits design, theists postulate a God, a supernatural agent who is responsible for bringing about such design. This line of thought pervades the history of philosophy in the form of the Design Argument (DA). Not surprisingly, naturalists argue against attribution of appearance of design to actual design itself. Perhaps the greatest challenge to DA comes from the field of evolutionary biology, specifically from the writings of Richard Dawkins. It is asserted that Darwinian Natural Selection (DNS) has the capacity to explain improbable complexity in living organisms without the needless assumption of a supernatural designer.

This paper addresses the issue of whether DNS has indeed defeated the DA, as naturalists claim. Our goal here is to establish through philosophical analysis of DA vis-a-vis DNS that there is still a rational ground for belief in God on the basis of DA. It shall be argued that even without dismissing the advancements made by the Darwinians, a modified DA can justifiably assert that the existence of a designer or creator makes the existence of certain properties or structures that give rise to evolution less improbable. This position undercuts naturalist accounts that regard the existence of design as highly improbable.

Key Words: design; Design Argument; naturalism; Darwinian evolution by natural selection; Dawkins.

1. BACKGROUND

Theists and naturalists alike concern themselves with the complex appearance of design in the universe. The two camps, however, disagree on how to explain the apparent design found in things given the complex arrangement of things and events that we find around us. Naturalists are of the belief that only natural laws and forces operate in the world, and they treat things and events as explainable in terms of natural laws. Theists do not

limit their explanations to purely natural laws and entities since belief in a supernatural being, God, is central to their system of belief.

This paper evaluates the opposing arguments offered by the theists and the naturalists in support of their respective positions. Philosophical and the Darwinian evolution by natural selection (DNS analysis of the Design argument (DA) put forward by theists) that challenges the DA will be presented with the goal of demonstrating that DA



withstands the supposed defeaters arising from the naturalist perspective.

2. THE DESIGN ARGUMENT

In the attempt to explain how the universe exhibits design, theists postulate a God, a supernatural agent who is responsible for bringing about design in nature. This line of thought pervades the history of philosophy in the form of the Design Argument (DA). Two of the most influential formulations found in history are the Fifth Way of St. Thomas Aquinas and William Paley's Watchmaker Argument.

St. Thomas (1225-1274) begins the Fifth Way by stating that we observe phenomena where things move toward their respective ends with seeming regularity and always, or nearly always, obtain the best result. Given the premise that whatever lacks intelligence cannot move towards an end, then it is not by itself that it achieves its end. It is not fortuitously, but designedly, that a thing achieves its end. Natural things, therefore, are directed to their ends by some being endowed with knowledge and intelligence, whom people call God (*Summa Theologica*, Part 1, Question 2, Article 3).

Himma notes that the argument rests on the claim that "the existence of end-directed system or process can be explained, as a logical matter, only by the existence of an intelligent being who directs the system or process towards its end." However, he adds, if it can be shown that non-directed natural processes, things, and events come about without a designer, then the main claim of the argument is defeated. Whether there is indeed end-directedness or teleological orientation to be found in things, and whether only with the postulation of an intelligent designer can teleology be explained are at the heart of controversy. Naturalists, appealing to Darwinian evolution by natural selection (DNS), present a contrary position.

The watchmaker argument formulated by William Paley (1743-1805) provides us with another version of DA. It rests on an analogy between the order found in things and the complex arrangement of parts in a watch. Just as a watchmaker is responsible for the intricate design in a watch, God is conceived as the designer of the universe. The

argument is based on the idea that the apparent design found in things, and the world as a whole, points to the existence of design and its designer without which the said design would not exist. According to Paley (1809:13), "Every manifestation of design which existed in the watch exists in the works of nature with the difference, on the side of nature, of being greater and more, and that in a degree which exceeds all computation...(T)he contrivances of nature surpass the contrivances of art, in the complexity ... of the mechanism."

The analogy between the watch and the world seem questionable since a watch is an article of manufacture with obviously mechanical properties whereas we find in the world not only mechanical objects but organic materials that are not obviously designed. A naturalist can challenge this by asking: "Why not compare the world to a spider?" It is not ordinary practice to inquire about the spider-maker, or about a designer for something biological in nature. Design does not seem incontrovertible when we consider biological organisms. It is thought that Darwin's theory of evolution by natural selection (DNS) debunks the notion of biological design by explaining how biological organisms evolved gradually over millions of years from simpler organisms through a process of natural selection. The Darwinian explanation, claims the naturalist, possesses higher probability of success than the design explanation.

These discussions bring about the main issue: Does Darwinian Natural Selection (DNS) defeat the DA and render it highly improbable?

3. THE CHALLENGE FROM DNS

While there are quite a good number of counterarguments against the different versions of the DA, it is generally acknowledged that what can be considered as the greatest challenge to DA comes from the field of evolutionary biology. In recent years, the writings of Richard Dawkins have become the chief articulation of this challenge.

In his work, *The God Delusion*, Dawkins (2006:157-158) claims that while (1) there are appearances of design in nature, (2) it is a mistake to attribute such appearance of design to actual design



itself (and consequently to a designer) because DNS has the capacity to explain improbable complexity in living organisms. What appears to be “designed” when considering biological matters is explainable in terms of physical and material explanation, specifically in terms of biological and chemical causes and effects. DNS, it would seem, replaced teleology with the causality of natural selection.

A simple but charitable account Darwin's Theory of Evolution can be gleaned at *All About Science.org* website. The theory stresses the development of life from inanimate nature through a purely undirected descent with modification. Evolution brings about complex creatures from more “simple” ancestors over time. Random genetic mutations occur within an organism's genetic code, and when the modifications are beneficial, that is, when they facilitate survival, these mutations are preserved. The process is known as “natural selection”, hence, we call it Darwinian Natural Selection (DNS). It is in the randomness of the entire process that the expression “blind evolution” derives its significance. Beneficial mutations are passed on to the next generation, and over time, these beneficial mutations accumulate and result in organisms that are entirely different from the original.

Whereas theist thinkers would not object to the first claim (1) made by Dawkins, the other claim (2) is not acceptable to adherents of theism, in particular, to those who adhere to the DA. Does the DNS provide a sufficient proof for the absence of design so as to defeat DA?

4. INADEQUACIES OF DNS

Our goal here is to establish through philosophical analysis of DA vis-a-vis DNS that there is still a rational ground for belief in God on the basis of DA. It shall be shown that there are good philosophical reasons for rejecting DNS's critique of the DA. The underlying thread in affirmation of DA amidst the critique from DNS is fact that there are features and properties exhibited in the analysis of both DA and DNS that are best explained in terms of DA.

4.1. Scientific Evidence

Advocates of intelligent design have a long list of objections to DNS, mostly scientific. They have a wide range of interests to pursue, including scientific and political ones. These may be different from our strictly philosophical concerns but still provide us with useful information. Luskin (2012) cites the following as some of the problems with biological and chemical evolution:

1. Lack of a viable mechanism for producing high levels of complex and specified information. Related to this are problems with the Darwinian mechanism producing irreducibly complex features, and the problems of non-functional or deleterious intermediate stages.
2. The failure of the fossil record to provide support for Darwinian evolution.
3. The failure of molecular biology to provide evidence for a grand “tree of life.”
4. Natural selection is an extremely inefficient method of spreading traits in populations unless a trait has an extremely high selection coefficient;
5. The problem that convergent evolution appears rampant -- at both the genetic and morphological levels, even though under Darwinian theory this is highly unlikely.
6. The failure of chemistry to explain the origin of the genetic code.
7. The failure of developmental biology to explain why vertebrate embryos diverge from the beginning of development.
8. The failure of neo-Darwinian evolution to explain the biogeographical distribution of many species.
9. A long history of inaccurate predictions inspired by neo-Darwinism regarding vestigial organs or so-called “junk” DNA.
10. Humans show many behavioral and cognitive traits and abilities that offer no apparent survival advantage (e.g. music, art, religion, ability to ponder the nature of the universe).

Darwin himself conceded, “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" (1859: 162). Such a complex organ would be known as an "irreducibly complex system". An irreducibly complex system, explains Behe (1996:39), is one composed of multiple well-matched, interacting parts, all of which are necessary for the system to function. If even one part is missing, the entire system will fail to function. Every individual part is integral. Such a system could not have evolved slowly, piece by piece.

In recent years, irreducible complexity figures prominently in the debate between advocates of intelligent design and DNS. Proponents of design estimate that there are tens of thousands of irreducibly complex systems on the cellular level. For molecular biologist Michael Denton (1986:250), "Although the tiniest bacterial cells are incredibly small, weighing less than 10^{-12} grams, each is in effect a veritable micro-miniaturized factory containing thousands of exquisitely designed pieces of intricate molecular machinery, made up altogether of one hundred thousand million atoms, far more complicated than any machinery built by man and absolutely without parallel in the non-living world."

Behe (1996) claims that there are numerous examples of irreducible complexity discovered in biochemistry, and one example he gives is the bacterial flagellum which is too complex to be evolved. Dawkins and company reject his evidence saying that these are not irreducibly complex biological systems. Perhaps this issue properly belongs to the domain of science, and we look forward to the discovery of adequate scientific evidence that will settle the matter.

4.2. Cognitive faculties

Philosophers agree with some of the reasons for the rejection of DNS including the last one (10) enumerated above. In philosophy of religion, we find Alvin Plantinga's argument to be very decisive against naturalism and DNS.

In *An Evolutionary Argument against Atheism*, Plantinga (1992) argues that if human cognitive faculties have been produced by blind evolution, then the probability of human cognitive faculties' being reliable is low. If we assume that

naturalistic evolution is true, then our cognitive faculties will have resulted from blind mechanisms like natural selection and random genetic mutation. If these blind and random forces are the causes or sources of our cognitive abilities and faculties, then it is questionable whether they serve any purpose, and if they do have a function, the ultimate purpose or function will be survival. "But then it is unlikely that they have the production of true beliefs as a function. So the probability of our faculties' being reliable, given naturalistic evolution, would be fairly low."

For the same reason, the opposite is less improbable, to say the least, if not more likely to be true: it is through the direction of an intelligent designer that evolution by natural selection would give rise to production of human cognitive faculties that are reliable in producing true beliefs when functioning properly. If naturalists claim that it is unlikely that there is design in nature, the Christian philosopher will simply reply by saying that it is more unlikely that absent design, our cognitive faculties function reliably in producing true beliefs.

4.3. Purpose and Function

Central to the affirmation of DA and consequently, rejection of DNS is the acknowledgement of *telos* -- end, goal or purpose -- to be found in nature, including living organisms.

It is hard to find people other than the naturalists who would not agree that the parts of living organisms serve purposes or functions. Logical analysis shows that the linguistic expression—

We have lungs *so that* we can breathe

is equivalent to the following:

The *purpose* of the eyes is to see, or

The *function* of the eyes is to see, or

Our eyes, together with the parts of the brain with which they are connected, process and interpret patterns of light, shade and color.

Further translation yields the statement --



The eyes are needed to provide the data-input for the brain, just as the brain is needed to process data-input from the eyes.

With this, Agutter and Wheatley (1996: 3-4) have demonstrated how the sense of "function/purpose" is retained even when we translate these statements into scientifically precise ones and even if the actual words don't appear.

Naturalists in the field of biology reject the notion that parts of living organisms are "endowed with purpose" and avoid the expressions "purpose" and "function". They account for phenomena in terms of causes and effects in chemical terms rather than in terms of biological function. Yet it is clear that there is implicit admission of "purpose" while they concentrate more-or-less exclusively on physico-chemical "cause" and "effect". "Biologists find function-statements problematic because they perceive them to be problematic in a way that nonbiologists do not" (Agutter and Wheatley 1996). If the expression "the purpose (function) of part X or organism Y" can be understood as "the effect of X that improves the chances of survival or reproduction of Y", then it remains to be seen whether the theory of evolution enables us to interpret it in exclusively mechanistic, non-teleological terms.

Analysis of function statements in terms of scientific, Darwinian propositions fail to be completely mechanistic, much less, blind. The teleological orientation remains as end-directedness remains. Substitution of a teleological proposition by a sequence of mechanistic propositions does in fact retain the necessity of being oriented towards survival. If by the naturalist's admission, evolution by natural selection is blind, then this general orientation or *telos* must be explainable in terms other than what DNS espouses. Biological nature is endowed with design.

5. DESIGN IN NATURE

Even without dismissing the advancements made by the Darwinians, a modified DA can justifiably assert that the existence of a designer or creator makes the existence of the structure of function and purpose less improbable as it is evident even in evolution. DA undercuts naturalist accounts

that regard the existence of design as highly improbable.

Given DNS, an organism's biological features can be understood in terms of their capacity to solve problems relating to survival. These features exhibit design-like properties since they must be well-adapted in order to serve their respective functions, otherwise, they simply would not have survival value.

DNS may explain that a fine working universe has a better chance of being reproduced, but ultimately it cannot explain why such a design is working so well. As the geneticist Gerard Verschuuren (2013) puts it, there's something in successful biological designs that carries them through the filter of natural selection. *Telos* or the goal-directedness must have been built into nature. DNS can only operate within a framework of design and its designer. This gives us a justification for believing in the existence and agency of a supernatural intelligence called God.

6. CONCLUSION

The teleological character of biological statements, the reliability of human cognitive faculties and the possibility of irreducibly complex organic systems undercut the Darwinian challenge to the design argument, justifies inference of design, and provides warrant for belief in intelligent designer.

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