

Paley, Hume, and the Design Argument

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I. William Paley's Argument from Design

William Paley's *Natural Theology* (1802) presents one of the classical arguments for God's existence in modern philosophy, the so-called argument from design. There are two general kinds of design arguments, global and local arguments. The former attempt to reason to God's existence from the fact of orderliness of the Universe as a whole, such as exemplified in its basic temporal regularities or the laws of nature. The latter attempt to reason to God's existence from the orderliness exemplified in living organisms, their symmetry, complexity, and being well-suited for the tasks of reproduction and survival. Paley's *Natural Theology* is a detailed account of a local design argument.

Paley begins with a scenario in which a person discovers a watch on the beach. Is it more reasonable to conclude that this watch is the product of random crashing of the waves against the shore, perhaps over long periods of time, or that it was produced by an intelligent being? In short, what best explains the existence of the watch? Paley thinks that the watch points to an intelligent designer. His second move is to forge a connection between this sort of inference and inferring God's existence from the existence of living organisms. His argument is usually read as, and was probably intended to be, as an argument from analogy. Living organisms are very much like watches, and so if we infer the existence of an intelligent designer for the one, we should do so for the other too.

Hence, we get the following sort of argument.

Watches are well suited to the tasks of measuring time.

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Therefore, watches are produced by an intelligent designer.

Living organisms are well suited to the tasks of survival and reproduction

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Therefore, Living organisms are produced by an intelligent designer.

Although Paley likely thought that living organisms were abruptly created in complex form by an act of God, this is not necessary to his theory. His basic point is that an intelligent being is responsible for the existence of living organisms, not

that the intelligent being created them all directly without the use of natural processes.

II. Hume's Critique of the Design Argument

In Hume's *Dialogues on Natural Religion* (1779), Hume presents a fictitious dialogue between three characters: Cleanthes, Philo, and Demea. Although Hume focuses primarily on the global design argument, it should be clear that his objections to the global argument can be applied to the local design argument presented by Paley. In the Dialogue, Cleanthes takes the position essentially advocated by Paley and other design advocate theists. It is usually thought that Philo represents Hume's position.

A. Cleanthes' Argument (Basic Form)

(C1) Houses are the product of intelligent design.

(C2) *It is likely (i.e., probable) that* the Universe is the product of intelligent design.

We observe houses, paintings, and machines produced by humans. We see that these things have the common features of ORDER and BEING PRODUCED BY INTELLIGENT DESIGN. It is natural to conclude that orderly things are produced by intelligence. Since the Universe is orderly, it must have also been created by an intelligence.

B. Two Objections Raised by Philo

1. The Weak Analogy Objection

Philo takes Cleanthes' argument as an argument from analogy, but he thinks that all such arguments involve the following form:

(P1) Object A has some property P.

(P2) Object A and object B are overall similar to some degree N.

(C3) Therefore, Object B has property P.

Philo thinks that (C3) is only as likely as the value assigned to "N" in (P3). If "N" is high, then (C3) is likely. If "N" is low, then (C3) is unlikely. Hence, we can conclude from <Lisa circulates her blood> that <John circulates his blood>, because Lisa and John are over all similar to a high degree. But to reason from <humans circulate their blood> to <plants circulate their blood> is not a strong argument because humans and plants are not over all similar.

Hence, Philo presents the following counter argument:

(P1*) Houses have the property of being produced by intelligent design.

(P2*) Houses and the Universe are NOT overall similar.

(C4*) Therefore, *It is unlikely that* the Universe has the property of being produced by intelligent design.

In other words, Philo thinks that the strength of Cleanthes' argument from (C1) to (C2) depends on the truth of the premise <Houses and the Universe ARE over all similar to a high degree>, but Philo clearly denies this premise.

The same argument could be constructed with reference to the local design argument found in Paley. Philo could argue that Paley's argument depends on there being a high degree of similarity between watches and living organisms. Philo could then deny this premise.

2. The Uniqueness Objection

Philo has a second argument against Cleanthes. The argument goes as follows:

(P3) If the order exemplified in some object O1 is evidence of intelligent design, then we must have had past experiences of other some other like object "O2" and past experiences of "O2 being produced by intelligent design."

(P4) We have had neither past experiences of other Universes nor experiences of any Universe being produced by intelligent design.

(C5) Therefore, the order exemplified in the Universe is not evidence of intelligent design.

"House" or "painting" is evidence for an intelligent designer only because we have in times past seen "house" and "builder" or "painting" and "artist" associated. Thus, at a later time when we see a house or a painting we can infer the existence of a builder or an artist, because they have been associated in past experiences. But we have not had experiences of other Universes, much less any experience of Universes being created by an intelligent designer, so we cannot make a similar inference in the case of the source of the Universe.

It's not clear how well this objection would work when applied to Paley's local argument. We do see other intelligent beings making other intelligent beings by the process of reproduction, but this is not the sort of thing Paley had in mind when thinking of humans as produced by an intelligent designer. He wasn't thinking of a person's parents. The closer analog would be cloning. In that case, Philo's point would lose force to the extent to which we observe intelligent

beings creating (not simply reproducing) other living organisms, especially other human persons.

3. Designer Without God

Philo presents a third argument against Cleanthes, which is also significant for assessing the force of Paley's argument. The objection is roughly as follows: At best, the design argument shows the need for a designer, it does not show that the designer must be God. Cleanthes, like Paley, thinks of God as all-knowing, all-powerful, and all-good.

But Philo objects:

by this method of reasoning you renounce all claim to infinity in any of the attributes of the Deity. For, as the cause ought only to be proportioned to the effect, and the effect, so far as it falls under cognizance, is not infinite, what pretensions have we, upon your suppositions, to ascribe that attribute to the divine being. . .

Philo goes on to raise similar difficulties with regarding the designer as perfect, since there are many imperfections in the Universe. Furthermore, what reason is there to conclude that there is a single designer? In human works (e.g., houses), we perceive multiple authors. The objection seems particularly problematic if Cleanthes (and Paley) must argue for a high degree of similarity between the analogs in view. In that case, Cleanthes (and Paley) can certainly argue for a designer, but the same logic will preclude inferring that the designer is God. The very high degree of similarity that allows infers a designer will preclude inferring that the designer is God.

III. Possible Responses to the Philo Objections

A. Regarding the B1 Objection (Weak Analogy Argument)

In that case, it is not necessary for Cleanthes' argument to be committed to the truth of an over all similarity between the Universe and objects such as houses, paintings, or machines. And similarly, Paley need not be committed to any thesis about over all similarity between watches and living organisms. Cleanthes seems to be saying that houses, paintings, and machines all have a single common feature, *Order*, and the Universe also has that feature. *The "order" Cleanthes has in mind is primarily **spatial** (the symmetry and arrangement of material objects and their properties), but also **temporal** (the physical laws that govern the interaction of material objects).* If the best explanation of the order we find exemplified in houses, etc. is that it was produced by an intelligent designer, we can likewise conclude that

the best explanation for the order we find exemplified in the Universe is an intelligent designer.

Better yet, we need not construe Cleanthes' argument (or Paley's) as requiring an analogy of any sort. Cleanthes can be construed as arguing, not necessarily by analogy, but an inference (from the observation of order in the Universe) to the best explanation (of that order), an intelligent designer. We can employ what some have referred to as the surprise principle to justify the inferences in question. According to the surprise principle, an observation O supports a particular hypothesis H1 over against another H2 just if (a) we would expect O if H1 were true and (b) we would not expect O if H2 were true. Hence, in the case of the Paley's watch, we would expect a watch to exist if we postulated a watchmaker, but if we postulated random crashing of the waves of the ocean against the shore, we would expect to find a watch. Similarly, then, mere chance would not lead us to expect complex living organisms, but an intelligent creator would. This of course depends on being able to deduce what sort of world God would create were He to create a Universe. God's goodness would lead us to expect God's bringing about good states of affairs, and order certainly seems to be a good state of affairs, both in itself and with respect to other goods (e.g., intelligent beings exercising freedom, beauty, knowledge). See Handouts 11 and 12 for more on this.

B. Regarding the B2 Objection (Uniqueness Argument)

The argument seems to rest on a false premise, namely premise (P3). That premise logically implies that we can only legitimately explain observable phenomena by appealing to things that are themselves (in principle) observable. But this would make most theories and models in contemporary science unwarranted. Atoms, electrons, photons, black holes, the physical conditions on earth prior to the evolution of organic molecules, the early states of the Universe (e.g., within the first minute of the Universe's existence) - all quite important to science - involve the postulation of unobservable entities.

The argument presupposes that because the Universe is unique, we cannot draw any inference about its origin. **(a)** But this has some quite disturbing consequences. If Philo is correct about this, we could not draw any warranted inferences about the size, age, density, and rate of expansion of the Universe (as well as its origin). Similarly, since there is only one human race, we could draw no warranted conclusions about the human race. If Philo is correct, contemporary physics and anthropology really have nothing to tell us about reality. It seems more likely that Philo has gone wrong somewhere. **(b)** More basically, the argument overlooks the fact that the uniqueness of an object is relative to description, and *every* object is unique under some description. <The house across the street from my house is the only house occupied by Lisa and Jeff

Smith across the street from Michael Sudduth's house in Burlington, VT in the year 1998>. But one could also describe the object across the street from my house simply as "a house," in which case it isn't so unique after all. Similarly, although the Universe is unique (in some respect), clearly it is made up of many individual objects that have common properties (e.g., density and mass), and we can speak of the Universe having these properties too. Like the objects within it, the Universe itself is a physical object (though more complex), and like many of its parts (e.g., galaxies and solar systems), it is a system of physical objects distributed in empty space.

C. Non-God Designer Argument

Philo is quite correct that nothing that Cleanthes (or Paley) has argued *requires* that the designer be God. But this would only preclude deducing a designer God from their premises. But as explained above, perhaps the arguments are best construed as inference to best explanation. In that case, the crucial question is whether the God-hypothesis is better supported by the evidence or observation than a non-God designer hypothesis. Is there an intelligent being, other than God, which would lead us to expect what the God hypothesis leads us to expect, and perhaps lead us to expect what the God-hypothesis does not lead us to expect. For instance, the non-God designer hypothesis might lead us to expect an imperfect Universe, whereas the God hypothesis might lead us to expect a perfect Universe. Imperfections, then, would be evidence that favors the non-God designer hypothesis over the God-hypothesis. On the other hand, would the non-God designer hypothesis leave further questions unanswered, such as what accounts for its own existence and nature?

IV. Hume, Paley, and Darwin

Paley's argument looks very vulnerable to Humean objections, such as those developed above, only to the extent to which Paley's argument is construed as an analogical argument. This opens the argument up to several serious objections. Hume can construct the following dilemma.

1. Either living organisms are very similar to a watch or living organisms are not very similar to a watch.
2. If living organisms are very similar to a watch, then they have a designer who need not be God. (Philo's Non-God Designer Argument)
3. If living organisms are not very similar to a watch, then they do not need a designer. (Philo's Weak Analogy Argument)
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4. Therefore, either living organisms do not need a designer or they need a designer who need not be God.

However, if we construe the argument as an inference to best explanation argument, then most of these worries are greatly alleviated. The crucial question then become: Is a designer God a better explanation for the existence of an orderly Universe and living organisms than either chance or some non-God designer hypothesis (or yet some other possibility)?

It would seem that one of Paley's strengths would be arguing that a designer God hypothesis is more likely than chance as an explanation of the existence of living organisms. But inference to best explanation is highly sensitive to the actual alternative hypotheses one entertains. Suppose that the rival hypothesis is not simply "chance," but Darwinian biological evolution. Evolutionary theory attempts to explain the existence of complex living organisms on the basis of random genetic mutation and natural selection. Although chance plays a role here, there are also *laws* of biology that play an important role. According to the laws of natural selection, traits that are conducive (or at least not disadvantageous) to survival and reproduction are passed on and those that are disadvantageous are not). More precisely, organisms that develop characteristics that are at least not disadvantageous for survival reproduce and survive as a species, whereas others die out. Only the strong survive (survival of the fittest). Hence, variants are thrown up by nature, and natural selection then goes to work on determining which traits or which organisms become extinct and which continue. This would lead us to expect the development of complex living organisms from more simple ones, though not necessarily all the complex organisms that actually do exist (e.g. human persons). And according to Darwin, it has an explanatory advantage over the designer God hypothesis since evolution would lead us to expect many imperfections in nature (in the competing struggle for dominance and survival), but, as Hume argued, we should not expect such imperfections if a perfect being created the Universe and the living organisms within it.

So it looks like Paley's arguments will require substantial modification to address the Darwinian challenge. Paley must find specific complexities that exist but are not expected given evolutionary theory but are expected given theism. Moreover, perhaps we should turn attention to the global design argument, for evolutionary theory is not a rival explanation to global design. In fact, the mechanism of biological evolution presupposes laws of biology, and these laws presuppose laws of chemistry, and these laws presuppose more fundamental laws of physics. What explains the fact that there is a Universe that possesses such deep and widespread order that makes possible a mechanism such as biological evolution, which in turn is responsible for the development of such a diversity of life on earth, and possibly elsewhere in the cosmos?