

## Paley's design argument<sup>1</sup>

It is common to feel wonder and amazement at the complexity and intricacy of living creatures. The way in which living things work requires a huge coordination of lots of tiny bits, each doing their specific job. The eye provides a common example. The eye is for seeing, and its parts work together to make this possible. For example, the muscles attached to the lens change its thickness so that it can focus light from different distances onto the retina. Without the lens, the muscles, and the retina, the eye wouldn't work properly. The parts serve the purpose of the whole.

The whole of life has this structure, with parts of cells working together to serve the purposes of cells, and cells working together as tissues, and tissues working together as organs, and organs working together to support the life of the organism. What we find is order, 'regularity', throughout nature. But it could have been very different - the universe could have had no order, no regularity. So what explains the order that we find?

The coordination and intricacy of interrelations between parts in living things working together for a purpose suggests that living things have been *designed*. If they are designed, then we can infer that there is a designer. Teleological or design arguments infer from the order and regularity that we see in the universe, the existence of a God that designed the universe.

In this handout, we'll look at William Paley's design argument and objections to it.

### PALEY'S ARGUMENT

In *Natural Theology*, William Paley begins his version of the design argument by comparing our responses to finding a stone lying in a field and finding a watch lying in a field. If I wondered how the stone came to be there, I might rightly think that, for all I knew, it had always been there. But if I found a watch, I wouldn't feel that the same answer is satisfactory. Why not?

Because, says Paley, the watch has parts that are organised and put together for a purpose, and without the parts being organised as they are, the purpose would not be fulfilled. This property - having parts that are organised for a purpose - is the mark of design. We therefore conclude that the watch must have been designed and made according to that design.

Suppose now that after a while the watch, on its own, produces another watch. It contains within itself all the robotic parts and tools for constructing a new watch.

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<sup>1</sup> This handout is based on material from Lacewing, M. (2017) *Philosophy for A Level: Metaphysics of God and Metaphysics of Mind* (London: Routledge), Ch. 2, pp. 78-86

The second watch has been made by the first watch. Does this explain the design of the second watch? No, says Paley. The first watch simply mechanically constructs the parts of the second watch according to a design that it follows, but it doesn't come up with that design. The design of the watch is only explained by its being designed by a designer.

Paley then argues that 'the works of nature' have the same property as the watch, namely parts organised for a purpose (he discusses the examples of the eye and the ear). He notes that living things create new living things (reproduction). But as with the watch, this doesn't explain the organisation of living things, including their ability to produce new living things. Plants don't design their seeds, and hens don't design their eggs. Rather, plants and hens simply mechanically produce seeds and eggs. Now, we rightly infer from the fact that the watch has parts organised for a purpose, that the watch is designed. Thus, Paley argues that we are right to infer from the fact that the works of nature have parts organised for a purpose, that they also have a designer.

Paley goes on to make two claims about the designer. First, to design requires a mind - consciousness and thought - because design requires that one perceives the purpose and how to organise parts to serve this purpose. So the designer is a mind. Second, the designer must be distinct from the universe, because everything in the universe bears the marks of design. To explain the design of things in the universe, we must appeal to something distinct from the universe.

So, Paley argues:

- P1. Anything that has parts organised to serve a purpose is designed.
- P2. Nature contains things which have parts that are organised to serve a purpose.
- C1. Therefore, nature contains things which are designed.
- P3. Design can only be explained in terms of a designer.
- P4. A designer must be or have a mind and be distinct from what is designed.
- C2. Therefore, nature was designed by a mind that is distinct from nature.
- C3. Therefore, such a mind ('God') exists.

## **DISCUSSION**

Paley claims that the organisation of parts for a purpose is evidence of design and that design can only be explained in terms of a designer. But are Paley's claims in (P1) and (P3) convincing?

### Paley, analogy and inferring causes

In his *Dialogues concerning Natural Religion*, David Hume objects to drawing an analogy between the universe and human artefacts. He argues that the products of human design, such as a house or a watch, are not much like nature or the universe as a whole. And the 'great disproportion' between a part of the universe and the whole universe also undermines the inference that something similar to human intelligence caused the universe. We cannot, therefore, reasonably infer that the cause of nature is anything like a human mind.

However, Paley can escape these objections, because Paley *doesn't offer an argument from analogy*. He does not argue that natural things are like watches, so their causes are like the causes of watches. He is arguing that watches have a property - the organisation of parts for a purpose - which supports the inference of a designer. Everything that has this property has this cause. Natural things have exactly this property as well and so have exactly that cause. Thus, he says 'Every observation which was made... concerning the watch, may be repeated with strict propriety . . . concerning . . . all the organized parts of the works of nature'. 'With strict propriety', not 'by analogy'. Natural things have the same property, so they too have a designer.

However, Hume challenges this argument as well. Are we right to think that *anything* that has parts organised for a purpose is designed? We can, he says, only know the cause of some effect when we have repeated experience of the effect following the cause. In the case of products of human design, we have repeated experience of a designer bringing about the arrangement of parts for a purpose. But we don't have any such experience in the case of nature. What causes the arrangement of parts for a purpose in nature? We don't know that it is a designer, since we have no experience of a designer bringing about this effect in natural things. The arrangement of parts for a purpose does not, *on its own*, show that the cause is a designer - because we can only know what causes what from experience. Without experiencing the cause as well as the effect, we don't know what brings about the effect. So we can't infer that the cause of order in nature is a designer.

However, according to Paley's argument, Hume's objections should apply just as much to our inference regarding the watch. If we found a watch in a field and had never previously experienced a watch, then if Hume were right, we cannot reasonably infer that it was designed. If we have no previous experience of watches, we don't yet know that the watch is a product of human design.

But perhaps Hume is right. If we have never experienced a watch or anything relevantly similar, then, on Hume's argument, we cannot reasonably infer that it is designed. We can only make the inference from the organisation of parts for a purpose to a designer in those cases in which we have the relevant experience. With watches, in fact, we do; but in Paley's thought experiment, we should assume that we don't. In Paley's thought experiment, we don't know anything about watches or watch-makers. We only have the experience - our very first experience - of the watch to go. In such a situation, Hume would say, then we can't infer a designer. And that is the situation we are in regarding the natural world.

Hume also notes that our concept of causation includes the concept of 'constant conjunction': whenever you have the cause, you get the effect. So to make a claim about cause and effect, we need *repeated* experience of the cause and effect occurring together in order to infer that one thing causes another. But the universe is a unique case. To make *any* inference about the cause of the universe, we would need experience of the origins of many worlds. We don't have this kind of experience, so we simply cannot know what caused the universe.

Suppose again we had never come across watches before. If Hume were correct, then if we found a watch in a field, this would be a unique case for us. And so we could not reasonably infer that it was designed.

But Paley argues, even if we had never seen a watch being made, even if we couldn't understand how it was possible, even if we couldn't tell if it could be done by a human being or not, we would still be perfectly correct to conclude, by examining the watch, that it was designed by some designer. We know enough about the causes of the organization of parts for a purpose to be able to infer, whenever we come across such organization, that it is the result of a designer. We should say exactly the same in the case of nature. Paley rejects Hume's claim that we don't know enough to infer a designer. All we need to know is the organisation of parts for a purpose. This is sufficient to infer that something is designed, and hence a designer exists. We would say this in the case of the watch, and the case of nature is no different.

#### Inference to the best explanation

Hume has a further objection. To infer a designer of nature, we need to rule out alternative explanations of the order we see in nature. For example, suppose that matter is finite but that time is infinite. Given that there are only a finite number of possible arrangements of matter, over infinite time, all the arrangements of matter - including those we experience as design - would occur. Can we show that this is not just as good an explanation as appealing to a designer?

Paley argues that we can. He considers and rejects alternative explanations. He accepts that it is possible that finite matter has taken all possible combinations of an infinite time. But, he argues, this is clearly a worse explanation than the proposal of the existence of a designer, because we have no evidence that matter constantly pushes into new forms or that all possible combinations of matter (plants, animals) have been tried in the past. (We may add that we now know that the universe began around 13.8 billion years ago, so time isn't infinite, and we know that matter doesn't organise itself randomly, but follows very particular laws of nature.) And, Paley claims, minds supply the only explanation of design we know of. Thus, the existence of a designer is the best explanation of the organisation of parts for a purpose.

#### Evolution by natural selection

However, Paley was wrong to say that the organisation of parts for a purpose can only be the effect of a mind. And if some other explanation is as good as or better than invoking the existence of a designer, then Paley's argument will fail. Neither Hume nor Paley knew or anticipated the explanation of the organisation of parts for a purpose that is now very widely accepted. Darwin's theory of evolution by natural selection provides an excellent account of how the appearance of design can come about without being the result of a designer.

Millions of alterations in the traits of living creatures randomly take place. Most disappear without a trace. But some trait that coincidentally helps a creature to survive and reproduce slowly spreads. That creature and its descendants reproduce more than others without the trait, so more and more creatures end up with it. It's not that the feature is 'selected' in order for the creature to live better and so

reproduce more. Instead, the feature simply enables the creature to reproduce more, so its descendants also have that feature and they reproduce more and so on. One very small change is followed by another. Over time, this can lead to great complexity, such as the eye. In time, creatures appear to be designed when they are in fact the product of coincidence. So we don't need to say that living things are actually designed by a designer.

This is a better explanation because it is simpler: we aren't inferring the existence of something new, but appealing only to what we already know exists.

### **THE PROBLEM OF SPATIAL DISORDER**

Paley's design argument appeals regularities of 'spatial order', in which different things, e.g. parts of an eye, exist at the same time in an ordered way, e.g. being organised to serve a purpose. However, what we are supposed to explain is the whole universe. And that contains a great deal of spatial disorder, vast areas of space in which there is no organisation of parts, no purpose. Why should we take the order to be more striking or important than the disorder when considering the cause of the universe? What reasons are there to suppose that the order outweighs the disorder?

Paley's response questions the strength of the objection. He claims that the inference from the organisation of parts for a purpose to a designer is correct even if the watch sometimes went wrong or if some of the parts don't contribute to its purpose. Likewise, evidence of some imperfections and irregularities in nature does not undermine the inference that it, too, is designed. His point is that the balance of spatial order and disorder isn't crucial. We needn't weigh one against the other to tell that the organisation of parts for a purpose must be explained in terms of a designer.