

Arguments from design

Arguments from design start from this evidence of design and infer the existence of a designer, a mind that can order things for a purpose. The most famous of these is the argument from analogy.

THE ARGUMENT FROM ANALOGY

In *Dialogues on Natural Religion, Part II*, David Hume expresses the argument like this

The curious adapting of means to ends, through all nature, resembles exactly, though it much exceeds, the productions of human contrivance; of human design, thought, wisdom, and intelligence. Since, therefore, the effects resemble each other, we are led to infer, by all the rules of analogy, that the causes also resemble; and that the Author of Nature is somewhat similar to the mind of man, though possessed of much larger faculties, proportioned to the grandeur of the work which he has executed.

Hume is saying that nature is like human inventions in the way it displays purpose (the adaptation of means to ends, e.g. the arrangement of the parts of the eye to see, of the heart to pump blood), so it must have a similar cause to human inventions, viz. a mind that intended to create such design. Similar effects have similar causes.

Objections

However, Hume argues strongly against the analogy. First, he questions its strength. A watch is a typical example of something designed and made by humans. But living creatures aren't really like watches in all sorts of ways. For example, watches aren't alive and they don't reproduce. So the 'effects' – watches, living creatures – aren't all that similar, so we can't infer a similar cause. Likewise, the universe is not at all like a watch. So again, because the effects aren't very like, we can't infer similar causes.

Second, even if the analogy between effects was better, inferring a similar cause would be dubious. Human beings are a fairly recent species living on a small planet on one of billions of galaxies. We can't reliably generalise from our very limited and finite experience to the cause of the universe as a whole. As Hume says, 'why select so minute, so weak, so bounded a principle as the reason and design of animals is found to be upon this planet' as a model for something that could set laws of nature?!

Third, there could be other explanations of apparent design. With life, this is evolution. We don't know what might explain the universe, but then, that's the situation we were in about life before Darwin developed his theory. Hume suggests the idea that if the universe is infinitely old, then over time, all possible combinations of matter will occur randomly. This suggestion isn't very good, because we know that the universe began around 13.8 billion years ago, and we know that matter doesn't organize itself randomly, but follows very particular laws of nature. But Hume's point is that if there are different explanations of the apparent design of the universe, then we can't infer that the cause is a designer.

IS THE DESIGNER GOD?

The argument from design is intended as an argument for the existence of God. However, as well as attacking the analogy, Hume also points out that even if we could infer the existence of a designer of the universe, it is an extra step to argue that the designer is God. And, because we are relying on analogy, this extra step also faces difficulties.

Let's take the analogy between human inventions and the universe further. First, we should note that, in the human case, the designer is not always also the creator. Someone who designs a car may not also build it. So we can't infer that the designer of the universe also created the universe. But God is said to be the creator of the universe; so we can't infer that the designer is God.

Second, the scale of the design reflects the powers of the designer. Watches aren't infinite, and neither are the minds that make them. But the universe isn't infinite either. So we can't infer that the designer is infinite, only that whoever designed the universe has sufficient power and intelligence to do that. But God is said to be infinite.

Third, we think that the quality of what is designed reflects the abilities of the designer. Designers need to be trained, and at first their designs will be poor and could be improved. We can argue that, if the purpose of the universe was life, this universe shows examples of poor design, e.g. volcanoes and tsunamis that wipe out life. [Margin: This idea is discussed further in *THE PROBLEM OF EVIL* (p. xxx).] Perhaps we should infer that the designer of this universe was not fully skilled, but made mistakes. But God is said not to make mistakes.

Some of Hume's points can be debated. But the overall message is clear: If we rest the argument from design completely on analogy, then the argument faces many problems. What philosophers have done since Hume is to remove the appeal to analogy.

SWINBURNE'S ARGUMENT

We can do this by using the considerations about probability. Cosmology supports the view that it is hugely improbable that the universe would have the right properties for life to evolve. But if God exists, we can explain this. So it is more probable that God exists and designed the universe for life than that the universe just randomly happened to have the right features for life. This is an inductive argument from probability for the existence of God.

The argument only works if God is the only satisfactory way that we can explain the fact that the universe allows life to evolve. In other words, we need to ask whether God is the best explanation for this fact. For example, could we not give a scientific explanation? In *The Coherence of Theism* (Ch. 8), Richard Swinburne argues not. Science can't offer any satisfactory explanation, because science can't provide us with the right sort of answer to why the universe has the laws it has or the exact quantity of matter it has. Science must assume the laws of nature in order to provide

any explanations at all. It can't say where they come from or why they are the way they are, because all scientific explanations presuppose laws.

For example, science explains why water boils when you heat it in terms of the effect on heat on the properties of molecules. It explains these effects and these properties in terms of other laws and properties, atomic and sub-atomic ones. Some further explanation of these may be possible, but again, it will suppose other laws and properties. So at root, scientific laws are 'brute' – they have no explanation unless we can find some other kind of explanation for them.

We use another type of explanation all the time, viz. 'personal explanation'. We explain the products of human activity – this book, these sentences – in terms of a person. I'm writing things I intend to write. This sort of explanation explains an object or an event in terms of a person and their purposes. The hypothesis that God exists and intended to life to evolve provides a personal explanation for why the universe is such that life can evolve.

Best explanation

However, we saw that Hume objected that even if you can show that the universe has a designer, you can't show that the designer is God, as we normally think of God? For example, this argument doesn't show that there is only one cause of the universe; nor does it show that that cause is perfect, omniscient, omnipotent, or cares about people. The argument only needs 'God' to be able to design the universe (and perhaps, put that design into effect). It doesn't say anything else about God.

Swinburne's response is to accept this objection. The argument so far is only evidence for a designer, not evidence for the traditional theistic conception of God. However, he argues, the argument is about what is the best explanation for design; and God as we usually think of him remains the best explanation.

Swinburne says an explanation is good 'when the explanatory hypothesis [in this case, the existence of God and his intention for the universe to contain life] is simple and leads us with some probability to expect the data which we would not otherwise expect.' 'Simplicity' means not invoking more different kinds of thing than you need to; and not giving them more or more complex properties than they need for the explanation to work.

Simplicity requires that we shouldn't suppose that two possible causes exist when only one will do. Supposing there is more than one cause of the universe is a worse explanation, because it is not as simple. It is also simpler to suppose that the cause of the universe is itself uncaused, or we have a problem of regress. It is also simpler to suppose that God has infinite power and intelligence, or we would have to explain why God had just the amount of power and intelligence he has (enough to create the universe, but no more), i.e. what limits God's power and intelligence.

(Swinburne adds infinite goodness to the properties of God, but we can question this – why does God need to be good in order to create the universe?)

The limits of explanation

If we explain design in terms of God, now we have to ask ‘What explains God?’ and this seems to be an even more puzzling question than ‘What explains scientific laws?’. So from not being able to explain design in the universe, we end up not being able to explain something else. This is not progress.

Swinburne responds that it is progress, and that we do something similar all the time in science. Science will introduce an entity – like sub-atomic particles – in order to explain something, e.g. explosions in a nuclear accelerator. However, these new entities now need explaining, and scientists don’t yet know how to explain them. This is absolutely normal, and has happened repeatedly throughout the history of science. It is progress, because we have explained one more thing. So we can still say that God is a good explanation for scientific laws even if we can’t explain God.

But if we will always have something we can’t explain, why invoke God? Why not just say we can’t explain scientific laws? Because scientific laws leave fewer things unexplained, and we should explain as much as we can. This is a principle of science and philosophy. If you give up on this, you give up on pursuing these forms of thought.

DOES THE UNIVERSE NEED EXPLAINING?

But do we need any explanation for why the universe appears designed? Some things that appear to be coincidence are in fact inevitable, e.g. winning the lottery: it is very unlikely that you will win, but it is inevitable that someone will win. For whoever wins, that they won is a huge coincidence; but we don’t need any special explanation for it (such as ‘someone intended them to win, and rigged the lottery’).

Suppose, then, that instead of just this universe, there are or have been millions of universes. Each had different scientific laws, and in most cases, the laws didn’t allow the universe to continue to exist – as soon as it began, it ended. Others existed, but there was no life. It was inevitable, we might think, that given all the possible variations in scientific laws, a universe such as ours would exist, and therefore so would life. It doesn’t need any special explanation – it had to happen.

But why ours? Well, it had to be ours because we wouldn’t be here if it wasn’t! Given that life does exist in it, this universe has to have the right scientific laws for life to exist. If it didn’t, life wouldn’t exist in it. There is nothing special about this universe, except that it has the right laws; just like there is nothing special about the ticket that wins the lottery. [Margin: Explain the argument that the appearance of design in the universe needs no special explanation.]

But we can object that this response assumes the existence of huge numbers of other universes, which are completely inaccessible to us, and for which we have (virtually) no other evidence. Why should we assume that? The existence of God, by contrast, Swinburne argues, is simpler (just one God, not millions of universes) and is also supported by other evidence, e.g. miracles and religious experience. So the existence of just one universe, designed by God, is a better explanation.

We can object, however, that we also have evidence against the existence of God, viz. the problem of evil. At least we don't have evidence against the existence of other universes.