

III. THE ARGUMENT FROM DESIGN

AIMS AND OBJECTIVES

You will be introduced to David Hume's presentation and discussion of a version of the argument from (or for) design in his *Dialogues Concerning Natural Religion* (DNR).

INTRODUCTION

Unlike an ontological argument, an argument from (or for) design begins with facts about the world. Unlike a cosmological argument, it begins with very specific facts about the world. And whereas in a cosmological argument the crucial notion is that of causality, in an argument for Design it is that of purpose (Le Poidevin (1996), p.44).

Kant called this type of argument 'physico-theological' (*Critique of Pure Reason* B548). About it he wrote:

This proof always deserves to be mentioned with respect. It is the oldest, the clearest, and the most accordant with the common reason of mankind. (B651)

It is certainly very close to spontaneous religious responses to the world: for example, Psalm 19:1 says 'The heavens declare the glory of God.' Although this is not itself an argument for God's existence, it easily generates arguments. Thus someone might argue from the glory of the heavens to the existence of God. Alternatively, someone might use the spontaneous occurrence of the experience expressed by the psalmist as implying God's existence. An argument of this second type is in fact used in the *Dialogues* by Cleanthes, the champion of empirical arguments for God's existence, when he says:

Consider, anatomize the eye; survey its structure and contrivance; and tell me, from your own feeling, if the idea of a contriver does not *immediately* flow in upon you with a force like that of sensation. The most obvious conclusion, surely, is in favour of design; (DNR Part III; Popkin, p.25, my emphasis)

HUME'S STATEMENT OF THE ARGUMENT

In *DNR* Part II the argument is presented by Cleanthes as a *scientific* argument: i.e. as an argument that uses only the evidence supplied by the senses, and principles of reasoning used in the natural sciences. Please read **Document 13** for his presentation of his argument:

Look around the world: contemplate the whole and every part of it: You will find it to be nothing but one great machine, subdivided into an infinite number of lesser machines, which again admit of subdivisions beyond what human senses and faculties can trace and explain. All these various machines, and even their most minute parts, are adjusted to each other with an accuracy which ravishes into admiration all men, who have ever contemplated them. The curious adapting of means to ends, throughout all nature, resembles exactly, though it much exceeds, the productions of human contrivance; of human designs, 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. By this argument a posteriori, and by this argument alone, do we prove at once the existence of a Deity, and his similarity to human mind and intelligence.

(David Hume, *Dialogues Concerning Natural Religion*, Part II; Popkin, R.H. (ed. & Intro.), David Hume: *Dialogues Concerning Natural Religion* (Indianapolis & Cambridge: Hackett Publishing Co., 19801, p.15)

This argument may be re-stated as follows:

- (1) There are sorts of things (call them artificial things) of which we know, from our experience, that they are produced by intelligent agents using that intelligence.
- (2) Everything that is not an artificial thing is a natural thing.
- (3) We take it for granted that natural things too have a cause or causes of their existence, that there exists such a cause or causes.
- (4) We observe that natural things *resemble* artificial things.
- (5) From this resemblance we infer, by virtue of the principle 'Like effects, like causes', that the cause(s) of the existence of natural things resemble the cause(s) of the existence of artificial things in that in them intelligence is at work.
- (6) Since natural things exhibit to a much higher degree 'the curious adapting of means to ends', we infer that the intelligence or mind that caused their existence, while it resembles the human mind, is much more powerful than it.
- (7) To accept the existence of such an intelligence is to accept that God, a highly intelligent Author of Nature, exists.

PHILO: CRITICISM (1)

The world and its natural contents have only the faintest resemblance to any artefact we know of. Consequently, the inference in (5) above is a mere guess or presumption (Popkin, p.16).

Reply: when one speaks of resemblance or of lack of it, one needs to specify *in what respect* there is resemblance or not. Natural things resemble artificial machines in this respect: they and their parts are so ordered, proportioned and arranged (cf. Popkin, p.16) that they serve ends. So the curious adapting of means to ends, throughout all nature, resembles exactly, though it much exceeds, the productions of human contrivance. (Popkin, p.15)

In an extended rejoinder (Popkin, pp.18-21) Philo reminds Cleanthes of the 'extreme caution' with which 'all just reasoners' extrapolate from what has been observed to happen under such-and-such conditions to what happens under other conditions. Cleanthes' own procedure is highly incautious. Observation tells us that intelligence is one weak and limited causal factor among others: are we justified in selecting it as the original cause of the whole? Even if the operations of human-like intelligence were universal and much more powerful than they are now seen to be, we would be dealing with a world 'constituted, arranged, adjusted': would we be justified in inferring that intelligence had the same power at a time when the world was advancing towards that state?

Exercise

What general conception of 'just reasoning' underlies Philo's rejoinder? Do you accept it as an account of scientific reasoning? Please read **Document 14** first:

Traditional empiricist epistemology and the traditional historiography of science are both deeply influenced by the Baconian myth that all science starts from observation and then slowly and cautiously proceeds to theories. That the facts are very different can be learned from studying the early Presocratics. Here we find bold and fascinating ideas, some of which are strange and even staggering anticipations of modern results, while many others are wide of the mark, from our modern point of view; but most of them, and the best of them, have nothing to do with observation.

..... Anaximander's theory of the suspension of the earth is still highly intuitive, but it no longer uses observational analogies. In fact it may be described as counter-

observational.

According to Anaximander's theory, 'The earth is held up by nothing, but remains stationary owing to the fact that it is equally distant from all other things. ...' ... the idea of the earth's free suspension in space, and the explanation of its stability, have no analogy whatever in the field of observable facts.

In my opinion this idea of Anaximander's is one of the boldest, most revolutionary, and most portentous ideas in the whole history of human thought.

What is important about a theory is its explanatory power, and whether it stands up to criticism and to tests. The question of its origin, of how it is arrived at - whether by an 'inductive procedure', as some say, or by an act of intuition - may be extremely interesting, especially for the biographer of the man who invented the theory, but it has little to do with its scientific status or character.

(From K.R. Popper, 'Back to the Presocratics', *Proceedings of the Aristotelian Society*, n.s. 59 (1958-9); repr. in his *Conjectures and Refutations* (London: Routledge & Kegan Paul, 3rd ed., 1969), pp. 137-8, 140)

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PHILO: CRITICISM (2)

Please read **Document 15**:

[Philo has suggested that it is just as plausible to think of the world as a vegetable as it is to think of it as a machine, an artefact.]

DEMEA: If the world had a vegetative quality and could sow the seeds of new worlds into the infinite chaos, this power would still be an additional argument for design in its author. For whence could arise so wonderful a faculty but from design? Or how can order spring from anything which perceives not that order which it bestows?

PHILO: You need only look around you, replied Philo, to satisfy yourself with regard to this question. A tree bestows order and organization on that tree which springs from it, without knowing the order: An animal in the same manner on its offspring: A bird on its nest; and instances of this kind are even more frequent in the world than those which arise from reason and contrivance. To say that all this order in animals and vegetables proceeds ultimately from design is begging the question; nor can that great point be ascertained otherwise than by proving, a priori, both that order is, from its nature, inseparably attached to thought, and that it can never of itself or from unknown principles belong to matter.

But further, Demea, this objection which you urge can never be made use of by Cleanthes, without renouncing a defence which he has already made against one of my objections. When I enquired concerning the cause of that supreme reason and intelligence into which he resolves everything, he told me [Part IV; Popkin, pp.32-3] that the impossibility of satisfying such enquiries could never be admitted as an objection to any species of philosophy. We must stop somewhere, says he; nor is it ever within the reach of human capacity to explain ultimate causes or show the last connections of any objects. It is sufficient if any steps, so far as we go, are supported by experience and observation. Now, that vegetation and generation, as well as reason, are experienced to be principles of order in nature is undeniable. If I rest my system of cosmogony on the former, preferably to the latter, it is at my choice. The matter seems entirely arbitrary. Judging by our limited and imperfect experience, generation has some privileges above reason: For we see every day the latter arise from the former,

never the former from the latter.

((David Hume, *Dialogues Concerning Natural Religion*, Part VII; Popkin, R.H. (ed. & Intro.), *David Hume: Dialogues Concerning Natural Religion* (Indianapolis & Cambridge: Hackett Publishing Co., 1980), pp.46-7)

Exercise

Do you think that there is some explanatory advantage in making intelligence, rather than one of the other candidates, the foundation of one's cosmogonic system? Or do you think that the choice of intelligence is *a priori*?

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Some of these issues will be discussed below, in the sections on Kant and Flew. See also Swinburne (1968).

PHILO: CRITICISM (3)

Cleanthes' line of argument, stressing as it does the analogies between human and divine agency, gives no reason, according to Philo, for asserting that God is infinite, perfect, unique and incorporeal. Taken seriously, the God-man analogy leads more readily towards ancient anthropomorphic polytheism: towards the existence of finite, imperfect, numerous and embodied gods and goddesses (*DNR* Part V; Popkin, pp.34-8).

Swinburne (1968) has responded to Philo's argument that Cleanthes ought to be 'a perfect anthropomorphite.' Please read **Document 16**:

The argument from design is, as we have seen, an argument from analogy. All analogies break down somewhere; otherwise they would not be analogies. In saying that the relation of A to B is analogous to a relation of A* to a postulated B*, we do not claim that B* is in all respects like B, but only in such respects as to account for the existence of the relation and also in other respects except in so far as we have contrary evidence. For the activity of a god to account for the regularities," he must be free, rational, and very powerful. But it is not necessary that he, like men, should only be able to act on a limited part of the universe, a body, and by acting on that control the rest of the universe. And there is good reason to suppose that the god does not operate in this way. For, if his direct control was confined to a part of the universe, scientific laws outside his control must operate to ensure that his actions have effects in the rest of the universe. Hence the postulation of the existence of the god would not explain the operations of those laws: yet to explain the operation of all scientific laws was the point of postulating the existence of the god. The hypothesis that the god is not embodied thus explains more and explains more coherently than the hypothesis that he is embodied. Hume's objection would, however, have weight against an argument from regularities of co-presence which did not appeal to the operation of regularities of succession. For one could suppose an embodied god just as well as a disembodied god to have made the animal kingdom and then left it alone, as a man makes a machine, or, like a landscape gardener, to have laid out the galactic clusters.

(R. Swinburne, 'The Argument from Design', *Philosophy* 43 (1968). Repr. in B. Davies (ed.), *The Philosophy of Religion: a Guide and Anthology* (Oxford University Press, 2000). This extract in Davies (ed.), p. 283)

Exercises

- (1) Can Swinburne avoid being driven to the conclusion that the material universe is God's body?
- (2) Considered as a scientific hypothesis, does the hypothesis of an incorporeal god cohere well with the scientific outlook?

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PHILO: CRITICISM (4)

In Parts X and XI of the *DNR* Philo argues that, for anyone trying to base religious belief on empirical data, the existence of natural evil is strong evidence against the existence of a perfectly good, omniscient and omnipotent God. He allows that, if God is *already* known to be of that nature, it is possible to reconcile his existence with that of evil—although he gives no hint of how this might be done.

These issues will be discussed in the section dealing with the problem of evil.

SWINBURNE: THE VALUE OF THE GOD-HYPOTHESIS

In **Document 14** we saw a contrast drawn between, on the one hand, a mythical Baconian (and Humean) science, in which laws of nature are formed by induction from repeated observations, and on the other hand a science whose 'laws of nature' are hypotheses formed, often without any basis in previous experience, in order to explain the greatest possible variety of phenomena—the science of sound generalization *versus* the science of comprehensive explanation. The approach in Swinburne (1968) is of the second kind.

Swinburne's intention is not to supply his own argument from design, but to describe the general form of a hypothesis that would be immune to Hume's criticisms, and to explain why it would be valuable to have such a hypothesis.

Swinburne concedes that *regularities of co-presence* can be explained without introducing divine agency. For example, the human eye is an example of spatial order, and the theory of evolution has told us how such order can be produced by processes involving random variations and the differential effects they have on the ability of species to reproduce successfully. But explanations of how spatial order emerges from chaos, or of how complex spatial order emerges from simple spatial order, all presuppose the existence of *regularities of succession*. S's point is now that these regularities require explanation.

Some of them are explicable in terms of more fundamental regularities of succession. But appeals to more fundamental regularities cannot go on forever: we will arrive at the most fundamental regularities. Swinburne's point is now that we either say, 'This is just how things are', or we try to explain why they are thus in terms of the activity of a rational agent—who would have to be incorporeal, see **Document 16**. But what would be gained if such an explanation were accepted?

Swinburne offers two gains:

- all explanations would be ultimately of the same type. As things are, we explain events either in terms of rational agency or in terms of regularities of succession, and these two types of explanation are quite separate;
- it would explain resemblances between regularities of succession known to have been produced by human rational agency, and the fundamental regularities of succession—assuming that science discovered such resemblances.

Exercises

- (1) What kind of explanatory power would the statement ‘The fundamental regularities of succession are as they are because God willed it’ have?
- (2) Does the apparent indifference to human interests of natural processes rule out the hypothesis that they are the will of God?

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KANT

It’s a feature of Swinburne’s approach that he is willing to accept that everything that happens in the natural world happens in accordance with the fundamental laws of nature. But this willingness runs contrary to a feature of some traditional approaches¹: that there is something about the actual operations of nature that cannot be explained solely in terms of nature’s own laws. This point is brought out clearly by Kant in his presentation of what he calls the ‘physico-theological’ argument:

This purposive order is *quite alien* to the things of the world, & belongs to them only contingently; that is to say, the diverse things could not *of themselves* have cooperated, by so great a combination of diverse means, to the fulfilment of determinate final purposes, had they not been chosen and designed for those purposes by an ordering rational principle in conformity with underlying ideas.
(*Critique of Pure Reason*, B653. Italics added.)

This argument does not rely on any alleged *similarity* between natural things and artefacts. It claims that this purposive order could not have been produced if its constituents and their properties had been the sole determinants of change.

The argument can be expressed thus, in outline:

- (1) We observe that there is purposive order in the world.
- (2) This order cannot be accounted for unless we suppose that the ‘things of the world’ were chosen and designed by an active rational principle.
- (3) Therefore, those constituents were chosen and designed by God.

A similar argument is found in Thomas Aquinas’s *Summa Contra Gentiles* I.42, which includes the following:

The arrangement of diverse things cannot be dictated by their own private and divergent natures; *of themselves* they are diverse and exhibit no tendency to form a pattern. (Italics added.)

In opposition to this, Hume makes Philo say:

For aught we can know *a priori*, matter may contain the source or spring of order originally within itself, as well as mind does; and there is no more difficulty in conceiving that the several elements, from an internal unknown cause, may fall into the most exquisite arrangement, than to conceive that their ideas, in the great universal mind, from a like internal unknown cause, fall into that arrangement.
(*DNR Part II*; Popkin, pp.17-18)

However, it has been argued on *a priori* grounds that the actual behaviour of matter cannot constitute a reason for postulating divine agency.

FLEW'S OBJECTION

An argument of the type sketched by Kant involves the claim that the basic behaviour of matter is impressed upon it rather than being due to its inherent properties. Flew (1966), pp.70-2, argues that such a claim cannot be empirically grounded. For in order to have reason to say that this behaviour is *impressed* on matter, one would have to be able to contrast its *actual* behaviour (which actually generates various forms of order) with its *inherent* behaviour. But 'inherent behaviour', if it is to be non-arbitrarily applicable, must mean its behaviour under universal conditions (i.e., conditions that hold everywhere). Now its behaviour under those conditions is actually such as to generate the sorts of order that we find in the universe. So we must say that the inherent behaviour of matter is adequate to explain order.

Flew has been answered in Kenny (1969), pp.116-7. How did Newton discover that the inherent behaviour of matter is to continue in its state of rest or uniform motion in a straight line, unless external forces are impressed upon it? For he could never have observed matter free from external forces, since gravitational forces of varying strengths operate throughout the universe. The answer is that Newton observed the difference that varying the external forces made to an object's motion, and extrapolated from that to the limit condition of total freedom from external forces. This allows Kenny to say that the inherent behaviour of matter is the way it behaves under any conditions in which it exists, rather than the way it behaves under actual universal conditions. Of course, Kenny's point has a very limited scope. It only establishes against Flew the *possibility* of discovering that matter's inherent behaviour (in Kenny's sense) is not enough to account for the regularities that actually exist.

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¹ But not that criticized by Hume, which reasons from similarity of effects to similarity of causes. The argument discussed by Kant does not need similarities between artificial and natural products.