

And then all this loyal Ipecacuanha in the paragraphs of litterary drudges!

O Pittites! insects of the moonshine! race of vileness! You have made me contemn the Land I came to adore.

Always, a dull petty *Person* for the servile idolatry of this grand Mob, instead of a noble eternal *Principle*.

They wanted a king: Well, there is one in the person of so noble a Prince. They wanted a *king*: not a lame Regent, not an abracadabrous phantom. He stood before them: the Law was plain: how simple! But what is simplicity of reason and plainness of public Law — for a cunning Juggler, and a people that can be a juggler's mock?

He paid his vile suspicious compliments of Parricide and High treason to the Prince. But what is more striking: he told through his Plan and Conduct the majestic People of England these very words: "It is clear, that you are all in your hearts *Felons*, that you wait only for a moment of Perjury, Perfidy, Regicide; that in the instant of the Prince's accession, you will laugh at your Oath and Honesty, trample your Laws and abandon the sacred king, doubly sacred in his utmost need of human kindness. It is clear, that you are the last, the most contemptible of mankind: Therefore you shall have a Mad-reign". Said and done. They heard, and blushed dully and adored.

What followed — the divisions, the noble indignation of the Irish, the fire kindled in every worthy man's breast — the dreadfull prospect of domestic wars — proves now that Salomon is right: *the Lord is the guardian of fools*.

Now all is an oriental mystery, and a theocratic wonder, and one man looks at the other and cannot distinguish Sun from Moon; and every foreigner feels the shame of the noble Britton; and all Europe smiles at the grand *Equivoque*.

O glorious England! dost thou deserve a smile of disdain, or still a tear of pity?



## DAVID HUME AND THE VOICE FROM HEAVEN

**Rope Kojonen**

### *Introduction*

David Hume's *Dialogues Concerning Natural Religion* (1779) is one of the best books ever written on natural theology (the attempt to provide some publicly available evidence in support of belief in God). The *Dialogues'* great merit is that it is written as a dialogue between a natural theologian, a mystical theologian and a skeptic, and attempts to do justice to all three positions. The same three parties are also present in modern-day debates. Some defend belief in a theistic God using arguments, others try to make room for a deeper and more mystical theology, and some are just skeptics about the existence of God. There are well-informed and intelligent people on both sides of the modern debate.

Recent decades have seen many serious defenses of natural theology. Modern natural theology is defended by Christian philosophers such as William Lane Craig, Robin Collins, J.P. Moreland and Richard Swinburne, though there are also Christian philosophers critical of natural theology (e.g. Alvin Plantinga). A controversial defense of natural theology has also been provided by the "Intelligent Design" movement, which argues that some properties of nature are best explained by reference to the action of some intelligent agent, and criticizes Darwinian evolutionary theory. Mod-

ern natural theologians have not accepted the *Dialogues* as the final word on the subject, and they formulate their arguments explicitly to avoid Hume's objections to the argument. To continue to be relevant, Humean arguments must be reformulated and new criticisms have to be developed.

In this paper, I will focus on an important, but seldom discussed aspect of natural theology: thought experiments. Hume's *Dialogues* contains one such thought experiment by Cleanthes, as well as a response from Demea and Philo. I will quote the example below, but for now I will paraphrase its idea: If all men simultaneously heard a voice from heaven teach wise things, would it not be reasonable to believe that it has an intelligent, personal cause, in spite of philosophical ideas which purport to make this impossible? And does this show the reasonability of design arguments? Hume discusses this question, and thus his *Dialogues* forms a good starting point for developing criticisms of modern thought experiments in support of design arguments.

In my paper, I discuss five thought experiments. These are Cleanthes' voice from heaven, William Dembski's incredible talking Pulsar, the movie *Contact*, Michael Behe's "survivor" and John Leslie's God in the particles. My modern examples thus come mostly from the Intelligent Design movement, with John Leslie as the notable exception. I also discuss the nature and logical structure of such thought experiments, and the conclusions we can make from them.

### *The Design Argument*

To understand the arguments of this paper, some knowledge of design arguments is necessary. Even after Hume, many people continue to feel that the beauty, rational orderliness and the useful arrangements of the universe reveal the existence, power and wisdom of its Creator. Design arguments based on the universe's

properties aim to be empirical arguments to give evidence of the existence of a wise creator or at least an intelligent designer with very great capabilities. Whereas metaphysical proofs of the existence of God often begin with the question “why is there something rather than nothing”, design arguments begin with the question “why is that which exists the way it is?”

Modern design arguments can be broadly divided into two categories. First, there are cosmic design arguments based on the overall rationality of the cosmos and the fine-tuning of natural constants benefiting life. These arguments are defended by a broad variety of theistic thinkers and are generally thought to be compatible with mainstream scientific views. Secondly, there are biological design arguments based on the apparently purposeful order of biological organisms. The Intelligent Design movement (ID) is an example of a controversial defense of design arguments, because of its criticism of evolutionary theory and its intrusion into the realm of naturalistic science.

The design argument is understood in the *Dialogues* to work by analogy. Cleanthes argues as follows: “*The curious adapting of means to ends, throughout 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.*” (*Dialogues*, part I) In the modern discussion, the understanding of the design argument as an analogy has been questioned. For example, the design argument can also be formulated as an inference to the best explanation. Because of this many of Hume’s criticisms do not apply directly to modern design arguments. This is not the subject of this paper, however (see Ratzsch 2010 for more discussion).

Cleanthes’ thought experiment comes after several criticisms of this argument by Philo (*Dialogues*, part II). First, for Philo, repeated observation is the only reliable way to demonstrate the

connection of cause and effect. Because we have not observed the generation of several universes, we cannot make general claims about what is required to make one. Secondly, Philo argues that there is a profound dissimilarity between human works of art and the cosmos, rendering analogical design arguments unsound.

### *The Voice From Heaven*

In response to Philo's criticism, Cleanthes presents thought experiments, starting with the following:

Suppose, therefore, that an articulate voice were heard in the clouds, much louder and more melodious than any which human art could ever reach; suppose that this voice were extended in the same instant over all nations and spoke to each nation in its own language and dialect; suppose that the words delivered not only contain a just sense and meaning, but convey some instruction altogether worthy of a benevolent Being superior to mankind — could you possibly hesitate a moment concerning the cause of this voice, and must you not instantly ascribe it to some design or purpose? Yet I cannot see but all the same objections (if they merit that appellation) which lie against the system of theism may also be produced against this inference (Dialogues, part III).

Cleanthes argues that Philo's objections could also be used against this inference. We could argue that we have no example of any previous event like this, and therefore an inductive inference won't work. We would need to observe several such voices caused by divine beings before being able to make the inference. An analogical inference could be criticized because of the many dissimilarities between human voices and the divine voice. No human voice could be so powerful, and no human so virtuous and wise. The vocal chords required to produce such a voice would be difficult to imagine, and so on. Cleanthes argues that such objections are intuitively absurd, and this reveals the emptiness of Philo's

scepticism: “*You see clearly your own objections in these cavils; and I hope too, you see clearly that they cannot possibly have more force in one case than in the other.*”

Cleanthes’ thought experiment is an attempt to test the cogency of Philo’s sceptical arguments by applying them to a new case. It is a *reductio ad absurdum* where Cleanthes is trying to show the falsity of Philo’s premises by extending them to their logical (but intuitively absurd) conclusion. His argument is that either Philo’s sceptical arguments also work against the evidence in the thought experiment, or they do not work at all. So Philo should either reject the intuitive conclusion of design in the case of the voice of heaven, or also accept it in the biological world. For Cleanthes, the design argument works both in the case of the voice and of the cosmos.

Thought experiments such as the “voice from heaven” are vehicles to explore our concepts and their relations by supposing some counterfactual situation. They are quite common in science and philosophy. Thought experiments have been used by scientists like Galileo Galilei (1564–1642) and Albert Einstein (1879–1955) to great effect, showing the incoherence of rival theories. Famous thought experiments include the “brain in a vat”, arguing the possibility that our perceptions are just illusions, “monkeys and typewriters”, arguing that chance can generate order given infinite resources, and Searle’s “Chinese room”, designed to show that computers do not think or understand. Thought experiments are varied, and their simple classification is difficult. Some thought experiments assume only the logical possibility of their example, while others assume situations that could realistically occur in our known universe.

The significance of thought experiments is disputed. Some argue that thought experiments are unreliable guides to philosophical and scientific truths because of their counterfactual nature. However, the majority opinion seems to side with the thought experi-

menters. As long as the background assumptions of thought experiments are not too bizarre, they serve well to test our concepts. Thought experiments provide a test of the adequacy of our models, concepts and intuitions. In both philosophical and scientific discourse, our intuitions and models built to support them are important. (For some varying opinions of thought experiments, see Häggvist 1996, Sorensen 1992 and Wilkes 1988)

### *Other Thought Experiments*

I now move on to analyze modern thought experiments, beginning with the Intelligent Design movement. In his article "*On the very possibility of the design argument*" ID theorist William Dembski formulates a thought experiment on the "Incredible Talking Pulsar". His purpose is to show that the detection of supernatural design is in principle possible, and thus the exclusion of design from consideration of possible explanations is not rational. Suppose that a pulsar star some billions of light years away emits regular radio magnetic signals, which are found to be a message in Morse code. As the worldwide scientific community studies the signal, the pulsar identifies itself as "*the mouthpiece of Yahweh, the God of both Old and New Testaments, the Creator of the universe, the final Judge of humankind.*" To confirm this claim, the pulsar agrees to answer any questions we might put to it. Soon, through the messages, medical doctors learn how to cure AIDS, archaeologists find lost civilizations, physicists find their unifying theory of the forces of nature, and mathematicians obtain proofs for problems which are impossible to solve without infinite computational resources. Dembski argues that this would be clear evidence of divine design.

Dembski himself acknowledges the outlandishness of his example: Probably no theologian would expect God to reveal himself in this way. Thus the example is for Dembski a mere logical possi-

bility, not something that would realistically happen. However, for him the example demonstrates that “*Design has at least the possibility of becoming perfectly evident.*” This then opens up the possibility of considering whether we have at least some evidence of design in our universe. Dembski goes on to argue that design can also be the best explanation for some pattern of nature even if the evidence is not quite as strong as in his example. He uses the thought experiment to simply to open us to consider evidence several further questions: “*Q1. Have any events that would constrain us to postulate design actually occurred, and if so, what are they? Q2. How subtle can the evidence for design be and still constrain us to postulate design? In particular, what methods of inquiry would enable us reliably to detect these more subtle instances of design? Q3. Why isn’t the evidence for design as obvious as it might be?*” (Dembski 1994)

The ID movement also uses less outlandish examples from science fiction and from human life. Dembski, Behe and Meyer have all referenced SETI pioneer Carl Sagan’s science fiction book *Contact* (1985, also as a movie in 1997) as an example of how we might detect the existence of nonhuman intelligence. In *Contact*, a signal from space is found to contain a long series of prime numbers and the blueprints for a vast machine. The signal is understood to be a message from an alien civilization. The ID’ers argue that this conclusion would be the only reasonable one, and it would be foolish to insist that we search for a materialistic, non-personal explanation for the message. This is thought to show how nonhuman design can in principle be detected. The ID theorists go on to argue that just the same type of order is also found in nature, for example in the genetic information of organisms, and that this provides evidence that life is intelligently designed: the existence of its features can only be explained if we suppose the operation of a mind (e.g. Meyer 2009, similarly Dembski 2005, 30).



Thought experiments are also used outside the Intelligent Design movement. In his influential book *Universes* (1986), philosopher John Leslie also uses thought experiments to show that many objections to the design argument are unreasonable. For example, it has been argued that we cannot have evidence of design, because (1) this is the only universe we have observed, (2) it is unreasonable to seek for an explanation for the properties of the laws of nature, since the laws are themselves the fundamental reality, and (3) there is nothing mysterious about the fact that natural laws allow for life, because otherwise we couldn't be here.

Responding to these arguments, Leslie formulates his thought experiment: "*the question-begging would be obvious were electron microscopes to reveal that particles regularly formed long chains which spelled out 'GOD CREATED THE UNIVERSE', this then being shown to result inevitably from basic physics*" (Leslie 1986, 109). If it is valid to claim that we cannot have evidence of divine design because this is the only universe, then surely the pattern "GOD CREATED THE UNIVERSE" as a result of natural laws also would be evidence of design. Likewise, if seeking to explain the basic laws of nature is unreasonable, then wouldn't it be unreasonable even if the basic laws created the pattern? Furthermore, of course we could not observe the pattern if it did not exist, but this does not yet provide an explanation for the pattern. Leslie argues that the order of the cosmos we observe is also reasonable to explain by reference to the action of a deity, even if the evidence for divine design is not as obvious as in the example.

### *Structure of the Argument*

Though there are differences in the above thought experiments, it seems that all of them have roughly the following logical form:

1. Model X says that we cannot have evidence of design unless condition Y.

2. In hypothetical situation Z, we have evidence of design, even though condition Y is not fulfilled.
3. Therefore, model X is faulty and not a trustworthy guide to evaluating design arguments.

Thought experiments thus act as evidence against any model of design detection which does not make sense of the situations imagined. For example, suppose that model X argues that we cannot have evidence of supernatural design unless we already have previous evidence of the existence of this same supernatural intelligent being. The “voice from heaven” and other thought experiments seem to show that this model is false: we can at least imagine situations where we would have evidence of supernatural design even without fulfilling the condition of prior evidence. Thought experiments also act as defenses of the premise that if something functions as evidence of design in the context of human artifactuality, then it can function as evidence of design even outside of this context.

What are we to think of this argument? Though I will soon develop some criticisms, I would argue that these thought experiments actually works against some common criticisms of natural theology. For example, consider the objection that design cannot be a good explanation for the order of the universe, because only natural and reductionistic explanations are good explanations (e.g. Dawkins 2006, chapter 4). Would this be a reasonable answer to the situations in the analogies? Faced with a voice from heaven and “MADE BY YHWH” marks on all particles, would we still insist that only a reductionistic and non-purposeful explanation is good enough, and that there is no explanatory value to the idea that there is a mind is needed to create such a voice? I do not think so. Yet if we should always prefer reductionistic and materialistic explanations over ones involving purposes and minds, then this would also make it irrational to accept design in these hypothetical situations. This seems to count against these defenses of material-

ism. (Of course, Dawkins' arguments are of course also otherwise problematic, as has been shown by numerous critiques.)

### *Criticism of the Argument*

Now it could still be, even given the thought experiments, that evidence for divine design or using design to increase our understanding of the world is conceptually impossible. This can be true if the concept of divine design is itself somehow contradictory. Then perhaps the thought experiments themselves are confused. Some thinkers in the modern debate on theism and atheism have argued in this way. Some even argue that even the concept of human design is incoherent: in reality, consciousness is an illusion. However, such views are rather extreme and not accepted as reasonable by the majority commenters.

Though the ID theorists and other defenders of the design argument often use thought experiments, they are more rarely commented on by the naturalistic critics of these arguments. Robert Pennock's analysis of Dembski's *"Incredible Talking Pulsar"* and the analysis of Del Ratzsch's bulldozer in space provided by Mark Perakh and Matt Young provide two exceptions. Pennock argues that Dembski's example is misleading because of the difference between the Talking Pulsar and the biological evidence: *"in each case we infer an intelligent signaller not because these are cases of complex specified information in a generic sense, but because the pattern of information matches a previously known pattern that we associate with intelligence"* (Pennock 1999, 254).

Mark Perakh and Matt Young similarly argue that Ratzsch's example of an alien bulldozer, recognizable as designed despite our lack of knowledge about the designer, is misleading. After all, the bulldozer can still be recognized as a bulldozer, leading to much knowledge about the designer's characteristics and purposes. It also has signs of artifactuality. Organisms, on the other hand, do not

have such a clear purpose for their designer, and have the capability of undergoing evolution. Thus differences between the thought experiments and the evidence we actually have is crucial for the critics: “*We know nothing whatsoever about the alleged disembodied designer of the intelligent design theory or about what that designer’s creations should look like. The case is therefore very different from bulldozers and poems. A reference to such a designer lacks explanatory power* (Perakh & Young 2006, 194–195).

It seems to me that in these responses to thought experiments, critics of the design argument make some important concessions to defenders of the design argument. The critics affirm here that “*a previously known pattern*” which we associate with intelligence can be evidence of design even outside the context of human activity. Thus the in principle possibility of evidence for design is admitted, and many objections to design arguments have to be waived. However, because thought experiments are hypothetical, they do not themselves provide evidence of design, but only test our concepts. This leaves open a number of criticisms of the design argument, such as the idea that there is a crucial difference between our situation and the thought experiments.

I will now sketch some more durable Humean criticisms of these thought experiments. I do not argue that these criticisms are unanswerable. However, to me they are still the best criticisms of these thought experiments. First, the order of nature is different from the cases in these analogies, and the evidence for design thus isn’t as strong as in the thought experiments. In the Dialogues, Philo argues that the order of the cosmos is not like human artefacts, but can also be compared to other types of order, such as that of vegetables which seem to grow by themselves. Philo argues that the differences make it possible to argue that even if there is an analogy to the human mind in the cause, this analogy is at best very distant.

I would supplant this line of argument using Del Ratzsch's in-depth analysis of design arguments. Ratzsch differentiates between several markers of intelligent design used in the human context. The strongest kind is "mind affinity". For example, on reading a literary work, the structure appears so clearly rational to the human mind that we feel like we can almost get in touch with the author's mind. The idea that there is a designer is forced on us in a way that does not depend on our prior knowledge that humans produce books. Many of the situations in the thought experiments, such as the voice from heaven, are examples of mind affinity. But Ratzsch also defines other types of evidence which we use to detect design in the human context, such as "mind correlativity", a weaker sort of commonality with our mind. The order of the universe does indeed appear rational to us, and science depends on this supposition, but the rationality is not the rationality of a message. Ratzsch argues that this order does give evidence of design even outside the human context: if some property is evidence of design in the human context, then it will be evidence for design even outside the context of known human activity. However, his distinction could also be used to argue, as Hume does, the difference between the order of the cosmos and the thought experiments (Ratzsch 2001).

The second line of Humean criticism I would develop is the religious criticism of natural theology. In the *Dialogues*, both Demea and Philo argue that the design argument can only show the existence of some powerful and wise intelligent creator, but that this is still far for the God of Christian theism, for Demea the "greatest possible being" (*Dialogues*, part IV). Philo also uses the problem of natural evil to argue the same point. The design argument is arguably a sort of "problem of natural good" for the atheist: if there is no God, why is the order of nature so rational? Philo uses the problem of natural evil to argue that the order of nature is actually not that good, and that the hypothesis of a good creator does not make sense. At most we might say that the Creator is of an un-

known nature, having only a distant analogy to the human mind (*Dialogues*, part X).

Design arguments require an account which leaves room for a realistic description of God as a designer, though acknowledging that God is much more (such as the ground of being). While Hume's particular criticisms can be contested, the general line of argument is nevertheless sound. I would supplant this line of argument with some broader theological arguments. For example, it can be argued that the rationality of religious communities and beliefs is based on quite broad grounds, not just the arguments of natural theology, which many deeply religious people are even unaware of (see e.g. Vainio 2010). When emphasizing the need for evidence for belief, there is the danger of scientism: the idea that this evidence must be scientific in nature. Scientism would negate the power of everyday and religious experience and the role of religious communities and authorities in forming religious beliefs, which would be devastating for traditional Christianity (Stenmark 2001). And if God is thought of primarily as a designer, then it is easily missed that the doctrine of creation is not about physics so much as about the dependence of all things on their Creator (Cunningham 2010).

### *Conclusion*

In conclusion, David Hume's *Dialogues Concerning Natural Religion* continues to be relevant for the current discussion on natural theology and design arguments. Thought experiments such as the voice from heaven represent just one class of arguments that are still being repeated today. They function to test our models of how we could have evidence of both human and divine design. I have argued that the thought experiments do provide evidence against some models of how we detect design, namely those models which rule out the possibility of evidence for design a priori.

For example, the argument that we cannot seek explanations for the universe's basic laws or that we cannot have evidence of design, since we have only observed one universe, seem faulty.

However, in the *Dialogues*, the thought experiments do not mark the end of the discussion in the favour of the natural theologian. Rather, Hume shows us how to develop a more enduring critique of these thought experiments and design arguments. These are based on the following premises: (1) the order of nature is different from the cases in these analogies, and the evidence for design thus isn't as strong as in the thought experiments, and (2) religious belief in God, in any case, requires more than the design argument. These counterarguments aim more at limiting the power of design arguments and opening up the possibility for scepticism rather than a proof against the very possibility of design arguments. Thus they make it possible to formulate a response which takes the thought experiments into account.

Defenders of the design argument, on the other hand, need to argue the broader theological and religious case, as well (as is indeed done in e.g. Craig & Moreland 2010). If they present a problem of natural good for atheists, this can be balanced with a discussion of the problem of natural evil. Thought experiments can be expanded into a full-fledged defense of the logic of design arguments, and design arguments need to be linked to the wider discussion on theism and religion. All of these issues are discussed in Hume's *Dialogues*, and thus the work continues to be important for the modern discussion of design arguments.

### *Literature*

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