

The Enduring Appeal of Natural Theological Arguments

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Abstract

Natural theology is the branch of theology and philosophy that attempts to gain knowledge of God through non-revealed sources. In a narrower sense, natural theology is the discipline that presents rational arguments for the existence of God. Given that these arguments rarely directly persuade those who are not convinced by their conclusions, why do they enjoy an enduring appeal? This article examines two reasons for the continuing popularity of natural theological arguments: (i) they appeal to intuitions that humans robustly hold and that emerge early in cognitive development; (ii) they serve an argumentative function by presenting particular religious views as live options. I conclude with observations on the role of natural theology in contemporary analytic philosophy of religion.

1. Introduction: *The Project of Natural Theology*

Natural theology is a branch of theology and philosophy that examines the existence and attributes of God – or in polytheistic traditions, the gods – through experience and reason. It is often contrasted with revealed theology, which depends for its sources on special revelation through scripture and religious experience. In this broad sense, natural theology consists of a diverse array of intellectual endeavors, including the formulation of arguments for or against the existence of God, such as the cosmological, design, moral, and ontological arguments, the examination of divine attributes, such as omniscience, omnipotence, and perfect goodness, and outlining a theology of nature, which does not set out to infer the existence of God, but rather, aims to understand and interpret the natural world under the assumption of God's existence. These projects are actively pursued in contemporary philosophy of religion and theology. This paper will focus on natural theology in the narrow sense of formulating arguments.

Natural theological arguments appear in monotheistic traditions, including Islam, Judaism, and Christianity, and in polytheistic traditions like those of India and classical antiquity. Since the 17th century, atheists and agnostics have also engaged with them, e.g., in work on the problem of evil. Natural theological arguments have been the target of incessant philosophical, scientific, and theological scrutiny. Philosophers like Hume and Kant have castigated natural theologians for extrapolating their common experience (e.g., artifacts and everyday causes) to the metaphysical realm (e.g., divine design and causation). Others have worried that natural theology is a fundamentally wrong-headed enterprise: faith does not require evidence, natural theology denies the revelation of God in Christ, and sinfulness has marred our capacity to know God, so we can never learn anything about him through reason (see Sudduth for an overview). Nevertheless, natural theology remains alive and well. It has 'a persistent habit of returning, even when its death notice has been extensively and repeatedly published' (McGrath 18).

This paper will examine why natural theology has a tendency of returning, in spite of repeated attacks on its legitimacy, with a focus on its popularity today. Reviewing the work of cognitive scientists and philosophers of religion who have investigated this question,

I explore two reasons for the enduring appeal of natural theological arguments, using the teleological argument as a starting point. First, these arguments resonate with stable intuitions that humans cross-culturally hold. Second, they are eminently well suited to argue for the truth of claims of revealed religion within a climate of intellectual diversity, where these claims have to compete with other metaphysical points of view (including those of other religions and naturalism). I argue that natural theological arguments are successful if they can contribute to a climate where specific religious views can be regarded as reasonable options. Considering the role of natural theological arguments today, I show that natural theological arguments are successful in this sense, which may explain their appeal in contemporary analytic philosophy of religion.

2. The Teleological Argument across Cultures

The teleological argument (also known as the argument from design) is among the best-developed arguments for the existence of God. It first appears in classical and Hindu sources. In Europe, it experienced a period of flourishing from the 17th century onward. Paley's *Natural Theology*, which contains the famous watch analogy, was written toward the end of this period and can be regarded as a revival and updating of natural theology (Burbridge). Today, it finds new expression in, among others, the fine-tuning argument.

In most of its formulations, the teleological argument builds on an implicit or explicit analogy between created artifacts and the natural world. It observes that features of our environment exhibit orderliness and goal-directedness. Such features include the anatomy of plants and animals, the predictable motions of celestial bodies, and the fine-tuning of cosmological constants and laws of physics. Two possible explanations for orderliness and teleology are put forward: a mindless chance process or design by an intelligent creator. Proponents then proceed to argue that the appearance of goal-directed complexity is far better explained by design than by mindless chance, as in our everyday experience teleology is not a product of chance but of deliberate design. Given that design entails a designer, the argument thus establishes the existence of God or gods responsible for creation.

In western theology, the teleological argument can be traced to ancient Greek philosophy. The earliest western design argument is formulated by Socrates, recorded in Xenophon's *Memorabilia* (book 1, 4, 55–63; book 4, 3, 299–309). To Socrates, there are two possible explanations for how living things are brought into being: design and chance. Living things often exhibit teleology, products of chance do not. Therefore, that which produced living beings did so by design. The design argument reappears with Stoic philosophers like Cicero and Sophists like Dio Chrysostom. Cicero dismisses the atomistic idea that chance collisions of atoms formed the material world:

He who believes this may as well believe that if a great quantity of the 21 letters [...] were thrown upon the ground, they would fall into such order as to legibly form the *Annales* of Ennius. I doubt whether fortune could make a single verse of them. How, therefore, can these people assert that the world was made by the fortuitous concourse of atoms (Cicero, book 2, §37S)?

Like classical antiquity, India harbored a variety of philosophies. Nontheistic schools proliferated, including materialism, atomism, some forms of Buddhism, and Sāṃkhya, an evolutionist doctrine. These views threatened a developing creationist form of Hinduism, according to which Brahman is the personal creator of the world (Brown, *Hindu perspectives*, chapters 2–4). Reacting to these heterodox ideas, philosophers like Śaṅkara (8th century) and Udayana (10th century) developed natural theological arguments.

Consider that in ordinary life no non-intelligent entity is observed to produce modifications suitable for satisfying the purposes of some particular person, by itself, without being superintended by an intelligent agent. In ordinary life what we do see is that houses, palaces, couches, seats, pleasure-gardens, and the like, which are useful for obtaining pleasure and avoiding pain at appropriate times, are constructed (*racitā*) by intelligent craftsmen. In like manner, observe that this entire universe, externally consisting of the earth and other elements, is suitable for experiencing the fruits of various acts. [...] Since even the most competent craftsmen cannot comprehend (the world's construction), how could the non-intelligent Material Nature (*pradhāna*) devise (*racayet*) it? In the case of such things as a lump of earth or a stone, no (power of contrivance) is seen, but the design (*racanā*) of special forms out of such things as clay is seen when they are superintended by potters and the like. In the same way, Material Nature (transforms itself) only when connected with a superintending, external intelligence. [...] Therefore, since the design of the world is otherwise inexplicable (*racanā-anupapatti*), its cause is not to be inferred as non-intelligent (Śaṅkara qtd in Brown, *Hindu perspectives* 108).

This design argument shows many of the classic features of later arguments, such as Paley's watch analogy: in our ordinary experience, design and purpose do not come about by chance, so it is unlikely that they do so in the marvelous construction of the world at large.

In early modern Europe, the teleological argument gained popularity in the 17th century (see McGrath for an overview). In the 17th–18th century, the emergence of the natural sciences led to a thorough reconsideration of the project of natural theology. Since it is concerned with empirical observation and reason, its methodology overlaps to some extent with that of the natural sciences. It became clear that the sciences contradict scripture, for instance, in the calculation of the age of the earth, its cosmology (heliocentric versus geocentric), and in its model of the origin of species. These scientific challenges to scriptural accuracy, together with biblical criticism, put revealed theology under pressure.

In this intellectual climate, natural theology became an attractive enterprise. Unlike other forms of theology, it could be conducted independently from scriptural sources and from ecclesiastical authority. But there were also positive reasons for its popularity in the early modern world, particularly the emerging mechanistic worldview, which made analogies between divine and human handiwork obvious to draw. In England, natural theology flourished between the end of the 17th century and the middle of the 18th century. Many natural theologians were also natural philosophers (what we would now call scientists), such as Robert Boyle and John Ray. In the Netherlands, too, natural philosophers like Bernard Nieuwentijt and Antonie van Leeuwenhoek offered explicit arguments from design (see Thomson for an overview).

Their design arguments have several recurrent features. First, they appeal to the audience's intuitions about ordinary objects, in particular artifacts, as designed for a purpose. Second, they juxtapose design (theism) and chance (nontheism) as competing explanations for teleology and propose that the former is superior. These two features are key to understanding the appeal of natural theological arguments; they concur with stable intuitions and are formulated in the context of intellectual diversity about ultimate reality.

3. *The Cognitive Appeal of Natural Theological Arguments*

A plausible explanation for the enduring popularity and cross-cultural recurrence of natural theological arguments is that they resonate with our basic intuitions about design and agency. Research in the cognitive science of religion indicates that humans have evolved cognitive dispositions that make the acquisition of religious beliefs easy. For the design argument, it turns out that teleological explanations are easier for humans to grasp than non-teleological explanations (see Kelemen for review). Young children intuitively assume that natural

objects like clouds and rocks are ‘for’ specific purposes, e.g., they believe that clouds are for raining or that lions are ‘to go in the zoo’. Indeed, when they are presented with a choice between teleological and physical, non-teleological explanations, they prefer the former, e.g., when provided with two types of explanations for why rocks are pointy, preschoolers are more likely to choose ‘so that animals can scratch on them when they get itchy’ (a purposive explanation) than ‘bits of stuff piled up for a long period of time’ (a non-purposive account). As a result of schooling, children become less prone to endorse teleological explanations as they get older, e.g., preschoolers still believe mountains are there so we can climb them, while teenagers appeal to tectonic processes.

Yet several lines of evidence suggest that humans continue to find teleological explanations appealing. For instance, atheists spontaneously appeal to teleology to explain important life events, such as why they failed an important exam: ‘So that I could see that even if I failed a course, my life wouldn’t actually end’ (Heywood and Bering). When asked to judge the correctness of explanations, adults are more likely to accept incorrect teleological accounts (e.g., ‘Germs mutate to become drug resistant’) than other wrong explanations, a tendency that has even been demonstrated in physical scientists from top departments (Kelemen et al.). Taken together, this evidence indicates that we are intuitively geared toward teleological explanations. This teleological stance helps us to understand features of animals and plants and also of designed artifacts. It can be suppressed by education, but it is never completely eradicated.

Kelemen argues that this intuitive teleology forms the foundation of what she terms ‘intuitive theism’: our tendency to see purpose everywhere leads us to assume the existence of purposive agents that have designed the world in accordance with their intentions. This would account for the observation that children until the age of about ten, even from atheist households, favor creationist over non-creationist accounts (E.M. Evans). Interestingly, Cleanthes in Hume’s *Dialogues Concerning Natural Religion* also argues that teleology and order are things that we spontaneously discern in nature, and that it is therefore straightforward to infer a designer: ‘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’ (dialog III).

However, recognizing teleology does not inevitably lead one to postulate a designer. There is an additional premise, made explicit in design arguments, namely, that teleology and complexity in the natural world are best explained by a designer. This builds on a reflective belief in the existence of God. Natural propensities, like our tendency to favor teleological explanations, at best make us receptive to religious belief but do not inevitably lead to the postulation of an invisible creator (De Cruz and De Smedt). After all, if intuitive teleology spontaneously resulted in intuitive theism, arguments from design would be redundant. In sum, the argument from design builds on intuitions about teleology but incorporates explicit premises that link the perception of teleology to an intelligent designer. The next section reviews hypotheses on the cultural factors that favor the development of natural theological argumentation.

4. Cultural Factors that Promote the Development of Natural Theology

One standard view on the function of natural theological arguments is what Moser has termed *intellectualism*; they help individual critical thinkers decide whether or not God exists. The assumption is that by going from premises to conclusions, either deductively or inductively, an individual reasoner can form a considered opinion about God’s existence. Another view (reviewed by Faust) proposes a more social dimension of natural theology; it holds that natural theological arguments are formulated with the aim of rationally persuading others to accept a particular religious outlook. However, both views are implausible. Few people become

religious believers or atheists because they are swayed by natural theological arguments. Social circumstances, such as the beliefs of one's peers and parents, are far more important determining factors of religious affiliation than persuasion through reasoning and argument. Stark, in his sociological analysis of Mormonism, the Unification Church, and early Christianity, states that 'conversion is not about seeking or embracing an ideology; it is about bringing one's religious behavior into alignment with that of one's friends and family members' (16–17). Although rational argumentation can play a role in the conversion process, it is rarely the main motivator.

If natural theological arguments only have a limited role in persuading others, why do people continue to formulate them? Faust appeals to natural theology as faith seeking understanding. It can be useful for justification and elucidation. Arguments can help justify belief, because they can provide those who already believe on the basis of faith or weak evidence with additional reasons for believing. They elucidate by prompting one to make inferential connections between propositions or to draw out conclusions implicit in premises. Evidence for this double function of justification and elucidation can be found in writings of natural theologians, for instance:

But I yearn to understand some measure of your truth, which my heart believes and loves. For I do not seek to understand in order to believe, but I believe in order to understand. For I believe even this: that unless I believe, I shall not understand (Anselm 93).

Although natural theological arguments serve these auxiliary goals, it seems implausible that they would not have any argumentative function. For one thing, these arguments do not seem to be addressed exclusively to likeminded readers who are only in need of elucidation or justification. As Draper and Nichols observe, the writings of natural theologians are sometimes colored by antagonistic, even militaristic, language. Unbelievers are called 'fools' (e.g., Anselm, following Psalm 14), Plantinga terms his modal ontological argument 'victorious,' Trakakis denounces theodicies (i.e., arguments for why an omnipotent and loving God would allow suffering) as not only misguided but as 'morally scandalous' (29). The fact that atheists and theists frequently debate with each other on the merits of natural theological arguments (e.g., the exchange between Craig and Grünbaum on the *kalām* cosmological argument) is not in agreement with a purely explicative role of natural theology either but also suggests an argumentative function.

Sedley notes that although authors like Aristotle wrote abundantly on teleology in nature, formal arguments from design remained relatively rare throughout ancient philosophy. When they do appear, as with Socrates, they engage explicitly with alternative worldviews like atomism. Atomism was a materialistic natural philosophy, developed by Leucippus and Democritus and later Lucretius, according to which the world and all its features are composed of small indivisible building blocks (atoms) and void. According to atomism, the world appears to be designed, but its features are really the product of chance collisions of atoms. This generated a variety of life forms, most of them unviable, but some of them were viable. Organisms today are descendants of these fortuitous encounters. Atomism became a nontheistic contender to creationism, so much so that theists felt compelled to provide rational arguments for theism:

By [Socrates'] day the creative power of accident had, thanks to its advocacy by atomists, emerged as an explanatory model aspiring to compete with intelligent causation. This would almost certainly be why Socrates became the first to *argue* for the creationist option against the rival materialist hypotheses (Sedley 82–83, emphasis in original).

Śaṅkara's design argument too is formulated with nontheists and thinkers from other religious persuasions in mind, especially those of the (Indian) atomist, Buddhist, and Sāṃkhya schools. It proposes that the design of the world is best explained by the existence of a supreme creator. Tellingly, though Śaṅkara believed that reasoning was subordinate to scripture as a source of knowledge, he resorted to natural theology, since his nontheistic opponents rejected scripture (Brown 'Design argument').

The early modern period also saw the rise of naturalistic explanations for apparent design, such as Buffon's 'internal moulds', which organized the organic particles that make up any individual creature; this would explain why progeny resembles its ancestors. By the time William Paley wrote *Natural theology*, his work already reflects an ongoing debate on the viability of the natural theological project. Paley was keenly aware of alternative naturalistic explanations of teleology in nature (like Buffon's) but found them less compelling than the hypothesis of a designing mind. Ultimately, he believed that even if these proposed naturalistic mechanisms and propensities are genuine, they still require a designer for their explanation. Thus, intelligent design is put forward as a better explanation than these naturalistic accounts (Gliboff).

Natural theological argumentation was not only directed at nontheists but also at theists with opinions that deviate from the authors'. For instance, the critique of the *al-falāsifa* (philosophers) by al-Ghazālī (ca. 1058–1111) was directed at Muslim philosophers who incorporated Greek philosophical concepts, such as the eternity of the world and the importance of rational proofs, into their worldview. Al-Ghazālī aimed to show that their claims were incoherent (the eternity of the world cannot rationally be proven), in this way, defeating them with their own weapons. However, his motivation for attacking the *al-falāsifa* was that their views were not in line with Muslim (Sunni) orthodoxy. Indeed, in the preface of *Incoherence of the philosophers*, he condemns these authors in strong terms and argues that they deserve to be killed for their deviance from orthodoxy (Griffel).

This suggests that natural theological argumentation is dependent on the presence of alternative (theistic and nontheistic) worldviews. In a culture where religious beliefs are relatively homogeneous and where there are no intellectual contenders to the dominant religious or non-religious views, there is no motivation to formulate natural theological arguments. Thus, one can predict that natural theology especially flourishes in contexts where there are several competing metaphysical positions.

5. *The Role of Natural Theology in Contemporary Philosophy of Religion*

In academia, naturalism is the default metaphysical position, e.g., only 7% of National Academy of Science members are theists (Larson and Witham). Nonetheless, theism enjoys renewed attention as a reasonable and defensible worldview in contemporary analytic philosophy. While the range of subjects that are currently being explored by philosophers of religion is very broad, natural theological arguments for and against the existence of God take a prominent position. They are published in a range of specialist journals (e.g., *Faith and Philosophy*, *International Journal for Philosophy of Religion*, *Religious Studies*, and the newly founded *Journal of Analytic Theology*), monographs (e.g., Swinburne), and edited volumes (e.g., Craig and Moreland, Re Manning).

To explain why this renaissance of philosophy of religion occurred in the second half of the 20th century, several authors (e.g., Wolterstorff) have pointed to the decline of logical positivism. Many analytic philosophers, under the influence of logical positivism (and its verification principle), believed that propositions about God and other religious matters were not just false, but meaningless. Reasoned arguments for the existence of God had no place in this

way of doing philosophy. However, once logical positivism and its verificationist criterion of meaning were abandoned, analytic philosophers could once again turn to philosophy of religion and revisit natural theological arguments that were previously regarded as unviable (e.g., Swinburne's cumulative case for the existence of God). About this growing influence of philosophy of religion, Craig and Moreland write 'The face of Anglo-American philosophy has been transformed as a result. Theism is on the rise; atheism is on the decline. Atheism, although perhaps still the dominant viewpoint at the American university, is a philosophy in retreat' (ix).

This triumphalist picture should be supplemented with some cautionary notes. For instance, there are only about 14.6% theists in philosophy, whereas the percentage in those who do philosophy of religion is about 70–75% depending on seniority (e.g., graduate students and faculty members¹). One could see this as a vindication of the power of natural theological arguments but also as a high degree of partisanship and conflict of interest in philosophy of religion (Draper and Nichols), or as an indication that atheists are less interested than theists in philosophical argumentation about religion, even though they can no longer dismiss it out of hand as meaningless. Attacks on the intellectual respectability of philosophy of religion, including its use of rational argumentation, are not uncommon (e.g., Levine, Trakakis, and more informally, on philosophy of religion blogs²). One could speculate that such attacks are a backlash against the increasing success of philosophy of religion, both in academia and in the wider intellectual arena. Smith remarks that contemporary philosophy of religion has advanced to such an extent that naturalists who are not at home in this field are either unaware of the natural theological arguments that are now being proposed, or are unable to adequately respond to them.

Natural theology in contemporary analytic theology is increasingly used for proselytism and apologetic purposes, for instance in Craig's reasonable faith ministry, which helps laypeople to use rational argumentation, 'to state and defend Christian truth claims with greater effectiveness'.³ Like the historical Greco-Roman and Hindu philosophers, contemporary theistic philosophers of religion defend theism as a rational option and contribute to a climate where theism (in particular, Christianity) can be regarded as intellectually respectable. They have sometimes voiced this concern explicitly:

In the contemporary Western intellectual world, a naturalistic worldview is often taken for granted, or expressly affirmed as the only respectable "scientific" view of reality [...] Regardless of upbringing, people may be influenced by intellectuals, such as Daniel Dennett or Richard Dawkins or Sam Harris who argue—or at least loudly assert—that belief in God no longer makes sense or is not rational any more. In such an intellectual climate, some people simply fail to take religious beliefs in any form seriously, whether those beliefs be thin or abstract, or rich and concrete. In such a world, natural theology may have real value. For, if it is successful, and there are rational grounds for belief in God, atheism as a kind of "default position" can no longer be taken for granted (C.S. Evans 10).

Natural theological arguments appeal to intuitions that are not peculiar to those of particular religious traditions, but, as we have seen, that are widely available to everyone. Going from those intuitions to an argument for the existence of God still requires substantial assumptions. While it remains to be seen whether theism is really on the rise in philosophy, its position in the intellectual playing field has improved. Without the ready availability of philosophical weapons of mass destruction⁴ such as the verification principle, there are no shortcuts to intellectual victory available to the atheist. Natural theological arguments need to be carefully examined for their merits and weaknesses.

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Short Biography

Helen De Cruz is a British Academy postdoctoral fellow at the University of Oxford. Her research interests include philosophy of cognitive science and philosophy of religion. Overall, her research is concerned with the question of how embodied, cognitively limited human beings can acquire knowledge, especially in domains that seem far removed from common-sense experience, such as mathematics and theology. She holds PhD degrees in art studies and archeology (2007) and philosophy (2011). She has published on the philosophy of cognitive science, philosophy of archeology, and philosophy of religion in journals such as *Philosophical Studies*, *Biology and Philosophy*, *Philosophical Psychology*, and *International Journal for Philosophy of Religion*. With Johan De Smedt, she has a forthcoming monograph on the cognitive origins of intuitions that underlie natural theological arguments, under contract with MIT Press.

Notes

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¹ http://www.academia.edu/1438058/Results_of_my_survey_on_natural_theological_arguments and http://philpapers.org/surveys/results.pl?affil=Target+faculty&areas0=22&areas_max=1&grain=coarse

² http://prosblogion.ektopos.com/2010/09/06/atheist_burnout/

³ mission statement, <http://www.reasonablefaith.org>

⁴ I thank Charles Pigden for providing me with this wonderful phrase.

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