

Does God Exist? Part I: Darwin and God

1. Paley's inference

Paley considers the example of finding a watch upon the ground while crossing a heath:

“The inference, we think, is inevitable, that the watch must have had a maker: that there must have existed, at some time, and at some place or other, an artificer or artificers who formed it for the purpose which we find it actually to answer; who comprehended its construction, and designed its use.” (Paley 1802, p. 3)

The evidence for this inference is the apparent unity of purpose of the parts of the watch. In short:

Premise 1: The watch displays *apparent unity of purpose*.

Premise 2: The best explanation for this apparent unity of purpose is a designer who designed the watch for that purpose.

Conclusion: There exists a designer who designed the watch for that purpose.

This is an *inference to the best explanation* (Lipton 2004). The explanation is *self-evidencing*: the phenomenon to be explained is sufficient evidence (Paley argues) for the truth of the explanation. Paley argues that the same inference can be made in the case of an eye:

Premise 1: The eye displays *apparent unity of purpose*.

Premise 2: The best explanation for this apparent unity of purpose is a designer who designed the eye for that purpose.

Conclusion: There exists a designer who designed the eye for that purpose.

2. Darwin's response

Paley assumed that the only process capable of creating apparent unity of purpose was intentional design. However, we now know that there is another such process: *natural selection* (Darwin 1859). Natural selection is the differential reproduction of organisms due to differences in their heritable characteristics. Over time, traits that promote the *fitness* of an organism—its propensity to survive and reproduce—tend to spread through populations.

Over longer timescales, small improvements accumulate and complex adaptations are gradually assembled. Because the criterion for improvement (fitness) is the same for all parts of the organism, these adaptations display apparent unity of purpose. In this sense, natural selection is a “blind watchmaker” (Dawkins 1986). This challenges Premise 2 of Paley's argument. Darwin directly responds to Paley (though not by name) in Chapter 6 of the *Origin of Species* (pp. 188-9 of the 1st edition).

Paley's argument is refuted only if natural selection provides a *better explanation* for the origin of the eye than intentional design. Does it?

A rather unconvincing answer: Yes, because an explanation that cites *natural* causes is always better than an explanation that cites *supernatural* causes.

A better answer: Yes, because an explanation that cites causes such that their *existence and competence to produce the phenomenon of interest can be supported by independent evidence* is always better than one that cites causes of unknown existence or competence (the *vera causa* principle).

3. Natural selection as “universal acid”

Evolutionary biology is *logically compatible* with the existence of God (Sober 2014). However, one can distinguish modest and radical ways in which evolutionary biology still threatens to undermine the justification for religious belief:

- *Modest way*: Evolutionary biology undermines what was previously the strongest argument for the existence of God, namely the argument from design.
- *Radical way*: Evolutionary biology provides *debunking explanations* of religious belief, showing religious belief to have originated in natural processes rather than supernatural revelation.

Dennett (1995): Darwin's "dangerous" idea "eats through just about every traditional concept, and leaves in its wake a revolutionized world-view, with most of the old landmarks still recognizable, but transformed in fundamental ways" (see also Dennett 2006).

The structure of an *evolutionary debunking argument* (Wilkins and Griffiths 2013):

Causal premise: *S*'s belief that *p* is explained by process *X*.

Epistemic premise: *X* is an *off-track* process (i.e. it is insensitive to the truth or falsity of *p*).

Conclusion: *S*'s belief in *p* is unjustified.

Evolutionary accounts of religion, although very speculative, have the potential to fill in the details of "process *X*" in the debunking argument. For example, David Sloan Wilson (2002) argues that religions are products of *cultural group selection* that evolved because of their benefits for group cohesion. But these benefits for group cohesion in no way depend on religious beliefs being *true*.

4. Darwin's agnosticism

Darwin in later life described himself as an *agnostic* (a term that had recently been coined by T. H. Huxley). Darwin held that an attitude of uncertainty, doubt and humility is appropriate with respect to religious questions, and that direct confrontation of religion is ineffective and misguided.

"I may state that my judgment often fluctuates. Moreover whether a man deserves to be called a theist depends on the definition of the term: which is much too large a subject for a note. In my most extreme fluctuations I have never been an atheist in the sense of denying the existence of a God.— I think that generally (& more and more so as I grow older) but not always, that an agnostic would be the most correct description of my state of mind." Darwin, letter to John Fordyce, 1879.

Primary reading:

Paley, William. 1802. *Natural Theology*. Chapters 1-6 (focus especially on Chapters 1-3).

Darwin, Charles R. 1859. *On the Origin of Species*, Chapter 6, Section on "Organs of Extreme Perfection".

Further reading:

Browne, Janet. 2006. *Darwin's Origin of Species: A Biography*.

Darwin Correspondence Project. What did Darwin believe?

<https://www.darwinproject.ac.uk/commentary/religion/what-did-darwin-believe>

Lamb, Trevor D. 2011. Evolution of the eye. *Scientific American* 305(1):64-69, July 2011.

Sober, Elliott. 2014. Evolutionary theory, causal completeness, and theism: the case of 'guided' mutation. In R. Paul Thompson and Denis Walsh (eds), *Evolutionary Biology: Conceptual, Ethical and Religious Issues*, Ch. 2, pp. 31-44.

Wilkins, John S. and Paul E. Griffiths. 2013. Evolutionary debunking arguments in three domains: fact, value, and religion. In Gregory Dawes and James W. Maclaurin (eds), *A New Science of Religion*, Ch. 8, pp. 133-146.

Other references (further further reading):

Dawkins, Richard. 1986. *The Blind Watchmaker*.

Dennett, Daniel C. 1995. *Darwin's Dangerous Idea: Evolution and the Meanings of Life*.

Dennett, Daniel C. 2006. *Breaking the Spell: Religion as a Natural Phenomenon*.

Lipton, Peter. 2004. *Inference to the Best Explanation*, 2nd edition.

Wilson, David Sloan. 2002. *Darwin's Cathedral: Evolution, Religion, and the Nature of Society*.