

At the Notre Dame conference [Darwin in the 21st century](#), [Paul Griffiths](#) gave an interesting [talk](#) on evolutionary debunking arguments for religion. Evolutionary debunking arguments basically say that religious beliefs are unjustified because they are a byproduct of evolved cognitive predispositions. Daniel Dennett's [Breaking the Spell: Religion as a Natural Phenomenon](#) summarizes this position very aptly: If religion is natural, i.e. if religious beliefs can be explained as a byproduct of everyday cognitive capacities, we need not invoke supernatural entities to explain these beliefs.

[Guy Kahane](#) (in his forthcoming paper 'Evolutionary debunking arguments' in [Noûs](#) - draft available [here](#)) argues that evolutionary debunking arguments come in the following general form: Causal premise: belief is the result of evolved psychological predispositions Epistemic premise: There is no connection between the truth value of our evolved beliefs and their fitness functions (natural selection is not a truth-tracking process). Conclusion: Therefore, religious beliefs are unjustified. Take as an example the tendency of people to think themselves on average smarter, kinder, more attractive, more sophisticated, etc. than others.

This belief is not properly causally connected to these people actually having such desirable traits, but rather arises from an adaptive bias to value oneself more than others, which very sensible in evolutionary terms but for obvious reasons cannot be true for everyone.

Turning to religious beliefs, there is an emerging consensus that agency detection plays a role in the formation of our religious beliefs. Humans have evolved cognitive tools to detect agency, or attribute agency as the cause of certain events (e.g., sounds, motions) It makes good evolutionary sense for the agency detection device to err on the side of safety, as false positives (detecting agency where there is none) are less costly than false negatives (failing to detect agency, e.g. of a predator). This is why a sudden noise in the night gets easily interpreted as a burglar, or why a boulder in a forest can be mistaken for a bear. According to Guthrie (1993, [Faces in the Clouds: A New Theory of Religion](#), religion is the result of an overactivity of this evolved capacity to detect agency. Agency detection is not the only evolved cognitive tool that gives rise to religious beliefs, to name but one other candidate, the evolved human capacity to attribute purpose and design to some objects (what [Deborah Kelemen](#) terms 'intuitive theism').

To simplify matters, let's assume that agency detection is indeed responsible for a substantial part of religious beliefs that humans entertain. Putting this line of reasoning in the evolutionary debunking argument as formulated above, we get the following: Religious beliefs are the result of a hyperactive agency detecting device (HADD). There is no connection between the truth value of the HADD and its fitness function since it is adaptive for HADD to yield many false positives Therefore, religious beliefs are unjustified. Theists like [Michael Murray](#) have responded to this that the evolutionary debunking would be effective only if the context in which our evolved cognitive capacities give rise to incorrect beliefs would be known. After all, our agency detection is usually on the right track: if I observe a dog running towards me at great speed, a bird flying in the sky, the sound of a cyclist trying to overtake me, I successfully detected agency. In the case of religious agency, it is not clear on what basis we are saying that the agency detection was false. On what grounds do we say that people with religious experience are off-track, except on the basis that the experiences are religious?

A more disturbing problem with evolutionary debunking arguments is that they seem to lead to a radical form of skepticism about evaluative beliefs in general. Take scientific concepts, which are clearly products of the evolved minds of human beings (scientists). Cognitive scientists such as [Peter Carruthers](#) argue that evolved forms of deductive reasoning and inductive inference underlie our capacity for scientific reasoning, and that such capacities have been shaped by our hunter-gatherer past (e.g., tracking prey requires hypothesis-testing similar to that of scientists). Might we not be tempted to regard scientific beliefs as unjustified? Of course one might respond by saying that scientific concepts have been honed by cumulative cultural evolution, but similarly, most religious ideas are honed by a long cultural evolution.

If evolutionary debunking arguments are successful for religion, I do not see how they would be any

different for any form of belief (take also common sense beliefs, such as that I have hands, or that other people have minds). Theists often take the fact that scientific beliefs can be debunked in the same way as religious beliefs as evidence that debunking arguments simply don't work. However, if they do work, they lead to skepticism about any kind of belief.

A possible way to salvage common sense or science against this more global debunking argument (as Kahane calls it), would be to argue against premise 2 - the idea is then that natural selection usually is a truth-tracking process. Griffiths thinks that we can successfully challenge premise 2 for scientific and common sense beliefs, but not for religious beliefs. However, K.J. Clark and [Justin Barrett](#) (in their forthcoming paper 'Reformed Epistemology and the Cognitive Science of Religion' to appear in Faith and Philosophy), inspired by the common-sense philosopher [Thomas Reid](#), argue that there is no reason why religious beliefs should be particularly suspect: beliefs produced by our cognitive faculties are innocent until proven guilty, not vice versa.

Consequently, God-beliefs should not be treated as suspect unless we have good additional reasons to believe them to be suspect (e.g., the problem of evil). In any case, it seems that either evolutionary debunking arguments would undermine the credibility of all beliefs formed through an interaction of human mind and brain, or that they do not challenge any of our beliefs.