

## Religion: Accident or Design?

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Creationists often charge evolution with being a product of materialist philosophy rather than genuine science. Materialists, the story goes, need an account of origins, and since they refuse to consider special creation as an option, they have to believe that some kind of evolution took place.

There is some—very little, but some—truth to this charge. After all, materialism has taken its inspiration primarily from physics among the sciences. Modern materialism often goes under the name of physicalism (Melnyk 2003). And before Darwin, extending physical explanations to living things looked very difficult. Functional complexity appeared to call for a designing intelligence beyond mere physics. So if materialism was to become more credible, it needed to account for the kind of complexity exhibited by life. Something like evolution had to be correct. Indeed, skeptical and materialist impulses contributed to the development of evolutionary ideas, and nineteenth century materialists warmly embraced Darwin's theory (e.g., Büchner 1884).

Physicalists today claim that everything that we know exists is physically realized. Alternatively, they say that everything in our world can be captured by explanations combining chance and necessity—rules and randomness, the two ingredients of every physical theory (Edis 2002, 2004; Monod 1971). Darwinian evolution, a perfect example of a theory combining chance and necessity, has become central to modern materialism, not just as a non-magical explanation of the history of life, but as a key to adaptive complexity in general. Biologists, rather than physicists, solved the problem of how to create information from the bottom-up, within a physical world. And today, Darwinian ideas are becoming more central to the modern sciences of the mind, beyond just biology (Dennett 1995).

Physicalists deny spiritual realities over and above the material world. And since the overwhelming majority of humans have religious beliefs, modern materialism attracts plenty of opposition. Darwinian evolution continues to generate public controversy, though alternatives such as “intelligent design” have made few inroads into academic life. Some philosophers attack physicalism concerning minds, though researchers in disciplines such as cognitive neuroscience think that a broadly physicalist approach is most

promising. Dualism is not just a part of folk psychology; it has also put down deep intellectual roots. But in the academy, defenses of a spiritual realm more usually rally around religious experience. Especially in the United States, the view from religious studies is often anti-scientific, in some cases holding that religion is *sui generis*, that religious experiences and traditions can only be understood from within, on their own terms (Wiebe 1999).

So modern materialists face a situation roughly similar to that in the early days of evolutionary thought. The question of why humans have a strong tendency toward spiritual beliefs has always been pressing, particularly for those inclined to think that these beliefs are in error. But today, with academic defenses of the supernatural revolving around postmodern fideism, affirmations of spiritual experience, and similar efforts to protect religion from critical investigation, the search for scientific explanations of religiosity becomes even more important. Materialists think that religion must be accounted for within the natural world, as a combination of historical accidents, social forces, and the way human brains have been shaped by evolution. So the present research program to explain the basis of supernatural convictions within cognitive neuroscience—to construct a sophisticated, well-tested psychology of religion—looks promising. Materialists will be inclined to think that even if the details need a lot of work, something like this has to be right.

A project of explaining religion scientifically need not be intrinsically hostile to supernatural belief (Rue 2005). After all, one likely outcome of such a project is an understanding that religiosity is a deeply ingrained part of human nature. If evolutionary explanations that conceive of religion as an adaptation (e.g., Wilson 2002) prevail, the view that supernatural convictions have vital social functions would be strengthened. If, as is perhaps more likely, religion arose as an evolutionary byproduct, it could still be very difficult to see what else could do the jobs religions have come to perform in human societies (Atran 2002). Even coming to understand spiritual beliefs as an artifact of the way human brains work need not threaten belief. After all, just as religious liberals portray evolution as the divine way of creating, they can assert that God designed human brains so as to make various experiences of spiritual realities available to all. Indeed, such liberal theological interpretations of science will be useful protective coloration for a scientific community that does not like to be associated too strongly with religious nonbelief (Edis 2006).

Nevertheless, the attempt to explain religion within science is, by and large, an impious, materialist project. For most devout people, statements such as “I believe because I respond to the Holy Spirit” account for their

conviction; it is only when such a view seems inadequate that outsiders ask for a different explanation. To the extent that explanations that do not grant reality to supernatural agents are successful, they tend to replace religious explanations. Even liberal views that the gods must have designed our brains just so we are religious begin to look more like after-the-fact excuses than statements that do genuine explanatory work.

Now, materialists, and just about anyone interested in extending the natural scientific picture of the world into the realm of culture and experience, have reason to be optimistic about current efforts to explain religion—even beyond their expectation that some such approach should work. Today, we can do more than speculate about how religion might be due to our consciousness of death, or brush off supernatural beliefs as relics of a prescientific mode of explanation, or talk about a spirit realm as a comforting but nontestable idea. Today's ideas are more sophisticated, and they make substantial contact with biology, experimental psychology, and anthropology. Researchers speak of religion as anthropomorphism (Guthrie 1993), relate "theories of mind" to conceptions of supernatural agents, argue that dualism is innate and a part of folk psychology, show how minimally category-violating (counterintuitive) notions tend to be memorable (Boyer 2001), or connect supernatural concepts to innate expectations about predator-prey relationships (Atran 2002). They draw on results from the cognitive science laboratory, and also use interesting theoretical frameworks such as evolutionary psychology and modular conceptions of minds. They extend cognitive science-based explanations of belief in supernatural agents to illuminate sophisticated theological enterprises (Pyysiäinen 2004), and provide a unified framework that can further our understanding of world religions, ancestor cults, and paranormal preoccupations alike.

In other words, current work on explaining religion appears to be making real progress. Hence it attracts attention. Indeed, anyone interested in debates over supernatural realities must take present research into account in order to refine how we understand the very concept of a supernatural agent.

In these conditions of increased interest, it is useful to look at views of religion that contrast with the current scientific direction. Explanations, after all, are also defined by what they exclude, what they deny. A materialist-leaning perspective is best contrasted with a sophisticated supernaturalist point of view. Liberal theological responses, however, will not help here, since many theologians have become too deferential to modern science. Instead of staking out a substantive supernaturalist position, they tend to argue that a suitably reinterpreted religious conviction is not entirely excluded by science. While anti-reductionist perspectives within religious studies tend to

support realities transcending nature, they rely too much on philosophical roadblocks in the way of scientific investigation. These are hardly persuasive when a scientific approach is making progress.

In that case, the example of creationist opposition to evolution might be useful once again. Today, especially in the United States, the intelligent design (ID) movement vigorously opposes Darwinian, naturalistic evolution. Much of ID presents a transparently propagandistic misrepresentation of mainstream science. But some of it is worth taking seriously. After all, ID proponents emphasize the question of the origin of *information*, and claim that the information embodied in complex systems cannot be assembled by mindless mechanisms alone. They state that intelligent agency is a third option in scientific explanations, one that is not reducible to chance and necessity. Such themes appear not just in the anti-Darwinian polemics associated with the ID movement, but even in more liberal views that have no quarrel with common descent (Dembski & Ruse 2004). A full reply to ID, then, requires an answer to the question of information. It requires reasons to believe that the physicalist option of relying on chance and necessity alone is sufficient to account for complex information. As it happens, there are excellent reasons to think so. These reasons come not just from biology, but also disciplines such as physics and theoretical computer science (Young & Edis 2004); indeed, it is becoming increasingly clear that intelligence itself can and must be built out of chance and necessity (Edis 2004). The contrast to ID highlights the compelling nature of Darwinian materialist explanations of complexity.

We do not have a scientific explanation of religion that has crystallized to any degree comparable to biological evolution. Furthermore, it is hard to pick out a central theoretical concept such as natural selection in today's scientific thinking about religion; instead, current work proceeds by weaving together insights from multiple disciplines. Therefore we can expect supernaturalist responses to this work to also have many strands. Indeed, many of the favorite arguments of conservative religious thinkers concerned about the influence of scientific materialism are relevant to efforts to provide a naturalistic explanation of religion. The ID movement, for example, resists any extension of Darwinian evolution to help explain minds and culture—a major thrust of current research on religion. ID proponents portray evolutionary psychology as a collection of just-so stories, and insist that phenomena such as morality and religion cannot be captured by naturalistic explanations. They explicitly defend dualist views of minds. As current naturalistic views of religion continue to attract more attention, we can expect that defenders of more conventional views of the supernatural will continue to draw on themes exploited by the ID movement. It will not be a surprise if evolutionary expla-

nations of religion come to take a more visible role in the endless creation-evolution wars taking place in the United States and Muslim countries.

Conservative religious resistance helps us see how present views that anchor religion in evolved human nature—in cognitive and brain science—function in the broader debate over religion. The scientific proposals under debate countenance only chance and necessity, not straying from physicalist views. They rely on Darwinian evolution and on naturalistic conceptions of minds, both which present deep challenges to supernatural realities and therefore attract determined opposition from sources such as the ID movement. For those of us impressed with current scientific views of religion, it becomes hard to avoid the conclusion that religion is ultimately an accident, not a divine design. And so, it seems that evolutionary approaches to religion are in fact linked to materialism, as part of a more ambitious project of constructing a thoroughly naturalistic picture of our world.

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