

The cognitive science of religion and Christian faith: some preliminary considerations

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Abstract

The 'cognitive science of religion' (CSR) is an inter-disciplinary research programme, predominantly involving anthropologists, psychologists, religious studies scholars, and philosophers. The aim of the research programme is, in Boyer's (2001) titular phrase, to 'explain religion'. That is, CSR endeavours to understand the psychological underpinnings of religious belief and behaviour, thereby explaining the ubiquity of religious belief and practice and the similarities and differences across religious traditions. While the empirical and theoretical research has been going on for nearly two decades, little attention has been turned to the implications of CSR for Christian belief and practice. In this paper, I shall (begin to) explore the potential implications of CSR for traditional Christian theism.

Keywords

cognitive science of religion, evolutionary psychology, naturalism, naturalistic explanations, theological explanations, doctrine of creation

The cognitive science of religion

Religion is historically and cross-culturally ubiquitous; we incorrigibly and promiscuously believe in supernatural agents: in gods and ghosts, angels and demons, souls and spirits, and their ilk. But why should this be so? Why is religious belief—as costly and counterintuitive as it so often is—so irresistible, so pervasive and persistent despite political persecution (for example in Soviet Russia, Communist China, Socialist Albania) and the protestations of public intellectuals (e.g., d'Holbach 1770; Hitchens 2007; Russell 1957)?

Such questions have been with us for a very long time, as have attempts to answer them. Since Xenophanes's (*Fragments* 14–16) accusation that we create gods in our own image and Lucretius's (*De Rerum Natura*) lament that fear of death drives religious belief, the Western history of ideas has been replete with such psychological explanations of religion. All together, our forebears—Hume (1757), Freud (1927), Feuerbach (1851), Marx (1843), Malinowski (1948), Durkheim (1915/1967), Tylor (1913)

and so on—provide a vast depository of ideas and hypotheses, to wrestle with and test.

The nascent cognitive science of religion (CSR), draws from this rich intellectual tradition, as well as from contemporary cognitive psychology and evolutionary theory, to carry on the explanatory programme. The last ten years has seen the publication of a slew of books by anthropologists, psychologists, religious studies scholars, and philosophers (e.g., Atran 2002, Barrett 2004, Bering 2010, Boyer 2001, Dennett 2006, Pyysiäinen 2009, Tremplin 2006, Whitehouse 2004, Wilson 2002), summarizing recent findings and proposing testable theories of the evolution and development of religion. While there is admittedly still much work to be done, there is increasing evidence for the account of religion proposed by the CSR research programme.

According to this account, our brains—just like any other organ—evolved by natural selection; our cognitive and behavioural tendencies, which supervene upon neurological structures and processes are therefore shaped by our phylogenetic history. Among the tools in our evolved psychological repertoire relevant to religious belief are the related abilities and tendencies to detect agency around us, and to impute mental states to agents. These were and are very important inclinations to have. In an evolutionary Pascal's Wager, it paid off to have a tendency to 'detect' agents under ambiguous situations (Barrett 2004, Guthrie 1993). Although this periodically leads to false positives it is, as it were, better to mistake a boulder for a bear than a bear for a boulder; it is better to expend energy escaping needlessly than to be mauled and masticated due to complacency. A similarly active theory of mind (Premack & Woodruff 1978), which infers (or imputes, Dennett 1987) mental states—beliefs, desires, emotions—in other people is crucial for social interaction, as anyone familiar with autism will know (Baron-Cohen 2004). Again, it is important to be able to do this with scant information; people are rarely explicit and never unambiguous in telling us what they are thinking or how they are feeling.

These basic cognitive tendencies go some way to explain why we believe in supernatural agents. Faces, for example, trigger these intuitions, and so when we see the face of a dead relative, we nevertheless feel like there is still a person—an intentional agent—lingering, surviving (e.g., Barrett 2004). The complex elegance of the natural world—from the growth of crops and the changing of the seasons to more sophisticated observations of biologists and physicists—is similarly automatically interpreted as a product of design (e.g., Bering 2010). As Mary Midgley (2001) recently observed, scientists, even those openly antagonistic toward religion, regularly use anthropomorphic language for natural processes: nature selects traits for some purpose, genes are selfish, the world is cruel or indifferent. These are, of course, meant as metaphors, but the fact that we cannot seem to do without them is telling. Indeed, recent research on atheists and their children suggest that these tendencies—to infer intentionality in objects and events around us, to attribute psychological functioning to the dead—are deeply-ingrained (see, for example, Bering &

Bjorklund 2004); it appears, religion is 'natural' (Bloom 2007), children are intuitive theists (Kelemen 2004), and atheism is only skin deep (Bering 2010).

Despite the explanatory fecundity of these cognitive theories, they do not put an end to the explanatory programme. Not all the outputs of our promiscuous agency detection and theory of mind systems become gods to be worshipped and obeyed at great individual and institutional cost. Successful gods also have to be memorable and transmittable; they have to be relevant, applicable to multiple domains; they have to motivate belief and concomitantly behaviour. The research on the motivational or functional drivers of religious belief is ongoing, but most of the work so far is on how religious beliefs variously facilitate social life and mitigate existential anxieties. Links between religion and morality (e.g., Bering 2011, Wilson 2002) and religion and fear of death (e.g., Jong, Halberstadt & Bluemke 2011, Norenzayan & Hansen 2006, Vail et al., 2010), for example, are actively being researched.

In summary, according to CSR, the belief in gods is an evolutionary by-product of a collection of adaptive cognitive mechanisms, especially those pertaining to folk psychology. However, these supernatural agent beliefs might also confer benefits to believing individuals and communities, which increases commitment to and communication of these beliefs. In other words, CSR provides a naturalistic and an evolutionary account of religious belief and behaviour. A philosophical appraisal of CSR's implications for Christian theism should therefore begin with an analysis of naturalistic and evolutionary explanations of religious belief more generally. This paper aims to do just that, drawing from CSR but leaving the theological implications of the particularities of CSR for some other occasion.

On explanation and justification (or refutation)

Hume (1757) is as good a place as any to start. In the introduction to *The Natural History of Religion*, Hume (1757 p. 134) draws the distinction between the 'foundation [of religion] in reason' and its 'origin in human nature'. This is, of course, an example of the quite apt distinction between justification and explanation, respectively; between whether (and why) we ought to believe and why we in fact believe, respectively. Now, not only are justification and explanation different enterprises, but explanation does not necessarily entail justification (or, more to the point, refutation). Indeed, to move directly from an explanation of a belief to its justification or refutation is just to commit the genetic fallacy, the mistake of 'considering factors in the discovery, or genesis, of a statement relevant, ipso facto, to the truth or falsity of it' (Salmon 1984 p. 12). It is, in Reichenbach's (1938 p. 36) terms, to confuse the 'context of discovery' with the 'context of justification'. The context of discovery concerns how someone came to believe something, in the origin of the belief. The context of justification concerns how someone comes to prove or defend or otherwise justify the belief.

To use a famous example from the history of science, August Kekulé recounts discovering the chemical structure of benzene in the dimly-lit study of his bachelor quarters in Ghent; day-dreaming as his writing was stagnant, he saw a snake seizing its own tail and behold! he 'recognizes truth without knowing the evidence for it' (Benfey 1958 p. 22). Upon receiving this revelation, Kekulé worked out the implications of his new theory, and marshalled arguments and evidence. In this case, the fact that Kekulé's original idea came from a dream—which, we will assume, is an unreliable way of discovering chemical structures—certainly does not make his claim that benzene has a ring structure either true or false. Furthermore, neither is the belief that benzene has a ring structure irrational, despite its questionable provenance; it is not irrational precisely because we can provide evidence and construct persuasive arguments for this belief.

In summary, whether a belief is reasonable depends on the context of justification, not the context of discovery. This is not to say that explanation and justification are necessarily unrelated: doxastic conditions might well have epistemic implications. The particularities about the origin of a belief might well serve to undermine or cast doubt on the veracity of that belief; however, the implications of an explanation of a belief for its epistemic merits requires examination on a case-by-case basis (Segal 1980).

On (evolutionary) explanation and justification (or refutation)

The general case outlined above applies to the relationship between evolutionary explanations and justifications of beliefs and behaviours. This is perhaps clearer in considering the ethical implications of evolutionary explanations of behaviour, about which much ink has been spilt. In ethics, as in epistemology, explanation does not entail justification. Again, this is not to say that explanation and justification never bear upon one another: circumstances might mitigate or aggravate, exculpate or condemn. However, to move directly from evolutionary explanation to justification is fallacious, as it omits an ethical bridging premise.

To use an oft-cited example, the move from any kind of evolutionary explanation of rape (e.g., Thornhill & Palmer 2000) to any normative claim about rape requires an additional ethical premise (Wilson, Dietrich & Clark 2003). The move from 'Rape is an evolutionarily adaptive behaviour' to 'Therefore, rape is morally acceptable/unacceptable' is a non sequiter without the bridging premise that 'Evolutionarily adaptive behaviours are morally acceptable/unacceptable'. Similarly, bridging premises are required even if rape was an evolutionarily maladaptive behaviour or if it were a by-product of an adaptation. Whether or not these bridging premises are true or false, of course, up for debate; what is clear, however, is that explanations of behaviours do not by themselves entail normative positions on those behaviours.

Similarly, to explain a belief (or act of believing) is neither to justify nor to refute it. The move from 'The belief in God is an evolutionarily adaptive

belief' to 'Therefore, belief in God is justified/not justified' is a non sequiter without the bridging premise that 'Evolutionarily adaptive beliefs are justified/not justified'. Again, bridging premises are required even if the belief in God was an evolutionarily maladaptive belief or if it were a by-product of an adaptation. Applied to the relationship between religion's 'foundation in reason' and its 'origin in human nature' (Hume, 1757 p. 134), between the reasonableness of religious belief and the success of evolutionary explanations of religion, the lesson is clear: explanations of religious belief do not by themselves entail justifications for or refutations of religious belief. This seems obvious, but the mistake is easily made. It would be equally mistaken, however, to unduly trivialize the potential relevance of evolutionary explanations for the epistemic merits of religious belief. Indeed, matters get more philosophically interesting when we consider that evolutionary explanations are naturalistic explanations, and—as we shall see—naturalistic explanations of religion can raise significant problems for certain kinds of religious belief.

On (naturalistic) explanations and justification (or refutation)

Prima facie, naturalistic explanations and theological explanations of phenomena in general seem to be in mutually exclusive competition. Indeed, unfavourable comparisons of religious explanations to 'scientific' explanations are often used in arguments for atheism.

Western philosophers of religion have certainly relied on the putative explanatory power of theism in their attempts to justify belief in God. Traditional cosmological and teleological arguments for theism, for example, may be construed as arguments that the existence of God is the best explanation of facts about the world, such as the contingent existence of the physical universe or the functional complexity of biological features. Furthermore, arguments from miracles and religious experiences posit unusual events to be explained by the existence and activity of God. In these cases, naturalistic and theological explanations do seem to be in competition: if naturalistic explanations suffice as the best explanations for these phenomena, these arguments for theism are defeated (Dawes 2009).

At least in principle then, successful naturalistic explanations of religious belief have the potential of defeating particular kinds of theistic arguments: those that religious belief itself is best explained by the existence and activity of God. For example, the argument consensus gentium may be mounted as an inference to theism as the best explanation of the universality of religious belief. Hume (1757 p. 184) comes close to making this argument, in the *Natural History of Religion*, writing in a way reminiscent of William Paley's famous watchmaker argument, that 'The universal propensity to believe in invisible, intelligent power...may be considered as a kind of mark or stamp, which the divine workman has set upon his work'. Similarly, Calvin (1563 p. 43) argues that, 'God himself, to prevent any man from pretending ignorance, has endued all men with some idea of his Godhead...so thoroughly has this

common conviction possessed the mind, so firmly is it stamped on the breasts of all men'. For such an inference to work, however, the existence and activity of God (who sets this mark or stamp upon human minds) must be the only or best explanation for the universality of religious belief. Evolutionary explanations of religious belief provide, at least, a naturalistic alternative to this theological explanation; indeed, they arguably provide more ontologically economical (and therefore more explanatorily virtuous) accounts of religious belief.

Another interpretation of the argument consensus gentium that avoids this challenge is associated with Joyce (1951), and was reformulated by O'Briant (1985 p. 77) as follows:

1. The human intellect may be misled in particular cases, but it cannot be mistaken in a general conviction.
2. There is a veritable consensus among men that God exists.
3. Therefore, God exists.

While evolutionary explanations of the universal beliefs qua naturalistic explanations do not challenge the veracity of such beliefs, religious or otherwise, they do challenge the first premise of the argument by showing how false beliefs may be universally held. Beliefs that are evolutionarily adaptive to hold, for example, may become universally (and, in some cases, innately) entrenched throughout an entire species; as noted earlier, such evolutionarily adaptive beliefs need not be true or justified. Evolutionary adaptiveness—and concomitantly, universality—is no guarantee of truth.

Now, religious believers might accept that evolutionary explanations of religion pose challenges for religious belief in general, but nevertheless maintain that their particular religions were revealed by God. Indeed, they might claim that while other religions have natural origins, theirs comes directly from above. Unfortunately, general theories can often easily be adapted to explain special cases. Take, for example, St. Thomas Aquinas's (cf. *Summa Contra Gentiles*) claim that the 'wonderful conversion of the world to the Christian faith is the clearest witness of the [miraculous] signs given in the past'. The argument can be roughly formulated abductively as follows (cf. Psillos 2007):

1. Christianity spread rapidly, despite the persecutory political climate during the time of the early Church.
2. The miraculous events reported in the New Testament would, if true, explain the rapid spread of Christianity. (That is, the rapid spread of Christianity would be a matter of course if early Christians witnessed miraculous events and therefore had compelling reasons to believe in Christ, as in Peirce 1903)
3. No other hypothesis can explain the rapid spread of Christianity as well as the occurrence of and belief in miraculous events during the time of the early Church.

4. Therefore, miraculous events, as reported in the New Testament (probably) occurred.

Now, plausible accounts of the transmission of costly religious beliefs, such as those proposed by CSR (e.g., Barrett 2004, Boyer 1994) undermine this argument by defeating the third premise: the spread of Christianity might be perfectly explicable without having to posit the actual occurrence of miracles, of spectacular acts of divine intervention. If so, such miracles are explanatorily redundant. If we have no other reason to believe they happened, we should not do so. However, if there are independent arguments for such miracles or for the truth of the Christian faith, the fact that a general propensity toward religious belief can be explained naturalistically is neither here nor there.

On Christian faith, category errors, and cosmological arguments

So far, we have seen that evolutionary explanations of religious belief, such as those offered by CSR can pose difficulties for religious belief by undermining certain arguments for religious belief. In particular, CSR challenges arguments that rely on the explanatory power of religious belief as well as those that infer epistemic merits from the universality of religious belief. However, naturalistic explanations of phenomena only undermine theological explanations if they are really in competition; furthermore, if there are good, independent arguments for religious belief, then the religious believer may well be able to assent to both naturalistic and theological explanations of the same phenomena (including religious belief itself). This final section of the paper will explore both of these issues from a decidedly Christian perspective; however, much of what will be argued should be generalizable to other theistic traditions.

The Nicene Creed is as good a place as any to start:

We believe in one God,
the Father, the Almighty,
maker of heaven and earth,
of all that is, seen and unseen.

We believe in one God, maker of all things. There is, so the Creed seems to say, nothing that God does not make, nothing that God does not create, does not sustain, does not bring into and keep in existence. Another way of saying this is that, 'All things come into being through him, and without him not one thing came into being that has come into being' (Jn 1:2-3 NRSV). Again and again, our Judeo-Christian tradition confronts us with a God who 'knits us in our mothers' wombs' (Ps. 139:13 NRSV), 'apart from whom not a single sparrow falls' (Matt. 10:29 NRSV). None of this is to deny that ontogenic development or death are natural processes; rather, it is to assert that even the most natural of processes—life and death, and all the awesome and awful stuff in between—are at the same time, supernatural, acts of God. That is to say, the distinction between the natural and supernatural collapses. We believe in God, maker of all.

Moreover, we believe in one God, though it is oddly difficult to tell sometimes; sometimes it seems as though Christians believe in two gods, in Nature—who does almost everything—and in God, who pokes the divine finger into the mix, every so often. It is, of course, this error—indeed, this heresy against the doctrine of creation suggested by our creedal and biblical traditions—that leads to people thinking and saying that natural science removes God from the equation. The Christian doctrine of Creation—that God is ground of all being, the condition of any existing at all, the reason that there is something rather than nothing—is precisely not the same sort of thing as the Big Bang Theory or Darwin’s Theory of Evolution by Natural Selection or any psychological explanation of religious belief and behaviour. To put them in the same category is to make God a causal factor among other causal factors, a force alongside the impersonal force of gravity and the brute force of military might. It is, in other words, simply an error of genre to pit theological claims against scientific ones, claims about divine action against claims about the causal relations among finite entities.

One way to construe the claim that the competition between theological and scientific explanations rests on a category mistake is to say that it mistakenly puts them at the same level of analysis. Causal analyses of phenomena may occur at more or less proximate or ultimate levels. For example, a psychological phenomenon (such as the widespread belief in supernatural agents) might be explicable with reference to neurocognitive structures and processes (for example, the theory of mind). Furthermore, the fact that a person's neurocognitive structures and processes are such that they are, might be explicable with reference to some developmental processes involving genetic and environmental variables. Further still, the fact that those particular genes are common among human beings might be explicable with reference to some evolutionary, perhaps natural selective variables (cf. discussion above about the evolution of theory of mind; see also Guthrie 1993). In this case, the neurocognitive explanation of the psychological phenomenon in question is a proximate explanation of the phenomenon relative to the developmental explanation, which is in turn proximate relative to the (more) ultimate evolutionary explanation. Indeed, evolutionary psychologists enthusiastically champion such evolutionary explanations of psychological phenomena as the ultimate explanations of those phenomena (e.g., Dawkins 1976).

Potential reservations about evolutionary psychology notwithstanding, it seems clear that to pit neurocognitive, developmental, and evolutionary explanations of psychological phenomena against each other is just to mistakenly place them at the same level of analysis. By the same token, to pit theological and scientific explanations of phenomena against each other is to mistakenly think of theological explanations as proximate explanations alongside other proximate explanations. Instead, the claim that God is the creator and sustainer of all things is best construed as the claim that divine action is the ultimate cause of all that exists and occurs, that theological explanation is ultimate explanation. In response, some might argue that ultimate explanations or causes of this kind are not explanations or causes in the usual sense at all; and I am inclined to

agree. Whatever it means for divine action to be a cause, whatever it means for a theological explanation to be an explanation, it is not the same sort of thing as human action being a cause, as psychological explanation being an explanation. However, such are our linguistic and conceptual limitations, and talk of God necessarily pushes against them; if we are to talk of God at all, we shall have to make do, with the appropriate caveats.

At any rate, it will not suffice to simply assert this. The assumption that there has to be an ultimate causal explanation of all that exists and occurs is a contentious one to be defended. In traditional philosophical theology (and philosophy of religion), this task falls to cosmological arguments for the existence of God, which variously argue from the contingent existence of the physical universe to the existence and creative activity of a divine being who either exists necessarily or otherwise self-sufficiently. Such a being would, by virtue of having created the entire universe, be the ultimate cause of all the entities and events that make up the universe. Although a robust defense of cosmological arguments goes beyond the scope of this paper (see Oppy (2006) for an extended discussion), such a programme should be undertaken to justify the positing of theological explanations of natural phenomena. Indeed, it is perhaps more worthwhile and certainly more consistent with the Christian doctrine of creation outlined above than the popular effort to show how some facts about the world point toward God or to reconcile the latest scientific theories with the Christian faith.

Concluding remarks

This paper identifies two common errors in reasoning about the implications of evolutionary explanations of religion for Christian theism. First, to explain religion is not necessarily to explain it away; to believe otherwise simply commits the genetic fallacy, confusing the context of discovery and the context of justification. Second, to pit naturalistic and theological explanations against each other is to commit a category mistake; it is to inappropriately place them in the same level of analysis. However, even when these errors are avoided, the onus remains on the Christian believer to justify her theological account; in particular, the claim that God is the maker of all things, including the entities and events that come about by natural processes, requires justification. This task is not a scientific one, but a theological and philosophical one. That is to say, the enterprise of either justifying or refuting religious belief has not been co-opted by psychological science (or, indeed, natural science more generally); the venerable theological and philosophical hard yards still have to be done.

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