

starkest illustration of a claim with which Ruse elsewhere takes issue, namely, that 'things like sexuality are not altogether good things' (183) – this in the context of decrying the general trend in Eastern religions towards asceticism. Sexuality is clearly not altogether a good thing – which does not mean, of course, that it is inherently evil – and even Nietzsche grants the virtues of a certain kind of asceticism.

Ruse concedes that there are no good grounds for concluding that religion *per se* is evil, claiming that there is 'fairly solid evidence that the religious do eat more sensibly, take more exercise, and smoke and drink less' (247). I question the solidity of this evidence, find it unremarkable that 'believing Jesus died on the cross for your sins does not protect you from cancer', and wonder how this could be the sort of thing that everyone needs to know. I suspect that Ruse agrees, and the 'envoi' of the book reveals a gentle and endearing attitude of non-belief which comes, we are told, from the theological and philosophical difficulties which seem to destroy the central claims of Christianity and related religions. Ruse is absolutely right to flag these difficulties, but he has done nothing to undermine religion, except perhaps those varieties which demand an attitude of atheism. It should be clear that the true theist has nothing to fear, and we should be alert in any case to the distinction between being religious and believing in God. As Georg Simmel put it in his essay 'The problem of religion today', a religious man might not have found his god, just as an erotic man might have found no-one to love.

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Helen de Cruz and Johan de Smedt *A Natural History of Natural Theology: The Cognitive Science of Theology and Philosophy of Religion*.
(Cambridge, MA; London: MIT Press, 2015). Pp. xvii + 246. £27.95 (Hbk).
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The project of this co-authored book is to effect a new synthesis between cognitive science and philosophy of religion by applying the prism of cognitive science to natural theology. Natural theology, which has flourished across large tracts of theological history, seeks to obtain knowledge of God (his existence, but also his attributes) through the natural resources of reason and experience. Many of its arguments rely on intuitions and inferences that seem natural to us. The book's aim is to examine the cognitive origins of such intuitions, thereby extending the project of naturalizing religious beliefs – long under way among cognitive scientists of religion – to the naturalization of theological arguments. Several

of these arguments have come under scathing attack from both philosophical and scientific quarters, and evolutionary science in particular has been used extensively to provide naturalistic accounts of religion that are taken not merely to explain it, but to explain it away. So this book situates itself at the crosshairs of critical debates, and the audience it appeals to is a wide one.

Two introductory chapters set out the key concepts of the book and the theoretical assumptions that underpin cognitive science of religion. These assumptions include the view of the mind as composed of specialized cognitive systems and of cognition as based on 'core knowledge', a set of innate, domain-specific bodies of knowledge and inference-mechanisms that emerge early in development. The authors here detail a set of 'intuitive ontologies' or category-based expectations that guide human reasoning about physics, psychology, biology, and engineering. Of the following six chapters, one deals with a divine attribute (omniscience) and the rest are devoted to arguments for the existence of God, some of which lie closer to the canon of natural theology (e.g. the cosmological and design arguments) while others less so (e.g. the argument from morality or beauty). The final chapter reflects on how causal naturalistic accounts affect the epistemic credentials of religious belief in general, and natural theological arguments more specifically.

Chapter 3 asks whether the idea of divine omniscience is maturationally natural or intuitive. Two competing views on the issue are what the authors call the 'anthropomorphism' and the 'preparedness' hypotheses. The former claims that the cognitive default is to think of other agents as limited in knowledge, and that the idea of omniscience, like many other divine attributes, is culturally acquired. The latter claims that children's minds are intuitively attuned to this type of property: children younger than the age of four or five assume that others' knowledge coincides with the state of the world. The authors defend an alternative view that draws on a distinction between two kinds of cognition, one fast and inflexible, the other slow and effortful, and associates the representation of cognitively limited agents with the former, and the representation of omniscient agents with the latter. It is cognitively easier (not only for children but also for adults) to reflect about agents whose knowledge corresponds to reality than about agents whose knowledge does not.

I found this chapter difficult to follow, not least because of the heavy reliance on labels such as 'anthropomorphism', incongruous in this context considered against its familiar theological usage, and also because the content of the labels kept shifting. But I was also perplexed by the authors' main thesis. One of the ways they frame this is as a basis for explaining the use of anthropomorphic imagery in scripture as 'outputs of this fast, inflexible system'; in other passages in the Bible where God is represented as omniscient, the 'slower, more flexible system comes into action' (58). Is this a suggestion that the authors of some books of the Bible were writing faster than others? There seems to be some real

artificiality in transferring a view of cognitive processing to the composition of religious texts.

Chapter 4 turns to arguments inferring the existence of God from the order found in the natural world. After addressing the logical structure of arguments from design, the authors consider their cognitive basis. People have a natural tendency to adopt a 'design stance' given the right background data; similarly, from an early age they have a natural tendency to reason teleologically. Having outlined these facts, the authors critique the probabilistic aspect of arguments from design that have the structure of inferences to the best explanation: we simply lack the 'right background data' in this case, and there are equally good rival explanations of natural order (such as 'cumulative selective retention', the basis of natural selection, which rivals 'brute chance' as an alternative explanation). Focusing on the notion of probability, they argue that ultimately the facts do not suffice to settle the debate, and that the reason some people find the argument from design persuasive is the prior probability they assign to the existence of a divine creator. That may well be true, but this conclusion has often been taken as a defeat of reason and one feels it should be earned, which the cursory discussion of the arguments in this chapter doesn't entirely seem to do.

Chapter 5 examines the cosmological argument, with the same aim of tracing the cognitive basis of relevant intuitions. From a young age, people naturally seek causal explanations and often prefer explanations that appeal to unobservable features; they distinguish between events caused by physical processes and events caused by agents, and find the latter type of explanation satisfying; and they show a distaste for infinite regress. The cosmological argument harmonizes with and derives its power from these cognitive dispositions. Does knowing the cognitive origins of the argument weaken it, as some writers have suggested? The authors indicate that it need not do so. On the flip side, with the intuitive foundations of this argument in view, what can we say about its power to persuade? Ultimately this argument may only 'provide those who already believe the conclusion (e.g., there is a God) with additional rational grounds for belief' (103).

Chapter 6 examines the use of morality as evidence for the existence of God, carving this up into two groups of arguments: those based on our moral awareness, and those based on the objectivity of moral norms. The authors conclude that evolutionary explanations for altruism and human moral awareness vitiate the possibility of inferring the existence of God from these phenomena. The discussion of the second argument is less easy to follow, but the authors' proposal appears to be that moral realism need not suffer the same fate of naturalistic 'debunking' and is compatible with a naturalistic framework. Given the close connections between 'moral awareness' (which according to the authors has a 'prescriptive, non subjective character', 115) and 'moral objectivism', their differing vulnerability to evolutionary debunking seems surprising, and would have needed a slower and more careful defence to convince.

Chapter 7 examines 'the argument from beauty', in which the experience of natural or artistic beauty is used to argue for the existence of God. The authors here consider a series of evolutionary explanations of our capacity for aesthetic appreciation, concluding that none of these are adequate. Then they outline two ways in which aesthetic experience could be explained in theistic terms, including one that reads it as a revelation of God's nature and thus as a mode of religious experience. But in so far as both readings unfold within a theistic framework, once again the aesthetic argument will have no sway on those who do not already subscribe to it. This chapter offers some stimulating discussion, but I found the authors' cognitivist parsing of the topic (as 'an argument') alienating, as it seems untrue to the more complex and elusive spiritual significance that the experience of nature's beauty and grandeur may carry.

Chapter 8 turns to the use of miracles as a means for establishing the truth of specific religious beliefs. Its first task is to formulate a coherent concept of miracles. After examining different historical interpretations, the authors propose a 'subjective' approach that draws on the concept of 'intuitive ontologies' to define miracles as exceptional events of religious significance that violate our intuitive ontological expectations. The authors then examine the approach to testimony taken in cognitive science, emphasizing its character as an irreducible yet defeasible source of knowledge. Possible defeaters include the unreliability of informants and the non-coherence of information with one's cultural or epistemic environment. This paves the way for the (by now familiar) conclusion that the ability of miracles to serve as arguments for specific religious beliefs will depend on their coherence with one's pre-existing beliefs, and will thus only convert those who already accord a high probability to theism. With a suitably qualified ('internalist' or 'internalist externalist') conception of justification, people can be 'justified' in believing in miracles, but the evidential strength of miracles will otherwise be limited.

Chapter 9 offers a broader discussion of the impact of causal explanations of religious beliefs on their credibility. Having argued against a steep separation of 'causes' from 'reasons', the authors consider two types of evolutionary strategies, generalized and specific, that have been used to debunk religious belief. Generalized arguments draw on the idea that intuitions produced by natural selection are unreliable because natural selection as such does not 'track truth'. Such strategies undermine the reliability of many other prized beliefs, including scientific ones, and are (thus) self-defeating. Specific debunking strategies focus on religious beliefs more narrowly, and in discussing them the authors address one of the best-known forms these strategies have taken, the ascription of religious belief to hyperactivity of the 'agency detection system'. This system often yields false positives, making animals see an agent where there is only an impersonal physical process. The authors argue that this claim trades on an unjustifiably monolithic view of the system and on a neglect of important distinctions between its different modulations and degrees of reliability across different agents and

contexts. Their appeal to the absence of relevant empirical studies (194) suggests that agency detection normally operates in the kind of 'here and now' that *ought* to be in principle the subject of empirical study. To appeal to this system to explain the historical genesis of the concept of a divine agent in human civilization displaces it from its context of operation without warrant.

Finally, the authors consider how the evidence of cognitive science of religion affects the credentials of natural theology. The conclusion will be familiar: ultimately, whether the cognitively natural intuitions that underlie natural theological arguments are deemed credible depends on the assumptions one brings to the table – theists will read them as a divinely installed apparatus designed to lead us to religious belief; atheists will consider their theological use a misapplication. Both groups, the authors conclude, 'reach reasonable conclusions and are justified in holding them' (201).

This oft-repeated irenic refrain – which meshes with the 'moderate naturalism' the authors adopt at the opening (5) – serves as a partial conductor for some of my dissatisfaction with the overall project of the book. Given its controversial subject, such neutrality may seem welcome, but it catalyses a question about the significance of the insights achieved. Many of the arguments used in natural theology, we hear, have natural cognitive foundations and derive their evidential force from their consonance with them. But this discovery seems rather less interesting once one takes on board that this force is ultimately inert, and plays second fiddle to the force of maturationally posterior acquired beliefs. These scruples about 'significance' are reinforced by concerns about the explanatory level to which the book addresses itself. The authors describe their project as an attempt to map the cognitive origins of intuitions deployed in theological arguments, but the notion of 'origin' turns out to be very mixed. In some chapters (particularly 6 and 7), tracing the origins of specific intuitions means considering their evolutionary genealogy. In others, it means showing that these intuitions are 'natural' or 'normal' in the sense that they are attested early in human life or indeed widespread among adults. The level of explanation in this latter case is far shallower. As the authors note from the start that these intuitions 'seem natural to us' (xiii), their progress simply appears to consist in deepening the 'seems' into a 'really is' by establishing the phenomena more methodically. The sheer familiarity of these phenomena combined with the artificiality of the empirical methods used to establish them makes it harder to experience this as progress. To readers like myself who are not initiated into the conventions of cognitive science, the empirical studies invoked throughout the book are a constant source of puzzlement and misgiving. To some extent this is a reflection on the field rather than the book. But had the authors gone deeper rather than wider – many chapters felt digressive and rushed, fighting too many battles and pausing too little for conceptual work – they may have remedied some of these flaws and allowed the virtues of the book – the

impressive range of material it synthesizes and the important dialogue it sets out to achieve – to stand out more clearly.

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Andre C. Willis *Toward a Humean True Religion*. (University Park, PA: Pennsylvania State University, 2014). Pp. xi + 248. \$74.95 (Hbk). ISBN 978 0 271 06487 1.

David Hume has standardly been read as one of the eighteenth century's most trenchant critics of theism and religion, in both doctrine and practice. Andre C. Willis's objective in the present study is to demonstrate that, although not wholly wrong, this traditional interpretation has been too one-sided, and does not do justice to the finer nuances of Hume's actual position, one that Willis is inclined to commend as 'a generative resource for religious thought' (178). Willis's contention is that Hume's criticisms of religion, although real and not to be ignored, were directed *solely* against popular, traditional, institutionalized religions; but that Hume also sought to retain a 'true religion', unencumbered by the spurious baggage of its vulgar cousins, and capable of providing genuine benefits for humanity.

Hume himself did indeed refer at times to a 'true' or 'genuine' religion, usually in order to contrast this with the superstition, enthusiasm, folly, and delusion he found in traditional religions. As Willis observes (126), even the character of Philo in Hume's *Dialogues concerning Natural Religion* was moved to declare at one point:

notwithstanding the freedom of my conversation, and my love of singular arguments, no one has a deeper sense of religion impressed on his mind, or pays more profound adoration to the Divine Being, as he discovers himself to reason, in the inexplicable contrivance and artifice of Nature. A purpose, an intention, a design strikes everywhere the most careless, the most stupid thinker; and no man can be so hardened in absurd systems, as at all times to reject it.
(*Dialogues*, 12.2)

Hume's criticisms of religion, and especially of the argument from design, were never more vigorous than when expressed through this character: so the fact that even Philo could say something like that must surely suggest that perhaps there is something deeper going on here.

As Willis himself acknowledges, these positive passages are few and far between in Hume's works. But he does find some others, and his own particular favourite