

HANS VAN EYGHEN

VU University Amsterdam

J. A. Van Slyke, *The Cognitive Science of Religion*, Ashgate Publishing, Ltd., 2011

James A. Van Slyke is assistant professor of psychology at Fresno Pacific University. The aim of his book is to develop an alternative for the causal reductionism which he claims to be widespread in current cognitive science of religion (CSR). CSR is a diverse field, so Van Slyke limits his discussion to the *Standard Model in the Cognitive Science of Religion* as it was described by Pascal Boyer (Boyer, Pascal, 'A Reductionistic Model of Distinct Modes of Religious Transmission', in *Mind and Religion: Psychological and Cognitive Foundations of Religiosity* by H. Whitehouse and R. N. Mccauley. Walnut Creek: Altamira Press, 2005.). Van Slyke distinguishes three important aspects of this *standard model*:

First, cognitive explanations are *general*, meaning that they are cross-cultural and would apply in any religious or cultural environment. The focus is on cognitive systems that process religious information, not the social contexts in which they are embedded. Secondly, cognitive accounts are probabilistic, meaning that the probability of a particular religious concept remaining in a culture is dependent upon how much those concepts match up with the way cognitive inference systems process information. Thirdly, cognitive accounts are 'experience distant', meaning that the experiential and explicit accounts of religion are different from the actual processes that make them memorable (pp. 9-10, italics in the original).

Van Slyke's main problem with the standard model is its reductionism. Many scientists have argued that the *standard model in the cognitive science of religion* shows that religious belief is nothing more than a by-product of ordinary cognition. This negatively affects the status of religious belief. His understanding of reduction is when a phenomenon is explained by the laws and processes of a *lower-level science*. In this case, the *lower-level sciences* are cognitive science and neuroscience, while what gets reduced is religious belief. Van Slyke notes that the term 'reduction' is heavily discussed in philosophy of science but bypasses this discussion and goes on to defend an emergent view as an alternative. In Van Slyke's view emergence is closely aligned to top-down causation or top-down constraints. He writes: 'Causation is not fully explainable

through standard descriptions of causation but requires an account of inter-level causality where the whole is able to act as a constraint on its parts' (p. 19). The occurrence of top-down causation or constraints suffices for Van Slyke to reject the reductionist position and allows for an alternative theological worldview which does not consider religious belief to be reducible to ordinary cognition.

A large part of the book is dedicated to making the case that emergent cognition occurs. Van Slyke uses many examples from neuroscience which go against the standard reductionist view. One important feature of Van Slyke's reasoning is a defence of an embodied account of cognition where he argues that the environment plays an indispensable role in cognition. Furthermore, recent neuroscience suggests that neural networks have features which its basic constituents lack. He therefore claims that cognition is above all a top-down, not a bottom-up process. As a result, he focuses his attack on the first and third aspects of the standard model and affirms the importance of religious and cultural environments for religious cognition.

Van Slyke ends with a sketch of his alternative: a *multi-level perspective on the emergence of religious beliefs*. He does not deny the value of standard accounts from CSR, like Boyer's counterintuitive concepts or Justin Barrett's *Hyperactive Agency Detection Device*, but argues that they require a broader perspective. This perspective takes emergent features into account to allow an adequate view of religious cognition. He calls this view theological but does not get into detail about what makes it theological. Near the end, Van Slyke applies this strategy to evolutionary theories of religion. He attributes a great deal of importance to attachment as the relational dynamic between offspring and primary caregivers. According to Van Slyke, God might have served as an attachment figure and thus religion might have been beneficial for extending pro-social relationships to larger communities.

Although the diversity in CSR makes his use of the term 'standard model' problematic, Van Slyke has offered a viable alternative to the widespread reductionist view in CSR. His approach allows for a fruitful collaboration of CSR and theology – mainly because his emergent view does not rule out the truth of religious belief like the *standard model* seems to do. His argumentation is mostly based on scientific literature (mostly neuroscience) and is very well supplemented with examples. Van Slyke offers a decent scientific foundation for his alternative emergent view on religious cognition. However, where science takes up the bulk

of the book, philosophical (and theological) discussions are kept to a bare minimum. This is unfortunate because the notion of 'emergence' has been heavily debated by philosophers. Van Slyke does not get into detail, but his alternative perspective requires a version that goes beyond weak emergence, where the whole has features which the basic constituents lack, to a version of strong emergence where something completely new (in this case religion) arises from different, more basic constituents. This position is very controversial and the lack of lengthy argumentation on this matter compromises Van Slyke's alternative view. A related worry is that Van Slyke's line of reasoning remains speculative. The (neuro)scientific examples he cites were usually formulated for other purposes than questions about religious cognition and therefore it is uncertain whether they are applicable to this discussion. These points could, however, be remedied. A final, deeper, problem is that Van Slyke's *multi-level perspective* might also be interpreted in a reductionist fashion. His view of God as an attachment figure allows for the claim that people are religious because it was evolutionary beneficial and nothing more than that. This is not a reduction to the level of cognitive science or neuroscience but a reduction nonetheless – in this case to the evolutionary adaptive value of religion. Van Slyke probably did not have a new reductionist model in mind but it can be interpreted in this fashion.

James Van Slyke's book is an important contribution to the philosophical debate about the implications of CSR. He rightly points out a number of problems with *the standard model of CSR* and offers a viable alternative; yet, his alternative is open to a reductionist interpretation which he is attempting to avoid. His discussion of scientific arguments is especially impressive. Unfortunately, the book suffers from a number of philosophical shortcomings which could have been prevented if Van Slyke had chosen for a more elaborate discussion on notions like 'emergence' and 'reduction'.