Review: Religion explained is a daring title, and this is the kind of spirit in which cognitive anthropologist Pascal Boyer sets out to present his readers a provocingly new perspective on religion. While some might find it shocking to what extent Boyer reduces the supernatural to its natural origins, this fascinating book certainly contains food for thought for everyone.

The author begins by planting doubts about common explanations of religion. Not surprisingly, all have some plausibility, but a closer look reveals problems with each of them. Religion offers explanation, just as it mystifies things; religion can be comforting, just as it can be terrifying, and socially integrating just as socially disruptive. Rather than adding another religion-in-a-nutshell definition to the list, Boyer takes religious ideas to be a subset of the ideas we are able to hold, and pauses to ask what we know about the way people handle ideas in general. Cognitive science offers a bulk of research results on that issue, which so far has been largely ignored in the study of religion. By drawing on these research results, Boyer is able to give a detailed and precise description of how concepts are stored in memory, how they are reconstructed and transformed, and how they are communicated. A central point is that concepts are not stored in isolation, but are subsumed under more general categories. This allows us to draw inferences from our general knowledge about the category in question, even if we never got the specific information about the concept we subsumed. Therefore, even very fragmentary information suffices to reconstruct a complete picture as long as this information is readily associated with given categories. But in order to attract our attention, concepts have to be interesting as well. This happens when a concept violates our intuitive expectations, which means that the concept's inferential potential is blocked in this regard. Therefore, the violation must be limited, because if the concept didn't allow any inferences to be made, it would become difficult both to keep in memory and to communicate. Culturally successful ideas, then, are those which have a prominent counterintuitive feature which attracts our attention and also have a rich inferential potential which makes them easy to handle. These two factors are regarded as natural selection principles.

Successful religious concepts, says Boyer, follow these two requirements as well. A ghost is imagined as a kind of person but with the special physical feature that it has no solid body. So when
dealing with ghosts we can rely on our intuitive knowledge on how to interact with persons. Superhuman beings may come with all kinds of odd features, but they are always imagined as having a mind. This allows us to make a lot of inferences about their behaviour, since most of our inference systems such as intuitive psychology, moral intuitions, or the goal-detection system are applicable to persons. Rather than being the causes of action, religious ideas are seen by Boyer as parasitic in the sense that their success depends on our inference systems. Religious rituals do not cause social transitions, but the meanings assigned to them are handy explanations for the complex social changes which the rituals mark. Equally, religious beliefs do not bring about moral behaviour. But to construe gods as superhuman agents with strategic knowledge is the perfect answer why we should follow our moral intuitions, since this makes us feel observed.

However, things get complicated by what Justin Barrett has termed the theological correctness effect: official religious doctrines can introduce numerous elements which do not conform to the requirements of memory economy as stated above, especially in literate cultures. These official doctrines will be represented more or less faithfully in believers' explicit reasonings about their religion. Yet it can be shown that spontaneous inferences are drawn from the natural model and not from the official doctrine, while believers are not even aware of the differences between the explicit and the intuitive version. The fact that religious concepts undergo constant transformations in the minds of the believers inevitably causes tensions with the official doctrine propagated by religious institutions. Boyer calls it the tragedy of the theologian that the very effort to prevent such adulterations renders the message tedious, which increases the risk of charismatic dissent. If an official doctrine deviates too far from what is required by our inference systems, it is no longer attractive.

Apart from being fascinating to read and containing many more highly original ideas than could be mentioned here, *Religion explained* is an important book for a number of reasons. First of all, Boyer is able to present a very dense network of theories which not only explains many religious phenomena but also sets them in relation to each other. The integration of cognitive science research leads to a very realistic model of how religious concepts are processed and communicated, something which has been conspicuously absent from most theories of religion so far. Boyer's account of the natural basis of religion explains very well the persistence and re-emergence of religion even in a secularized environment, as well as the tensions between official and folk religion. Boyer is right to point out that religion in the secularized West is exceptional, and therefore it is a good thing that he moulds his theory of religion on traditional cultures. But this focus with an emphasis on the individual rather than the social perspective also means that he neglects political and economic factors in the dissemination of religion. This becomes apparent in his effort to give an evolutionary explanation for fundamentalism in terms of very basic coalitional principles, a field in which far more sophisticated sociological explanations exist. Boyer seems to overestimate the explanatory strength of evolutionary explanations, which is generally weak. While his account of the transmission of religious ideas is a detailed systems theoretical model with strong empirical support especially from memory psychology, his musings on humans as cooperators are too simplistic and speculative to be convincing.

Boyer's approach to explaining the success of religious concepts by their adaptation to our inference
systems is a major challenge to the customary perspective on religion. Incidentally, it is also a challenge to the concept of religion. Detailed though his explanations of religious phenomena may be, the overall concept of religion Boyer is employing remains rather vague. Religious concepts, says Boyer, are those supernatural concepts that matter. He then narrows his focus to superhuman agents who have access to strategic knowledge, as opposed to unimportant superhuman beings such as the Bogeyman. While the differentiation of religiously important and unimportant superhuman beings certainly is vital, the criterion is far from clear. The definition that strategic information is information treated by a particular person's inference systems for social interaction and the assertion that there would be just no way to predict whether a given piece of information is strategic or not (p.153) does not render it testable. The reader is also left to wonder if Boyer accepts those concepts as religious which are not or only indirectly linked to superhuman agents, such as cosmic laws or the sacred order of the world, or else rituals which do not refer to superhuman agents. Superhuman beings certainly are a characteristic and frequent religious feature. But when Boyer takes them to be just a particular adaptation to our inference systems he begs the question whether other equally adapted concepts should not count as religious as well, provided that they matter to the believers. Boyer does explain a lot about religion, and is able to give numerous unexpected insights into this field, yet there remains some work to be done.

© Brigitte Schön (University of Bonn)