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Hansjörg Hemminger

# Evolutionary Processes in the Natural History of Religion

Body, Brain, Belief



Springer

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# Introduction

The study of religion from the perspective of both the humanities and social sciences has become increasingly ripe for a re-look from an evolutionary perspective. Usually, the history of religion is regarded as a social history. Yet recently, a consensus has developed that it could be elucidated by concepts taken from evolutionary biology. A copious body of scientific literature from the last two decades aims at such an interdisciplinary approach, with widely different preliminary results. If, and to what extent, the social history of human religion, from a scientific perspective, might be turned into a natural history is a question which has provoked contradictory answers. The title of this book presupposes that both perspectives might be valid. But so far, their proper relation within the scientific study of religion has not been definitely framed.

Some scholars model the evolution of human religion in strictly Darwinian terms. Others propose a synergy between evolutionary processes that are literally driven by biological evolution, and superimposed processes which may be considered Darwinian by some sort of analogy. Many other researchers have called for the allowance of developments in the history of religion which are plainly non-Darwinian. A successful synthesis is far off; despite the inspiring and prolific work already done. Therefore, the scientific study of religion, at present, is not a strong interdisciplinary project. Biological concepts transferred to constructs modeling the evolution of religion are often fragments, or simplifications, of the “state of the art” of evolutionary biology. One reason, beside the well-known difficulties of interdisciplinary work in general, might be that the biological research community (with few exceptions) takes little part in the enterprise.

The evolutionary approach, however, requires a “strong” interdisciplinarity, which would mean the involvement of evolutionary biologists, especially those with both methodological and theoretical leanings. Accordingly, this book undertakes to invert the line of vision which at the moment dominates the field. Its guiding question is: How do the interdisciplinary models of religious evolution, which have so far been proposed, look from the perspective of biological methodology, and of the biological theory of evolution, as they currently stand? The question has no simple

answer, but reveals a number of epistemic and methodical difficulties which have to be dealt with separately:

- How can the subject area of religion be defined or described from the perspective of behavioral biology, so that it can be regarded as a biological research topic?
- There are subsequent versions of evolutionary biology that extend from the original Darwinism to the recent Extended Evolutionary Synthesis. So far, the evolution of religion has been modeled according to biological concepts pertaining to various versions, from simple “selection stories” to constructs which take advanced concepts into account, e.g., epigenetics, inclusive fitness, and group selection.
- The most important biological concept used in modeling the evolution of religion is coevolution: Most researchers currently propose gene-culture coevolution as the basic causal explanation of the evolutionary dynamic towards religion. From a biological perspective, one has to assess the fact that, in this proposal, the term coevolution denotes a process quite different from the process normally signified by the biological term.
- Important theoretical concepts of evolutionary biology, so far, rarely appear in models of religious evolution, e.g., neutral evolution, evolutionary drift, drift barrier, developmental evolutionary biology, system theory of evolution, and evolutionary constraints. Could it perhaps be important to include such concepts into an interdisciplinary approach to the evolution of religion?
- How can a biological approach deal with the asymmetry between the scarce empirical knowledge of prehistoric religion, and the immense body of knowledge concerning extant and historic religions, which has been assembled outside the natural sciences?
- How does paleoanthropological knowledge about evolution from *Hominidae* to *Homo sapiens* relate to the evolution of human religion? Are there recognizable evolutionary pre-adaptations of hominin behavior, cognition, and sociality?
- Does the cognitive science of religion (CSR), an important source of current explanations for the evolution of religion, assort well with behavioral biology and with the brain sciences? How should CSR concepts be interpreted biologically?
- Functionally, religion can be regarded as a bidirectional, individual, and cultural coping system to deal with life’s contingencies, risks and evils by rendering practical support, and by providing meaning for human existence in this world. How did these functions arise synergistically or perhaps competitively, in evolution?
- What can be learned about the psychodynamics of religious attitudes and experiences, and in turn about their possible phylogeny, by analyzing deviant, zealous, and rigorist forms of religion from an evolutionary perspective?
- Religion is part of human culture. Culture, in turn, is supported by a complex, multi-level system of behavioral, cognitive, and social features. How can such a system be modeled scientifically without reverting to a misleading reductionism and without inadvertently introducing non-scientific concepts?

These and some other questions will be addressed in the following 16 chapters. Part I (Chaps. 1–4) deals with the epistemological and methodological requirements for the book’s enterprise. Part II (Chaps. 5–7) describes the “state of the art” of evolutionary biology in reference to hypotheses modeling the evolution of religion. The subsequent part III (Chaps. 8–10) summarizes the available data and “documents” which relate to the prehistory of religion, as it appears from the archeological and paleontological perspective. Part IV (Chaps. 11–14) discusses evolutionary psychology and the cognitive science of religion (CSR) in the context of a general psychology of religion. The final part V (Chaps. 15 and 16) presents multi-level concepts which might serve to model the evolution of human culture including religion.

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