Contemporary Theories of Religion
A critical companion

Edited by
Michael Stausberg
For most of the twentieth century, theory in the study of religion was marked by two main approaches – theologically or philosophically informed phenomenology and social-scientific theories of religion. It was only in the last decade of the century that theories inspired by the natural sciences, particularly evolutionary biology and cognitive psychology, became popular. The book to be considered in this chapter – Loyal Rue's *Religion is not about God* (Rue 2005) – in some respects combines all three of these approaches, although at first sight it appears to be attributable to the natural-scientific faction. This is due to the fact that its starting point and core argument is the biological evolution of the human species and its vocabulary makes heavy use of the terminology of cognitive psychology.

Contemporary evolutionary theories of religion oscillate between two opposing interpretations. One of them – exemplified by the works of Pascal Boyer (Boyer 1994, 2001) – apparently to date the majority – considers religion a natural phenomenon that is a by-product of the evolution of the human brain without adaptive functions. The other one – represented by David Wilson (Wilson 2002) – sees religion as a product of biological and cultural evolution with immense adaptive value for group survival. Rue’s position belongs to the latter school of thought, although his theoretical and methodological approach is different from Wilson’s. For Rue, religion is of utmost importance for the survival and well-being of the human species. His theory may thus be seen as the extreme opposite to Richard Dawkins’s biological interpretation of religion (Dawkins 2006), who – while equally using evolutionary theory and cognitive psychology for his argument – concludes that religion is one of the major obstacles to human well-being.}

The sympathetic attitude Rue takes towards religion may partly be due to his academic background. He is Professor of Philosophy and Religion at Luther College in Decorah, Iowa. A two-time Templeton Award winner, he has published several philosophical books on natural history, including *By
The grace of guile: the role of deception in natural history and human affairs (Rue 1994) and Everybody’s story: wising up to the epic of evolution (Rue 1999). Religion is not about God takes up again many thoughts of these earlier works to use them for his theory of religion.

The purpose of this book is ‘to show how the ideas, images, symbols, and rituals of religious traditions have been designed to engage and to organize human neural systems for the sake of human survival, and then to examine the contemporary conditions that have compromised their adaptive utility’ (1). To this end, Rue proposes a ‘general and naturalistic theory of religion’ (2), whose core argument is that there is a universal human nature that can be known by examining the evolutionary history of humankind. In this context, religion is seen as fulfilling vital functions in influencing the cognitive and emotional systems of humans in a way that allows for the achievement of personal and social well-being.

This chapter summarizes and critically comments on the main arguments of Rue’s book, following roughly the sequence of its three parts: 1. On human nature; 2. On spiritual traditions; and 3. On the future of religion. The focus is on the theory of religion and its evolutionary and psychological background. I will conclude with some methodological comments on Rue’s theoretical approach.

The evolution of behaviour

The theory of religion is presented in the first part, ‘On human nature’. It starts with a narrative account of evolution that begins with the ‘creation of matter from energy’ (22), reviews the emergence of life, and continues with the evolution of behaviour. Humans are part of this natural process and at the same time unique in the combination of their traits, which evolved ‘for doing what every life form must do – that is to endure and to reproduce’ (26). To the extent that humans are living beings, their nature can be described as fitness-maximizing biochemical systems. But what makes them unique? It is the astonishing range and complexity of behaviour that makes the species stand apart from all the others.

Consequently, Rue’s discussion of human nature turns to the evolution of behaviour, beginning with the biochemistry of bacteria up to complex emotional and cognitive systems. The behaviour of higher animals is controlled by the brain, which processes information about the environment and steers motor responses of the organism. In the course of evolution, the architecture of the brain became increasingly complex, comprising quite a number of different neural systems (or neural modules) that handle various tasks including perception, memory, emotion, and cognition. The evolution of neural modules, according to Rue, was largely
determined by the sequence in which animals faced challenges as new environmental circumstances selected for abilities to process new forms of information (32). Here, as elsewhere in the book, Rue suggests that natural selection works as a goal-directed process to respond to environmental 'challenges'. He ignores the fact that evolutionary changes have no direction such as increasing complexity. For some reason, his otherwise fairly comprehensive evolutionary narrative does not mention the mechanisms of genetic evolution. Perhaps the idea of pure chance being a driving force of evolutionary change would have spoiled his narrative, which depicts evolution as a meaningful process.

However, it may also be that Rue pays no attention to the genetic mechanisms of evolution because what he is really interested in is not genetic but cultural evolution. For Rue, evolution - while being a natural process - is more than biological evolution that can be explained by genetic variations and natural selection. His theory of human behaviour is naturalist in that he stresses the fact that the capacities of the brain are a result of biological evolution. However, he does not ignore the fact that human behaviour is also influenced by social and cultural factors. The brain is 'almost literally, a social artifact' (45). To explain how the working of the brain depends on both innate cognitive algorithms acquired through genetic evolution and culturally shaped algorithms acquired through social interaction, Rue presents a hypothetical model of different types of mental operators.

**Mental operators**

As Rue describes it, human behaviour is regulated by two sets of brain functions or 'operators'. On the one hand, there are primary operators of the cognitive system, which are innate modules that process information and produce an intuitive worldview. On the other hand, there are secondary operators that compete with the primary operators. The 'intuitive worldview' includes both 'intuitive science' – that is, information about which things exist and what they are like – and 'intuitive morality' – that is, information about the value of things. Intuitive morality is the result of the functioning of primary valence operators that evaluate the significance of external facts relative to the biological teloi of the species, which are survival and reproduction. Rue makes a strong point that humans come into the world equipped with a biological value system – an intuitive morality embedded in the goal-directed workings of their basic drives and emotional systems (56).

The concept of primary mental operators producing an intuitive worldview is based on Steven Pinker's theory that the human mind is a naturally selected system of organs of computation (Pinker 1997). Rue develops this theory
further by hypothesizing that the human brain also constructs ‘secondary operators that compete with our primary operators in ways that inevitably and differentially override our intuitive worldviews’ (61). Were there only primary operators, all humans would share more or less their ways of feeling, thinking, and behaving, guided by the same intuitive science and morality. It is the secondary operators, which are shaped in the course of one’s individual life, that are responsible for the behavioural patterns of different individuals. To the extent that they share a common social and cultural environment, these patterns exhibit certain similarities. As behaviour is controlled by neural processes, we can conclude that the brain’s behaviour mediation systems are influenced by cultural factors that may overrule the algorithms of intuitive science and morality (60-3).

The working of secondary operators is illustrated with the formation of self-esteem, which Rue sees as the most dominant of all our behaviour mediation systems. He explains self-esteem as being dependent on a process of self-monitoring that observes the outcome of one’s own behaviour (63f.). Now, it is not only the primary valence operators that evaluate one’s behaviour but also secondary valence operators. While the primary valence operators evaluate the significance of external facts relative to the biological goals or teloi of the species, the secondary valence operators evaluate according to culture-specific values. What is regarded as good or bad behaviour depends on socially induced standards. The reactions of others will influence the subject’s evaluation. Positive reactions will induce positive feelings and reinforce behaviour that provokes positive reactions. At the same time, this will increase one’s self-esteem and link it with values that are in conformity with social standards. These secondary values may diverge from the biological teloi pursued by the primary valence operators. The secondary valence operators are not part of our biological heritage but of our socio-cultural heritage. They operate by extra-genetic rules in that they are objectified and transmitted across generations through symbols (63-6).

Symbol systems and cultural evolution

The use of symbols marks the passage from genetic to cultural evolution. Symbol systems contain information on the world and the value of things that give orientation to human behaviour. Intuitive science and intuitive morality are no longer the sole form of guidance. ‘[S]ymbol systems are both extra-genetic and extra-somatic: They exist outside the body, in the objective social domain, a sort of commons where their elements are negotiated and modified in relation to other elements’ (70). While the evolution of behaviour governed by genetically transmitted information was slow, the use of symbols enabled it to reach an unprecedented dynamism tied to the
dynamics of cultural evolution. Rue borrows the term *memes* from Richard Dawkins (cf. Dawkins 1976: 203-15) for the units of symbolic variation, transmission, and selection in the course of cultural evolution. 'A cultural tradition is the sum of its memes' (70). I doubt that this concept helps much to clarify the mechanism of cultural evolution, but as it is not central to Rue's argument we may leave it at that.

### The meaning of life

More important is the final paragraph of the chapter on the evolution of behaviour, which is presented as a kind of conclusion. Its heading, 'Human nature and the meaning of life', indicates that the focus is suddenly shifting from questions of biology and psychology to the big questions of philosophy. Unfortunately, Rue is not very precise in his argumentation – at least, so it appears to me. We read that 'the point of pursuing a view of human nature is to discern the point of human existence, the meaning of life' (74). This seems to imply that the meaning of life is the same as 'the point of human existence', but what does 'point' mean in this context? Apparently it means 'purpose' or 'telos'. As Rue explains: 'The meaning of human life should be expressed in terms of how our particular species pursues the ultimate telos of reproductive fitness' (75). Moreover, he claims

> that these immediate pursuits are about a pair of mutually depending yet mutually contending intermediate goals: *personal wholeness* and *social coherence*. Everything we do at the behest of our behavior mediation systems can be seen to contribute toward, or detract from, an achievement of one or both of these twin teloi’. (75; italics in original)

The last sentence is logically true under any circumstances, because everything we do can be seen as either contributing to or detracting from these goals. But what reasons can be given to support the claim that the meaning of human life is to pursue personal wholeness and social coherence? The argument seems to be that these two goals are essential for reaching the ultimate *telos* of human existence – reproductive fitness. This may be the case or not; that is an empirical question. It is my impression that most individuals fail to meet the standards of ‘whole persons’ as described by Rue:

> Whole persons are those who are fully engaged with the world, and whose motivational systems are robust yet efficiently managed – persons who are able to construct agendas of sequential tasks, to anticipate outcomes, to assign priorities, and then attend to the most important matters while...
momentarily suppressing the demands of competing impulses. By such means the whole person is able to achieve a state of functional unity against the odds inherent in a plurality of motivational systems. (76)

Although such whole persons appear to resemble more a superman than ordinary humans, the reproductive fitness of the species does not seem to have been significantly impaired by the fact that this ideal is seldom realized. Thus, empirical evidence hardly supports the claim that personal wholeness is the ultimate *telos* of human existence. There are, however, also theoretical objections to Rue’s conclusions.

Central to his argument is the idea that human nature can be detected by understanding the meaning and purpose of evolution. In his grand ‘Epic of evolution’ humans emerge ‘for doing what every life form must do – that is to endure and to reproduce’ (26). This, for him, is the purpose of existence, the ultimate *telos* of evolution. Yet, we also could narrate the epic of evolution from a different perspective. Then it would be the story of countless forms of living that have been extinguished. It would appear that it is not survival and reproduction that are the essence of natural selection but elimination. What could be the ultimate *telos* of those life forms that have disappeared? Is it to drive forward the process of evolution by allowing their more successful competitors to survive? In any case, their *telos* could not have been to endure and to reproduce, for then there would have been no selection and no evolution. To look for a *telos* – an ultimate purpose – of existence with evolutionary theory is to misunderstand the theory. Biological evolution has no *telos*, it is not a teleological process (Mayr 2005: 154). We can, of course, with Rue narrate evolution as an epic. In this epic, every chapter has a meaning in that it is a prelude to the following. But meaning is not inherent in the evolutionary process; it is constructed by the narrator. If some individuals or species survive and others don’t, it is not due to the purpose of their nature. It just happens because some are better adapted than others. It is no more the ultimate *telos* of a species to reproduce than it is the ultimate *telos* of rivers to carry water. If they cease to do so, they will disappear like so many other things that have disappeared over the millennia. Natural selection is basically a process of elimination (Mayr 2005: 150). Evolutionary theory may explain the causes of what happens in nature – of survival and elimination – but for its meaning and purpose we have to look somewhere else.

I do not think, therefore, that Rue’s suggestion of defining the meaning of human life in terms of its ultimate *telos* can be grounded in evolutionary theory – at least not in its prevalent biological variant. This is not to say that it cannot be grounded in other theories such as philosophical anthropology. We may ignore this question here and proceed to the subsequent chapters of his book, which lead to his theory of religion.
Religion and the education of emotions

Before he comes to this, Rue further explains the role of emotions in human behaviour. In his view, which is informed mainly by the works of Richard Lazarus (Lazarus 1991) and Antonio Damasio (Damasio 1999), emotions arise when inputs from the environment are appraised by the cognitive system as either contributing to or distracting from the subject's goals. They vary according to the goals of a subject. Emotional states have a central position in Rue's theory of human behaviour as they trigger behavioural responses; they are 'powerful forces' that hold potentials for danger as well as good; they can be conductive or threatening to the achievement of the ultimate telos of personal wholeness and social coherence. 'For this reason, humans have always found it necessary to develop various strategies for managing the emotional process' (107). Managing emotions is seen as an essential function of culture. Cultures moralise the emotional life by defining rules specifying the conditions under which the display of certain emotions is considered appropriate or inappropriate. In this sense, they can be said to play a crucial role in 'the education of emotions', as the third chapter is entitled.

The education of emotions is mediated by the symbol systems that every culture provides and which contain information about what is real and what is important. This symbolically expressed cosmology and morality competes with the intuitive science and morality shared by all humans. However, to the extent that the culturally transmitted morality is internalized by individuals, its values dominate the appraisal process of emotions and stimulates behaviour. In this way, human behaviour can overcome the constraints of our biological nature and is free to develop a variability of adaptive strategies that far surpasses all other species. 'In short, we have in our nature the means to manipulate our nature' (122).

At this point, Rue finally shifts his attention from human nature to spiritual traditions, which for him seem to be the core of 'the conventional meanings inherent in cultural systems' (123). Rue summarizes their 'consilience' with the 'adaptive meanings inherent in biological and psychological systems' by the 'principle of reduction', which is expressed in five points:

1. The myths, symbols, and practices in a religious tradition will have a decisive influence on the mental objects featured in the working memory of individuals.
2. The mental objects (neural imaging) featured in the working memory will have a decisive influence on the cortico-limbic interactions taking place during appraisal and coping events.
3. Patterns of cortico-limbic interaction will have a decisive influence on the mediation of human behaviour.
4. The mediation of behaviour will have a decisive influence on the prospects for achieving personal wholeness and social coherence.
5. It is by the achievement of personal wholeness and social coherence that members of our species influence the odds favouring reproductive fitness. (123ff.)

In short, religious myths, symbols, and practices are devices for producing certain patterns of neural stimulation. The theory of religion, which Rue elaborates in the following chapter, holds that the neural stimulation produced by religions works in such a way as to provoke emotions and behaviour that contribute to the achievement of personal wholeness and social coherence— that is, to the ultimate purpose and meaning of human existence.

The structure of religions

The chapter entitled ‘The nature of religion’ starts with the thesis that all religions have a common structure. Rue develops a structural model of religions that describes ‘all particular religions as narrative traditions or myths, which are formulated and revitalized by a set of ancillary strategies. These strategies (intellectual, experiential, ritual, aesthetic, institutional) may be seen as overlapping dimensions that collectively shape the religious life’ (143). The core of every cultural tradition is a story, a myth, which is a narrative integrating ideas about how things ultimately are and which things ultimately matter—that is, it includes cosmology and morality (126).

As Rue sees it, every myth is centred on a ‘root metaphor’—a concept that is not further explained but illustrated by examples. The root metaphor of the Abrahamic traditions is God-as-person, in the Greek tradition it is logos, in Chinese myth it is the Tao. Later in the book, we also learn that the root metaphor of the Indian traditions is dharma (215). The root metaphor of a religious tradition links cosmology to morality, it integrates facts and values, and ‘renders the real sacred and the sacred real’ (127). The root metaphor is, as it were, what keeps the mythic narrative together and gives meaning both to cosmology and morality.

The origin of religion

Having identified myth as the core of religion and the various dimensions of religious life that explain, confirm, perform, express, and control the mythic narrative, Rue turns to the origins of religion. He gives a highly speculative account of what might have happened during the last 200,000 years of
human history. It is a story narrating how small bands of hunter-gatherers that in many respects resembled groups of chimpanzees gradually developed intellectual competencies that allowed them to form larger social units (149–59). The theoretical background of this story is Rue's assumption that between 200,000 and 40,000 years ago two great cultural transitions must have happened. During this development, the intuitive science and intuitive morality resulting were partly replaced by 'ad hoc science' and 'ad hoc morality', that is, culturally constructed worldviews ruled by secondary mental operators (149). Rue believes that the first of these transitions was gradual - lasting for about 120,000 years - and saw the development of an anthropomorphic interpretation of nature similar to what Tylor describes as an animistic worldview. However, for Rue such ideas of gods and immortality were not religious, but rather proto-scientific (152).

The second transition was not gradual but a great leap forward occurring about 40,000 years ago. It was the step from intuitive morality to ad hoc morality, that is, the invention of social rules that allowed for the formation of larger social units that are too complex to function on the basis of the innate valence operators. Rue believes that new patterns of social organization developed as small groups of hunter-gatherers established episodic yet stable coalitions. These changes were analogous to the emergence of multicellularity from unicellular forms of life (156). The sheer novelty of these emerging forms of sociality generated a crisis of self-understanding which left individuals confused and perplexed about fundamental personal and social realities:

Our ancestors found themselves in a state of desperate need for a story that could tell them who they were, where they came from, what the group was, how it came to be, and why they should follow the new rules. (159)

To this need responded the early thinkers who borrowed the anthropomorphic language of ad hoc cosmology and expanded it to include the nature of self and society, thus unifying the cosmic and moral orders. Religion emerged when storytellers imagined the first myths that brought together cosmological and moral ideas in a coherent narrative of gods and spirits. 'The first religious traditions arose as these stories found their distinctive strategies for carrying on' (159).

The strong point in Rue's account of the evolutionary origins of religion is that it is a fairly plausible if invented story of how things could have happened. It is a narrative that mixes up facts and fiction, and in this way makes fiction appear as facts. It cannot be denied that somehow and at some time in the past humans must have developed the ability to produce systems of symbols representing cosmological and moral ideas guiding behaviour in a way that goes beyond the intuitive orientations of innate responses to
external stimuli. Rue's theory is an attempt to explain how, when and why this happened by proposing a possible scenario.

The weak point is that it is a just-so story and not a scientific theory that could in any way be confirmed or falsified on the basis of available evidence. One can, however, ask some questions. What is the foundation of the claim that socially constructed morality ('ad hoc morality') emerged in a 'great leap forward' about 40,000 years ago (152)? If it is true that the human brain developed the ability to form secondary valence operators that can overrule the intuitive values of the primary operators, why should this ability have remained unused for more than 100,000 years in the history of *homo sapiens*? How could this ability of the human brain have been naturally selected if it was without function? Why should the small bands of hunter-gatherers not have had cultural traditions and rules adapted to their diverse natural environments? As Rue does not address or resolve these questions, his account of the origins of religion is pure speculation. Given his understanding of religion, all we can say about the origin of religion is that it emerged when humans started to invent and transmit myths.

### The function of religion

More central to the main argument of the book is Rue's description of the function of religions, which he sees in the achievement of personal wholeness and social coherence. It should be clear by now how he thinks religion fulfils this function. The mythic narratives and the ancillary strategies of religions shape the emotions and motivations of individuals in a way that allows them to overrule the innate intuitive morality of their biological heritage in favour of the culturally defined values encoded in the myths. Of course, this is premised upon the notion that religious myths actually do promote a morality that induces behaviour leading to personal wholeness and social cohesion. One may ask whether there is empirical evidence for this claim. Rue's answer is rather general:

For example, whenever solidarity, cooperation, security, and harmony appear to be decreasing, or whenever social animosity, discrimination, injustice, and conflict appear to be increasing, we may begin to suspect a failure of religious function. And likewise, whenever happiness, tolerance, generosity, and forgiveness appear to be giving way to depression, aggression, obsession and repression, we may wonder about the religious life (160).

To suspect and to wonder are certainly good reasons to ask questions and possibly also to formulate hypotheses. But there is neither a logical nor a
theoretical connection between the decline of social harmony and the decline of ‘religious function’. At best, there could be an empirical correlation – although even this may be doubted given the unprecedented prosperous and harmonious developments in Western Europe after the Second World War. As is well known, it is a period that is also marked by a singular decline of religious commitment and belief in the core myth of the prevailing Christian religion. Which empirical cases could Rue have in mind? In the second part of his book he gives a survey of major religious traditions (Judaism, Christianity, Islam, Hinduism, Buddhism) to support his claim by empirical evidence. He tries to show that each of these religions centres on a core myth and uses the ancillary strategies mentioned to support it. He also argues that the meaning of this core myth and in particular its inherent morality enhanced personal wholeness and social coherence – if they were properly understood and practised. What he does not discuss, however, is the question of the extent to which these religious traditions really contribute to the achievement of personal wholeness and social coherence in the cultures under consideration.

Rue shows a certain sensitivity to this question when he deals with Christianity and reveals that he is quite aware of the gap between possibility and reality:

One wonders what psychological and social consequences might follow if something close to a majority of self-professed Christians practiced their religion in the manner envisioned by its principal architects. ...

If Christians seriously apply themselves to resolving intellectual problems of the myth; if they seek personal validations of the myth in extraordinary experiences; if they saturate themselves with aesthetic expressions of the myth, making every effort to apprehend their multivalent meanings; ... if they observe the sacraments; if they prompt themselves to ask what Jesus would do in situations they face – if they do all these things with regularity and consistency, then we may expect harmony with the Christian vision of how things ultimately are and which things ultimately matter. (222)

Obviously, there are many ifs. Religions might promote personal wholeness and social coherence if they functioned according to Rue’s theory. But do they function in this way? Is it possible to give empirical evidence? Has this function of religion ever been fulfilled? If it is true that there were times when humans lived a religious life, believing their religious myths, participating in religious rituals and consuming religious art, then we must suppose that these were times of whole persons living in harmonious societies. When and where was it? I would guess that it was _in illo tempore_, in the mythic time.
when things were as they ought to be. What Rue presents as the functions of religion is a normative theory that describes how religions should work to serve their intended purpose.

**Functions or effects?**

There is nothing wrong with designing normative theories that explain how things should work if all interfering factors were eliminated. Economists do it all the time. If we remove the normative element, we arrive at what could be called 'pure theory' – that is, a theory that constructs an abstract model to understand the effects of some factors of the real world without denying that the real world is far more complex and the calculated effects may be distorted by countless other factors ignored by the theory. Would it be possible to interpret Rue's theory in this way? I think some of its aspects have considerable heuristic value. In my view, the most important contribution of Rue's theory to the study of religions is to emphasize the role of emotions in human behaviour and to show that religions have a significant share in the cultural shaping of emotions. Rue makes it clear that religious myths, rituals, and aesthetic perceptions can influence attitudes, moods, and motivations that shape the emotions of everyday life and not only religious experiences. This perspective allows us to understand better the psychological mechanisms that connect religious symbol systems with human behaviour.

A famous definition of religion given by Clifford Geertz starts with the phrase:

*A religion* is (1) a system of symbols which acts (2) to establish powerful, pervasive, long-lasting moods and motivations in men by (3) formulating conceptions of a general order of existence. (Geertz 1966: 4)

Here, we have some ideas similar to Rue's theory: symbol systems (e.g., myths) that act to influence moods and motivations (and thereby emotions) by formulating conceptions of a general order of existence (i.e., cosmology and morality). Of course, Rue's theory comprises much more than these elements, but it is enlightening to consider a significant difference between these two theories: Geertz leaves open the question what kind of moods and motivations are established by religions. His theory does not exclude that the mood induced by a religion may be aggression and the feeling hatred. I would argue that this indefiniteness is more in accord with empirical evidence than the idea that religions generally promote emotions that enhance personal wholeness and social coherence. In contrast to Rue, Geertz describes in his
definition of religion not its functions but its effects. The difference should not be ignored. The notion of function contains a normative component in that it evaluates the effect positively (Searle 2006: 17). We may say that the effect of a certain religious myth is to foster intolerance; if we say that the function of a certain religious myth is to foster intolerance, we imply that intolerance is a desired effect, at least for some observers or participants.

When Rue explains that it is the ‘ultimate function’ of a religion to enhance personal and social well-being, he means that they should do so. He is aware that religions do not really work in this way. Thus, he mentions that the ‘exploitative aspects of Aryan-Indian religious life might erode the conditions for personal wholeness and social coherence’ because ‘the sacrificial system encouraged psychological dependency and fatalism’ (255). We must conclude that this religion did not fulfil its ultimate function. Rue would probably agree and could argue that the function of the heart is to pump blood, but not all hearts function properly, which may eventually cause the death of an organism. Similarly, a culture or society whose religious function is impaired would have difficulty surviving.

**Religious naturalism**

It is this view that forms the background of the last part of the book, entitled ‘On the future of religion’. What will happen if religions fail to fulfil their function to adapt human emotions and behaviours to the challenges of a changing environment? Rue sees the present situation of humankind as facing nearly unsolvable problems marked by a global environmental crisis that has been induced by excessive human impact on the life-supporting natural systems. He depicts this global crisis in the darkest possible colours. There are just two options: either humans quickly and thoroughly change their modes of behaviour that undermine the natural fundament of their survival; or they continue to increasingly overstrain the life-supporting systems, which will eventually result in a massive reduction of the human population caused by natural disasters.

Rue has little hope that there is time enough to avoid an environmental catastrophe, for this would call for a new morality that gives high priority to the protection of nature. He is convinced that such a change in value systems, which would demand personal sacrifices for the sake of saving natural resources, could only be accomplished by religion. However, the received religions do not seem to be able to respond appropriately to this challenge. There are two reasons for this: First, their traditional morality does not accord nature a high rank in the hierarchy of values, and this may change too slowly. Second, the traditional religions are undergoing a ‘crisis of influence’ in the contemporary world. The ultimate cause of this crisis is
the dwindling belief in the reality of their root metaphors effected by the rise of modern science and the awareness of religious diversity. Another factor is consumerism, which Rue describes as sharing the basic structure of a religion, including a myth and ancillary strategies to support and maintain the myth. He even concedes that consumerism fulfils the functions of a religion as ‘personal wholeness and social coherence are both maximized by a growing market, with no discernible sacrifices for anyone’ (339). Though consumerism does not undermine belief in traditional religions intellectually, it simply drives them out of the mind and replaces religious values by its own goal hierarchies. However, the side-effects of consumerism are to increase the exploitation of natural resources. It will therefore only speed up the coming environmental catastrophe.

Rue is rather concrete in depicting possible doomsday scenarios, which would see humankind ‘descending into hell’ (358–60). He also envisions the aftermath of a global collapse, when the human population will be greatly reduced. Then, ‘the remnant will clamor for ways to make their experience intelligible and restore the conditions for personal wholeness and social coherence’ (361). In other words, they will need a new religion – a religion that gives meaning to their experience and provides a morality shaped by it. Rue guesses that the central myth of this religion would seek to integrate a naturalist cosmology with an ‘eco-centric morality, the imperative to sustain human life on the planet by addressing the needs for personal wholeness and social coherence within the limits of natural systems’ (363). It would be religious naturalism. As he says, prophets of the myth of religious naturalism have already started to appear, and we may suppose that he is one of them.

Seen from this perspective, many traits of this book that on first reading are irritating make sense. Rue’s description of natural history and evolution is presented as a narrative, a story to be told – the ‘epic of evolution’. Epic is a literary genre common to myths. Rue proposes a myth of religious naturalism that starts with the creation of matter and primordial chaos and ends with apocalyptic events preceding redemption. It is a myth informed by science and natural history, but unlike science it includes morality. In this myth, nature has meaning and life has a purpose.

The book has been extensively discussed in four articles published in the journal Zygon (Baxton 2007; Klemm 2007; March 2007; Rottschaefer 2007). Significantly, none of them pays particular attention to Rue’s theory of religion, but they all concentrate on the theological and philosophical implications of his prophesied religious naturalism. They are possibly right in taking the last, if shortest part of the work as being the telos of Rue’s argument, but after all he starts with the promise to propose ‘a general and naturalistic theory of religion’ (2). For the study of religions, it is the first part of the book that deserves discussion.
A general and naturalistic theory of religion?

Rue proposes a general and naturalistic theory of religion. For him, a general theory is one 'that tells us what religion is, where it comes from, and how it functions' (2). We may ask to what extent his book answers these questions. Rue deals with the first question by describing the structure of religion, which consists of a central myth and ancillary strategies to transmit the myth and make it appear plausible. However, he finds the same structure in consumerism. Is consumerism a religion? Given the fact the Rue also states that consumerism fulfills the 'religious function' we must suppose that it meets his criteria for being a religion. We can go further and note that any cultural tradition could be described as comprising a core myth and ancillary means of making the myth appear real. Rue does not explain the difference between religion and other cultural traditions, if there should be any.

Rue obviously does not agree with most cognitive scientists of religion, who would maintain that religion is different because it implies ideas of counterintuitive supernatural agents. 'Religion is not about God' is the first sentence of the book (1). In Rue's view, religion 'is about us. It is about manipulating our brains so that we think, feel, and act in ways that are good for us, both individually and collectively' (1; italics in original). This sounds a bit like addressing a congregation. It seems to imply that a cultural tradition is a religion if and only if it is good for us, or perhaps its followers. Do Judaism, Christianity, Islam, Hinduism and Buddhism cease to be religions when they legitimate war and violence? Rue's description of these religions, which is intended to provide empirical evidence for the central religious functions of personal wholeness and social coherence, ignores the fact that these traditions have also been sources of individual suffering and social conflicts. His theory does not tell us what a religion is and how it functions; it rather appears to be an idealized vision of what religion should be and how it should function.

As to the question where religion comes from, the theory offers two kinds of answer. One is a story telling us how and when paleolithic man started to invent myths that integrated socially constructed cosmological and moral ideas into narratives. It is a plausible story but no scientific theory. The other answer is more theoretical, in that it uses the language of neuropsychology in explaining why human behaviour is not completely determined by the cognitive algorithms developed through genetic evolution, but instead guided by culturally transmitted cosmological and moral concepts. The explanation postulates a set of secondary mental operators that enable the human brain to overrule the impulses of the innate primary operators. Religion, then, is based on these secondary operators and may be said 'to come from' the brain's ability to construct them.
One could object that the theory of secondary operators just expresses in other language what was known before, that is, that human behaviour is influenced by genetic as well as by cultural factors. However, it should be recognized that his translation of insights of the cultural sciences into the terminology of neuropsychology and biological evolutionary theory is a valuable attempt to overcome the lack of communication between cultural and natural sciences. Rue subscribes to Edward O. Wilson's programme of consilience (Wilson 1998) – the unity of science based on scientific materialism. His theory of religion is intended to integrate the social sciences and the humanistic sciences into the consilience programme designed in the natural sciences (16). To develop a common terminology certainly is an important step to this end. In this respect, Rue's theory of religion can be seen as a significant contribution that may open new paths of cooperation and mutual stimulation of the natural and social sciences.

It is in view of the consilient unity of science that Rue is advocating not only a general but also a naturalist theory of religion. However, if by 'naturalism' he should mean scientific naturalism, there are some problems with his approach. Rue sees evolution as a teleological and meaningful process. If we understand the 'epic of evolution', we can find out what the meaning and purpose of human nature is. Yet evolution is no epic composed to make us understand the meaning of life, but a natural process. Unless we subscribe to the theory of intelligent design, there is no goal, purpose, telos, or meaning in natural evolution. Scientific naturalism is a major agent of what Max Weber has called the 'disenchantment of the world'. It deprives the world of the meaning it had when religious and other myths described it as a cosmos full of mysteries. What Rue proposes is a religious naturalism engaged in the re-enchantment of the world to nurture an 'acquired sense for the mystery and sanctity of nature itself' (17). His theory of religion drafts the myth of religious naturalism.

As a postscript and to do justice to Rue, it should be added that he is without doubt well aware that he is offering a myth camouflaged as scientific theory. In one of his earlier books he argues for the necessity of inventing a 'noble lie ... to reenchant the universe' as an adaptive strategy 'for opposing the maladaptive truth of nihilism' (Rue 1994: 279). To this end he envisions the creation of a 'biocentric myth' that 'takes its basic vocabulary from the sciences, adding only a narrative dimension to them' (Rue 1994: 304). This is what he has done in the book under scrutiny here. He may be right in thinking that deception can be more adaptive than truth and mythmaking more necessary than scientific argument. I doubt, however, that we should assign the task of inventing myths to the study of religion.
Notes

1 On Boyer’s theory see Jeppe Sinding Jensen in this volume.
2 On David Sloan Wilson’s theory see Joseph Bulbulia in this volume.
3 On Dawkins’s theory see Armin Geertz in this volume.
4 Unless further specified, numbers in brackets refer to the pages in Rue 2005.
5 ‘Naturalism’ is a diffuse concept that cannot be discussed here. It includes both ontological naturalism and methodological naturalism. Rue oscillates between them. He apparently is an ontological naturalist (‘the natural is real and the real is natural’ [12]), which implies that he is also a methodological naturalist (‘reducing religious experiences and expressions to the status of natural events having natural causes’ [2]). Scientific naturalism would be methodological naturalism based on the theoretical concepts and methodological principles of the natural sciences.
6 For a more explicit description of his understanding of the ‘spiritual’ dimensions of evolution see Rue 1997.

References


New Atheistic approaches in the 
cognitive science of religion

On Daniel Dennett (2006), Breaking the spell and 
Richard Dawkins (2006), The God delusion

Armin W. Geertz

The growth of New Atheism in the United States during the last 20 years has closely paralleled the increase of religious extremism in the world. New Atheists are organizing themselves and are conducting systematic campaigns to reduce the influence of religious fundamentalism in all aspects of public society, ranging from anti-Darwinian school curricula to anti-abortion measures and foreign affairs decisions by the US government. An important part of New Atheist activities is the publication of popular books on religion, its origins, and its horrors. Peter Berkowitz reports in the Wall Street Journal (2007) on impressive book sales by New Atheist writers. In less than 12 months over a million books were sold. As of 2007, 500,000 hardcover copies are in print of Richard Dawkins's The God delusion (2006), 296,000 copies of Christopher Hitchens's God is not great (2007), 185,000 copies of Sam Harris's Letter to a Christian nation (2006),1 64,100 copies of Daniel Dennett's Breaking the spell (2006), and 60,000 copies of Victor J. Stenger's God: the failed hypothesis (2007). These are the main New Atheist authors, but there are also other recent publications which follow suit.2

The fact that authors Daniel Dennett and Richard Dawkins are included in this collection indicates that their impact is worth noting. The problem is that they are not scholars who have produced scientific books and articles arguing their particular theories of religion in the peer review contexts of the academic study of religion.3 Both books are popular books with clearly formulated ideological, apologetical, and polemical agendas. There is no doubt in the reader's mind that religion in their view is bad and should be removed from the human race in the name of world peace and sanity.

Dennett's and Dawkins's books have no regard for, nor are written to, other scholars of religion. Their knowledge of religion is woefully limited and spotty, they reference comparative religionists from more than a half