This book provides a fascinating journey through many of the contentious issues raised by the subject of the relationship between religion and evolution. Cunningham’s approach can be described as having both negative and positive objectives. The negative objective is to critique both creationist and atheistic (naturalistic) perspectives on evolution, with the vast bulk of his attention given to the latter; indeed most of the book is devoted to this topic. The more positive objective is to provide his own take on how a reconciliation of evolution and religion can be best explained, and to show how evolution simply understood as a scientific theory is not a threat to religion (and so can be regarded as a pious, and not a dangerous, or atheistic, idea). Readers are likely to find his negative objective, especially his critique of atheistic interpretations of evolution, to be more successful than his own positive views, which, though interesting, are provocative and lack specificity. However, this book is worth the read just for Cunningham’s devastating critique of an evolutionary naturalistic view of reality, as well as for his extensive survey of so many different voices in philosophy, theology, and science.

One of the author’s main aims is to subject an approach like that of Richard Dawkins to critique; he intends to show that Dawkins’ attempt “to appropriate Darwinism as a vehicle for his particular and rather odd—nay, vulgar—brand of atheism will be exposed for the farce that it is.” Chapter 1 introduces what Cunningham calls the “received view of Darwinism: the myth that the theory of evolution represents a radical upheaval of all of our ideas and that major, that is, negative consequences arise from it” (xvii), including the view that man is a mere animal and does not differ in kind from other species. Chapters 2 and 3 provide an examination of the concept of natural selection, the mechanism that drives evolutionary change. Cunningham’s analysis includes a withering, forceful critique of Dawkins’ theory of the selfish gene. Chapter 4 considers the role of randomness in evolution, as well as the topic of the progressive directionality of the process. The extension of Darwin’s theory beyond the biological world is examined in chapter 5, particularly in the study of the mind and its activities, and here Cunningham presents a careful, well-argued critique of the movements of sociobiology and evolutionary psychology, which are attempts to apply evolutionary principles (accompanied, usually, by an assumption of genetic determinism) to society, culture, and morality. The general critique of materialism with regard to the mind, and of an atheistic, naturalistic approach to reality more generally, is continued in chapter 6. The author also shows that the science-versus-religion conflict is a myth, one driven, not by rational arguments but by an atheistic agenda, and based on a selective reading of intellectual and recent history.

The final chapter presents Cunningham’s own reflections on theology, where he argues that “orthodox Christianity can offer an account of life and of nature that avoids such contemporary nihilism, and in so doing restore our commonsense world, and with it the possibility of beauty, truth, goodness, and . . . our belief in evolution” (xix). While this general point is true, his own account,
which is inspired by his reading of the early Church Fathers, among others, and which revolves around an interpretation of the first two chapters of Genesis, the identity of Adam and Eve, the concepts of original sin and the doctrine of the Fall, comes across as quite abstract, and perhaps a bit too metaphorical to engage effectively with the specific issues that evolution is thought to raise for religious belief.

Nevertheless, Cunningham is to be commended for offering a theological account that attempts to reconcile evolution and religion, though it may prove unsatisfying to some readers, but it is his critique of naturalism that is the key contribution of this book. He first examines a central question with regard to common understandings of natural selection (especially the view that it operates by pure chance): what is it that is actually selected for in the process? It is problematic to say that either the individual or the group is selected for, so Dawkins has been influential with his suggestion that it is the (selfish) gene that is really the object of selection, where the gene is defined as “any portion of chromosomal material which has the potential to last enough generations to serve as a unit of natural selection” (41). According to this view, the gene is favored in the process of selection, and is passed on in reproduction, and its frequency is thereby increased in the next generation. In this way, the gene is prior to the individual and leaps from generation to generation, and so in a way is immortal! However, it is not quite the gene as a unit that is selected, and that survives, for genes are “contaminated” (and therefore changed) by causal interactions with other genes and bits of DNA; so it is rather gene types or combinations that can be said to survive; so new genes in successive individual organisms and species (especially as these become more complex) involve traces of former genes, but not the actual genes themselves.

Yet there are many problems facing such a speculative view. For example, to say that genes are what is selected for in natural selection does not follow from the fact that genes are what is replicated. Dawkins has offered a speculative account to illustrate the latter claim, but we would need to know how selection works before we can end up with, and thus explain, replication. Second, Dawkins acknowledges that a major problem facing his interpretation of natural selection is that it is not a scientific theory, and that no experiment could be done to verify it. As Cunningham notes, it is rather a “point of view” or a narrative, a way to look at certain facts about nature. But the problem with “a way of looking at facts” is that it does not constitute evidence that this is the way we should explain the facts. Cunningham argues that Dawkins has resorted to metaphors to explain his view (such as hardware/software, selfishness/altruism, replicators/vehicles) because the view is vacuous; he notes also that a review of recent work in biology shows that much of what happens in the biological world is the opposite of selfishness, that nature quite often exhibits altruistic behavior, cooperation, and group support.

Cunningham surveys the many problems that still remain in our attempts to understand how the process of natural selection is supposed to work, and provides a good overview of the discussion concerning whether natural selection can explain all features of an organism or only some features. Officially it is supposed to explain every feature, of course, and he expertly introduces us to interesting but complicated arguments concerning the notion of imperfect (less than optimal) “designs” in organisms and the discussion of adaptationism (whether every trait arises out of an organism’s adaptation to its environment), and engages with the views of Stephen Jay Gould (who is a critic of adaptationism), Richard Lewontin, and Michael Ruse, among others. What is obvious from this discussion is the lack of specific evidence to support the radical claims made for natural selection. Even though it may be the best current theory we have with regard to the origin of new species, our inability to show how it can produce by chance complex features of organisms in anything other than abstract terms means that its radical (and often atheistic-inspired claims) must be regarded with suspicion.

The book has much more in it than it is possible to cover in a short review, including
an excellent analysis of whether or not evolution is progressive. Cunningham surveys many views, and favors Simon Conway Morris’s argument that there is an inevitable direction to evolution, because many features of organisms have evolved several times independently of each other in nature (the structure of the eye, for example), a phenomenon called convergence. There is also a critical discussion of Dawkins’ notion of memes (a word that comes from the combination of “genes” and “memory”). A meme is understood as a unit of cultural transmission, or a unit of imitation, such as tunes, ideas, catch phrases, clothes fashions, and so forth. The suggestion, borrowed from the selfish gene idea, is that memes propagate themselves by leaping from brain to brain in a process of imitation, and the argument then, advanced by Dawkins, Daniel Dennett, and others, is that the human self and human culture are products of memes (including religion). Cunningham illustrates powerfully that such a view can only be regarded as pseudo-science by asking penetrating questions such as where do memes come from? If they come from the mind, he notes that they are then dependent on the mind and so cannot make the mind. But if not, then from where? How do they arise from the process of evolutionary development? What is their relation to truth and evidence, or are they mere metaphors? If so, what is the reality behind the metaphor?

Cunningham is at his best when probing what are pseudo-scientific (and sometimes philosophical) views masquerading as science, and he shows very effectively that the reductionist, materialist approach that motivates such theories would introduce a nihilism about truth and meaning, life and culture that defies common sense. Such theories and claims are best understood not as reasoned, scientific arguments, but as attitudes toward life and morality that express the ideology of their holders, and as such they do not require scientific evidence, careful argument, knowledge of or engagement with alternative views, or even much familiarity with the key issues under discussion. This is particularly evident in the work of Dawkins, who frequently demonstrates poor philosophical reasoning and lack of familiarity with the arguments and positions he disparages (perhaps to the point of irrational dogmatism). “The logic at work here,” as Cunningham observes, “is reminiscent of one of those spam e-mails that annoyingly arrives in your in-box, offering a university degree without having to sit for any actual exams” (211)!

Seasoned readers will find the book occasionally long-winded and sometimes lacking focus, moving from topic to topic, as if the author felt that he needed to refer to every view and thinker on each topic. Readers not that familiar with the general subject matter will likely find it difficult to keep up, and may find it a bit overwhelming. On the positive side, Cunningham pulls no punches in his critique of atheistic naturalism and does an exceptional job of showing that the emperor has no clothes when subjected to rigorous logical examination. While his positive views still need further elaboration, this is one of most refreshingly direct exposes of the bankruptcy of the naturalistic view that I know of, and as such represents a first-rate contribution to what is a momentously important debate.

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