The Philosophy of Human Evolution

by Michael Ruse

reviewed by Matt Cartmill

From the beginning, the relationships between Darwin and philosophers of science have been uneasy. To please the philosophers of his day, Darwin labored to make his theory fit the approved Newtonian model of physical science, with less than perfect success. C.S. Peirce regarded Darwinism as both scientifically dubious and morally disgusting (Russett 1976:64). Karl Popper thought that the neo-Darwinian synthesis was not so much a scientific theory as a “metaphysical research program.” (He changed his mind later.) And postmodernist philosophses who insist that nature is a human construction have never been happy with a theory that depicts humans as emerging over geological time from an independent natural order.

Michael Ruse's new book The Philosophy of Human Evolution is a historical and critical survey of the ways in which Darwinian thinking has clashed and interacted with the concerns of philosophers. Intended for a general audience, the book showcases Ruse's manifold skills as a writer. His prose is lucid, straightforward, and colloquial. Each paragraph leads into the next with elegant coherence and no complicated impediments to the smooth flow of ideas. As might be expected from so brief and readable a book, there are no profound or subtle new ideas here; but most readers will bring away new facts and insights from this thoughtful little page-turner.

The beginning and end of the book deal with the history of ideas. They set forth Ruse's incisive critiques of a huge array of questionable notions in evolutionary thought, including spandrels, constraints, memes, complexity, eugenics, evolutionary medicine, evolutionary psychology, and biological progress. The philosophy proper comes mainly in the middle of the book, beginning on page 66 with the question: is Darwinian theory real science? There are two main grounds for doubt. First, it seems trivially true to say that the fittest genes or organisms out-reproduce the others, because that's what “fittest” means. Second, if explaining something scientifically means showing that it obeys a law of nature, then you can't explain unique events (Hume 1748 [XI], 1825 [2]: 149–50); and many or most evolutionary events are unique. Ruse dispatches the first problem handily, but I thought he waved away the second too easily, by pointing to the astrophysicists' supposed success in “explaining” the Big Bang. This confuses explanation with description. I'm inclined to stick with Hume on this one.

Ever since Plato, philosophers have been debating the meaning of the True, the Good, and the Beautiful. Ruse devotes his central chapters to trying to shed some Darwinian light on the first two. His chapter on “Knowledge” begins with some generally kind words for two related notions: the ideas that science progresses by a process analogous to natural selec-
tion, and that a lot of our intuitive “knowledge” (for example, our unshakable conviction that everything has a cause) is itself the product of natural selection. This latter idea is essentially Kant’s reply to Hume’s attack on induction, simplified and given a Darwinian spin. This move, however, runs into an objection urged by theists like Alvin Plantinga and CS Lewis: if our faculty of reason was bestowed on us by an age-long baby-making contest rather than by God, there are no grounds for assuming that it works to ensure true conclusions—only larger numbers of babies. Ruse evades the dilemma by invoking a pragmatic theory of truth (truth is whatever works), but he ultimately ends this chapter with a question mark.

Ruse begins his next chapter, “Morality,” by recounting the ideas of Darwin and his successors about the origins of altruism in animal and human societies. He has some properly scathing things to say about the sorry history of Social Darwinism, from Herbert Spencer down through the National Socialists. He reports happily that Social Darwinism evaporated after World War II and is, “one can say with some relief, no longer fashionable” (p 165). I would imagine that Ruse wrote those comforting words before the 2012 Presidential election campaign got into full swing. Unfortunately, the notion that the undeserving poor must not be succored lest they drag down the successful is alive and vital in American politics.

Ruse has little patience with evolutionary ethicists who define virtuous impulses as those favored by natural selection. Probably most philosophers today would agree that David Hume slammed the door in 1740 on all such attempts to reason from “is” to “ought”—from the way things are to the way we ought to behave. But then how can we determine how we ought to behave? Ruse thinks that Darwin and Hume can be reconciled to yield an answer. As Hume wrote, “Our sense of duty always follows the common and natural course of our passions” (Hume 1740:2[1]:484). Thanks to Darwin, we now know that those passions—our instinctive sense of justice and fair play, our love for our families, our bodily perceptions of pleasure and pain—are part of our biology and the product of evolution, and our sense of duty arises from them naturally.

Fine: but where is the “ought” in all this? It won’t do to say, as Ruse wants to say, that we just naturally avoid acting wickedly because we are not psychopaths. (No doubt we ought to, but in fact people exhibit an impressive capacity for unrepentant wickedness.) Something more is needed to lend moral force to our shared natural preferences. I think the “something more” here is logic. Ultimately, moral reasoning has to incorporate something like the Golden Rule—the principle that you should act towards others as you would like them to act toward you—as a self-evident premise. I suggest that this axiom of moral reasoning derives at least partly from the operations of syntax, which allows us to put ourselves in another’s place by switching the pronouns around (Cartmill 2006).

For some reason, Darwinians (including Ruse) are reluctant to admit the compulsions of logic as an independent influence on human behavior. Logic, Darwinians like to think, has to be what it is for some practical reason grounded in natural selection. But Ruse admits that this is a tough proposition to swallow when it comes to the self-evident truths of mathematics—for example, Euler’s famous equation eπ = -1, which he considers “one of the most beautiful things ever encountered by humankind” (p 182). It’s hard to see this equation as a fact about human genes.
Whatever you think of Ruse’s conclusions about the Good and the True, he has done a wonderful job of covering and evaluating a huge range of important ideas about the political, ideological, and philosophical implications of Darwinian thought in this short, easily read book. His errors of fact are few and minor. I wish he had gone on to deal with the Beautiful—Darwinians have never had anything very plausible to say about esthetics—but you can’t have everything. This book gives us more than we have any right to expect in its brief span of 245 pages of text.

REFERENCES

ABOUT THE AUTHOR
Matt Cartmill has published more than a hundred scholarly and popular works on the evolution and functional anatomy of people and other animals, and on the history and philosophy of evolutionary biology. His writings include the award-winning book A View to a Death in the Morning (Cambridge [MA]: Harvard University Press, 1996), a history of Western ideas about hunting and human origins. The recipient of numerous awards for his research, writing, and teaching, Cartmill is a Fellow of the American Association for the Advancement of Science, a 1985 JS Guggenheim Fellow, the former President of the American Association of Physical Anthropologists, a founding editor of the International Journal of Primatology, and the former editor-in-chief of the American Journal of Physical Anthropology. His research interests include primate origins and phylogeny, systematics, cranial morphology, and the functional anatomy and evolution of bipedal and quadrupedal locomotion.

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