



Knowledge, Intent, and Morality in Darwin's World

Darwin and the Emergence of Evolutionary Theories of Mind and Behavior by Robert J. Richards

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KNOWLEDGE, INTENT, AND MORALITY IN DARWIN'S WORLD

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A review of

DARWIN AND THE EMERGENCE OF EVOLUTIONARY THEORIES OF MIND AND BEHAVIOR. *Science and Its Conceptual Foundations.*

By Robert J. Richards; Series Editor: David L. Hull. University of Chicago Press, Chicago (Illinois). \$34.95. xvii + 700 p.; ill.; index. ISBN: 0-226-71199-4. 1987.

Ten years ago, puzzled by the virtual absence of Darwinian theory in the philosophy of science literature, I wondered if philosophers have failed to understand what biologists are doing with the theory of evolution, and how they are doing it. Since then, a small cadre of philosophers has delved extensively into these questions, among them David Hull, Elliott Sober, Michael Ruse, Philip J. Kitcher, and Robert J. Richards. Of these, the last three have shown spe-

cial concern for the evolutionary background of human attributes. In the present book, Richards writes as a student of "history, philosophy, and behavioral science." He begins with an absorbing description and justification of the historian's craft, fills most of the book with historical narrative and analysis, and ends with a discussion of historiographic models of science and a defense of his own brand of evolutionary ethics.

Richards attempts to trace the reasons for changes in Darwinian ideas about the human mind and human behavior, using a "natural selection" model in which ideas that work, last, and he argues: "There is no justification for historians to assume a priori that only social forces (i.e., political and ideological interests) finally determine ideas" (p. 557). He thinks

that "Contemporary Darwinism focuses a stark image of man" (p. 504), and hopes that ". . . the results of this study will help undermine the received view of Darwinism — that it formed man in the image of a materialistic, mechanistic, and amoral being" (p. 558). He identifies the "legatees of the transformed image of Darwinian man" as "Wilson, Dawkins, and Alexander — to name the more prominent contemporary sociobiologists" (p. 546), and argues that "The neutral monism elaborated by late nineteenth century evolutionists . . . comports better with the sort of biology Gould and Lewontin would like to establish. . . . [an] original image [that] depicted man as authentically moral. . . . I have tried to restore that older image in order to bring out its bright moral features, to show that if our morality has profound roots in our animal past and has evolved by natural selection, this conviction hardly demeans our humanity, rather it elevates our biology, our evolutionarily human and moral biology" (p. 548).

It seems to me that the central theme in Richards's arguments about ethics (as opposed to his extensive and sometimes delightful information about the history of this part of academia) is a failure to "go the whole orang" (he seems to like this phrase) in accepting the notions that (1) group selection accounts for attributes of organisms only in special cases (G. C. Williams, *Adaptation and Natural Selection*, Princeton University Press, 1966), (2) much concern for others reflects a history of inclusive-fitness-maximizing via relatives (Hamilton, *J. Theoret. Biol.*, 7: 1–52, 1964), and (3) much apparent altruism is a part of social reciprocity (Trivers, *Q.R.B.*, 46: 35–57, 1971). He often writes as if evolution were principally a matter of between-species phenomena, and speaks liberally of "community-level selection," as in describing Darwin's answer to sterility in the workers of social insects. But Darwin also wrote of the social insect colony (a nuclear family) as bearer of the *trait* of sterility, which could be expressed or not in individuals carrying it, and of how the trait of sterility could be advanced by selection if those carrying it but not expressing it were helped sufficiently by those expressing it. This is as close as anyone could get to genic selection without knowing about genes.

Richards does not seem to distinguish group selection that works because the interests of all members of a group are identical (the kind, presumably, that results in an even distribution of chromosomes and cytoplasm during mitosis, or causes everyone to row when the current is taking us in the wrong direction) and the hypothetical Wynne-Edwardsian kind, which yields individuals that behave in the interests of the group (e.g., to regulate population size) even when their own reproduction thereby suffers relative to that of other, genetically different group

members (i.e., who presumably do not carry genes leading to tendencies to withhold reproduction). With humans there is the complication that powerful individuals and subgroups can impose such behaviors by creating punishments that make community-benefiting behaviors (e.g., stopping at stop signs, or giving to the United Fund) less expensive than their alternatives. Richards, however, regards such "contract altruism" as "morally inferior" to something he calls "authentic" or "true" altruism, and seeks to defend an evolutionary ethics based on the latter. He stipulates that "community welfare is the highest moral good" (p. 620), and distinguishes intent from motivation. Intent, he says, is required for morality, this rendering nonhumans amoral. One is tempted to suggest that he read Franz de Waal's *Chimpanzee Politics* — or at least *something* on nonhuman animal behavior, for, as with the general topic of biology by biologists, precious few such references appear in his extensive bibliography.

This problem of intent is obviously central, for all of us believe that we do things costly to ourselves and our relatives, for the benefit of the community; and this is indeed where the notion of morality is centered. By Richards's arguments, if we automatize (internalize, render unconscious) the weighing of costs and benefits, and then accept only propositions that net us (our genes) benefits, all we have to do to be superior moral beings is to generate the sincere belief that we are serving the welfare of the community. If we intend our acts to be moral then they are — no less moral than those of others who also think they are serving the welfare of the community at their own expense when they in fact are, but morally superior to still others who serve either the community or themselves, through contracts. One cannot omit that contracts can be viewed as being with one's fellows or with gods, with returns to be realized either in this life or another.

Richards seems to have decided, from the work of such as Michael Wade (and David Sloan Wilson, not cited, however), that group selection is back, with the power to explain social behavior, and that this "new group selection" allows him to generate an explanation of morality that will make everyone happier. He is evidently one of those who erroneously believe that group-living and group selection yield only beneficent tendencies. Such a simplistic view avoids many pertinent questions: What is a community? Can we define it as we wish? Can it be moral to serve one's own community at the expense of another? What if we are so designed that to make the entire world a single community is even more difficult than Darwin supposed when he originally suggested such an extension? And what about all those intents that we serve daily which are not focused on the welfare of the entire community?

By Richards's usages it might be argued that a

fully trained army is the most moral system around (and he does speak of soldiers killing "innocent civilians" as if this were their only—or most likely—immoral possibility). But there are problems in this, relating, for example, to the notion of intent: In the army in which I served one was schooled so effectively to serve the welfare of his unit (community?) that not only the contract altruism that Richards says is inferior to his "pure" altruism, but the intent that he requires, both disappear in a kind of automaticity that ceases to involve any deliberateness, either in maintenance of the contract signed when drafted or enlisted, or in explicitly serving the rest of one's unit. Is this the same (evolved) process of automatization that allows us to convince ourselves when we behave heroically in civilian contexts that we are "authentic" altruists?

Richards hardly mentions the problem of conflicts of interest, which of course is why armies are formed in the first place, and perhaps why "community welfare" is a common phrase and a valued end. He does not deal with the evident fact that cooperation evolves not as an alternative to competition, but as a form of it, and that direct intergroup competition—so prominent in human endeavors—gets more people into trouble than any other kind. He simply skips the extensive literature arguing that humans evolved their intellects via social and intergroup competition.

No one supposes it easy to work up a widely or universally acceptable normative scheme. Some of us think it not likely at all because the entire proposition is based on feelings about conflicts of interest, unlikely to go away; that people think they have different values because they have throughout evolutionary history been genetically unique as individuals, therefore are evolved to behave as though their interests are unique whenever such behavior is possible (profitable). One also wonders if a moral system can ever be judged "superior" on logic, or loftiness of intent or content, or rather only on expectations and realities of outcomes. Although Richards denies such consequentialism, he does so on grounds that mistakes are possible in judging consequences and intent is all that counts.

Richards is probably correct when he maintains that his narrative will not collapse just because readers reject either his notions about the evolution of ideas or his particular theory of evolutionary ethics. For, even if not quite in the language, approach, or literature that a biologist might favor, this is a scholarly, information-filled volume, probably the best ever exposition of its topic. Nevertheless, it also bolsters my belief that brilliant, imaginative interpreters, with unusual command of language, have readers more or less at their mercy, as would poets if we read them as history.

LIFE AND SCIENCE INTEGRATED

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A review of

THE STATUE WITHIN: AN AUTOBIOGRAPHY. *Alfred P. Sloan Foundation Series.*

By François Jacob; translated by Franklin Philip. Basic Books, New York. \$22.95. vi + 326 p.; index. ISBN: 0-465-08223-8. 1988.

In the summer of 1906 or 1907, following either his second or third year as a student at the Johns Hopkins Medical School, the eager young man who was later to become my father carried out some experiments under the tutelage of William G. MacCallum; he tried to ascertain whether bacteria that had been cultured in one variety of sugar solution could grow in a different one. The results were negative, and there seems to be no record of them except in my memory of a conversation held during a long Sunday morning walk sometime in the early 1920s. According to Nancy McCall, who in 1982 was Assistant Archivist in the Alan Mason Chesney Ar-

chives of the Johns Hopkins Medical Institutions, there is only a single mention of bacterial growth in sugar in the collection there of MacCallum's personal papers (letter, McCall to JMO, October 7, 1982). That is in the text of a lecture on bacterial physiology that seems to have been presented by MacCallum on October 22, 1907 (his name is written on its typescript in hand writing, probably not his own). Nothing resembling what we would call enzyme induction, as sweet by any other name, is mentioned, but the content of the lecture seems at least to authenticate my memory that I had been told that MacCallum was interested in the sugar metabolism of bacteria at the time.

Well over a half-century later, in 1965, a Nobel Prize in medicine was awarded to François Jacob, André Lwoff, and Jacques Monod for their discovery of a previously unknown class of genes whose function is to regulate the activity of other genes.