KITCHER, Philip, Vaulting Ambition: Sociobiology and the Quest for Human Nature. Cambridge, Massachusetts: The MIT Press, 1985.

There are not many, one would suspect, among the educated public in the Western world who have not heard of Sociobiology. In the last few years especially, human sociobiology has attempted to absorb (or threatened to do so) various domains of human thought to itself: from ethics to epistemology, from economics to sociology. The shrill and strident tone of the proponents and enthusiasts of this "revolution" in human thought makes them a bit suspect though: if human sociobiology can really do all this, why the need to shout? Philip Kitcher, in this magnificent book under review, gives the answer: the shout is because it can do no such thing. Worse, human sociobiology is not even a serious theory with a rigorous central core, but a set of indifferent and largely speculative studies or a motley.

But, of course, critics of human sociobiology have alleged this for quite sometime now. Amidst the hundreds of books extolling the virtue of human sociobiology, there also obtain a not-inconsiderable number criticizing its emptiness. But, what sets Kitcher's *Vaulting Ambition* apart from any of these, and into a class all by itself, is the painstaking meticulousness and care with which he scrutinizes the doctrines and tenets of human sociobiology. On the dust

150 REVIEWS

jacket of the hardcover edition, Lewontin calls the book "the last word on the subject of sociobiology". I am neither a seer nor a biologist, but I find myself assenting: I cannot quite imagine a more cogent or a better reasoned critique of human sociobiology than this one. It is, quite simply, the best book on the subject yet.

Kitcher's focus is not so much "sociobiology" as such, but upon one enterprise within it which he calls *Pop Sociobiology*, where 'pop' abbreviates 'popular'. His choice of the term is "because the work that falls under this rubric not only is what is commonly thought of as sociobiology but is deliberately designed to command popular attention." (p. 15) This tradition counts under its practitioners such luminaries as Wilson, Dawkins, Trivers, van den Berghe, Chagnon, Alexander etc. Pop sociobiology, says Kitcher, "consists in appealing to recent ideas about the evolution of animal behavior in order to advance grand claims about human nature and human social institutions." (p. 14-15) However, in pop sociobiology, there are three distinct rival research programs: the early Wilsonian program announced in his *Sociobiology: A New Synthesis*, and *On Human Nature*, the later Wilsonian Program announced in *Genes, Mind and Culture* and in *Promethean Fire*, and the program of the likes of Alexander and Chagnon.

The first chapter sets the scene for what is to follow: the desire of pop sociobiology to ascend from Nature up to controversial claims about human nature (an ascent, which Kitcher calls Wilson's ladder referring to the arguments required to do so). In the course of clarifying the terminus of this program, Kitcher takes ample care to carry the uninitiated along with him when outlining the problem of "genetic determinism". In the second and the third chapters, we are provided with enough basic notions of evolutionary biology and genetic theory, together with the methodological controversies surrounding the former, and the studies of animal behavior so as to enable us to follow Kitcher in his further discussions. Though in the course of this discussion some mathematics is made use of, all quantitative and mathematical analysis is separated from the text as boxes (throughout the book) so that the flow of the argument is not obstructed for non-mathematical readers.

Kitcher's critique begins with a distinction between sociobiology as a field and sociobiology as a theory. Within the field of sociobiology, he makes a further distinction between narrow and broad sociobiology. The former involves the systematic study of the biological "basis of all social behavior, including not only questions about the evolution of social behavior but questions about the mechanisms of social behavior, about the development of social behavior, about the genetics of social behavior, and perhaps even about the function of social behavior." (p. 114) This kind of study is obviously legitimate as are its results important. In this domain, there obtains no single theory.

The evolutionary questions of narrow sociobiology are more selective: "in posing the question why animals engage in the forms of behavior that they do, narrow sociobiology construes the request as asking for a specification for the actual workings of evolution: How did the behavior originally evolve? How is it maintained?" (p. 115) Wilson's "new synthesis" is to be sought in the field of narrow sociobiology. With this useful distinction made, Kitcher then reconstructs Wilson's ladder (p. 126) comprising of four rungs and, in the next four chapters, knocks them out one by one. Chapters 5 to 8 are the best examples

of the care and meticulousness characteristic of this work. Scrutinizing example after example, a procedure necessitated by the motley nature of pop sociobiology, Kitcher hammers home the weaknesses and fallacies in Wilson's ladder.

In the ninth chapter, he looks at Alexander's version of pop sociobiology and its exemplification in the anthropological studies of Chagnon and Dickemann. The penultimate chapter goes into the later Wilsonian version. In Genes, Mind and Culture, which is simply a mathematical jungle, the coauthors Wilson and Lumsden intended to open a new chapter in the history of human sociobiology. I could not wade through the mathematics of that work, nor could I follow the boxed mathematical discussions in Kitcher's book. The former, if I understand Kitcher was no loss; but the latter, regrettably, is. A discussion about altruism, freedom and the objectivity of moral values constitutes the ultimate chapter. And by then, there is not much left of the "new synthesis", which was to herald the much trumpeted revolution.

As I indicated at the beginning of the review, this is truly a beautiful book. It is not the contents alone which makes for such an excellent reading. Kitcher's prose is smooth and elegant with just the right touch of the literary and the humorous to keep you going right until the last page. This is a book which is a must for all those who aspire to become philosophers, and to all those social thinkers interested in the issues and promises of human sociobiology. I really do hope that it will reach the public that it, without doubt, deserves. The implications of a social and political policy based on 'faulty sciences' are those that go beyond the confines of a classroom: as Kitcher points out, it touches and transforms the lives of millions. This is sufficient enough a reason to read this book and reflect about it. I have decided to pitch in with Kitcher; I sure hope that his backyard is big enough to accommodate the many tents that will be springing up there soon.