## SOCIOBIOLOGY: THE NEW DISCIPLINE OF CONSIDERABLE RELEVANCE TO COUNSELLORS

- Sociobiology and Behavior, D.P. Barash, New York, Oxford, Amsterdam: Elsevier, 1977, 378 pp. \$5.00 (paperback)
- The Selfish Gene, R. Dawkins, New York and Oxford: Oxford University Press, 1976, 224 pp. \$10.00
- Sociobiology: The New Synthesis, E.O. Wilson, Cambridge, London: Belknap Press of Harvard University Press, 1975, 697 pp. \$20.00

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For psychologists, the theory of biological evolution has been like "good old Charlie" okay in some situations but wisely avoided in others. Imagine, however, a new and improved, self-actualizing Charlie — one who had outgrown his major inconsistencies. Imagine as well that Charlie had developed a profound interest in human behavior and that he was now able to make some alternate, provocative, but credible contributions to our understanding of human nature. Charlie has been reincarnated in the new discipline of sociobiology. Since sociobiology is likely to have a revolutionary impact on counselling psychology, you might wish to get better acquainted.

Sociobiology, as defined by Wilson, is a comparative science which is concerned with the biological or genetic basis of social behavior. The major assumption of sociobiology is that all forms of life evolved by natural selection. In contrast to psychology's focus on the here-and-now. sociobiology is interested in the behavioral predispositions which the environment may have created or selected over a long period of time. If the selective effect of the environment is known, then theoretically it is possible to estimate human predispositions based on the fact that ancestral forms survived and prospered in that environment. It is assumed, then, that this "human nature" is genetically coded and controlled, and it manifests itself in behavioral that predispositions. These genetically based predispositions, according to Dawkins, are analogous to the program of a chess-playing computer. The genes determine our basic goals and learning strategies, and with this limited freedom we set off to interact with and learn from the world in our guest to win as many matches as we can. Investigating the contents and specificity of this program is what the important work of sociobiology is all about.

Let us sneak a preview of what sociobiology

says these genetically based human predispositions may be. We may not always be predisposed to seek self-improvement. Even a viable "learned" helplessness may be evolutionary alternative. We may generally not wish to see the world accurately. Idyllic views should dominate. We are probably programmed to cheat, but to avoid getting caught. We exploit the socialization process in order to determine the "safest" opportunities for cheating. We are probably genetically motivated to detect and punish cheating in others. If sanctions are not effective in correcting behavior, ostracism or death may quickly appear indicated. Depending upon our life situation, we will likely espouse different morals, use different principles of moral reasoning and different attribution processes. Altruism and spite are but the Janus faces of selfish motivation. ultimately Innate predispositions may make child-parent, sibling, adolescent-adult and male-female conflict inevitable. All this suggests that we may have genetic predispositions for specific age and sex roles. Material acquisition may "taste inordinately sweet", and there is probably little aversion to despoiling our environment. Kindness toward relatives and suspicion toward strangers is to be expected. What Charlie is saying cuts across our theory and therapy in a way which offers both challenge and potential for growth.

Sociobiology specializes in non-idyllic explanations of human behavior. But there is room to explain human goodness and rationality. Perhaps the greatest conceptual appeal of sociobiology lies in its ability to blanket goodness under theory. and evil one Moreover, sociobiology may present a picture of human nature "whose time has arrived". Many are beginning to doubt the assumption of peoples' inherent goodness and malleability. Sociobiology may offer a more realistic view of human nature. It makes people seem "human".

Interested? These three books are the place to start a relationship. They herald a return of evolutionary thinking to an understanding of human nature.

The Selfish Gene is the primer for sociobiology. The gene is selfish in that it demands to be reproduced, but that doesn't mean it makes us completely uncooperative. The apparent inconsistency between selfishness and cooperation has plagued the theory of natural selection since Darwin's formulation. Recent solutions to this inconsistency account for the development of sociobiology. Dawkins' telling of this triumph of logic over dilemma has all the excitement and readability of good science fiction. Eliminating technical terms and equations, Dawkins weaves natural selection through selfishness and cooperation with the brillant use of analogy. He starts with competition among genes in a primeval soup and ends with "survival machines" programmed by the genes to occasionally be cooperative in order to remain competitive. Like an amiable companion, this work is a necessary reference point for delving more deeply into sociobiology.

Sociobiology and Behavior is a sketch book of sociobiological understandings directed toward students in the social sciences. Barash outlines an improved theory of natural selection and takes particular pains to disassociate sociobiology from the past abuses of natural selection, committed both from within biology and without. Social-Darwinism and the assumption that the environment selected primarily for the benefit of the group or the species are among the disclaimed. The body of the book is taken up with examples of predispositions in other animals, drawn of course, to encourage the reader to make appropriate generalizations to the human species. The behavior of other animals represents solutions to environmental constraints analogous to human predispositions. When the environmental contraints seem to be similar, animal behavior should be comparable to that of people. In the last Barash likens human chapter, behavioral predispositions to human's perennial sweet-tooth. We are not born as a tabula rasa, nor are we as determined as a reflex. We are predisposed. We may avoid the excessive use of sugar in our diet, but it will require effort. The last chapter follows this sweet-tooth analogy into some interesting extrapolations. Sociobiology and Behavior will prove a valuable aid in tackling Wilson's imposing Sociobiology: The New Synthesis.

Wilson's work constitutes the founding text book of sociobiology. There is no use kidding around; this massive work will call for some tough slugging. Sociobiology: The New Synthesis is addressed to students in biology and to the task of developing a unified theory of sociobiology. Thus, the more direct implications for an understanding of human nature occur in odd places, except for the last chapter. Moreover, Wilson has the annoying ability to state a set of complex ideas in a few sentences. He briefly notes, for example, a similarity between ideas and genes but Dawkins spends a whole chapter on the same concept. But this also means that the book is packed with "hidden" potential awaiting further development.

Dawkins and Barash come across as cautious no doubt a normal response arising from a tradition of being told that natural selection is not too useful for understanding human behavior. Wilson is different. He believes that sociobiology may well gobble up psychology. After all, in a very basic sense, both are dealing with the same object. Wilson, in effect, is saying "try the hypothesis of sociobiology and you may find an increased understanding of human beings". His discussion of moral behavior is typical and illustrative. Citing the conditioned emotional response approach of Eysenck and the cognitive developmental approach of Piaget and Kohlberg, Wilson feels that with further research, both may merge to form a "recognizable exercise in behavioral genetics". The first approach tells us about the learning process; the second tells us what is rewarding and, thus, makes conditioning possible. Further research is, of course, to be based upon sociobiological insights. Bold perhaps, but in comparison to sociobiology solid grounding in evolutionary theory, we in psychology sometimes appear to pull our theoretical constructs and independent variables out of thin air. By the sheer weight of plausible reasoning, sociobiology requires some serious consideration.

As may occur with old acquaintances who have suddenly acquired a new boldness, first they demand more of your time, next they want to move in. At the very least, this new Charlie will not be ignored.

(Editor's Note: The counsellor interested in a concise and popular introduction to sociobiology should also see: Galvin, Ruth and Jaroff, Leon (ed.) Why you do what you do; Sociobiology: A new theory of behavior. *Time*, Aug. 1, 1977, 36-41.)