HUMAN NATURE, SOCIOBIOLOGY AND COUNSELLING

WILLIAM A. LANG and LLOYD W. WEST
Department of Educational Psychology, University of Calgary

Abstract

Assumptions about human nature play an important role in the formation of counselling theories. Sociobiology suggests that much of our basic psychological makeup is genetically determined and has evolved by means of natural selection. The sociobiological picture of human nature challenges the assumptions that human goodness is innate and that human behavior is easily modified by reinforcement. Rather, sociobiology suggests that biologically based human predispositions will often conflict with the legal and moral requirements of modern life and that resolving this conflict will not be easy. Accordingly, sociobiology provides support for the direct teaching of moral values and social skills to compensate for the vestigial predispositions which impede self and social enhancement. Sociobiology, thus, may serve as the cornerstone of a rationale for the role of counsellor as educator.

Résumé

Certaines présuppositions sur la nature humaine jouent un rôle important quand il est question de formuler des théories de consultation. La sociobiologie suggère qu'une partie importante de la dimension psychologique de base est déterminée par la généalogie et qu'elle a évolué par la voie de la sélection naturelle. La dimension sociobiologique de la nature humaine questionne les présuppositions que la bonté humaine est inée et que le comportement humain se modifie facilement par le renforcement. La sociobiologie suggère que les prédispositions humaines d'origines biologiques entreront souvent en conflit avec les normes légales et morales de la vie moderne et que la résolution de ce conflit ne sera pas facile. Par conséquent, la sociobiologie appuie l'enseignement direct des valeurs morales et des compétences sociales afin de compenser les vestiges des prédispositions gênant le développement du soi et du comportement social. Par ce fait, la sociobiologie sert de pierre d'angle à la raison d'être du conseiller à titre d'éducateur.

Donald T. Campbell (1975) chose the occasion of his presidential address to the American Psychological Association to discuss the conflict between contemporary psychology and moral tradition. Arguing from a sociobiological perspective, he challenged the psychological community to re-examine that conflict. Somewhat later, Christensen (1976) introduced readers of the Canadian Counsellor to Campbell's argument and to the potential implications of sociobiology for the practice of counselling. Christensen's editorial provided stimulus for a special issue of the Canadian Counsellor edited by Lloyd West (1977) and devoted to the topic of "Teaching, The Substance of Counselling." In that issue, Lang (1977) reviewed three books on sociobiology and urged counsellors to gain some acquaintance with this new discipline. The present writers now pick up this theme for a more detailed look at the sociobiological paradigm and the implications of the sociobiological portrait of human nature for the philosophy, theory and practice of counselling. 

Human Nature

The nature of man has been an important concern of philosophers, poets, priests and peasants throughout recorded history. How much of our behavior is attributable to our biological heritage and how much is the result of the environment in which we are raised and live? What is the source of good and evil in human behavior? Are we naturally good but sometimes corrupted by society or are we savages requiring socialization in order to behave in civilized ways? Is our behavior the result of rational and conscious choice, or is it largely the product of irrational and unconscious forces? Answers to questions like these make up our assumptions about human nature and it is on the basis of such assumptions that we decide what we ought to do and what we can hope to accomplish.

Three forces (the psychoanalytical, the behaviorist and the humanistic) are commonly believed to have exerted a major influence on the development of counselling psychology. Before
elaborating upon the sociobiological portrait of human nature, it will therefore be useful to briefly review the positions held by eminent spokesmen for these movements.

Freud, it will be recalled, held a very pessimistic view of human nature and was quite skeptical about the future of our species. He contended that people were driven from cradle to grave by unconscious forces of sex and aggression and that without social restraint chaos would reign supreme. Cultural progress was thought possible only through the inhibition and sublimation of sexual and aggressive energies. Freud believed that people submit to social control in order to protect themselves from one another. The security of the collective, however, comes at a price since thwarted instinctual drives continue to generate internal tension. The appropriate release of this tension is the key to effective adjustment. Thus, the aim of psychoanalysis is to strengthen the ego or rational component of the human personality so that it can obtain control and find personally and socially constructive outlets for these instinctual impulses.

Behaviorists, like B.F. Skinner, work under the assumption that the content of “black boxes” is too intractable for speculation. Thus Skinner makes few assumptions about human nature. Rather he turns his attention to the observable effects of environmental variables on human behavior. This orientation leaves the impression that our biological heritage has endowed us with virtually unlimited flexibility. The founding father of behaviorism, J.B. Watson (1925) declared that he could take any infant at random and make of it anything he liked, given only the appropriate environment. In the tradition of Watson, behaviorists generally assume that we turn out the way we do largely as a result of environmental influences — the rewards and punishments in daily living. Since most of what is “within” was put there by operant conditioning, Skinner holds that cultural progress, however defined, can be achieved only by the planned and rigorous management of reinforcement contingencies.

Carl Rogers, representing the third force to influence counselling psychology, subscribes to the romantic view that people are basically good. From this very optimistic perspective, human beings like Rousseau’s “noble savage” are naturally inclined toward self and society enhancing behaviors. Rogers contends that through the provision of growth facilitating “conditions,” individuals are enabled to follow the wisdom of their organism, which he believes to be a most reliable guide. Since a predisposition toward and a potential for goodness “awaits within,” people need not be directly taught constructive modes of behavior. Although social influences may result in a supression or perversive of our inherent source of wisdom, human empathy, warmth and unconditional acceptance leading to self-exploration are presumed to aid its rediscovery. Clearly what we believe about human nature makes a difference to what we do as counsellors.

Sociobiology is a new discipline based upon modifications to Darwin’s theory of evolution. It claims not only that our basic nature is much less than perfect, but also that it is biological. At a general level of description, sociobiology’s portrayal of human nature matches well with the Freudian. Sociobiologists, however, would not see human nature limited to a few basic drives nor as mechanistically determined as the instinct concept seems to imply. Nash’s (1970) “psychological efficiency” construct captures the sociobiological assumption about the relationship between genes and human behavior. Nash (1970) claims that as a result of our biological heritage, “certain modes of function [are] easier to elicit and more effective in operation than others” (p. 8). Sociobiology puts detail to this construct by suggesting that our biological heritage has programmed us in such a way that it is much easier to learn and to perform self-enhancing behaviors than to learn or to perform socially enhancing behaviors. From this perspective and contradistinction with the Rogerian and Skinnerian perspective, human beings are neither basically good nor blessed with virtually unlimited flexibility. Rather, we are biologically predisposed toward behavior which society will very likely judge as inimical. It is to be expected, then, that human beings will often find that their natural inclinations are in conflict with societal expectations. In order to become good citizens in a complex world, many social skills and moral values will need to be learned. Moreover, this learning will not be easy. Barash (1977) likens genetically influenced predispositions to the human sweet tooth. We may overcome the excessive use of sugar in our diet but it will require effort. The counsellor who accepts the sociobiological picture of human nature must come to see him or herself as an educator. Teaching becomes the preferred mode of enhancing both individual and social welfare.

The Sociobiological Paradigm

Sociobiology seeks an ultimate explanation for all social behavior in terms of biological evolution. Although Darwin has first propounded the mechanics of natural selection in 1859, E. O. Wilson’s founding text, *Sociobiology: A New Synthesis*, was published as recently as 1975. A brief look at this more-than-a-century hiatus between Darwin’s and Wilson’s work will serve to place sociobiology in a context of scientific thought.
Evolution by natural selection, like major paradigm shifts before it, challenged existing "world views" and led to furious religious, political, and scientific controversy. Fundamentalists, who held to a literal interpretation of the Biblical account of creation were enraged. Darwin's theory was considered blasphemy — an insidious attempt to undermine the most cherished beliefs, if not the very foundations of our culture. Growing acceptance of Darwin's theory by the scientific community was counterbalanced by notable efforts to ban the teaching of evolution from publicly supported institutions.

As if to add fuel to the fire, Social Darwinists misapplied concepts from evolutionary theory such as "the struggle for existence" and "the survival of the fittest" to support their elitist social and political ideology. Instead of striving to promote the welfare of less fortunate members of society, Social Darwinists regarded them as genetically inferior and argued that they should be allowed to die out according to "natural laws." Moreover, Francis Galton, noting that society had effectively negated natural conditions of selection, founded the eugenics movement to curtail the propagation of the "unfit." Social Darwinism and the eugenics movement were later to play a role in Hitler's Nazi political philosophy. Thus, for many people Darwin's theory posed not only a threat to their religious faith, but also to their physical existence. It is not surprising that the zeitgeist of a post-war world was less than congenial to the extension of evolutionary principles to human behavior.

The controversy in the scientific arena had a different focus. Scientists striving for dispassionate objectivity typically challenge theoretical paradigms on the basis of disconfirming evidence. One of the strongest challenges to the application of natural selection to human behavior was the acknowledged reality of human altruism and the inability of Darwinian theory to account for this phenomenon.

The theory of natural selection predicts that individuals will do whatever is necessary to maximize their own reproduction. Thus we would not expect to see individuals wasting time helping others. Time spent being helpful to others is time unavailable for acquiring a territory, finding a mate, producing and enhancing the welfare of offspring. Selfishness will result in more offspring than altruism. Altruism has a precise definition in sociobiology. It refers to any behavior which while reducing the reproductive fitness of the actor, benefits the reproductive fitness of the recipient. Thus, any behavior that is genetically controlled will be characterized by selfishness.

This selfishness is found in many aspects of animal behavior, but not all. An individual in a flocking species gives a warning call, attracting a predator's attention while the flock escapes. An ant will lay down its life in defense of the colony. A person gives money to charity or saves a drowning stranger. We know that the behavior of ants, for example, is genetically controlled, yet it is anything but selfish. This paradox between the theory predicting selfishness and examples of altruism even caused some biologists to turn partly away from Darwin's theory of evolution and claim that in some respects the environment selected for behaviors which benefitted the group rather than the individual. If biologists could not make up their minds between group or individual selection, and altruism or selfishness, then counselling theorists were, in effect, free to develop their own assumptions about human nature. Consistent with two of the illustrative positions outlined in the opening section, perhaps the genetic influences on our behavior were either minimal or perhaps our genetic predispositions were toward socialization, growth, goodness — in short, the benefit of the group.

Ways out of this selfishness/altruism paradox account for the development of sociobiology. Two new theoretical conceptions provided the keys that turned acts of apparent altruism into selfishness and lessened the need for a group selection hypothesis. One of the conceptions, known as kin selection (Haldane, 1955; Hamilton, 1964, 1970; Dawkins, 1976), is based on the idea that natural selection operates on the gene not the individual as Darwin originally postulated. Since related individuals (kin) share genes, altruism toward relatives to the degree of relatedness helps increase the frequency of those genes in future generations. Many acts of altruism, then would be nothing more than genetic selfishness based upon the implicit assumption that kin may pass on the genes shared. This kin selection conception would seem sufficient to provide an explanation for the apparent altruism of ants and of flocking species since such altruism is likely to benefit kin. It may even be sufficient to explain some of the altruism of a person toward a drowning stranger since human altruism may have evolved at a time when our ancestors lived in small groups of closely related individuals.

The second theoretical key twists altruism into genetic selfishness in situations where kin are not involved. Trivers' (1971) reciprocal altruism concept is based on the assumption that as organisms developed the capacity to recognize individuals and remember events, a pattern of "you scratch my back, I'll scratch yours" could develop. A reciprocal exchange of favors could be beneficial to both parties. Such an arrangement is inherently unstable however, because of cheating. As Dawkins (1976) cleverly put it, "you scratch
my back, I'll ride on yours." The increased recognition and discrimination powers are necessary for the avoidance of nonreciprocators and the effective application of sanctions. Indeed, reciprocal altruism would in some ways be better called sanctioned altruism. The scenario would then read: "If you do not return the favor, you will not get any more favors, and I may tell others about your transgressions to see if they will help me punish, ostracize or kill you." The group will undertake sanctioning activities because group action against a single individual is relatively safe. This safety factor helps maintain reciprocal altruism. Other acts of altruism, then, are nothing more than genetic selfishness based upon the assumption of reciprocity or the fear of sanctions.

The combination of the traditional natural selection perspective with kin selection and reciprocal altruism constitutes the paradigm of sociobiology. Thus armed, sociobiology is prepared to enter the ring wherein explanations of human behavior will be decided. Of course, the idea that genes influence behavior is hardly new. Much work in psychology has involved attempts to separate the influence of nature and nurture in human behavior. Ethologists have studied behavioral processes and sought to understand their evolution. Some psychologists have employed an evolutionary perspective in understanding human development. The thoughts of Nash, the psychobiologist, quoted in the introductory section, reflect this approach. The work of ethologists and psychologists form much of the raw data upon which sociobiology is built. What is new about sociobiology is its principal concern with the process of evolution itself. Whereas ethologists and psychologists might wish to look experimentally at the behavior of existing organisms and generalize on the results, sociobiologists in a very real sense don't need to "see" behavior in order to understand behavior. For sociobiologists, trying to figure out human nature by watching human behavior is like trying to discover the program of a chess-playing computer from watching it play. Sociobiology as a science is built on the assumption that it is more productive to seek to understand the programmer's perspective; i.e., to understand evolution.

Obviously, sociobiology is more theoretical-deductive than the empirical-inductive approaches of ethology and psychology. What has made the science of sociobiology possible is the improvement to theory; the primary improvements being the solutions to the selfishness/altruism paradox outlined above. Wilson (1975, 1978) is confident enough of the theory to forecast that sociobiology will replace ethology and the social sciences. That is, hypotheses about behavior will be derived from a sociobiological perspective. There is of course, much debate as to the soundness and generalizability of sociobiological theory (e.g., Allen et al., 1975, 1976; Baerends, 1976; Barkow, 1978; Ellis et al., 1977; Midgley, 1978; Richerson & Boyd, 1978). Nevertheless, sociobiology is a rich source of hypotheses about human nature; hypotheses which may stimulate a re-evaluation of some of our assumptions.

The "Sociobiology Study Group of Science for the People" (Allan, et al., 1975, 1976), while criticizing the scientific credibility of sociobiology, have also sought to link sociobiology with Social Darwinism and, thereby, to discredit the science of sociobiology on ethical, political and social grounds. While the present authors acknowledge that a scientist is in some sense responsible for the implications of the discoveries that s/he makes, the implications attributed to sociobiology by the study group seem ill-founded. An empirical picture of human nature does not necessarily imply what human nature ought to be. Indeed, there are many things which exist or occur in the world which, on ethical grounds, we would wish to eliminate. An accurate, empirical picture of human nature serves two primary purposes for ethical reasoning. First, it allows the wise choice of instrumental values for obtaining ultimate objectives. In Wilson's (1978) words, "the evidence of biological constraints alone cannot prescribe an ideal course of action. However, they can help us to define the options and to assess the price of each" (p. 134). Second, it allows us to monitor — and particularly warns us of the dangers in — our own ethical reasoning processes. Sociobiology not only does not provide any justification for Social Darwinism, it warns us that a common human predisposition is to build elaborate rationalizations of self-interest.

The following offers a brief review of some of the sociobiological predictions about and interpretations of human nature. The basic strategy is to see if human behavior may be interpreted consistent with genetic selfishness or as Dawkins (1976) calls it, "genemanship." To the degree that human behavior may be interpreted consistent with genetic selfishness, the case for genetic selfishness underlying our psychological makeup is strengthened.

**Sociobiology at Work**

A general sociobiological prediction about behavior is that individuals will be tempted to cheat whenever possible. Cheating refers to gaining reproductively relevant benefits with others paying the costs. Good genemanship however, requires subtle cheating. Gross and obvious cheating are evolutionary failures. Such behavior is easily detected and punished. Awareness of purpose has to go underground; become unconscious. You are far less likely to give yourself away if you are un-
aware that you are trying to cheat. Alexander (1975) concludes, "[m]an will not see in himself what he does not want to see, or what he does not wish his neighbors to see . . ." (p. 97). Trivers (1976) challenges the view that natural selection necessarily favors nervous systems which accurately reflect reality. We generally wish to see ourselves and have others see us in idyllic terms. We may invest considerable energy in maintaining our self-image and avoiding dissonance. Our image, however, does not likely reflect our real motives. Even our feelings may lie. We may use morality to justify our action and cement apologies for transgressions but so that we might be able to cheat next time. We may feel guilty, but guilt may not detract us when an opportunity to cheat is available. We are likely to covet our neighbor's wife, but not while he is watching. We seek out friendships, but in order to build alliances. We may have admirable character traits, but these traits are poor predictors of behavior given a situation which "permits" atypical behavior. Prosocial behavior is encouraged by externally imposed restraints and by the internalization of social values.

Obviously, genemanship requires skills in cheat detection. While we turn a pleasant face to the world, another is watching for the possible cheating of others. We preach one story but practice another. We attribute the behavior of strangers to lack of character while reserving consideration of the situation to explain our own behavior. He did that because he is evil; I did it because I was forced. We excuse ourselves while others are readily censured. Our relatives and friends however, are probably afforded the luxury of situational explanations. We wish to maintain the positive evaluations of those with whom we share genes or alliances. Our justice system and ethical codes also reflect a duality. Virtues necessary to maintain reciprocal altruism are extolled, but these are quickly followed by a listing of possible transgressions and appropriate sanctions. Justice and morality are not solely the triumphs of culture; they are rooted in our genes in order to control the selfish predispositions of others.

Cheat detection and the application of sanctions may be time-consuming and dangerous work. If the cheating does not affect us directly, why not turn a blind eye in the hope that others will be forced into the nasty business of confrontation and punishment. The ease with which societal restraint is imposed upon human selfishness is in part a function of the degree to which there is consensus about values. Pluralistic societies may face the danger of a runaway positive feedback toward greater degrees of self-centeredness. On the other hand, it is important to note that people may be predisposed toward repression and the excessive use of force. Designed to be sensitive to cheating, we probably tend to over-react. Human nature may facilitate acquiescence better than growth. The more natural methods for controlling "strange" behavior are ostracism and death.

Selfishness and the predisposition to cheat based upon this selfishness remain, but specific behaviors are modified by the norms of the group. If children were born without a predisposition toward socialization they would end up gross and obvious cheaters with negative evolutionary consequences. The social system encourages the child toward contribution to reciprocal altruism. Parents expect altruism, particularly with respect to relatives, but want their children to be successful in the outside world. Selfishness drives the individual first toward socialization but increasingly toward assertiveness and self-centeredness. The interaction of these forces and the norms of the group help determine the individual's approach to reciprocal altruism situations. Deviant behavior is a predictable outcome given a failure to teach social norms. Individuals may live out their lives in service to their fellow humans but such an outcome is dependent upon appropriate learning.

Sociobiology indicates that many types of conflict are inevitable. Females, by virtue of pregnancy and nursing, make a larger investment in reproduction than males. By being sales-resistant and coy, females can extract an equal investment from the male. Females will usually not mate until the male builds a home, defends a territory or shows signs of domesticity. The male will appear faithful, but sneak away at every opportunity. Love helps the male deceive his mate and achieve his purpose of passing on as many genes as possible. Females, on the other hand, have an advantage in always knowing that their child carries their genes. Males will get particularly upset with promiscuous mates. The double standard is good genemanship.

Parent-child conflict is likely because the child will want a greater investment of parental benefit than the parents, given consideration of their entire reproductive potential, will be willing to give. Children will attempt to subtly manipulate their parents into giving benefits; parents will attempt to teach their children to behave altruistically. Parents will raise their children to become independent as quickly as possible and/or to benefit the parents in raising other offspring. Wilson (1975) believes that home and school education is as much indoctrination in reciprocal altruism as anything else. The conflict between parent and child will not be total warfare. A level of conflict consistent with good genemanship will emerge.

Children arrive in a world dominated by the old and wise. The acquisition of higher status is one of the main roads to evolutionary success: status de-
The Counsellor as Educator

selfish gene in all of this: either.
cally fit when these are but fleeting conditions. We justify and teach altruism. Wilson, thus, sees an evolutionary basis for Kohlberg's stages of moral reasoning. Also reflecting the relative advantage/disadvantage of the old and young, the young will be more responsive to new ideas. They have less to lose and more to gain from a new idea. Genes play a part in the generation gap.

Material acquisitions translate into the production and enhancement of offspring. The notion that "if some is good, more is better" probably sounds a natural ring. Moreover, as material acquisitions become one of the symbols of status, our predispositional key to the appropriate level of acquisition or exploitation may have become the ingenuity of our neighbor. Both our selfishness and our desire for status may operate as counter-tendencies to living at a level of acquisition and consumption consistent with the maintenance of the eco-system.

Although conflict is inevitable, it is not uncontrolled. Human beings are not subject to an aggressive instinct as Ardrey (1966) and Lorenz (1966) argue. Human aggression should reflect good genemanship. Dawkins (1976) believes that an unconscious cost-benefit calculation underlies aggression and most other behaviors. In certain situations, helplessness may be a viable evolutionary strategy. A reciprocal altruism system may be exploited by appealing to the sympathy of others. Awfulizing and excuse-building maintain the image where one may always request understanding, sympathy and aid. Human behavior is flexible enough to allow people to achieve selfish goals by many methods. Human beings do not have to be happy, self-actualized or blessed with an abundance of inner peace and contentment to be genetically fit. Indeed, we are probably more genetically fit when these are but fleeting conditions. We are not programmed for perfection in self-benefit either.

Dawkins (1976) effectively implicates the selfish gene in all of this:

[our genes] swim in huge colonies, safe inside gigantic lumbering robots, sealed off from the outside world, manipulating it by remote control. They are in you and in me; they created us body and mind; and their preservation is the ultimate rationale for our existence... we are their survival machines. (p. 21)

The Counsellor as Educator

The philosophy, theory and practice of counselling psychology must be based upon a realistic and credible picture of human nature. Sociobiology might provide such a perspective. If sociobiology comes to be fully assimilated into the body of scientific knowledge, the impact on counselling psychology will have an educational theme.

Should we teach? If we reflect upon the possible human predispositions outlined in the previous section, socially constructive counterparts can easily be generated. In our rational moments we would prefer interpersonal relationships based on trust and guided by reason and morality, equality of opportunity for the sexes and understanding between the generations, commitment to maintenance of the eco-system, self-imposed restraint on desires, dedication to higher ideals, etc. Our genes however, have programmed us for past worlds. It may take a veritable saint to walk a modern path through the predispositions indicated by sociobiology. Our nature is estranged from modern social requirements and, in some ways, from our own self-satisfaction. We not only need to be controlled, but our controlling tendencies need to be controlled as well. The combination of the sociobiological picture of human nature with a desire for good citizens makes teaching essential.

What should we teach? Campbell (1975) has challenged psychologists for what he believed to be their uncritical attack upon traditional cultural wisdom. Drawing upon sociobiology, he reasoned that traditional beliefs and values represent a certain wisdom since they have been able to keep beneficial company with our selfish predispositions for a long time. His message is clear: before advocating the removal of traditional cultural restraints, counsellors should consider the possible reasons for their existence and question whether their removal would be socially constructive. Perhaps such "old" ideas as restraint, duty, responsibility, guilt, rational thought and morality merit continuous attention. But it is one thing to show respect for traditional values and another to offer improvements. Where is the counsellor's list of empirically verified recipes for good living which blend individual enhancement with social requirements? Even more conspicuous by their infrequency are recipes which blend individual enhancement with the requirements necessary to maintain the eco-system. Just as sociobiology sensitized Campbell to have a more respectful look at traditional values, sociobiology may make counsellors more aware that their recipes of good living must do more than simply satisfy their client's preferences.

How should we teach? Human nature has a Janus face. It is important to note that we are naturally endowed with the capacity for guilt, rational thought, morality, etc. — the underpinnings of prosocial behavior. An effective educational
technology must take cognizance of the limitations of our natural endowment and also must build upon its strengths. Magoon (1978) draws upon sociobiology to suggest that perhaps the reason research on learning technologies fails to show significant differences is because we are genetically predisposed to learn certain things regardless of how they are taught. Biggs (1978), using similar reasoning, suggests that such things as learning to talk, follow examples, and read emotions, would need little specialized aid whereas learning to read and write and solve abstract problems would require specific teaching. In a counselling context, one might suggest that acquiring some skill with interpersonal relations would be easy, but that learning to control some of the selfishness to be expected in interpersonal relations may require specific teaching. Sociobiology would seem to suggest many hypotheses about human capacities and limitations relevant to developing an effective educational technology.

Can we justify what we teach? If human nature is in conflict with modern social requirements, then counselling must have a soul — and, an interdisciplinary soul at that. It is one thing to note the political, economic and philosophical detail. Specification of social requirements. Such a specification would have to have psychological, social, and limitations relevant to developing an effective educational technology. Are we justified in particular teaching? If human nature is in conflict with modern social requirements, then counselling must have a soul — and, an interdisciplinary soul at that. It is one thing to note the political, economic and philosophical detail. Specification of social requirements. Such a specification would have to have psychological, social, and limitations relevant to developing an effective educational technology.

References