

IDEOLOGY AS BRAIN DISEASE

by *Lionel Tiger*

Abstract. The brain evolved not to think but to act, and ideology is an act of social affiliation which can be compared to kin affiliation, both satisfyingly emotional and expressing a perception about the nature of the real world central to the nature of being human. Males may affiliate to macrosocial ideologies more enthusiastically than females because of their relative lack of certainty of kin relationships. Exogamy was the necessary solution to kin-related strife in prehistory. Perhaps what the world needs is not only a moral equivalent to war but an ideological equivalent to exogamy to resolve social differences on a much larger scale.

My concern is to look at a very small section of the general problem of the management of cooperation and aggression. Traditionally, when people have talked about a biological explanation, they have in many cases meant a gonadal explanation or something to do with the pancreas or a deficit of protein or something that had to do with the squishy bits inside the body. This was frequently considered a kind of reductionism, and therefore simple-minded and unlikely to produce any significant explanation of complex phenomena. Customarily it has been a curse upon the social scientist to be accused of reductionism.

I was once involved in a panel discussion at a UNESCO meeting in Brussels about aggression; this was a very Victorian panel and it took us half a day to decide we were not talking about aggression but rather about aggressiveness, which seemed less aggressive, I suppose. In those early days the discussion of aggression invariably raised the spectre of testosterone coursing through the body in raging males, causing them to go off and conduct the most bellicose of activities with no apparent purpose to outsiders, whereas for females the recurrent or chronic production of estrogen produced a sort of benign affiliative pattern. Thus these hormonal differences tended to produce the quite striking

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bimodality in the aggressive participation of males and females. So again we were back to the squishy bits.

This approach remains fascinating, let it be said. Work currently going on has made it absolutely clear that the skin is not a package. It is a blotter—a transmittal device, if you will; there is a major amount of interaction between the inside and outside of the body. For example, work done by Michael McGuire, Michael Raleigh, and C. Johnson (1983), psychiatrists at the University of California at Los Angeles on the relationship between serotonin, a neurotransmitter, and dominance in vervet monkeys shows quite clearly a sociogenic cause of changes in internal secretion. There is a very clear generation of changes in serotonin levels because of an animal's place in the social structure. Having demonstrated a sociogenic cause of a physiological event, we can begin to talk about somatization in the body of social circumstances, as some psychiatrists do, as does Harvard anthropologist Arthur Kleinman. We can begin to talk about not only psychosomatic but sociosomatic illness. This suggests a central question we are concerned with here: How real is social structure? Is social structure merely an artifact of the brain or is it a real thing intrinsic to the body and essential to the functioning of the body? We know that, short of violent punishment, solitary confinement remains the most severe punishment available in our communities by and large, and it is clear therefore that social participation is a highly desirable if not also necessary phenomenon. We thus can begin to see that, if you will, behavior is also one of those squishy bits. It is deep in the structure of the body even though it is also apparently outside of it.

I would like to look at a particular output—ideology—of a particular squishy bit—the brain. Richard Alexander, in his *Darwinism and Human Affairs*, writes that “some social scientists seem to believe that to locate function at group rather than individual levels implies less competitiveness and strife during human history.” Then in an understatement he continues, “this is not necessarily the case.” We know that the model of “nature red in tooth and claw” is not the most important model today if we want to understand human mayhem and violence. The most important model is rather a reflection of that very cool assembly of highly skilled, hopefully talented people sitting in a mountain in Colorado somewhere analyzing the movements of the planets, of stray satellites, of Russian rockets, and so on. This is the essence of modern skillful mayhem, and it is that kind of thing we ought to approach, not the lunatic behavior of a drunk in a barroom. The two may or may not be correlated; in a sense, one doubts it.

My argument rests on a simple hypothesis about the brain. While we have the conceit that the brain evolved in order to think and while we

call ourselves with spectacular generosity of self-congratulation *Homo sapiens*, in fact this could not be wholly the case. The brain did not evolve to think; it evolved to act. Like any other organ of the body, it is not designed to be apart from the system of which it is a part. It is designed to act, and it also had to act (as Charles Darwin told us to his eternal credit) with respect to the whole process of sexual selection and hence natural selection. I would like to make the point that ideology and coded beliefs—some we might call religion, others we might call political beliefs, and others we might call ideological perceptions about economic behavior—in fact all these systematized forms of social preference which we can call ideological are linked not so much to thought *per se* but rather to action, to social action, and, further, to social affiliation.

Humans are very smart animals, and these great brains we have are constantly active, doing something, seeking work, seeking outlets, seeking input, and so on. And we have to assume that our brains will undertake action which is appropriate to the other major attribute of our species, our gregariousness. We are so gregarious, for example, possibly to some extent unlike other species, that, when we find ourselves alone, rather than remain so we are likely to switch on the television set and come into contact with a series of people on television, or read a book, or make a phone call. The intensity of our demand for gregariousness is very considerable, and this should give us a clue about the functions which most of the major systems of the species are likely to subserve. Thus, for example, ideological constructions are not necessarily designed to produce dispassionate ratiocination or absolutely clear-minded passionless perception of a certain reality. No, ideologies are forms of affiliation. Because the brain is designed to act, and action is affiliative, ideologies are special forms of codified affiliation.

Kenneth Boulding talks about the great oddity of science itself and mentions how exotic science as an enterprise is (Boulding 1983). Indeed it is an extraordinary oddity because it is a form of intellectual activity which does not lead necessarily to practical action. While it is a highly affiliative activity (Boulding stresses how important it is for scientists not to lie, for example), it is quite acceptable for a scientist to produce results which would in political terms constitute disaffiliation—to disprove the experimental evidence or the theoretical propositions of other colleagues. It is a token of the exoticism of science that it has to take place in circumstances that are really firmly protected by cultural procedures, such as academic freedom, tenure, and other mechanisms that are essentially designed to protect explicitly this very bizarre behavior. Further, as Boulding points out, the emergence of

science in the world as a major cultural force is relatively infrequent. It remains still quite exotic and, as we can see also, it is a fragile plant that can be affected by action from the outside. The Russians, for example, in one fell swoop decimated biology in that powerful and sophisticated country for thirty years, because of the adherence of its political community to Lysenko.

Science is therefore radically different from ideology-making. One can define ideology as a self-sustaining social message both to the individual and community. It may appear to be an exercise of thought, but it is really an act of affiliation. When political parties have ideological disputes, the argument may be partly about dispassionate analysis, but as we know from interest group theory in political science, it also reflects fissiparous tendencies in groups or different economic interests, regional interests, and cognitive patterns called ideologies or philosophies or whatever.

My colleague at Rutgers University, Robin Fox, in a paper called "Kinship Categories as Natural Categories," asserts with some convincing effect that there is not, as Marshall Sahlins would suggest, a kind of *ad libitum* connection between kinship categories and real reproductive categories. Rather, kinship categories, as we see them in anthropology, have real connection to real genetic interchange between generations, what we call the biological kinship system. And kinship systems are critical to the operation of human groups.

Our principal reproductive activity occurs during that period of life when it appears that thinking is very difficult to sustain, namely, late adolescence and early adulthood. This is when extraordinarily expensive, elaborate, and beguiling structures known as secondary schools and universities are required to produce in students even the modicum of distance from their own tempestuous concerns to permit them to "think." The rest of the time they are actively involved either in the reproductive fray itself or in a series of ancillary behaviors which will, they think, affect their reproductive access in the best of all possible worlds—getting on the football team, for a metaphysical example. In other words, the prime time for reproduction seems to be the non-prime time for ratiocination. Again (and again science's assumptions suggest its oddity), the existence of groups such as the American Association for the Advancement of Science and the like suggests that the brain is essentially about rational processes and structures. But it could be argued from sexual selection theory that the brain is really concerned with sexual selection. If one looks at the whole question of phylogeny, ontogeny, and so on, to put all this together, striking realities emerge in the life cycle and in its extraordinary recurrence and predictability. The life cycle itself is a demonstration of such stunning

precision and wonder that it makes one ask why anyone could doubt the ongoing power of genetic programming.

If reproduction and ratiocination were closely linked, we should expect high birth rates among philosophers and intellectuals; in fact typically we find in some cultures that people doing this exotic work, if they are males, are made to wear female-like garb and do not marry. Similarly with females, there is a curious kind of history of, if you will, "breeding out" for highly skillful ratiocinative capacity. Philosophy or thinking in general also tends to be a relatively older person's job, and so is the production of ideologies.

To continue the argument we must go back millions of years to the Paleolithic era when we were forming our societies as they currently are. We can begin to see that codified affiliation, which we now call ideology, could well have been isomorphic with kinship in earlier times. That is to say, one's analytical perception about the nature of the real world, the beginning of codification, the origins of systematic thought, were articulated through kinship terminology. That is one reason why kinship terminology still matters. It is the bread and butter and chocolate of anthropology, as it should be, because it remains so central to the business of being human. In kinship-oriented societies it was perhaps the earliest and most important organizing kind of ideology. Kinship has not changed its hegemony over the time and concern of people. And we can see that ideology—a form of affiliation—is the post-Paleolithic neo-kin system of secular societies. People began to generate strong beliefs, not only about their families, not only about the Montagues, the Capulets, but about systems of belief; and modern people may focus more on more generalized ideologies than on kinship itself as a source of a similarly affiliative self-recognition and identity.

I would like to make a comment in this context about sex differences. An extremely interesting paper by Jonah Western and Shirley Strum (1982) about sex differences in male kinship certainty and female kinship certainty suggests that males and females will have a differential attachment to kinship ties; females more so because they know who their kin are, males less so because they cannot be sure of their offspring. Males cannot be sure who their children are, a chronic problem, Othello's disease, and by the same token, although it is not as well understood or dealt with in theoretical terms, neither males nor females can be fully sure who their ancestors were, except directly in the female line. So males, lacking fifty percent of the kin certainty of females—about offspring—are by Western and Strum's argument less likely to affiliate to kinship structures than females. What do males affiliate to? They will affiliate, sometimes most enthusiastically and uncritically, to ideological structures (as people may also to their kin-

ship systems), and much more so than females. Some years ago I published a book called *Men in Groups* (1969; see also 2nd ed., 1984) which was at that time controversial because I argued that there were sex differences in patterns of affiliation—not at that time a popular assertion. However, the Western and Strum proposition appears to me to justify that speculation, because it seems to suggest that males will be more likely to produce macrosocial organizations not having to do with kinship or intimate structure than will females. We are quickly moving, of course, into the kind of society in which virtually all organisms, male and female, are required to enter the productive scheme equally. This will inevitably change, as it already is doing, the reproductive scheme too. But that is another issue.

Interestingly, in this area in terms of ethics, Carol Gilligan, looking at the moral structures of children and trying to assess how they emerge on a gender based distinction, describes in *In a Different Voice* (1982) serious and clear differences between how males and females organize their ethical universes. Again this is hardly surprising if you understand sexual strategy theory, and also if you accept (and Western and Strum's piece came out after Gilligan's in 1982) the Western and Strum proposition or the notion that there will be differential sexual strategies in males and females. It suggests that the early work in social psychology by Lawrence Kohlberg, Jean Piaget, and others, which was sex-blind, will turn out to be inaccurate to the extent attention was not paid to sex differences.

I am trying to locate tendencies to ideological macrosocial affiliation within something biologically real, namely, gender. Again, I recognize that this remains an unpopular issue because it seems readily to turn itself into political use, which it should not except to ameliorate rather than exaggerate the political conditions possibly brought about by a perception of gender based differentiation. If these differences do in fact exist, it is well to know about them and to take them into account to produce such equity in the society as we can get.

My point is that ideology has to do with sexual selection strategies and probably is in some sense male-based. I am reminded that most of the major utopias (as well as most of the important writings on social theory) have been essentially male artifacts. In the early seventies I did a study of women in the kibbutz movement in Israel with Joseph Shepher, an Israeli colleague (1975). Our sample was the total populations of two of the federations of the kibbutzim over three generations, 34,000 souls. We found enormous variation in how males and females operated and a very strong demand by the females to revise the patterns of life—particularly those separating parents and children—that the male ideologists had produced in the first place. The ideology, the

utopia, was a male fantasy and a male plan, and it was not finally in accord with the desires of the females actually living on the ground of the community.

Something very interesting happened to the kinship system when our species began to get more numerous, when we met more people, when the forest edge got more crowded. In your own community of course you accept your kinship group as the best. But when you must make a treaty with another group there is a ready technique to reconcile disagreements—called exogamy. It made Claude Lévi-Strauss's reputation to begin to understand just how precise and complex were, and are, these patterns of exogamic transaction. If we see ideology as a neo-kinship analysis, is there a current, moral equivalent of exogamy—a natural way of resolving ideological differences? This remains one of our central problems: a small scale primate—equipped, it appears, to deal with groups of perhaps twenty-five to a hundred comfortably—finds itself operating on a global scale of almost terrifying size and mystery.

Anthony Lewis of the *New York Times* described the last day of the 1970s, and made the following statement: "If there was a link among the brutal politicians who flourished in these last years, it was their ability to treat human beings as abstractions, to brush them aside. People had to yield to the imperatives of ideology, megalomania, or national power" (1979). Writing on the left, Robert Sherrill, in *The Nation*, describes what he calls "the zany spirit of liberal fratricide," the capacity of people to argue with individuals who may be their closest associates in some sense (1983). And interviewing Colonel Mummar Quaddafi, when Oriana Fallaci asked him, "Colonel, do you really think this philosophy of yours, this little green book, will change the world?" he replied, "Yes, without any doubt. *The Green Book* is the product of the struggle of mankind, *The Green Book* is the guide to the emancipation of man, *The Green Book* is the gospel, the new gospel, the gospel of the new era, the era of the masses. . . . I'm not humble, because I can resist the attacks of the entire world and because *The Green Book* has resolved the problems of humanity and society" (1980). This is an ambulatory leader of considerable efficacy saying these things. It is a measure of the kind of problem we face, that grown-ups with guns say things of this order. The quotation is hair raising in its simplicity. The problem is a practical one, not only an intellectual dilemma.

I would like to conclude with two brief points. One is about our enterprise here in the scientific community, that is, essentially a literate community. I would like to suggest that Quaddafi's *Green Book*, the *Bible*, and sundry other artifacts of the literary persuasion have in fact

been extremely dangerous and destabilizing artifacts, because they have produced in a small-scale primate community the possibility of exaggerating whatever tendencies might be at any one time ambient in the community and of providing instruments of social control to a small cadre of people. After all, the first readers and writers were priests, and to some extent accountants; but really, "in the beginning was the word" for religious or political purposes. Literacy itself was an extremely destabilizing phenomenon which was not supposed originally to be an instrument of expression. Writing was about control; it was about codifying methods of behavior and so on. And now this has become augmented drastically, given the spread of literacy since the industrial revolution. So people from Zaire come to Friendship University in Moscow for instruction about how to deal with the world in the proper Marxist-Leninist fashion, or they come to Johns Hopkins University or the Massachusetts Institute of Technology or another place in another country for equivalent purposes. Literacy provides leverage for an unprecedented intrusion into formerly intimate and well integrated societies, operating independently of the larger ideological structures. And obviously, finally, the electronic impact of radio and television, records, satellites, and so on makes it possible to market ideologies even more coercively and has added an entirely new and more terrifying dimension to the process.

David Hamburg, currently President of the American Association for the Advancement of Science, in 1963 wrote a beautifully laconic and important essay on the function of the emotions. He said that the interesting question to ask about an animal was not whether it had learned to do something or was its activity innate, but rather, What is easy for the animal to learn? It appears that what I call dispassionate ratiocination is very difficult to learn and that ideology in general is relatively easy to learn. So I think we are dealing now not simply with a stupid or evil species but with one which really has never learned to do anything other than commit itself to strong beliefs, first in families and then later in intermediate structures. But now it thinks too globally. Unfortunately, so do the defense planners, if defense is the word.

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