

Chapter 9

Darwinian Conflict Theory: A Unified Evolutionary Theory of Human Society

We have now reviewed and assessed the strengths and weaknesses of all of the major theoretical strategies in contemporary sociology and even included some from sociology's sister discipline of anthropology. What remains to be done is to show how the most important and valid features of the best strategies can be brought together in a new theoretical synthesis. I call the resulting synthesis *Darwinian conflict theory*. Darwinian conflict theory brings together many of the elements of sociobiology, Marxian and Weberian conflict theory, cultural materialism, and rational choice theory. It acknowledges that much of human society is "socially constructed," but insists that the constructions that result are not arbitrary and capricious products of some sort of autonomous "culture." Social constructions are constrained by the material conditions – biological, ecological, economic, etc. – of human existence. Darwinian conflict theory also recognizes that many of the features of human social life exist because they perform "functions," but claims that these functions pertain to individuals and their needs and goals rather than some reified abstraction called "society."

Darwinian conflict theory is intended as a comprehensive theoretical strategy orienting the formulation of more specific theories of human society. It is, in a very important sense, a kind of marriage of Marx and Darwin, or, more accurately, a marriage of Darwinian biological materialism to the broader economic and ecological materialism and conflict theory that owes its ancestry to Marx and that has been continued by such leading anthropologists as Marvin Harris. Its most important feature is showing that the basic principles of sociobiology are highly compatible with, or at least can be made highly compatible with, some traditional modes of social theorizing that ignore or downplay the biological side of humans. Sociobiology, it is argued, is the ultimate form of materialist and conflict social theory, and other materialist and conflict theories must be grounded in it. As Sebastiano Timpanaro (1975:34) has said:

By materialism we understand above all acknowledgement of the priority of nature over "mind," or if you like, of the physical level over the biological level, and of the biological level over the socio-economic and cultural level; both in the sense of chronological priority (the very long time which supervened before life appeared on earth, and

between the origin of life and the origin of man), and in the sense of the conditioning which nature *still* exercises on man and will continue to exercise at least for the foreseeable future.

By incorporating sociobiology and using it as its foundation, Darwinian conflict theory is able to provide the “first principles” that are lacking in other social theories. Marvin Harris, for example, is able to identify certain fundamental human preferences but is unable to tell us why humans should have those preferences rather than others. Similarly, Randall Collins tells us that humans are highly conflict-prone organisms but cannot tell us why – in fact, apparently does not even think to ask why. By incorporating sociobiological principles into sociological theory we are able to bring the understanding of human behavior down to its most basic level, beyond which it is not necessary (or even possible) to go. One of the reasons that sociology has failed to progress as much as it can and to fulfill the hope that was once held out for it is because it has not yet had its badly needed Darwinian revolution. Darwinian conflict theory is the outcome of taking that need seriously. Most of the parts of Darwinian conflict theory are already highly familiar to sociological theorists. Darwinian conflict theory’s novelty lies not in its specific parts, but in the combining or arranging of the parts.

Darwinian conflict theory is a multitiered or multilayered theoretical strategy. It starts with the deep wellsprings of human action and then moves upward to deal with such things as the principles of group relations and the systemic relations among the parts of societies. The more we get to these higher-level principles the more we must construct specific propositions covered only in the most abstract and general way by the theoretical strategy as a whole. For example, such phenomena as the geopolitical actions of states, social revolutions, and long-term economic cycles are understandable in terms of Darwinian conflict theory’s deepest principles, but only in general. Applying these principles to such phenomena is vital, but more specific lines of thinking are also needed.

It is not hard to see how sociobiology is related to at least one of the theoretical strategies forming part of the synthesis, viz., rational choice theory. Both sociobiology and rational choice theory are methodologically individualist approaches that assume a rational actor seeking his or her interests, and sociobiology simply takes rational choice principles further by grounding them in evolutionary principles (Hirschleifer, 1977; Richerson and Boyd, 1992; Nielsen, 1994). However, eyebrows will undoubtedly be raised with respect to the attempt to synthesize sociobiology with Marxian conflict theory and cultural materialism. These are theoretical traditions that seem, on the surface at least, utterly unsynthesizable. After all, Marxists are usually extremely critical of sociobiological arguments, on both theoretical and political grounds, and Harris and the cultural materialists have also been sharp critics of sociobiology. But there is much more of a connection than may initially seem apparent. Jerome Barkow (1989:310) has said, “Like Marxism, a sociobiological view of society yields conflict theory,” and Laura Betzig (1986) has noted that Marxism and Darwinism have much in common. As for the old man himself, Marx read *The Origin of Species* in 1860 and in early 1861 said to Engels in a letter that “Darwin’s book is very important and serves me as a natural-scientific basis for the class struggle in history” (quoted in Taylor, 1989:409). Indeed, Wilhelm Liebknecht, an important German socialist leader who visited Marx frequently, indicated that “when Darwin drew the consequences of his investigations and presented them to the public, we spoke for months of nothing else but Darwin and the

revolutionizing power of his scientific conquests” (quoted in Feuer, 1978:109). Both Marx and Engels were very unhappy with Darwin’s reliance on Malthus for his concept of the struggle for existence, but nonetheless the “class struggle came to be regarded as the form which the struggle for existence took in class societies; *the materialistic conception of history was derived as a limiting case of the biological struggle as it obtained for the conditions of the human species*” (Feuer, 1978:110; emphasis added). It is most unfortunate that the extraordinary implications of this last idea have never been properly developed. It is one of the main tasks of Darwinian conflict theory to draw out these implications and state them formally.

As for cultural materialism and sociobiology, it will probably be much more than just a single eyebrow that Harris will raise regarding the validity or even coherence of Darwinian conflict theory. But a close connection is clearly there. Once one looks beyond the surface level, the cultural and biological materialisms are not only highly compatible with each other, but in fact require each other. Harris’s entire critique of sociobiology is not only misguided; it is totally unnecessary. In fact, the principles of cultural materialism make sense only *in light of* sociobiological principles. I am hardly the only one to see things this way. Pierre van den Berghe, the leading advocate of sociobiology within the discipline of sociology, has for many years argued that Harris’s rejection of sociobiology is entirely gratuitous. “In its materialism,” he claims (1991:278), “sociobiology shares much in common with classical Marxism as well as with a prominent school of cultural ecology in anthropology represented by Marvin Harris.” Richard Alexander agrees with van den Berghe on the gratuitousness of Harris’s rejection of sociobiology, and he has argued more forcefully than anyone that sociobiology and cultural materialism are complementary rather than competing approaches (1987:26-27):

[L]et us suppose that someone argued that humans are interested in sex because of the pleasure associated with it and *not* because of procreation. Sexual intercourse in humans may (unlike nearly all or all other organisms) have acquired significance beyond fertilization of eggs per se (e.g., in long-term pair bonding) but this cannot detract from the facts that (1) historically it has been the only way babies were created, (2) the creation of babies is the only reason for our continued existence, and (3) those of us alive today carry in preponderance the genes of those who produced and raised the most babies.

Happiness and its anticipation are thus proximate mechanisms that lead us to perform and repeat acts that in the environments of history, at least, would have led to greater reproductive success. This is a central hypothesis in evolutionary biology. Paralleling it in importance is the hypothesis that control of resources is the most appropriate route to reproductive success. . . . Similarly, I presume that status is typically a vehicle toward resource control and an outcome of it. If these ideas are correct, then humans should always experience pleasure when they gain in status or increase their control of resources (unless they do so at large expense to close relatives or spouses), and they should experience some converse feeling when they lose status or resource control (except, sometimes, when they transfer it to relatives or spouses).

Harris’s analysis takes economic or “productive” ends as ultimate rather than as means to the end of reproductive success. Such analyses are like those which take pleasure and happiness as ultimate ends. They cannot explain why the proximate mechanisms of pleasure and happiness (Harris’s “bio-psychological benefits”) operate as they do, or even why they exist. . . . Harris implies that reproductive success, representing “remote and hypothetical interests,” is somehow an *alternative* explanation

to more proximate “bio-psychological benefits” as “the most certain and powerful interests served by infrastructure.” He sees the “struggle to maintain and enhance differential politico-economic power and wealth” as *opposed* to “the struggle to achieve reproductive success.” In the sense of comprehensive explanation, however, the relationship between such proximate and ultimate factors is not adversarial. Rather, neither can be explained without the other. . . . I cannot imagine how cultural materialist explanations of human behavior and institutions can ever make real or complete sense except in light of a continuous history of natural selection of genetic alternatives.

Alexander concludes this argument by claiming that “the cost-benefit analyses of cultural materialism are necessarily subsumed under those which take into account the history of human strategies of reproductive success” (1987:29). This is my view exactly.

In fact, even Harris himself almost seems to dimly recognize the compatibility of cultural materialism and sociobiology. He already has one foot hovering above the sociobiological camp and needs only a little shove to get it planted squarely there (thus giving him one foot solidly in each camp). Harris (1985) has made good use of optimal foraging theory in constructing some of his theories of food preferences and avoidances; in his edited collection *Food and Evolution* (Harris and Ross, 1987b) he has published two articles by anthropologists whose starting point is sociobiology, and he devotes himself as well to important discussions of food and human biology. Optimal foraging theory (discussed in Chapter 14 of the present book) derives from evolutionary ecology, which is directly linked to the broader sociobiological paradigm. And Harris has spoken many times of the crucial causal role of the modes of production and *reproduction* in social life without fully realizing the implications of what he is saying. Indeed, reproduction has a crucial impact on social life, but in a more fundamental biological way than Harris has been willing to acknowledge. Moreover, consider the following statement made by Harris (1979:139):

True, sociobiological models based on reproductive success and inclusive fitness can yield predictions about sociocultural differences that enjoy a degree of empirical validity. . . . But the reason for this predictability is that most of the factors which might promote reproductive success do so through the intermediation of bio-psychological benefits that enhance the economic, political, and sexual power and well-being of individuals and groups of individuals.

Yes, exactly, but once again this is perfect grist for Alexander’s mill. The proximate and ultimate causes are inextricably intertwined. Consider also Harris’s so-called biopsychological constants. Harris proposes only four such constants and claims that these are sufficient to give us a picture of basic human nature. That is an argument that cannot possibly succeed, but here let us focus instead on the content of the constants (Harris, 1979:63):

1. People need to eat and will generally opt for diets that offer more rather than fewer calories and proteins and other nutrients.
2. People cannot be totally inactive, but when confronted with a given task, they prefer to carry it out by expending less rather than more energy.
3. People are highly sexed and generally find reinforcing pleasure from sexual intercourse – more often from heterosexual intercourse.
4. People need love and affection in order to feel secure and happy, and other things being equal, they will act to increase the love and affection which others give them.

These proposed biopsychological constants are not only consistent with sociobiology, but are predicted by them and *only make sense in terms of sociobiological principles*. Consider in particular the third constant. Why should people be so highly sexed, and why should most be oriented toward heterosexual sex than toward any other? The answer can only be, because heterosexual sex, and lots of it, works to promote one's inclusive fitness. The general point is that these biopsychological constants need to be grounded in something deeper, and that is sociobiological theory. Harris's failure to engage in such grounding, as well as his failure to expand the list of biopsychological constants appropriately, is entirely gratuitous and unnecessarily restrictive.

Let us now turn to the basic principles of Darwinian conflict theory.

THE BASIC PRINCIPLES OF DARWINIAN CONFLICT THEORY

I. Principles Concerning the Deep Wellsprings of Human Action

1. Like all other species, humans are organisms that have been built by millions of years of biological evolution, both in their anatomy/physiology and their behavioral predispositions. This means that theories of social life must take into consideration the basic features of human nature that are the products of human evolution.
2. The resources that humans struggle for, which allow them to survive and prosper, are in short supply. This means that humans are caught up in a struggle for survival and reproduction with their fellow humans. This struggle is inevitable and unceasing.
3. In the struggle for survival and reproduction, humans give overwhelming priority to their own selfish interests and to those of their kin, especially their close kin.
4. Human social life is the complex product of this ceaseless struggle for survival and reproduction.
5. Humans have evolved strong behavioral predispositions that facilitate their success in the struggle for survival and reproduction. The most important of these predispositions are:
 - Humans are highly sexed and are oriented mostly toward heterosexual sex. This predisposition has evolved because it is necessary for the promotion of humans' reproductive interests, i.e., their inclusive fitness. Males compete for females and for sex, and females compete for males as resource providers. Humans do these things in order to promote their reproductive success.
 - Humans are strongly predisposed to perform effective parental behavior, and the female desire to nurture is stronger than the male desire. Effective parental behavior has evolved because it promotes reproductive success in a species like humans. The family as a social institution rests on a natural foundation.
 - Humans are naturally competitive and highly predisposed toward status competition. Status competition is ultimately oriented toward the securing of resources, which promotes reproductive success. Because of sexual selection, the predisposition toward status competition is greater in males than in females.
 - Because of the natural competition for resources, humans are economic animals. They are strongly predisposed toward achieving economic satisfaction and well-being, an achievement that promotes reproductive success.
 - In their pursuit of resources and closely related activities, humans, like other species, have evolved to maximize efficiency. Other things being equal, they prefer to carry out activities by minimizing the amount of time and energy they devote to these activities. A Law of Least Effort governs human behavior, especially those forms of behavior that individuals find burdensome or at least not rewarding in and of themselves. The Law of

Least Effort places a major limit on the behavior of humans everywhere; much behavior can only be explained satisfactorily by taking it into account.

6. None of the tendencies identified above are rigid. Rather, they are behavioral *predispositions* that move along certain lines rather than others but that interact in various ways with the total physical and sociocultural environment. The behavioral predispositions tend to win out in the long run, but they can be diminished or even negated by certain environmental arrangements. At the same time, other environments can amplify these tendencies, pushing them to increasingly higher levels.
7. From the above it follows that humans' most important interests and concerns are reproductive, economic, and political. Political life is primarily a struggle to acquire and defend economic resources, and economic life is primarily a matter of using resources to promote reproductive success. However, at the experiential level, individuals have no conscious recognition that their behaviors are driven by these motives. People often experience economic and political behaviors as valuable in themselves and are often highly motivated to continue and elaborate such behaviors in their own right.
8. Many, probably most, of the features of human social life are the adaptive consequences of people struggling to satisfy their interests. The following provisos concerning the notion of adaptation are in effect.
 - Adaptation must be sharply distinguished from its corollary, adaptedness. Adaptation is the process whereby individuals originate (or inherit or borrow) social forms that are devoted to serving their interests and fulfilling their needs and wants (it refers to the origin or persistence of a social form). Adaptedness, on the other hand, involves the extent to which a social form actually benefits the individuals who originated (inherited, borrowed) it. Adaptedness, in other words, refers to the consequences of a social form that originally arose as an adaptation.
 - Although adaptations frequently lead to adaptedness, there are numerous instances in which this is not the case. Although adaptations must logically lead to adaptedness (or at least the perception of adaptedness) in the short run (otherwise they could not exist as adaptations), in the longer run this adaptedness may disappear and even lapse into maladaptedness. Individuals create and re-create society through intentional actions, but the consequences of such actions are often very different from what the intenders intended.
 - The extent to which adaptations lead to adaptedness varies greatly from one set of individuals and from one time period to another. The more complex a society, the more this rule of thumb applies. What is adaptive for some individuals and at some times may be maladaptive for other individuals and at other times.
 - Adaptation is a process pertaining to individuals and not to units larger than the individual. Social groups and societies in and of themselves cannot be adaptational units – i.e., cannot be the units on which selection operates – because they cannot and do not exist apart from concrete flesh-and-blood individuals and because groups cannot have a critical trait of individuals, viz., consciousness and a brain. Although social groups may be said to have needs and wants, these needs and wants are ultimately only the needs and wants of their constituent members. Any social form that is said to be adaptive for any group or society as a whole is so only because it is adaptive for all (or nearly all) of that group's or society's constituent members. Any so-called adaptation at the level of a group or society is but a statistical aggregate of individual adaptations.

- Adaptation is not necessarily an optimizing process. Individuals often satisfice rather than optimize, i.e., they remain content with a satisfactory rather than an optimal way of meeting their needs and wants.

II. Principles Concerning Group Relations

1. Individuals pursuing their interests are the core of social life. The pursuit of interests leads to both highly cooperative and highly conflictive social arrangements.
2. Many cooperative forms of behavior exist at the level of social groups or entire societies. Cooperative social relations exist because they are the relations that will best promote each individual's selfish interests, not because they promote the well-being of the group or society as a whole. The selection of cooperative social forms occurs at the level of the individual, not the group or society.
3. Cooperative forms of interaction are found most extensively among individuals who share reproductive interests in common, i.e., among kin and especially close kin. This is the basis for the family as a fundamental social institution.
4. Outside of kinship and family life, cooperative relations are most likely to be found among individuals who depend heavily on each other for the satisfaction of their basic interests.
5. When conflictive behavior will more satisfactorily promote individual interests, cooperative relations will decline in favor of conflictive relations.
6. People are unequally endowed to compete in the social struggle (i.e., some are bigger, more intelligent, more aggressive or ambitious, more clever, more deceitful, etc.), and as a result social domination and subordination often appear as basic features of social life.
7. Members of dominant groups benefit disproportionately from their social position, and frequently they are able to make use of subordinate individuals to advance their interests. Their use of these individuals frequently takes the form of economic exploitation or social exclusion.
8. Because they benefit from their situation, members of dominant groups are highly motivated to structure society so that their superior social position can be preserved or enhanced.
9. Social life is therefore disproportionately influenced by the interests and actions of the members of dominant groups.
10. The primary forms of social domination and subordination in human social life relate to gender, ethnicity, social class, and politics, although other forms of domination and subordination occur as well. These forms of domination and subordination are most basic because they stem directly from the deep wellsprings of human action.

III. Principles Concerning Systemic Relations Within Societies

1. Human societies consist of four basic subunits:
 - Individuals themselves as biological organisms, which we may call the *biostructure*.
 - The basic natural phenomena and social forms that are essential to human biological reproduction and economic production, i.e., the ecological, demographic, technological, and economic structures essential for survival and well-being; this we may call the *ecostructure*.
 - The institutionalized patterns of behavior shared by individuals, especially the patterns of marriage, kinship, and family life; the egalitarian or inegalitarian structuring of the society along the lines of class, ethnicity, race, or gender; a society's mode of political life; and its mode or modes of socializing and educating the next generation; these patterns may be identified as the *structure*.

- The primary forms of mental life and feeling shared by the members of the society, i.e., its beliefs, values, preferences, and norms as these are expressed in such things as religion, art, literature, myth, legend, philosophy, art, music, and science; these we may refer to as the *superstructure*.
2. These four components of societies are related such that the flow of causation is primarily from the biostructure to the ecostructure, then from the ecostructure to the structure, and finally from the structure to the superstructure; the flow may sometimes occur in the reverse manner, or in some other manner, but these causal dynamics occur much less frequently.
 3. According to the logic of III.2, it is clear that the forces within the biostructure and the ecostructure are the principal causal forces in human social life; the biostructure structures social life both indirectly, i.e., through its action on the ecostructure (which then acts on the structure and superstructure), and through its direct effect on some of the elements of the structure and superstructure. It follows, then, that the ideas and feelings within the superstructure have the least causal impact on the patterns of social life.
 4. The components of societies are related as they are because such causal dynamics flow from the deep wellsprings of human action. The biostructure and the ecostructure have a logical causal priority because they concern vital human needs and interests relating to production and reproduction.
 5. Once structures and superstructures have been built by biostructures and ecostructures, they may come to acquire a certain autonomy. New needs and new interests may arise therefrom, and these new needs and interests, along with reproductive, economic, and political interests, may form part of the human preference and value structure characteristic of the members of a society. Thus do new social constraints on – more accurately, new contingencies for - individual action arise.

IV. Modes of Darwinian Conflict Explanation

1. As is obvious from III, Darwinian conflict theory's mode of explanation is materialist; this materialist mode of explanation may take any or all of three forms: biomaterialist, ecomaterialist, or polimaterialist.
2. *Biomaterialist* explanations explain a social form by direct reference to a basic feature of the human biogram. That is to say, an explanation is biomaterialist if it links a social form to the human biogram without reference to any necessary mediation of the causal relationship by some other social form. *Example:* Polygyny is a widespread feature of human societies because it springs from an innate desire of males for sexual variety and from the tendency of females to be attracted to resource-rich males.
3. *Ecomaterialist* explanations explain a social form by linking it directly to the influence of ecological, technological, demographic, or economic forces, and thus only indirectly to a feature of the human biogram. *Example:* Hunter-gatherer societies frequently display intensive sharing and cooperation because these are behaviors that promote individuals' interests within the configuration of hunter-gatherer technoeconomic systems and natural environments.
4. *Polimaterialist* explanations explain a social form by linking it directly to the political interests or situations of the participants. Political interests or situations ordinarily spring from the participants' economic interests, which in turn are ultimately derived from the character of the human biogram. *Examples:* Democratic forms of government emerged earliest in those Western societies with the largest and most politically organized working

classes. Third World revolutions occur most frequently in societies where the state is highly vulnerable to a revolutionary coalition.

5. Darwinian conflict theorists formulating materialist explanations are obligated to specify whether their explanations are biomaterialist, ecomaterialist, or polymaterialist.

V. Principles Concerning Social Order and Change

1. Societies exhibit both the persistence and the transformation of their basic structure, and neither may be regarded as more fundamental than the other.
2. Order and change are, in fact, not truly distinct phenomena, but in actuality simply different temporal dimensions of the same reality.
3. It follows from the above that order and change must be explained in essentially the same way. The basic theoretical principles of Darwinian conflict theory therefore apply equally to order and change.
4. The process of socialization cannot explain the persistence of sociocultural arrangements any more than it can explain how these arrangements are transformed. Both order and change must be explained as results of the adaptation of individuals to their circumstances. Persistence involves the adaptation of new generations of individuals to the same circumstances, whereas change is a matter of new generations working out new adaptations to new circumstances.

VI. Principles Concerning the Relationship Between Micro and Macro

1. Societies are aggregate expressions of the myriad interactions of individuals pursuing their interests. Macrolevel phenomena are ultimately to be explained in terms of microlevel factors.
2. Societies, however, are "more than" the individuals who created them. In other words, the macro, though stemming from the micro, is "more than" the micro. This means that the macro, though ultimately to be explained in terms of the micro, cannot be fully explained in terms of the micro. Features unique to macro structures must always form part of the theoretical analysis of such structures.
3. Since societies are more than the individuals who created them, they are an important part of the context within which individuals pursue their interests. Societies "act back on" their individual creators. Although the macro comes from the micro, it "acts back on" the micro and partially reconstitutes it.
4. Human social life in all of its complexities is an ongoing process of individuals creating and re-creating social forms designed to serve their interests. Sociocultural systems are constructed and continually reconstructed by the actions of individuals.

VII. The Scope and Sufficiency of the Principles of Darwinian Conflict Theory

1. All of the foregoing principles constitute a broad and highly abstract theoretical strategy. This strategy is deemed to be useful for orienting the sociological analysis of substantive social phenomena. A very large number of much more specific theories can be deduced from Darwinian conflict theory when it is used to confront the substantive world, and it is these theories that do the actual explaining of what we want explained.
2. In and of themselves, the principles of Darwinian conflict theory are incapable of identifying all of the dimensions of all of the variables necessary to the construction of any specific theory. This can only be done on a case-by-case basis in the actual process of theory formulation and theory testing. In other words, the principles of Darwinian conflict theory

are very broad-grained ideas that provide the basis for the formulation of more fine-grained ideas.

Since the proof of the pudding is in the eating, the burden is now squarely placed on me to present the evidence that supports Darwinian conflict theory. The following chapters develop this evidence with respect to most of the major areas of sociological concern. These are reproductive behavior; human sexuality; sex and gender; marriage, kinship, and family patterns; economic behavior and economic systems; social hierarchies; and politics and war. Before getting to the evidence, however, a brief digression regarding the concept of culture is necessary.

DARWINIAN CONFLICT THEORY AND THE CONCEPT OF CULTURE

The Nature of Culture

From the perspective of Darwinian conflict theory, traditional social-scientific conceptions of the relationship between human biology and human culture are highly problematic. These conceptions regard biology and culture as two separate realms that may interact to some extent but that are nonetheless ontologically distinct. Culture is not something that is imbued with biology, but is rather a distinct realm of existence that, however it originates – and it must be said that most sociologists and anthropologists talk about culture as if it simply magically dropped on strings from the sky! – works its charms on human behavior. But from the perspective of Darwinian conflict theory, culture *is itself already in part biological*.¹ This means that it is senseless to talk about the impact of culture *on* behavior since the two are inextricably intertwined (or, more accurately, the decision modules in the brain that direct behavior are inextricably intertwined with culture). For Darwinian conflict theory, what culture *is* is just as important as what culture *does*.

Let us look at some traditional conceptualizations of culture. As Marvin Harris (1980, 1997) has pointed out, since the middle of the twentieth century culture has tended to be defined by both anthropologists and sociologists as something exclusively mental or ideational. It is a “blueprint for action” that consists primarily of beliefs, values, norms, and role expectations. Surprisingly, the biologist Richard Dawkins (1976:206), who helped to found sociobiology, has perpetuated this notion of culture with his concept of *meme*, which is an idea that propagates itself “by leaping from brain to brain.” Equally surprisingly, Lee Cronk (1999), an evolutionarily oriented anthropologist, endorses Dawkins’s meme concept and himself insists that culture be defined in a strictly ideational or mentalist way.² This narrow conceptualization excludes both behavior and technology as being part of culture. Harris prefers a broader conception of culture that includes both behavior and material technology, as do I. He defines culture as “the learned, socially acquired traditions of thought and behavior found in human societies” (1997:88). Although this broader definition is an improvement on narrow idealist definitions, it is still problematic in the sense that Harris conceptualizes culture as a “thing apart” from humans’ biological nature, a reified entity with a life of its own. The evolutionary psychologists John Tooby and Leda

Cosmides (1989a, 1992) provide a much more rigorous conceptualization of culture by distinguishing two major forms of it, which they call *transmitted* and *evoked* culture. By transmitted culture they mean roughly what most sociologists and anthropologists who rely on broad definitions of culture mean, minus, of course, the nonbiological emphasis. But before culture can be transmitted it must first be created by the members of a particular group or society. Tooby and Cosmides regard evoked culture as the within-group similarities and between-group differences that result from the way in which functionally organized, domain-specific psychological mechanisms – mechanisms in the brain – are triggered by the local circumstances in which people find themselves. Tooby and Cosmides (1992:116) exemplify evoked culture in the following way:

For example, when members of a group face new and challenging circumstances (drought, war, migration, abundance), this may activate a common set of functionally organized domain-specific mechanisms, evoking a new set of attitudes and goals. The newly evoked psychological states will make certain new ideas appealing, causing them to spread by transmission, and certain old ideas unappealing, causing them to be discarded. In contrast, the Standard Model “do what your parents did” concept of culture is not a principle that can explain much about why cultural elements change, where new ones come from, why they spread, or why certain complex patterns (e.g., pastoralist commonalities) recur in widely separated cultures.

Tooby and Cosmides’s reconceptualization of culture gives whole new meaning to the concept of learning. They note that traditional concepts of learning, just like traditional concepts of culture, have little meaning. As they point out, “most social scientists believe they are invoking a powerful explanatory principle when they claim that a behavior is ‘learned’ or ‘cultural.’” However, “as hypotheses to account for mental or behavioral phenomena, they are remarkably devoid of meaning. At this point in the study of human behavior, *learning and culture are phenomena to be explained, and not explanations in themselves*” (1989a:46; emphasis added).

This crucial but generally overlooked point has been cleverly made by George Homans (1984) by means of his concept of “culture vultures.” Culture vultures are social scientists who explain a pattern of social behavior as being the way it is “because of the culture.” Most sociologists and anthropologists are culture vultures, in Homans’s view. What these social scientists fail to realize is that to explain a behavior pattern as being what it is “because of the culture” explains nothing. What has to be explained is why the culture is the way it is, i.e., how it came to be formed. Take the following example. The Chinese have traditionally had a strong aversion to drinking milk and eating milk products. As Marvin Harris (1985) has said, they regard drinking a tall glass of milk the same way Westerners would regard drinking a tall glass of cow saliva. But throughout much of Europe (especially northern Europe) and the United States and Canada milk is considered an excellent food and is consumed in large quantities. Now if we ask the question, Why does little Chang Wu never drink milk and in fact abhor it?, and answer the question by saying that he was conditioned by his culture to feel that way, our explanation is probably quite correct. But what have we really explained? Nothing, for the real question is: Why did the Chinese come to adopt this dietary habit?

The traditional concept of transmitted culture is closely linked to the concept of socialization. Most sociologists and anthropologists hold that people are the way they are because they have been socialized into a particular culture or subculture. But does the concept of socialization explain much of anything? Yes, at the proximate level, but remaining at this level is neither very interesting nor very enlightening. Socialization is

a given, something that obviously goes on constantly in all cultures. Older generations obviously have a vested interest in transmitting their cultural patterns to younger generations. This can be taken for granted. But socialization is only the mechanism through which culture gets transported from one generation to the next. It has nothing to do with why a culture became the way it is.

There is an even more serious problem. In modern societies like our own (but even in many preindustrial societies to some extent) there is often considerable slippage between generations. Each new generation may have many different thoughts and actions compared to the previous one. Western societies, for example, are much less sexist today than they were two generations ago. Western culture has changed, which can only mean that people do not automatically absorb their culture from the senior generation and are always to some extent resistant to socialization efforts. Humans are not Parsonian “cultural dopes.” Cultures are constantly changing, and we cannot explain that crucial fact by claiming that “culture comes from culture” or by invoking the concept of socialization.

The Psychological Foundations of Culture: Domain-General or Domain-Specific?

Adherents of the SSSM have long claimed that the the most important way – indeed, in some formulations, the only way – human biology contributes to culture is through the evolution of the “capacity for culture” (Spuhler, 1959; Montagu, 1964; Harris, 1979; Sahlins, 1976a, 1976b). The evolution of the large human brain has endowed humans with the ability to solve problems through superior learning ability, and this has caused culture to become the primary mode of human adaptation, one that has replaced the old biological mode of adaptation. For example, Marvin Harris notes that during the five-million year period during which we humans have been evolving from our apelike ancestors “natural selection favored a behavioral genotype in which the programming acquired through learning progressively dominated the programming acquired through genetic change. Every discussion of human nature must begin and end with this aspect of the human biogram, for its importance overrides every other conceivable species-specific trait of *Homo sapiens*” (1979:134). Moreover, this capacity for culture is regarded as a highly generalized and flexible trait that allows humans almost infinite plasticity in their mode of cultural adaptation. For many adherents of the SSSM, when it comes to culture almost anything is possible.

The SSSM implies that the human brain is a domain-general learning mechanism, or at least consists of a relatively small number of domain-general mechanisms. However, evolutionary psychologists such as Tooby and Cosmides (1989a, 1992) provide a compelling argument to the effect that the brain could not have evolved as a domain-general mechanism (or cluster of mechanisms) because such mechanisms would be too clumsy to have had much adaptive import. In some respects they may have actually been maladaptive (Boyer, 1995). “Many adaptive problems that humans routinely solve,” Tooby and Cosmides say, “are simply not solvable by any known general problem-solving strategy, as demonstrated by formal solvability analyses on language acquisition” (1992:111). They argue that the brain evolved as a very complex network of domain-specific mechanisms, and that it is these mechanisms that interact

with the total human environment to produce the shared patterns of thought and action that we call culture. They say that (1992:111)

domain-general, content-independent mechanisms are inefficient, handicapped, or inert compared to systems that also include specialized techniques for solving particular families of adaptive problems. A specialized mechanism can make use of the enduring relationships present in the problem-domain or in the related features of the world by reflecting these content-specific relationships in its problem-solving structure. Such mechanisms will be far more efficient than general-purpose mechanisms, which must expend time, energy, and risk learning these relationships through [an inefficient process of trial and error].

Echoing Tooby and Cosmides, Randy Thornhill and Craig Palmer (2000) indicate three reasons why the human brain must consist of a large number of highly specialized, domain-specific mechanisms. First, the adaptive problems confronted by our ancestors in the EEA were very specific. Specialized adaptations are much better than general adaptations in solving specific adaptive problems. This is essentially the main point made by Tooby and Cosmides. Second, because a great deal of successful behavior is dependent on highly variable environmental conditions, humans must show a great deal of behavioral flexibility, and this flexibility actually requires highly specialized rather than general brain mechanisms (the opposite of what most social scientists have thought). Thornhill and Palmer (2000:18) quote Donald Symons (1987) on this point: “Extreme behavioral plasticity implies extreme mental complexity and stability; that is, an elaborate human nature. Behavioral plasticity for its own sake would be worse than useless, random variation suicide. During the course of evolutionary history the more plastic hominid behavior became the more complex the neural machinery must have become to channel this plasticity into adaptive action.” Finally, special-purpose mental designs are implied by our knowledge of how nonpsychological adaptations are designed. The human body is nothing at all like a general-purpose system, but rather is an extremely complex system consisting of many highly specialized organs that do very specific things.³

Many sociologists and anthropologists continue to genuflect before the altar of their Great God, Culture. But they are worshipping a deity that does not deserve such respect and that to a large extent has created more problems than it has solved. As Steklis and Walter (1991:161) note, “although the culture concept can have limited utility insofar as it is employed as a general analytical abstraction that may be used to summarize a complex set of behavior patterns in a society, it is far too vague a term to be of use in specification of the exact relationships between the variables that govern the expression of behavior.” For the most part the concept has outlived its usefulness and must eventually be jettisoned. Unfortunately, we do not yet have a suitable substitute. In view of this fact, for the time being we must continue to use the concept, but sparingly and in full recognition of its limitations.

NOTES

1. This point has been made by Pierre van den Berghe and a number of others. Essentially the same argument has been made by the behavior geneticist David Rowe (1994) for the individual rather than an entire culture. Rowe points out that most sociologists have conceptualized the environment as something entirely separate from individuals and their biological makeup, when in fact what is called “environment” is itself already partly imbued

with individual biology. To some extent the environments of individuals are created by them. Nature and nurture thus cannot be neatly separated, as the SSSM assumes.

2. The meme concept, I am sorry to say, has to be one of the most dubious concepts invented in recent years, and I am dismayed by the number of intelligent social scientists who have fallen for it. It does absolutely no work at all and simply reinforces the old idea that culture is a self-perpetuating “thing unto itself.” It comes as a shock that it was Dawkins who developed it, thereby separating himself from mainstream sociobiology, the very approach he helped to found. I find Cronk’s use of it entirely gratuitous. The book in which he endorses it and an idealist notion of culture generally (Cronk, 1999) says a great many very intelligent things and could have been written in essentially the same way without any reliance on the concept whatsoever. In fact, Cronk shows at one point that culture in the sense of what people say or think they are doing frequently has no impact on behavior at all and often is directly contradicted by it (e.g., the Mukogodo, a pastoral people in Kenya, say they favor sons and that they should favor sons, but in fact they clearly invest more in daughters). Had anyone other than the brilliant and highly regarded Dawkins developed the concept, especially an intellectual mediocrity or halfwit, I think it would have died a deservedly early death.
3. There are evolutionary psychologists/sociobiologists who do argue for the existence of domain-general mechanisms (e.g., Turke, 1990; MacDonald, 1989, 1991; MacDonald and Geary, 2000). However, domain-general is a relative term, and the kinds of domain-general mechanisms these social scientists are arguing for are much more functionally specific than anything conceived by the SSSM. Moreover, they are weaker than domain-specific mechanisms (MacDonald and Geary, 2000). Undoubtedly the most important domain-general brain mechanism is intelligence, whose general adaptive capacity is really beyond question. MacDonald and Geary (2000) argue that intelligence is an especially adaptive trait when people are confronted with novel or unpredictable environments or situations. Flinn (1997) argues that the brain has evolved some domain-general mechanisms that function to integrate domain-specific mechanisms.