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## CHAPTER 7

# Cultural Materialism

It is tempting to dismiss Wilson's reliance on theoretical and ideological structures familiar to us from pre- and nonevolutionary thought as a peculiarity of his own thinking. But Wilson's difficulties are shared in the human sociobiological writings of Richard Alexander (1979), David Barash (1979), and Richard Dawkins (1976), among others. The problem, of course, could be a peculiarity of sociobiology, irrelevant to other attempts to apply evolutionary theory to the study of humans. An analysis of Marvin Harris' "cultural materialism," however, shows the problem to be much broader. In Harris' presumed application of evolutionary ecology's energy-flow analysis to certain human cases, the same flaws are evident.

Sociobiology and evolutionary ecology are quite distinctive theoretical structures within evolutionary biology. Though they must ultimately be reconciled under the overall principles of evolutionary biology, they focus attention on quite different aspects of biological systems and use very divergent methodologies. Were cultural materialism and human sociobiology genuine applications of these theories and methods, they should be quite distinctive. Yet Harris' and Wilson's works

share many of the same defects. Their similar difficulties arise not from evolutionary biology but from both authors' reproduction of key elements of pre-evolutionary naturalistic views of society in their work, in particular their common commitments to static "natural" categories and the nature/nurture dichotomy, and to deriving political and moral conclusions from the study of "nature."

### Cultural Materialism

The application of frameworks based on the analysis of population/resource relationships to human situations antedates modern evolutionary biology. It is conventional, though not therefore correct, to claim that Malthus made the first scientific statement of this approach in 1798. The recent popularity of population/resource models and theories dates from the 1960s and is associated with Paul Erlich, Barry Commoner, Garret Hardin, "Earth Day," the Club of Rome—that is, the ecology movement. Spokespersons for this perspective share the common aim of using ecological analysis as a basis for the formulation of social policies.

Despite some intriguing proposals, none of these scholars and groups really came to terms with the cross-cultural application of ecological perspectives. Certainly none of them dealt effectively with cultural diversity or the full sweep of human history. Into this gap stepped the anthropologist Marvin Harris.

Harris began these efforts in 1974 by reanalyzing some of the major problems in the interpretation of human diversity and history with the aid of ecological perspectives. He calls his approach "cultural materialism" to set it off from other ecological approaches. Cultural materialism first was brought to the attention of the general public in two very popular books—*Cows, Pigs, Wars, and Witches* ([1974] 1975) and *Cannibals and Kings* (1977)—which projected Harris into the arena of both academic and public debate.

Harris, who does not shrink from criticizing opponents, has polarized his sympathizers and detractors and now stands at the center of a series of polemics that are always revealing, occasionally entertaining, and often fruitless. Indeed, because of this polemical atmosphere,

people who analyze the role of ecological analysis in anthropology are tempted not to deal with Harris. His treatment of critics is both unpleasant and unproductive. Neither he nor his supporters have shown much willingness to learn from criticism.

Harris is nevertheless important. Most generally unbiased readers of his popular books are readily convinced by his arguments and react with considerable hostility to criticism of his work, seeing criticism as an attack on science, rationality, and the experimental method. Harris' detractors, on the other side, are always mystified by the power of his seemingly weak arguments.

For this reason Harris must be taken seriously. He has an uncanny ability to capture the imagination and scientific optimism of an audience through arguments for the application of ecological principles to the analysis of human problems. Yet Harris violates evolutionary reasoning at every turn, shows little awareness of the evolutionary ecology that he claims to employ, and appeals to his audience mainly through just-so stories about adaptation, rationality, science, and democracy.

Harris returns to important aspects of the pre-evolutionary Western view of the relationship between nature and culture, and he does so by violating most of the principles of science, rational argument, and the experimental method to which he appeals. Anyone who wants to see useful applications of a balanced combination of evolutionary biology and cultural analysis to human beings has first to deal with Harris' claims.

Harris' history as an anthropologist extends back to monographs on race relations in Brazil and in Mozambique. The part of his work relevant to the persistence of nonevolutionary views in the study of humans begins with the publication of *The Nature of Cultural Things* in 1964. This book is a methodological essay on the "objective" observation of human behavior. It was followed in 1968 by his monumental *Rise of Anthropological Theory*, in which he rewrote the history of anthropology to legitimate the development of what he came to call "cultural materialism." In 1971 he published a very successful introductory textbook, *Culture, Man, and Nature*, in which the principles of cultural materialism were put into play for teaching purposes. Revised versions of the book are still in print. These works

were followed by the four books I shall examine here: *Cows, Pigs, Wars, and Witches*; *Cannibals and Kings*; *Cultural Materialism*; and *America Now*. The first of these books is his attempt to explain strange cultural behaviors by cultural-materialist means; the second endeavors to make the cultural-materialist model dynamic; the third is a theoretical defense of cultural materialism and an all-out attack on its opponents; and the fourth is an interpretation of the ills of American society.

### *Cows, Pigs, Wars, and Witches*

Originally published in 1974, *Cows, Pigs, Wars, and Witches* is a gem that rewards close reading. Tightly structured, lively, and occasionally both eloquent and convincing, it reveals a pattern of thinking that remains consistent throughout Harris' subsequent works. Here Harris throws down the gauntlet, claiming that he can explain with his method what the rest of us recognize as problems but are unable to deal with. He asserts that science is on his side, a bold claim in a bold book.

#### Objectivity and Science vs. "Cultural Dreamwork"

Harris opens with the statement that theory must reflect the "real" world (p. vii). Though hardly revolutionary, it immediately raises the question of what kind of "real" world he believes is out there. It will become clear that his theoretical preferences favor a view of the real world as a realm that operates in accordance with a very small number of "natural" laws. The real world for Marvin Harris is a world of energy flows. Calories and the ecosystems through which they flow are the material reality of human life to which he believes a true cultural science must refer.

Harris evokes the antisience ideology of the 1960s, specifically the arguments that rationality in general and science in particular are the prime causes of our social problems. Whenever this antisience specter is raised, Harris waxes furious and occasionally compelling. A staunch defender of science, Harris argues that whatever the causes of our problems are, too much scientific understanding of the causes

of social life is not one of them. One can only agree with him in general and with his assertion that much more study of the material organization of the human world is vitally necessary.

But Harris' own argument goes far beyond the demand for more scientific work. He insists that the testing ground for a science of human behavior must be a coherent scientific (and therefore materialistic) explanation of the highly various, puzzling lifestyles that anthropologists have often portrayed so engagingly. The subtitle of this book, *The Riddles of Culture*, refers to cultural practices that have generally defied anthropological analysis (according to Harris). He claims to resolve these analytical problems with his theory, thus giving a scientific explanation to culture.

Despite the scope of the task, his argument is very simple: "I shall show that even the most bizarre-seeming beliefs and practices turn out on closer inspection to be based on ordinary, banal, one might say 'vulgar' conditions, needs, and activities" (p. 5). The problem is that

practical life wears many *disguises*. Each lifestyle comes *wrapped in myths and legends* that draw attention to impractical or supernatural conditions. These wrappings give people a *social identity and a sense of social purpose*, but they conceal the *naked truths of social life*. *Deceptions* about the mundane causes of culture weigh upon ordinary consciousness like *layered sheets of lead*. [Harris [1974] 1975:5; emphases mine]

The call is to strip off the disguises, to reveal our self-deceptions by means of science.

Certain words and turns of phrase are most informative. Practical life is "disguised" in a costume created by a "wrapping" of myth and legend. The meanings people create, then, are external to the major causes of human existence. These disguises provide interpretations of experiences, but they are at base "deceptions" that cover the "naked truths of social life." In a few lines Harris has separated our material life as humans from the meanings we attribute to it. He has equated cultural interpretations of the "naked truths" with disguises and deceptions. Cultural systems of meaning are for him intrinsically false "layered sheets of lead."

The necessary implication is that Harris' own consciousness is in

some sense not culturally mediated; that it is not “ordinary.” If he can see the “naked truths” for what they are, his sources of conceptual objectivity must be uniquely noncultural. This is, in effect, his definition of science—the use of nonculturally mediated objectivity to strip the disguise from the naked truths of social life. His views are remarkably like E. O. Wilson’s.

Harris takes up recognized major problems of anthropological interpretation to “test” his approach and to “prove” its validity. He deals with Hindu sacred cows, Melanesian pig veneration, Middle Eastern pork prohibitions, primitive war, male aggression, the potlatch, cargo cults, religious movements, and European witchcraft. Each case is treated as a challenge, a riddle to be solved.

Harris seeks to ferret out the underlying material causes of these apparently irrational phenomena to find the unitary truth behind the disguise. He is generally a pleasure to read as he goes about his task. The analysis is always interesting and occasionally genuinely provocative. There is no lack of intellectual derring-do and fun. Harris must be read to be appreciated.

#### Taboos against Temptation as Inferior Science

Harris’ type case is the sacred cow of Hinduism. “Sacred cow” has become a Western cover term to refer to all that is irrational in cultures different from our own. Harris argues that Hindu cow veneration is based on sound ecological principles. Specifically he argues that by making the cows sacred, the Hindus conserve an ecological balance and population density that would otherwise be impossible to maintain. He is able to adduce some limited energetic evidence to support his argument. There is no doubt that Harris considerably altered our way of thinking about sacred cows; his formulation has forced researchers to take this phenomenon more seriously than they had done before. This alone is sufficient recommendation for Harris’ argument, but my interest here is in the larger logic of his position and his general methodology as well.

After the sacred cows are disposed of, Harris moves on to other cultural practices for which he provides a cultural-materialist explanation. In comparing places where pigs are venerated with places where

they are abominated, Harris rejects the “cultural” interpretations of these phenomena out of hand. Once again he equates the “natural” with the mundane and material and implies that culture is the opposite: unnatural, vague, spiritual (real nature versus unreal culture). He does sympathize a bit with Maimonides’ medical materialism because it deals with the natural, definite, mundane forces that are involved in everyday life (p. 40). But Maimonides was too narrow for Harris; he did not include the whole ecosystem of which human behaviors in relation to pigs are a small part.

Given the desert environment of the Near East, Harris argues that pig prohibitions are good ecological practice. But apparently good ecological strategy alone is not enough for “pre-scientific” people, for “as in the case of the beef-eating taboo, the greater the temptation [here to raise pigs], the greater the need for divine interdiction” (p. 44). Thus people have to create elaborate false explanations to support their correct ecological strategies. This is the only way to avoid the temptation of destroying the ecological basis of their societies.

Just why people are tempted to do something wrong that the gods must protect against is not clear. If evolution is the guiding force in human behavior, why do people not simply behave as they must without any cultural “dreamwork”? Harris’ answer apparently is that, in the absence of modern science, these ecological forces cannot be understood directly. Hidden in his apparent respect for the practices of other cultures is a unilineal argument for the development of objectivity and science, a view that has been immensely popular in the Western world for a long time. The Western world is placed at the pinnacle of rationality.

But if uniform material causes have uniform effects (as science insists), we are within our rights to ask what are the practical, natural, mundane forces that obligate Harris to seek this form of objectivity and that cause him to wrap social reality in science. His answer is that science is objective and that he is a scientist. So despite the fanfare, his argument ends up restating, though with some new twists, the contrast between the cultural orientations of primitive societies and modern ones. He believes that the full potential of modern society has not yet been realized and that its realization requires the intercession of scientific intellectuals. This is hardly a new idea.

When Harris deals with primitive warfare, his lack of regard for people's own conceptualizations of their lives and motives becomes even clearer.

Irrational and inscrutable motives predominate in current explanations of primitive warfare. Since war has deadly consequences for its participants, it seems presumptuous to doubt that the combatants know why they are fighting. . . . But . . . the answers to our riddles do not lie within the participants' consciousness. The belligerents themselves seldom grasp the systemic causes and consequences of their battles . . . [P. 62]

People have motives for what they do but they are incapable of understanding the real reasons for their actions. These reasons are systemic, not individual or motivational. Only true scientists can comprehend systemic causes and consequences.

This position is rather awkward. Harris argues that people must have a structure of culturally created motivations that encourage them to behave as they must for the sake of their system, but their set of motivations never represents the system as it really is. To see the "real" system, an outside scientist is required. But by what evolutionary path can people end up incapable of understanding the "real" causes and consequences of their behavior? Surely people in other cultures are not less intelligent than we are.

### Ecosystem Analysis

Harris claims that the key to all these problems is ecosystem theory, especially energy-flow analysis. He wants to show that all such behaviors are part of ecological adaptive strategies that yield the best possible results in their context. By applying these "material" principles to the analysis of unusual human behaviors, Harris tries to solve cultural riddles.

Does ecosystem analysis support him? The kind of ecological theory and the ecological data he uses are exceptionally primitive. The sacred cow argument is perhaps the one for which he has the best empirical evidence.

The portraits of the Indian ecosystem (pp. 16–19, 22) and of the

others Harris discusses do not approximate any ecological standard. They are evocations of whole environments, incredibly diverse areas with enormous diversity of interlinked ecosystems. While there is no question that India, even the planet Earth, can be called an ecosystem, there is a real question whether this level of abstraction is relevant to a behavioral analysis such as the one Harris tries to make. Harris' argument centers on fine adjustment mechanisms in local ecosystems in which cows play a particular role. Yet as his portrait of the ecosystem is virtually India-wide, it is necessarily vague and abstract.

At the level of local detail, even ecologists who deal with relatively simple ecosystems find it necessary to devote hundreds of pages to the microenvironmental diversity and complex dynamics of an ecosystem before a small sample of the activities of humans can even be factored in (Netting 1971, E. Smith 1980, Winterhalder 1977). Thus Harris does not really apply ecological analysis to the Indian environment; rather he evokes the material world and then goes on.

Unfortunately this is true of all of Harris' cultural-materialist works, though as a matter of theoretical conviction he argues persuasively for the study of the specificities of the material interactions between humans and our environments. As he offers neither careful operationalization of concepts nor empirical proof, however, his argument can appeal only to those who are already convinced. While his audience is large and enthusiastic, the fact remains that Harris uses an advocacy method of argument when he deals with the human condition. This is not a scientific strategy.

### The Sources of Scientific Objectivity

The question of objectivity is particularly vexing. In the analysis of sacred cows, for example, Harris squares off against Alan Heston, who has argued that the cows perform important ecological functions but that India would be better off with fewer of them. Harris counters that Heston's program would lead to the elimination of small farmers and the improvement of the lot of the larger farmers. Harris is certainly right to consider the distributive effects of development policies, but the difference between the two scholars opens up an interesting question. If Harris' cultural materialism is supposed to explain

the sources of cultural ideas, then where do Heston's false ideas come from? And what is the source of Harris' correct ones?

Though Harris provides no clear answer in abstract terms, his explanation can be derived from the overall structure of his analysis. The Indian farmers' ideas arise from the cultural "dreamwork" that wraps and hides the "naked truths of social life." The penalty for thinking other than the way they do would be mass starvation. This much is consistent with Harris' cultural materialism.

In capitalist societies, and especially in the ranks of academe, people are capable of thinking up ideas and rules for behavior that are completely at odds with the "real" world. How they can do so in a world that, according to Harris, is uniformly ruled by material causes is a real problem for his theory. His answer appears to be that a short-lived bubble of capitalist abundance has somehow unhooked us from the real world. This is a major part of the argument in *Cannibals and Kings*. It appears that uniform material causalities argued for in Harris' cultural materialism are not so uniform after all.

### Riddles that Dissolve into Social History

Harris' argument contains a source of slippage that effectively demolishes most of his own theoretical claims. At one point he says: "This is an appropriate moment to deny the claim that all religiously sanctioned food practices have ecological explanations. Taboos also have social functions" (p. 45). Though not particularly debilitating in this context, this point comes up repeatedly in his work. While Harris insists on the universal applicability of his materialist arguments, whenever he runs into trouble he invokes a social or historical factor to explain the anomaly. This strategy effectively insulates his theory against any negative evidence, much as does Wilson's use of proximate and ultimate causality. So much for science.

In dealing with primitive peoples Harris introduces historical forms of explanation in a most disturbing way. Attempting to explain anomalies in the behavior of the Yanomamo Indians of Venezuela, Harris argues that their recent movement into their geographical area and adoption of a new subsistence system accounts for many of their problems. He speculates that they had been a nomadic people and

began only recently to experiment with agriculture. The resulting great food increase led to higher population densities, which in turn created problems with hunting and other activities. The Yanomamo "have already degraded the carrying capacity for their habitat" (p. 105).

But how are such processes possible in the framework of his theory? How can the "adaptedness" of one system be compared with another? How can the degree to which a particular society meets a set of analytical expectations or deviates from them be measured? Without having answered these questions, Harris deviates from direct cost-benefit optimization in the analysis of particular behaviors or groups of them whenever it suits his convenience to do so.

This is not a side issue. If we follow Harris' approach to the analysis of a particular society, we must know whether or not the society has been in its present location long enough to have worked out a well-balanced adaptation to the environment. Such knowledge requires some useful measure of "adaptedness." Neither of these requirements is met. Any time the data do not fit his expectations well, the lack of such knowledge constitutes an open invitation to consider that the cause is historical, that the deviation is caused by some interference. But the deviation could also be caused by bad data, poor formulation of the analytical categories, or simply an incorrect analysis of the data.

An evolutionary ecologist, recognizing that these issues have to be fully settled by agreed-upon measurements, would see this requirement as a heavy additional weight on an analytical framework that is already difficult to apply because it makes extraordinarily comprehensive empirical demands. Harris does not face up to this problem. His approach is to tell just-so stories about adaptation without much interference from the data. Lacking good ecological data, the formulation of alternative hypotheses, consistent analytical standards, and operational tests, Harris' view becomes a textbook case of adaptationism.

Examples of this approach are found throughout the book. Harris argues that the potlatch of the Kwakiutl functioned as a necessary redistribution of resources; that is, it was a systematic process. Why did the Kwakiutl have such a system when the Yanomamo do not? Harris would probably answer that the Kwakiutl had been in their

environment longer and had worked out their adaptation fully. But what theory of evolutionary ecology tells us how long it takes to become “adapted”?

While it makes sense to argue that societies that have taken up a new way of dealing with the environment relatively recently will be less finely tuned to the local ecology than those that have been in place longer, such an argument must meet high theoretical standards. Among other things, there must be a set of definite criteria by which to judge the “adaptedness” of societies. Further, it is necessary to model the adaptedness of a society over time and predict how long is long enough for stable adaptations to develop in particular ecological zones given certain sets of food-getting strategies.

This line of reasoning also implies that some kinds of societies degrade their environments and others do not. The theory must explain under what circumstances a society does and does not produce a stable adaptation. Harris opens the door to all of these dilemmas the moment he abandons direct material causation by invoking a loose historical standard for judging adaptations.

The alternative is even worse. To argue, despite the existing evidence, that all societies are well adapted to their ecosystems would be a travesty. But to save the argument by shunting the deviations from expected adaptations off to history is no solution. Harris’ next book, *Cannibals and Kings*, attempts to solve just this problem.

As the reader is brought to consider messiahs and the witch panic in Europe, the problems of historical causality get worse. Harris uses these cases to try to explain how consciousness got so far out of touch with “reality” in Western societies. His strategy obligates him to explain why the panic broke out when it did and not earlier or later. This sort of question plagues all historians and is not helped a bit by Harris’ cultural materialism.

Harris seeks demographic and ecological causes for these events, but his arguments rest on such a long series of assumed relationships that they are of little interest to anyone familiar with the details of the great religious upheavals in Europe and the United States. If Harris only wanted to persuade us to pay close attention to the material aspects of social life during the period of these outbreaks, no one could disagree. But he sacrifices the analysis of the detailed social

etiology of these movements in order to make room for his particular materialist interpretation, which then turns out to be too vague to be helpful.

### “The Return of the Witch”

As he begins to close out the argument, he speaks metaphorically of the “return of the witch,” meaning the ways in which contemporary consciousness is out of touch with “practical and mundane constraints” (p. 252). How can consciousness, which is, in Harris’ own words, “adapted to the practical and mundane conditions” (p. 253), get out of touch with those conditions? No answer is given.

The reader is left with the idea that primitives think about *what is* in fantastic symbols while peasants and academics think about *what is not* in other kinds of fantastic symbols. Only scientists, and in particular cultural materialists, relate “true” consciousness to the practical and mundane constraints of everyday life. Marvin Harris believes that we must use science to learn to eliminate from our culture all of our false conceptions of how things are and ought to be.

Harris’ drive for data about the material world is good, a useful corrective to anthropology’s large dose of idealist bias and empirical laziness. His inclusion of the Western world in anthropological comparative statements is important and his flashes of insight and wit are engaging. Still the book is a great disappointment. Ecology is invoked only in the loose sense that everything must have energy costs and benefits. Harris engages in an extreme form of adaptationism, creating adaptive stories unmediated by any sense of the operational requirements of ecology. This approach hardly represents the sophistication of evolutionary ecology and the multiplicity of ways its theories and methods could be adapted to anthropological use.

The book does not cope with the central theoretical problem in attempts to deal with humans ecologically: how to treat the interaction of economic and energy currencies, since they do not match up in any obvious ways (Bennett 1976, E. Smith 1980). Because of culture, human ecosystems are not bounded in space and time in the same way that nonhuman systems are. The kinds and amounts of

information they process are different. No account is taken of this fact.

Instead Harris tries to make history the arbiter of adaptation, arguing that a certain amount of time is required for a system either to settle adaptively into a stable strategy or to disappear. No means of determining the amount of time needed is ever suggested, or any means of distinguishing between systems that are maladaptive and those that are not yet adapted. These questions require answers from any theory that calls itself scientific.

Harris' view of human history is not nearly so new or revolutionary as he thinks it is. He treats tribal societies as ones where people do what they must in a balanced relationship with the environment, avoiding the temptation to do otherwise by wrapping their actions in fantasy. In early states, people behave pretty much as in tribal societies, but the logic of political power forces a certain degree of environmental modification. In capitalist states, people are driven to deplete the environment by the logic of capitalism, while their consciousness of the situation is the exact opposite of what is really happening. The ideal future society is one in which scientific consciousness of the ecological and economic constraints at the base of all societies will predominate. Through this knowledge a reconciliation of consciousness and reality will be created so that the dichotomy between nature and culture can be abolished. This is a rather commonplace form of utopian rationalism.

*Cows, Pigs, Wars, and Witches* leaves the following problems unresolved: What causes the major transitions in human history? What is the relationship between consciousness and ecology? What is adaptation? How can we distinguish between systems that are maladaptive and systems that simply have not yet achieved an adaptive balance? What is the source of scientific objectivity? *Cannibals and Kings* and *Cultural Materialism* are Harris' attempts to address some of these questions.

### *Cannibals and Kings*

*Cannibals and Kings*, subtitled *The Origins of Cultures*, shows that Harris is aware of the major flaw in *Cows, Pigs, Wars, and Witches*:

the lack of a dynamic that moves history through the transitions he has described. This work is intended to provide that dynamic. He states the argument succinctly at the outset:

In the past, irresistible reproductive pressures arising from the lack of safe and effective means of contraception led recurrently to the intensification of production. Such intensification has always led to environmental depletion, which in general results in new systems of production. . . . [Harris 1977:xi]

Then he brings his policy position forward:

That a blind form of determinism has ruled the past does not mean that it must rule the future. . . . I have no difficulty in believing both that history is determined and that human beings have the capacity to exercise moral choice and free will. . . . In my opinion, free will and moral choice have had virtually no significant effect upon the directions taken thus far by evolving systems of social life. . . . It behooves those who are concerned about protecting human dignity from the threat of mechanical determinism to join me in pondering the question: why has social life up to now consisted overwhelmingly of predictable rather than unpredictable arrangements? I am convinced that one of the greatest existing obstacles to the exercise of free choice on behalf of achieving the improbable goals of peace, equality, and affluence is the failure to recognize the material evolutionary processes that account for the prevalence of wars, inequality, and poverty. [pp. xi–xii]

*Cannibals and Kings* provides a population/environment motor to drive the cultural evolutionary process along. The book also clarifies Harris' ethical stance considerably. Equating rationality, knowledge, and the exercise of freedom, he seeks to study the laws of nature in order to defeat them or at least to subordinate them to certain ethical standards.

### The Cultural Basis of Cultural Materialism

Harris' population/environment argument, strangely enough, rests on a cultural foundation, though apparently he does not see it as such. He claims that the severe costs of infanticide to humans are the

real motor of human history. It is very difficult for humans to endanger pregnant women's lives and to kill children. But he does not explain why the killing of infants is worse for humans than for other animals. Nor does he argue that it is harder on human females physically. Harris believes that infanticide has a high moral and cultural cost.

For this to be the case, Harris has to argue for certain panhuman cultural capacities that have not evolved over time. The high cost of infanticide is treated as a universal, fixed characteristic of the human species as a whole. This generic statement about what is "natural" to humans is undefended and is incompatible with Harris' evocation of an evolutionary view. In such a view, a fixed, universal "human nature" has no place.

"I suspect," Harris writes, "that only a group under severe economic and demographic stress would resort to abortion as its principal method of population regulation. . . . In the case of both geronticide and infanticide, outright conscious killing is probably the exception" (p. 15). His concept of "costs" of population control is clearly a culturally mediated one, resting on a view of panhuman moral sentiments, an immensely popular idea. Harris is an optimist about human nature, a point relevant to much of his popularity because audiences respond favorably to it.

### Adaptationism

*Cannibals and Kings* is even looser than the previous work in its appeal to adaptationist stories. Harris states, "Yet I have already *shown* that what keeps hunter-collectors from switching over to agriculture is not ideas but cost/benefits. . . . This theory *explains* why the domestication of plants and animals occurred at the same times and places in the Old World" (pp. 26–27; emphases mine). "I have shown" would be more accurately stated as "I have argued." As for the claim that the theory "explains" the timing of domestication, Harris offers a hypothesis, then takes it as confirmed, and then converts it into a theory that explains. This indefensible strategy is consistently pursued throughout the book.

In discussing the origin of war, Harris argues that variations in the

intensity of war are caused by cultural factors. “Obviously it is part of *human nature* to be able to become aggressive and to wage war. But how and when we become aggressive is controlled by our cultures rather than by our genes” (p. 37; emphasis mine). This kind of argument posits a timeless human nature apart from history. It also embodies an extreme form of environmentalism: humans have the capacity to do many things but the particular environment *absolutely* determines what they will do. Soon Harris takes the next step: “Warfare . . . is not the expression of human nature, but a response to reproductive and ecological pressures. Therefore, male supremacy is no more natural than warfare” (p. 57).

Human nature is constant but its expression varies in accordance with the situation. If human nature is constant, then how can Harris have any hope that humanity will change in the future? He must call on science to create an environment that will permit the expression of the “true human nature” (as opposed to the nature of observed humanity). This position is neither new nor defensible according to the cultural-materialist ground rules he lays down. It is familiar to us from Hippocrates and Jean Bodin, among others.

### Material Causes, the Human Will, and the Ethical Duty of Science

In regard to causal statements, Harris’ lack of attention to operational questions places him in an awkward position. He states, for example, “The Oedipus complex was not the cause of war; war was the cause of the Oedipus complex (keeping in mind that war itself was not a first cause but a derivative of the attempt to control ecological and reproductive pressures” (pp. 65–66). Then he justifies this statement with the following: “It is an established principle in the philosophy of science that if one must choose between two theories the theory that explains more variables with the least number of independent unexplained assumptions deserves priority” (p. 66).

This, of course, is true, but he has left out a step. Ockham’s razor can be invoked only in operationalized explanations. Since statements such as those about the Oedipus complex are not in any operational form, it is impossible to decide which alternative view does contain

the largest number of unexplained assumptions. Harris rarely moves to the level of operational research; yet the issues he tries to resolve cannot be dealt with by logical manipulation alone.

Other statements move us toward an even more ambiguous stance on causality:

War and sexism will cease to be practiced when their productive, re-productive, and ecological functions are fulfilled by less costly alternatives. Such alternatives now lie within our grasp for the first time in history. If we fail to make use of them, it will be the fault not of our natures but of our intelligence and will. [P. 66]

Here the separation of will and intelligence from human nature must be kept alive if the dynamic of his model of history is to work. Again we are required to view human nature as outside of history—an enterprise that makes no biological sense. Yet without such a view Harris' moral claims lose much of their support, as in the following case:

I urge those who feel that my explanation of the evolution of culture is too deterministic and too mechanical to consider the possibility that at this very moment we are again passing by slow degrees through a series of "natural, beneficial, and only slightly . . . extra-legal" changes which will transform social life in ways that few alive today would consciously wish to inflict upon future generations. Clearly the remedy for that situation cannot lie in the denial of a deterministic component in social processes; rather, it must lie in bringing that component into the arena of popular comprehension. [P. 82]

By bringing these determinisms to the attention of the people, he hopes to improve the situation. Human nature is assumed to be good and reasonable; humans, faced with the right information, are likely to make much more constructive decisions than they have done in the past. As I said, Harris is an optimist.

And then he hedges: "I do not claim that the analysis of ecological costs and benefits can lead to the explanation of every belief and practice of every culture that has ever existed" (p. 137). In the absence of operational definitions, this kind of caveat becomes the ultimate fudge factor. It says that the explanation explains what it explains and does not explain what it does not explain.

Finally, Harris derives a lesson from Karl Wittfogel:

The effective moment for conscious choice may exist only during the transition from one mode of production to another. After a society has made its commitment to a particular technological ecological strategy for solving the problem of declining efficiency, it may not be possible to do anything about the consequences of an unintelligent choice for a long time to come. [P. 163]

This is quite an important point, for it adds to his earlier model of societies that are adapted and others that are not the idea that there are certain open doors in history. Only during these transitions is free will operative. This is Harris' way of reconciling his cultural materialism with his appeal to free will. It is not clear that the reconciliation makes any sense.

Harris believes that we are at such an open juncture now; thus the exercise of informed free will is crucial at present. He states:

No one who detests the practice of kowtowing and groveling, who values the pursuit of scientific knowledge of culture and society, who values the right to study, discuss, debate, and criticize, or who believes that society is greater than the state can afford to mistake the rise of European and American democracies as the normal product of a march toward freedom. [P. 175]

How, then, do we keep them from disappearing?

Only by decentralizing our basic mode of energy production . . . can we restore the ecological and cultural configuration that led to the emergence of political democracy in Europe. This raises the question of how we can consciously select improbable alternatives to probable evolutionary trends. . . . To change the world in a conscious way one must first have a conscious understanding of what the world is like. . . . It is only through an awareness of the determined nature of the past that we can hope to make the future less dependent on unconscious and impersonal forces. . . . While the course of cultural evolution is never free of systemic influence, some moments are probably more "open" than others. The most open moments, it appears to me, are those at which a mode of production reaches its limits of growth and a new mode of production must soon be adopted. We are rapidly mov-

ing toward such an opening. . . . In life, as in any game whose outcome depends on both luck and skill, the rational response to bad odds is to try harder. [Pp. 194–96]

This idea of the open moment and the appeal to democratic values together provide the drama and the call to action that makes Harris a compelling writer. But it does not make him a materialist or an evolutionist in any clear sense. Indeed, we have heard similar arguments before, in the writings of Jean Bodin and a host of other pre-evolutionary social reformers.

### *Cows, Pigs, Wars, and Witches* Revisited

Does *Cannibals and Kings* correct the weaknesses of *Cows, Pigs, Wars, and Witches*? It does not. The use of adaptationist arguments is more rampant and attention to operationalism is nil. Even the occasional encouragements to readers to get the data needed to examine these general propositions have pretty well disappeared.

The discussion of the relationship between culture and biology is not moved forward from the position taken in the earlier book, though it is restated in clearer terms in *Cannibals and Kings*. Human nature is given a definite static quality that it did not have earlier, a quality that eliminates much of the possibility of thinking about humans in evolutionary terms. Harris plainly creates a definitional separation between human nature (which is static), human cultures (which evolve), and human will and intelligence (which, though part of human nature, may or may not be exercised according to principles that Harris never clarifies).

The stages of human history are partly explained by means of Harris' abstract model of population increase, intensification, and depletion. This abstract model is quite interesting. With attention to the variety of operational problems involved and the elaboration of serious research hypotheses, this kind of model could be employed and its usefulness could be assessed. But Harris does not rely on the model as much as he claims. The rampant adaptationism of his mode of argument prevents deployment of the model or even discussion of the problems of deployment. He attempts to settle the matter in favor of the model with appeals to inadequate data from the research of others.

Though at first glance the model appears to be a materialistic one, it relies on the permanence of the values humans place on human life, especially on the lives of mothers and children. Were it not for these values, nothing would prevent abortion and infanticide from solving the population problem. Thus Harris' argument ultimately rests on assumptions about panhuman moral preferences. While these assumptions may be correct, they must be argued forthrightly as part of his model. In actuality Harris has created an eclectic model of human behavior and history, despite the aspersions he casts upon eclecticism.

Finally, the sources of scientific objectivity, a problem in the first book as well, are not clarified at all. To this problem is added the confusion surrounding the desirability of democracy and rationality as guiding principles of human life. Rather than take a more clearly moral position regarding both democracy and rationality, Harris suggests that democracy arises under particular ecological conditions and that these conditions have to be reproduced if democracy is to be preserved. And he argues not that rationality should be an ethical standard but that rationality is scientific and science gives us control over our environment. Thus rationality can be justified because it is evolutionarily successful.

In both of these arguments Harris moves from "is" to "ought" without being aware that he is doing so. He continues to claim that evolutionary biology can guide us into a rational assessment of our situation, and that once we have made that assessment, we will know exactly how to behave. And if we fail, he says, it will be a failure of the will and intelligence. Thus we shall be to blame for not following our material interests.

### *Cultural Materialism*

To build a "scientific" basis for this view, Harris then wrote *Cultural Materialism* (1979). This book attempts an epistemological justification of the cultural-materialist strategy, both in its own right and in comparison with all other major strategies of culture analysis. Though Harris continues to write on the subject, the trajectory leading from *The Nature of Cultural Things* (1964) to *Cultural Material-*

*ism* forms a remarkably complete corpus containing methodology, history of theory, synchronic and diachronic theory, and epistemological justification. Indeed, the overall coherence of his enterprise is intriguing.

*Cultural Materialism* is not very successful in accomplishing its aims because it does not effectively address most of the issues the earlier books leave unresolved. Instead it sets out a conventional philosophy of science and then proceeds to heap scorn on non-cultural-materialist approaches to the study of human behavior. Though often entertaining—few writers can match Harris’ way with words—these critiques do not advance the cause of materialist or evolutionary analysis in any clear way.

### Cultural Materialism as Science

Harris makes quite acceptable general statements about science. He stresses the openminded comparison of alternative theories and argues that a scientific strategy should be explicit regarding the epistemological character of its basic variables, the relationships between the variables, and the interconnected bodies of theory that are relevant to it. He also stresses parsimony in theory formulation and the continual monitoring of theory through empirical testing. No one could disagree that such an enterprise is laudable and perhaps possible. It does not describe what Harris has done in his previous works.

The sections on cultural materialism proper add nothing to the doctrine that has not already been heard before. Harris stresses the distinction between emic and etic data and the importance of measuring the discrepancy between them. And he argues that “the universal structure of sociocultural systems posited by cultural materialism rests on the biological and psychological constants of human nature, and on the distinction between thought and behavior and emics and etics” (Harris 1979:51).

Harris endeavors to incorporate the concept of infrastructure into his argument both to clarify his position and to incorporate those elements of Marxism that he deems useful. Infrastructure, he says, is the interface between nature and culture, and then he states: “Unlike ideas, patterns for production and reproduction cannot be made to

appear and disappear by a mere act of the will” (p. 58). Where now is the power of the will (and intelligence) claimed in *Cannibals and Kings*?

### Individual Wills and Historical Trajectories

When Harris turns to the problem of why the sum of individual biopsychological utilities, calculated on their own, will not yield a predictive theory of cultural evolution, his explanation sounds like a negative model of group selection in which groups are much less rational than individuals.

The more hierarchical the society with respect to sex, age, class, caste, and ethnic criteria, the greater the degree of exploitation of one group by another and the less likely it is that the trajectory of sociocultural evolution can be calculated from the average bio-psychological utility of traits. This leads to many puzzling situations in which it appears that large sectors of a society are acting in ways that diminish their practical well-being instead of enhancing it. [Pp. 61–62]

### Decaying Infrastructures and Cultural Mystifications

This idea is quite important for his model because it is the beginning of an attempt to take account of a problem I stressed earlier. He is trying to explain why tribal societies’ adjustments to their circumstances break down as social stratification develops.

Later he claims that decaying infrastructures yield the worst forms of ideological mystifications. “A final ideological product of a decaying infrastructure . . . [is] the growing commitment of the social sciences to research strategies whose function it is to mystify sociocultural phenomena by directing attention away from the etic behavioral infrastructural causes” (p. 113).

Harris has finally diagnosed the cause of the “overdose of intellect” he decried in *Cows, Pigs, Wars, and Witches*: it is the collapsing infrastructure of capitalist industrial society. This decay is causing our consciousness to stray from the real problems we face. Without expert guidance from intellectuals who study the infrastructure directly, we

will not survive. This is why we think about what is not rather than about what is.

Cultural materialism is posed as the answer to this dilemma. How we know when an infrastructure is decaying is not addressed.

### Eclecticism and Obscurantism

Among all analytical approaches, Harris most dislikes what he calls eclecticism. He is particularly vexing on this point since he does not distinguish between eclecticism and confusion. He begins by claiming to have discovered that eclecticism is itself a strategy of analysis and then, by fiat, he says that “eclecticism cannot lead to the production of a corpus of theories satisfying the criteria of parsimony and coherence” (p. 288).

This statement reveals much about Harris. Such a bald assertion can be based only on a metaphysical belief that the world of observation operates according to a few simple, regular laws. This view cannot be derived from the principle of parsimony because that principle calls not for the simplest explanation but for the simplest *possible* explanation. If there is reason to think that the empirical world operates with a set of heterogeneous causes that may not be usefully reduced to each other—biological and cultural causes for example—then a parsimonious and coherent explanation would have to be “eclectic” in Harris’ terms.

He argues that eclecticism would be viable only if nature were fragmented and inconsistent (p. 290), makes undefended metaphysical distinctions between crucial and less important variables (p. 295), and finally equates eclecticism with confusion:

The notion that all the parts of sociocultural systems are equally determinative of each other is a prescription for theoretical chaos. . . . There is as little room in the social sciences for the idea that all parts of sociocultural organisms “inneract” [sic] equally, as there is room in physiology for the belief that all parts of a plant or animal are equally vital for the maintenance of life functions. [P. 312]

This is a red herring. An eclectic argument in no way must assert that all parts of a system are equally determinative; rather eclectic

explanations emphasize that different causes are determinative in different degrees under specifiable conditions. Since Harris' own model includes demographic variables, panhuman nature and ethics, and intelligence and will, it seems to me that he is thinking eclectically himself. Harris does himself a disservice by deemphasizing precisely this eclectic component of his own vision.

Harris' criticism of Marshall Sahlins' rejoinder to his analysis of Aztec cannibalism (Sahlins 1978) shows just how pointless this kind of debate can be. According to Harris, Sahlins "has no alternative explanation. The sole purpose of his unremittingly negative critique is to prove that Aztec 'culture is meaningful in its own right,' a proposition to which one cannot object but which has no bearing on the question of whether or not Aztec cannibalism can be explained by cultural materialist theories" (p. 339).

Harris objects to Sahlins' departure from cultural materialism—by which Harris here means demographic/ecological causalities from which other cultural phenomena are derived. Yet Harris' cultural materialism contains a variety of heterogeneous and untestable assumptions about panhuman ethics and morality which drive his whole model. There is nothing less empirically testable or more eclectic in Sahlins' assertion about culture than in Harris' assertions about human nature and values. If cultural systems are meaningful in their own right, and we agree that such systems arise historically and maintain a certain coherence over time, then we can study them systematically and historically in conjunction with the infrastructure without creating any contradictions. The issue between Harris and Sahlins is not science but metaphysics.

### *America Now*

Harris' more recent book, *America Now: The Anthropology of a Changing Culture* (1981), claims to extend his techniques directly to the study of American society. It begins by invoking the collapse of the American dream: "This is a book about cults, crime, shoddy goods, and the shrinking dollar. It's about porno parlors, and sex shops, and

men kissing in the streets. It's about daughters shacking up, women on the rampage, marriages postponed, divorces on the rise, and no one having kids . . ." (p. 7). Harris is characteristically interesting and entertaining, offering some insightful observations about American life. But there is no connection between his analysis and any applications of energy-flow analysis. The political and moral values that motivate Harris are more clearly in evidence here than ever before.

Harris claims that "traditional moral and spiritual values have lost their appeal"; it is the function of the book to explain why. According to Harris, it is best to start analyzing such problems from the bottom up, "from the changes in the way people conduct the practical and mundane affairs of their everyday lives" (p. 11). But rather than relying on a strong form of techno-environmental determinism, Harris hedges by stating that "there is no single chain of causes and effects that can be followed out link by link from one basic change to all others" (p. 12). He sets out to show instead that the whole array of changes fits together in an intelligible pattern; other thinkers, he says, see these problems as unconnected or as the workings of obscure forces. "The task of this book," he writes, "is to reassert the primacy of rational endeavor and objective knowledge in the struggle to save and renew the American dream" (p. 15). The use of rationality to revitalize democracy, a theme lurking in most of his other works, now takes pride of place.

Throughout he takes up issues that all social commentators on the American scene have examined: shoddy goods, poor service, economic problems, the women's movement, gay liberation, crime in the streets, new religious cults. The subjects are interesting and Harris is good at picking out striking details. Yet even the best of the chapters reads like an analysis in the editorial pages of the *New York Times* rather than an application of a "science of culture." Nothing in this supposed application of cultural materialism seems to produce insights different from those to be found in standard liberal, conservative, and Marxist critiques. Certainly the connection between this analysis and ecosystems analysis has been severed; in its place stands an invocation of mundane conditions and general patterns of change.

In the end Harris' politics and moral aims dominate all other motives:

Given the enormous power and formidable inertia of the hyper-industrial oligopolies and bureaucracies, there is only a slim chance of achieving a future more in accord with the vision of freedom and affluence on which past generations of Americans were nourished. Nonetheless, this chance is sufficient to support a rational hope of reversing the trends that have led to America's present malaise. The will to resist and to try for something better is an important component in the struggle against oligopoly and bureaucracy. Of course, to desire something strongly enough to fight for it does not guarantee success. But it changes the odds. The renewal of the American dream may be improbable, but it will become finally impossible only when the last dreamer gives up trying to make it come true. [P. 183]

The preservation of America (not unlike the preservation of our species for Wilson) through rationality is the goal. Harris clearly claims that dreamers can affect events, a view that lurks in all of his works under the mantle of ecologism.

Harris equates utopia with a state in which rationality is used in the service of democracy. It is a society in which everything works, people are supportive of one another, the economy is in balance, family structure is stable, the crime rate is low, and irrational religious sects are on the wane. Somehow his long intellectual detour through evolutionary biology and the science of culture has ended up reproducing a conventional middle-class version of American life as the ideal.

## Conclusions

Major metaphysical assumptions are necessary for the operation of Harris' model. He asserts that reality is orderly, causally uniform, and divided directly into the following dichotomous properties:

<i>Nature</i>	<i>Culture</i>
law	will
etic	emic
genetic	cultural
natural	artificial
mundane	transcendent

For Harris, human nature is constant and uniform over time and space. Humans have the capacity to discover directly the order that causes reality to operate as it does. Equating science with objectivity about reality, he argues that science demands that cultural systems be derived logically from natural systems.

Harris divides evolution into biological and cultural evolution, yet nothing in his theory provides a basis for such a distinction. He unproblematically considers biological evolution to be an optimizing process and treats selection as a constant force. His implicit ethical stance is democratic, with a *sub rosa* requirement that democracies be guided by scientist/kings—presumably well versed in cultural materialism.

Finally, he argues that natural causes account for culture as a general human characteristic and for the details of cultural systems. Human history begins in a Malthusian balance but larger stratified societies develop internal contradictions that can be dealt with only through policy. Our failure to understand this predicament is caused by our decaying capitalist infrastructure.

Since Harris' claim to science is based on his evocation of evolutionary biology, and specifically of energy and demographic analysis taken from ecology, it is legitimate to ask how well he has represented these theories in his work. The answer is not well at all. The metaphysical assumptions of evolutionary biology do insist that nature is orderly and subject to the constant action of uniform causes, but there is no evolutionary biological distinction between the material and spiritual aspects of human behavior. This is Harris' addition.

Evolutionary biologists who treat these issues carefully would claim that while it must ultimately be possible to reduce culture to nature, reduction and explanation are not the same thing (Hull 1974). The reduction of culture to nature cannot explain the operation of cultural systems—it only sets broad parameters within which culture exists. Further, most evolutionary biologists would certainly agree that there is no acceptable experimental evidence that could lead to the formulation of any general propositions about “human nature.”

There is no basis in evolutionary theory for separating biological and cultural evolution. The concept of cultural evolution is a misleading analogy based on a misunderstanding of biological evolution

(Greenwood and Stini 1977). There is one evolutionary process—biological evolution, of which culture is a part. Nor is evolution an optimizing process (Gould and Lewontin 1979). Selection is neither constant nor unitary; it is episodic and focused on certain traits and certain moments (Gould and Eldredge 1977). Finally, most evolutionists feel that evolution does not provide any clear source of ethics. Little of Harris' theory is directly implied in evolutionary biology; most of what he says runs counter to the core of biological science. He did not need evolutionary biology at all for the formulation of his cultural materialism.

The source of Harris' theory is found in pre-evolutionary thought, in which a radical dichotomy between nature and culture was held to be scientifically meaningful and politically useful. The relationship between nature and culture was seen as one of struggle between natural laws and human will, and theorists used naturalistic arguments to set ethical and political standards. Harris' appeal to rationality, will, and intelligence belongs to this tradition, not to the tradition of Darwin.

To understand Harris' views, a knowledge of the works of Hippocrates, Bodin, and Torres Villarreal is more helpful than a reading of Darwin. The conflict between the genealogical and environmental principles and the political management of states is a key theme for Harris. With Torres he shares the basic underlying notion that a series of fundamental and stable moral premises undergird "human nature" and that our relationship with nature can either support or destroy these premises. Torres' desire to have people recognize their basic constitutions and to harmonize themselves with "nature" is virtually identical to Harris' plea for a rational approach to the problems of population, pollution, and war. Torres' scathing critique of abstract intellectualism is closely echoed in Harris' commentaries on contemporary social scientists, humanists, and politicians. All these thinkers find sermons in nature in ways that should make evolutionary biologists shudder.