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Review Of "Ecodynamics: A New Theory Of Societal Evolution" By K. E. Boulding And "Cultural Materialism: The Struggle For A Science Of Culture" By M. Harris

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Review

Reviewed Work(s): Ecodynamics: A New Theory of Societal Evolution by Kenneth E. Boulding; Cultural Materialism: The Struggle for a Science of Culture. by Marvin Harris

Review by: Frederic L. Pryor


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Both Kenneth Boulding and Marvin Harris have written books covering the entire history of the human race; both are grappling with the same fundamental problem of making sense of the vast cacophony of events that we call historical and social reality; both present new approaches to change our ideas of social development so that we will carry out our research differently.

Their differences are also vast for they have quite opposite views as to what constitutes an adequate explanation and what a social theory should be. Harris argues for his particular brand of materialism, while Boulding presents his particular theory of evolution. Their styles of argumentation also differ greatly: Harris is a ferocious Tartar horseman who lops off the heads of his enemies with his scimitar and then thunders down the steppe to dazzle us with his theories. Boulding is a garrulous but gentle Pied Piper who wears a thousand disguises—prophet, harlequin, economic theorist and heretic, social critic—to beguile us with his wit and insights.

By contrasting the two books, the basic structure of their ideas become clearer. But before this can be done, the contents of each need to be briefly sketched.

A. Boulding

According to Kenneth Boulding, evolution is a pattern that can be perceived in the structure of the universe in both space and time; and the basic law of evolution is that complexity increases in terms of differentiation and structure.\(^1\) The evolutionary perspective requires specification of a species (or population), determination of its niche and structure, and investigation of the mechanisms of interaction with other species that influence its size, structure, and niche.

Boulding defines social evolution as a process of development of knowledge (the “genetic structure” of society), which operates through energy and materials to produce phenotypes (or production); these three elements he labels the KEM saga. He views human history in terms of the evolution of human artifacts, which include things (material artifacts), organizational artifacts, and personal artifacts (humans themselves, including their knowledge and skills); he labels this the TOP saga. And he views society in terms of three bonding relations or systems: threats, integration, and exchange; he labels these TIE. The nine elements contained in KEM, TOP, and TIE interact with each other and form the key elements of his analysis; but of these nine, knowledge is primal because it is “what evolves.”

Roughly the first 30 percent of the book is

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\(^1\) Kenneth Boulding joins a long list of social commentators (such as Norbert Wiener) who have equated increasing entropy with decreasing “structure,” and who have pointed out that in the biological and social world, structure is increasing so that the second law of thermodynamics is being violated. Boulding explains this apparent violation in terms of the development of little islands of anti-entropy in a vaster sea of increasing entropy. But “entropy” is not “structure” (or “anti-structure”), for structure is only a metaphor; and entropy can increase at the same time as biological structures increase in complexity. That is, it is only the metaphor of entropy that appears to clash with evolution, not the technical reality. I might also add that “structure” is a word with many conflicting meanings; and Boulding sometimes employs the term without defining very clearly what he means.
devoted to defining and exploring the implications of various types of evolutionary processes in the physical, biological, and societal realms. The analysis is carried out at a highly general level, since the application of the evolutionary approach and of the particular concepts is the focus of analysis, not the specific cases employed in the discussion. The second 30 percent of the book is spent in discussing the three types of bonding systems—the way in which societies incorporate the three types of TIE relationships in various institutions. Of particular interest is the integrative system, which embraces hierarchies, social classes, symbols, religion, and benevolence. The remainder of the book deals with a series of topics—power in society, dialectics, evaluation of change, limits to growth, images of the future, dynamics of religion and ethics, and other subjects to which the insights of the evolutionary themes are brought to bear.

It should be clear from this condensed description that the book incorporates and ties together many of the themes discussed at greater length in his previous 30 books. The prose is sprightly, and the argument (while sometimes stated whimsically) is always serious. Boulding again shows his ability to look at phenomena in very novel ways.

B. Harris

Marvin Harris is an anthropologist who views his field of concern as all societies from the most primitive to the most advanced. His “cultural materialism” is based on two sets of crucial definitions. One set deals with the infrastructure, structure, and superstructure of society. The infrastructure consists of the mode of production (which includes the technology and practices employed for expanding or limiting basic subsistence production, given the opportunities and restrictions provided by various technologies interacting with particular habitats) and the mode of reproduction (which includes the technology and practices employed for expanding, limiting, or maintaining population size). The structure of the economy includes the domestic and political economy (embracing the organization of reproduction and basic production, exchange, and consumption within the society). The superstructure includes art, literature, rituals, sports, and science of the society. Another crucial set of definitions consists of two distinctions: the difference between behavioral and mental activities; and the difference between emic and etic analysis (the latter distinction is paralleled by the differences between phonemics and phonetics), where the emic analysis refers to the participant’s point of view and the etic refers to an outside observer’s view.

The basic proposition of cultural materialism is that the etic behavioral infrastructure determines probabilistically the etic behavioral structure which, in turn, determines probabilistically the emic superstructures. On the basis of this causal model, Harris marches forth.

Roughly one third of this book is taken up by defining cultural materialism and discussing basic methodological problems of research strategies. The remaining two thirds is devoted to alternative modes of analysis and why they are not as fruitful. The enemies-list include: sociobiology (especially E. O. Wilson); dialectical materialism (especially Marx and Engels); structuralism (especially Lévi-Strauss); structural Marxism (especially Marshall Sahlins); psychological and cognitive idealism; eclecticism; and obscurantism. In each case he discusses some major propositions of the school involved and then offers alternative explanations.

Harris’s book is closely argued and a great pleasure to read, even when one disagrees with him. Some of his argument splinters conventional clusters of ideas (e.g., his acceptance of Marxist materialism and his rejection of Marxist and Hegelian dialectics) and forces one to rethink a series of fundamental issues. Although his law of infrastructural primacy would lead one, for instance, to hold that the economic system is not an important causal variable, a position that I would reject, the case studies he uses to prove his points suggest strongly that we have not paid sufficient attention to the variables he places in his infrastructure when analyzing societal change.

C. Contextual Theories versus Causal Theories

According to Boulding “the evolutionary vision is unfriendly to any monistic view of human history that seeks to explain it by a single factor. . . . [It] sees human history as a vast interacting network of species and relation-
ships of many different kinds, and there is really no 'leading factor' always in the forefront . . ." (p. 19). Further, evolution is not deterministic but is probabilistic, so that prediction is difficult. Evolutionary theory is not a model in the sense in which economic theory is a model, but rather is a vision of the universe that has great use in analyzing patterns of development (p. 115). In short, it is a tool for organizing knowledge and for pointing toward the causal relations that may exist, without attempting to specify particular causes in particular instances. For example, Boulding briefly discusses (pp. 136-39) the change from the paleolithic to the neolithic period and the invention of agriculture in terms of an expansion of knowledge, which represented a very major niche expansion of the human race. Although he does not explain why agriculture developed in a great belt around the world between 10,000 and 5,000 B.C., the metaphor allows Boulding to explore the implications of this change and what it meant for human history.

Thus evolutionism is "true" because it provides a powerful tool by which a set of events can be placed in context and by which the implication of such events can be drawn; it provides a framework within which to use a specific causal model.

Harris would reject such an approach for several reasons. That "ideas" and the growth of knowledge causes change would, he would argue, merely force one to ask under what conditions the growth of knowledge occurred. For instance, he also discusses the neolithic revolution (pp. 85-88), starting first with the notion that there was a fundamental shift in the relative benefits and costs of hunting and gathering as opposed to farming and stock raising. The underlying causes, he speculates, are that these shifts were probably related to the global climatological change after the last ice age; the depletion or extinction of the Pleistocene megafauna, which had been the preferred prey species for thousands of years; a lower protein intake and a diminishing effect of lactation as a means of birth control; and a subsequent increase in population pressure. Harris does not argue that the behavioral infrastructure is always the ultimate cause, but that a useful research strategy is to examine these matters first, especially the technology of subsistence, the techno-environmental relationships, and the work patterns. Harris uses such an approach to examine a series of other situations that others had analyzed in terms of non-material causes, e.g., the existence of the sacred cow in India and other food taboos, cannibalism among the Aztecs (which Boulding also discusses), the development of the state, the decline of the birth rate in twentieth century America, the nature of sex roles, marriage classes among Australian aborigines, the development of warfare and infanticide, matrilineal marriage patterns, puberty rights, and crime.

Boulding never really says why we must reject materialism; he just provides occasional examples in which non-material causes seem plausible. Harris's case studies are carried out in considerably more detail, and he wages intellectual war on two fronts—to show why non-material explanations are misleading or unfruitful and to show why materialist explanations are better. On the face of it, Harris's arguments are more convincing, even though they sometimes run against common sense in a way in which Boulding's approach does not. That is, although Boulding's general approach has considerable intuitive appeal, his case appears much weaker; for Harris can win each individual battle, as he is better prepared for combat with regard to the important specifics in each encounter with reality.

Must we choose between these competing approaches? Harris would argue in the affirmative, since he views the ultimate goal of the social sciences to be the understanding of the causal mechanisms underlying specific social phenomena. Further, he devotes an interesting chapter to the evils of eclecticism and the necessity of following a single major research strategy as far as it will take you. Boulding is more tolerant of employing quite different causal mechanisms to explain different social phenomena; and he sees his task as providing an overarching framework with which to place such results in a broader context.

Since the two authors are, in large part, dealing with different levels of analysis, it can be argued that a choice between them is really a matter of taste, for some of us are hedgehogs while the others are foxes. But it seems to me that Harris is grappling with specific issues that Boulding avoids; and that no matter how broad
our framework of analysis may be, we must ultimately understand specifics. Although some of Harris’s theories about the development of the world economy are quite at variance with my own, I believe that confrontation with his ideas will ultimately prove more fruitful for increasing our understanding of social and historical reality than with Boulding’s. But since both authors are dealing with such vast topics, any final judgement on the part of a reviewer may more reflect his faith than his reason.

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World economic development: 1979 and beyond. By HERMAN KAHN. With THE HUDSON INSTITUTE. Boulder, Colo.: Westview Press (cloth); New York: Morrow (paper); 1979. Pp. xxi, 519. $20.00, cloth; $7.95, paper.

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These two books have in common an attempt by the authors to deal with uncertainty in the future as a basis for planning and decision-making. Kahn’s method is to analyze macro-history trends, and Ayres’s is to examine methods of measurement. Both succeed in identifying the boundaries and parameters of future development, but (as would be anticipated) neither expects to forecast the future in other than broad outlines. Rather, the books are exercises in intellectual understanding of the prospects ahead.

Kahn puts his caveats and defenses up front by saying that one of his major methodological tools is the agnostic use of information and concepts, which contrasts with academic and theoretical reasoning based upon a narrow bounding of a problem so that high quality information and theories may be applied. However, since decision-makers do not have the luxury of operating with clear problem formulation, adequate time, quality data, or adequate theories, the biggest issue may be, “What is the question? How much time is available?” The agnostic method presumes, says Kahn, that he genuinely does not know whether the themes he uses are correct or not. Secondly, he is often willing to use these concepts as dramatic and pedagogically useful ways to explain certain trends. The purposes of his agnostic method, and of the book, are to make readers aware of the intellectual and ideological underpinnings of events, which Kahn acknowledges may not necessarily be constructive. Kahn also assumes an optimistic posture, although he strikes several pessimistic notes.

With these disarming disclaimers, Kahn launches into his sweeping portrayal of the Big Picture, which he does with zest, colorful metaphor, keen reportorial sense, and clever phrase. The structure of his argument, as nearly as may be discerned from his metaphor and analogy, is this: The world finds itself in the second phase of the Great Transition or modernization period with Affluent Capitalist Nations (ACN’s) moving from industrialization to post-industrial development. Following concepts of P. A. Sorokin and Joseph Spengler, Kahn reaffirms his Long-Term Multifold Trend of previous books, arguing that the advanced Western nations are moving away from strictly industrial-economic goals toward more sen- sate, personal motivations of inner satisfaction, i.e., intellectual, cultural, recreational, spiritual.

Meantime, the rest of the world is moving through its phase of modernization, which includes industrialization plus the cultural and institutional changes that accompany it. Here the world is doing rather well. The Middle Income Nations, some 2 billion people and 47 percent of the world population, have made considerable progress since 1950, many nations with growth rates higher than the Affluent Nations (who comprise 24 percent of the world). The remaining 29 percent of the world is poor, but of these 1 billion are “coping poor” in that they have experienced real advances in their standard of living and doubled their per capita income in the past two decades. Only ¼ billion people remain very poor. The outlook, moreover, is that the Poor Nations will continue to make absolute increases in their per capita income, while the Middle Income Nations will continue with modernization and industrialization at higher economic growth rates to the year 2000 than the Affluent Na-