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THE EMERGENCE OF GLOBAL SOCIETY: INTRODUCTION

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This symposium on the emergence of global society is a welcome expression of a revival of interest by anthropologists in issues of world-wide scale. When I first became interested in international, multinational, affairs in the 50s and early 60s, many anthropologists believed such matters to be the proper domain of economists and political scientists only. Among those not satisfied with an anthropology limited to any traditional subject matter was, of course, Margaret Mead. By example and by direct encouragement, she urged us not to shrink from treating major world issues. A little later, in a paper entitled "Alternatives to War," Mead drew upon a series of anthropological contributions to attempt to distill, as she put it, "new combinations and new forms that will release us from our historically limited imaginations" (1968: 224-225)"

There is now more interest in matters of international scale (Bodley 1976). The International Congress of Anthropological and Ethnological Sciences has devoted several symposia to such issues (Idris-Soven, Idris-Soven, and Vaughn 1978; Maruyama and Harkins 1978). Eric Wolf's *Peasant Wars of the Twentieth Century* (1969) and Richard Adams *Energy and Structure* (1975) certainly address that level. As the 1980's approach, more anthropologists are beginning to sense more thoroughly the smallness of the globe on which we live. We are now beginning to feel directly the interdependence we have long spoken of in theory. Energy problems -- oil, on the one hand, nuclear power on the other -- have enhanced our awareness of interdependence. The capacity to communicate around the world and into space almost instantaneously is a technological achievement that makes global cultural integration not merely possible but inevitable. Whether we like it or not, events on opposite sides of the globe, or on opposite sides of whatever artificial barriers people erect, are mutually contingent. The mutual contingency of events results not only from the fact that we draw upon the same sources of physical, material energies but also from the fact that we know so much about each other that those on one side of the earth "respond" to what they "think" those on the other side will do. Humankind was never before so immediately interdependent. If global integration is not here, it is clearly emerging. That emergence affects not only the wealthy, but, for good or ill, it affects also the poor in their familiar communities.

The emergence of global society is, in my view, nothing less than the evolution of a new system at a higher level of integration. This does not mean the loss of all our present institutions, but it does mean significant change. It is as Julian Steward said in 1951: In culture, simple forms, such as those represented by the family or band, do not wholly disappear when a more complex state of development is reached, nor do they merely survive fossil-like. They gradually become modified as specialized dependent parts of new kinds of total configurations" (1951:379). My own attempts to study this modern evolutionary process cause me to believe that scholars of the past, and many still today have overemphasized the nation-state, treating it as if it were a fundamental component of the universe instead of merely one among many institutional products of cultural evolution, vulnerable as any other to changing natural, technological and symbolic conditions (Wolfe 1977, 1999). The nation-state, along with other systems of lesser scale, may be in for significant modification, in Steward's terms, "as specialized, dependent parts of new kinds of total configurations."

To understand the emergence of global society, we must understand evolution. For me a most important concept to appreciate in connection with social and cultural evolution is the distinction between different levels of sociocultural integration. There are many ways in which this distinction can be understood or misunderstood.

When I use it I emphasize an element of discontinuity in sociocultural structure and process.- namely, that within a sociocultural system is a hierarchy of sub-systems each with some identity of its own. For example, within a nation-state are communities that have some identity of their own even if they are also parts of the larger system. Within each of those communities are still smaller sociocultural systems, some form or forms of domestic units that also have their own identities.

Although we may say all sociocultural systems exhibit some degree of integration, the mode of integration of systems at different levels is not necessarily the same.

The forces that compel the members of a family "to interact: with one another systematically are quite different from the forces that compel systematic interaction within a community or nation. Herein lays the important discontinuity. The rules or principles that govern systems at different levels in such a hierarchy are different.

The hierarchy is composed of qualitatively distinct systems. It has been our mistake to expect one set of scientific generalizations to cover sociocultural systems at different levels. In the physical sciences, different principles are called upon to account for the integration of elements at different levels in the hierarchy of material systems -- electrostatic and molecular forces govern the organization of microcosms, at the level of quarks, or at the level of corpuscles or at the level of atoms; at the other extreme of scale, gravitation governs in the macrocosms of satellite systems and galaxies. Actually, at least fourteen distinct levels of material systems have been identified, from the minute quarks defined only in the past few years, up to that which is called the universe, still incompletely comprehended, above the galaxies and metagalaxies. In the biological realm, also, are different systems organized by different principles -- from the colloidal aggregates where the biological hierarchy branches off from the merely physical, to the cell to cell aggregates, to organisms, to populations, to ecosystems. Even though they are called equally biological, the systems at different levels of the organic hierarchy are governed by different principles. What makes a cell function as a system is not the same as what keeps an organism alive, notwithstanding that the systems at different levels in the organic hierarchy are interdependent.

Analogous to these other systemic hierarchies is the sociocultural hierarchy that diverges, in still another dimension, from the organic hierarchy. Where an aggregate of organisms form a domestic group whose integration depends on some cultural principles, we have the first level of sociocultural integration.

How do we get from such meager beginnings to an anticipated global society? Certainly not by mere expansion, any more than a galaxy is an expanded atom or an organism an expanded cell. If we are to understand a system such as global society we must first appreciate the complexity of the hierarchy of sociocultural systems. Global society and global culture will not be merely an expansion of one or more of our current systems, but will be a new synthesis using as its components modified forms of the subsystems that now exist. From this perspective a global social system encompasses a hierarchy of subsystems more or less autonomous and dependent with respect to the total configuration.

The phrase "more or less autonomous and dependent with respect to the total configuration" deserves some clarification. For too many years social scientists have tried to use, in their analyses, only units that are well defined, logically disparate, and empirically bounded. Now, social scientists (and other natural scientists as well) are coming to recognize that, in order to make complex phenomena understandable. Our theoretical formulations must have at least as much flexibility as the phenomena we study. Instead of assuming that a system is well-bounded and that every part is, by definition, within that boundary, we must take the interdependence of

components as problematic, so that system parts may be, as I said, "more or less autonomous and dependent with respect to the total configuration."

The biologist Richard Lewontin (1978) identifies as the two most fundamental characteristics of the evolutionary process the characteristics of "quasi-independence" and "continuity," demonstrating clearly that where change is a reality the states of phenomena are not rigidly bounded but are rather supplely bordered. It is not a question of being vague, but rather of being explicit about the indeterminacy in the phenomena. Mathematical developments such as the theory of fuzzy sets (West 1976. Zadeh 1974), can help us work with concepts that are flexible in this sense. The use of network models to analyze situations where groups are not well defined is another example of deliberate flexibility in our way of thinking. Adrian Mayer (1966) has used the term quasi-group in recognition of the action potential of moderately structured social relationships in social systems. Even the concept "society" needs to be reconsidered, for all societies are much more open systems than earlier theories would have them. While there may be some hyperbole in it, a statement made by Herbert Simon (1973) gives us pause:

A society is fundamentally a simple system, not a complex one. In organization it is more akin to a mass of colonial algae than to a highly synchronized machine. Its main regularities are statistical regularities, and its parameters statistical aggregates (1973:3).

If the important concepts are not black and white but rather gradations of gray, how is it that we arrive, through evolutionary processes operating on weakly bounded units, ultimately, at "qualitatively distinctive systems at different levels of sociocultural integration"? Many evolutionists have emphasized, after all, the continuous nature of changes. Carneiro (1974) stresses the point that there are no saltations in cultural evolution, but only graduate accumulation of cultural elements. Even Lewontin (1978) to whom I have just referred on the matter of quasi-independence stresses continuity as the other fundamental characteristic of evolution.

As it turns out, there is developing a mathematical theory that may describe well the kinds of generative processes of which we speak, where a continuously changing factor has an abruptly changing effect. Derived from topology, this useful theory, originally presented by Rene Thom (1972) as structural stability and morphogenesis, has come to be called "catastrophe theory."

What happens is this. Relatively sudden transformations – like the water freezing, a gas becoming a liquid, a nation moving from a peaceful state to one of war – can be reasonably modeled as folds, cusps, and other shapes of a surface which represents all the equilibrium points of the subject phenomenon.

Imagine that several controlling factors such as costs of warfare and degree of external threat control whether a government decides on war or on appeasement. These factors may relate in such a way that when costs are high there is an overlap (a fold or cusp, technically) in the surface representing the probability of war. In the area of that overlap there is societal ambivalence -- doves would not, and hawks would, go to war when threat reaches this range. Somewhere within that range, war may erupt in a catastrophic denouement, a saltation from the low side to the high side of the surface which is still appropriately represented as continuous. Isnard and Zeeman (1976) put it well: "The objective . . . is the qualitative characterization of those points where small variations in some variable way cause large variations in a dependent variable, in other words those points where 'catastrophic change' may occur. This is the reason for the name "catastrophe theory" (p.44). Noting that sciences dealing with such apparent discontinuities and divergences have heretofore been labeled "inexact sciences," they continue, "However, the creation of catastrophe theory has now revealed that sudden change and divergence are not only natural, and interrelated, but also amenable to rigorous mathematical treatment" (p. 45). The objective is to provide qualitative understanding and global insight.

This new method of analysis will help us to model, and hence to understand a variety of morphogenetic phenomena which appear to be qualitative leaps. I am interested particularly in what the method may offer toward understanding how subsystems controlled first primarily by local factors come, sometimes catastrophically, under the control of factors deriving from a wider, subsuming system. In evolutionary terms, it holds promise of helping us to understand how a new sociocultural system can emerge at a higher level of integration: gradual cumulative changes in sociocultural and ecological variables result at some point in a catastrophic leap representing the consolidation of the wider system. Here and now, that means the autonomy of nation-states and multinational corporations would be constrained by some integrative factors of the emerging global system.

That there are identifiable sociocultural systems arranged hierarchically within wider complex systems has more than mere heuristic significance. Actually, the hierarchical arrangement improves the probability of the evolution of a still higher level of system. Or to put it another way, as does Herbert Simon (1977):

“One can show on quite simple and general grounds that the time required for a complex system containing K elementary components, say, to evolve by processes of natural selection from those components is very much shorter if the system is itself comprised of one or more layers of stable component subsystems than if its elementary parts are its only stable components” (pp. 247-248).

Simon follows this with a parable of two watchmakers assembling fine watches. “Each watchmaker is interrupted frequently to answer the phone. The first has organized his total assembly operation into a sequence of subassemblies; each subassembly is a stable arrangement of 100 elements, and each watch a stable arrangement of 100 subassemblies. The second watchmaker has no such organization. The average interval between phone interruptions is a time long enough to assemble about 150 elements. An interruption causes any set of elements that does not yet form a stable system to fall apart completely. By the time he has answered about eleven phone calls, the first watchmaker will usually have finished assembling a watch. The second watchmaker will almost never succeed in assembling one – he will suffer the fate of Sisyphus: As often as he rolls the rock up the hill, it will roll down again” (p. 248).

Lest the notion of hierarchy be misunderstood, especially in reference to the global situation we are concerned with here, let me state that a hierarchically arranged system need not be centrally controlled, need not be monopolistic. To say that there is interdependence among the component units is not to say that some control while others are only controlled. To say that subsystems are contained within systems of wider scale is not to say that components are more controlled by the wider system than by the lesser systems.

It remains an empirical question to discover how and to what degree the system or systems of global scale constrain or compel the behavior of constituent subsystems and institutional components such as nation-states, multinational corporations, cities, families, and so forth. In a recent paper I argue that the decline of state power commensurate with the currently increasing activity of multinational corporations has increased the autonomy of some cities, relative, at least, to the states wherein they are located (Wolfe 1979). I do not suggest that we already know how global society will be organized. I am saying that if we see the current situation as a process generating a new system at a higher level of integration we have the opportunity to learn much about it.

The major papers in this symposium will present different aspects of the problem. Eric Wolf addresses the historic and on-going processes of the emergence of a world system dominated by capitalism, emphasizing the heterogeneity of the system itself, and the tendencies toward differentiation inherent in it. Richard Adams, concerned with the shift from homogeneity within

and diversity between cultures to heterogeneity within and similarity between cultures of wider scale, presents concepts toward a theory of cultural emergence. Laura Nader points up how disciplinary and other boundaries impede not only the study but also the resolution of problems people share, a condition which may explain why there is a lot of groping for something new. Whether global society will ameliorate or exacerbate such problems remains to be seen.

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