The Multinational Corporation as a Form of Sociocultural Integration above the Level of the State

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THE MULTINATIONAL CORPORATION AS A FORM OF
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OF THE STATE1

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INTRODUCTION

Twenty years ago, in the early 1960's, I began to argue that the international activities of large corporations provided the stimulus for the generation of a new system of sociocultural integration at a supranational level (Wolfe 1962, 1963). That idea did not catch on then, partly because anthropologists of that period were fascinated with kinship and the details of cognitive taxonomies, while those social scientists interested in economic development were fascinated with the stages of growth of national economies. Not until some years later did economists and management scholars discover what they have since popularized as "multinational" or "transnational" firms.

Now, twenty years later, there is considerably more interest, at least in studying international operations of business firms, if not precisely in seeing these activities as part of the evolution of social systems, and as the emergence of a new level of integration. Since then we
have seen the whole Harvard University research program on multinationals led by Raymond Vernon (Vernon 1971; see Evans 1981). Since then we have seen the widespread acceptance of dependency theory (Frank 1967; Evans 1981) with implications for a supranational system. Since then we have seen a large research program on "World Systems" which has concentrated on describing the international development of the European capitalist system (Wallerstein 1974, Chirot and Hall 1982).

In anthropology as well as in those other fields we now find increased interest in matters of international scale. Eric Wolf's Peasant Wars of the Twentieth Century (1969) and Europe and the People Without History (1982), and Richard Adams' Energy and Structure (1975) certainly address them, as does Cyril Belshaw's The Sorcerer's Apprentice (1976). My article in Current Anthropology (1977) set forth in greater detail my own ideas based primarily on observing the African situation in worldwide perspective. The International Congress of Anthropological and Ethnological Sciences has devoted several symposia to such issues (Idris-Soven et al 1980). The American Anthropological Association devoted a plenary session of the 1979 meeting to "The Emergence of Global Society." The key symposium of the Southern Anthropological Association at their 1980 meeting, on "Cities in Hierarchical Perspective" tended to focus on international implications (Collins 1980). Two chapters in a recent issue of the Annual Review of Anthropology deal with these matters (Nash 1981; Holzberg and Giovannini 1981). Reed Riner (1980) presents a review of corporate interlocks as seen from a supranational perspective.

Reviewing these other studies, those by economists, social historians, sociologists, and business scholars, arouses uneasiness in me as an anthropologist. Each of them tends not to see the whole just right -- if they see the whole at all. For me, the increased activity above the level of nation-state is more than just a matter of increased scale or enhanced degree. It is nothing less than the evolution of a new system at a higher level of integration, something genuinely new. It provides us with an unprecedented opportunity to study the processes of evolution of a brand new system. That opportunity is comparable to our having been able to be participant
observers when those first "pristine states" emerged as integrated systems out of the less-ordered if not chaotic breeding grounds that gave rise to them.

I feel uncomfortable at the treatment some of our colleagues give to what I see as momentous events portending an unprecedented shift. Whereas they tend to portray them as merely gradual changes, growth but basically business as usual, I see these current developments as the expression being at or near a pivotal point in an evolutionary trajectory.

To encourage a more future-oriented perspective try to do four things in this paper:

1. review the notion of hierarchy in evolution because its misunderstanding produces misinterpretation of increases in scale;

2. consider some theoretical models for describing generative processes because without adequate models we cannot envision how new things can come into existence;

3. call attention to some implications of the electronics revolution because information processing is so crucial to the new system; and

4. illustrate how, in the light of these ideas, we might look at the problem empirically to assess the implications of this unprecedented evolutionary shift.

THEORY OF HIERARCHICALLY ORGANIZED SYSTEMS

For me, a most important concept to appreciate in connection with social and cultural evolution is the distinction of different levels of sociocultural integration. There are many ways in which such a distinction can be understood or misunderstood.

Hierarchy is one of those words in such common use that users seldom bother to define it. Yet, the concept is important when dealing formally with systems. In a recent attempt to develop a logical definition and an
abstract mathematical model of system based on graph theoretic concepts, Harary and Battel (1981) find that hierarchical or nested structure is among the few necessary characteristics that must be taken into account in the model. Except that they associate it with "nested" and use it in figures showing clustering at different levels of units and subunits, they do not make any great effort to define the meaning of hierarchy as a characteristic of systems. In a book entitled Hierarchically Organized Systems in Theory and Practice, Paul A. Weiss (1971) defines system and unit and subunit in such ways that a system must have at least two levels (pp. 9-14). In that context, a unit is a composite fragment of the universe which in our experience has proved to retain sufficient identity over a given period of time to deserve a name -- a conservative array of measurable properties amidst the continuously and erratically changing 'background' phenomena that reveal no recognizable pattern" (p. 9). And a system, then, is "a complex unit in space and time so constituted that its component subunits, by systematic cooperation, preserve its integral configuration of structure and behavior and tend to restore it after non-destructive disturbances" (p. 14).

Because the term is so often used in reference to systems of authority, "hierarchy" is commonly associated with control by components at higher levels over components at lower levels in the system. If you look the word up in a dictionary, you are likely to find it defined in just that way, usually with a reference to the Catholic Church. This has, I think, been the source of much confusion, even among sophisticated scholars. Let me state categorically that a hierarchically arranged system need not be centrally controlled. To say that there is interdependence among the component units and subunits is not to say that some control and others are controlled only. To say that subsystems are continued within systems of wider scale at higher levels in the whole system, is not to say that the components are more controlled by the wider system than by those lower in the hierarchy. In fact, the reductionists' argument is that everything that happens at the higher levels is controlled by the properties of units at the lowest levels. Still, there is a lot of misunderstanding on these issues.
Magoroh Maruyama (1974) criticizes Western scientists in general for their "hierarchical thinking," saying it expresses a unidirectional causal bias inconsistent with the mutual causal paradigm that is a more realistic way to address the universe. In my view, hierarchical arrangement of subsystems is not inconsistent with a mutual causal paradigm. Hierarchical structure does not determine the direction of causation. There can be mutual influence between subsystems at different levels. Families, communities, nation-states, influence one another, but they operate primarily at different levels.

Another author who uses hierarchy as if it can only mean control by those at higher levels over those at lower levels is Hazel Henderson. Reviewing Boulding's (1978) Ecodynamics, Henderson (1981) says, "Boulding . . . still relies on hierarchical concepts.... There is the same implicit assumption in Boulding that organization is impossible without hierarchy, 'governor' and governed and levels and spans of control." I too am critical of Boulding, but on other grounds. He fails to deal adequately with the genuinely hierarchical structure of the sociocultural system. However, his error is less serious than the error in Henderson's belief that complex organization is possible without hierarchy.

The reason I am concerned to set straight the ideas about hierarchy is not primarily because of feelings about the direction of control. Rather, I am concerned because hierarchy has a bearing on the probability of evolution. Namely, the hierarchical arrangement of relatively stable subsystems makes it possible to understand better not only how complex systems work but how they could have been generated in the first place. Herbert Simon writes:

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 (1977:247-248).
Having mentioned Boulding, I should state that, in my own view, his interpretation of evolution in *Ecodynamics* (Boulding 1978) is faulty because he treats all sociocultural institutions as involving the same principles (in exchange, integrative, and threat systems). He locates all manner of institutions on one plane, differentiating them according to the degree to which they express those principles. Thus, families, clubs, corporations, labor unions, national states, and the United Nations are treated as if they were all the same kind of actor. Such a view masks the fact that some of these institutions are systems at different levels in a hierarchy of systems. What can effectively integrate nations into a United Nations must be quite different from what can effectively integrate persons in a family, because the relations among nations are of a different order than are those among persons. One gets the impression from Boulding that all sociocultural evolution is merely the gradual accretion of minor changes. This is an erroneous view that some anthropologists also make. Carneiro (1973), for example, says, "By and large, evolution occurs, not by saltation, but by cumulation. Small steps follow one another in close succession until a qualitatively new level is attained and one type of sociocultural system is transformed into another" (1973:97). Even though he uses the phrase "qualitatively new level," Carneiro does not seem to recognize the significance it has for the system.

I find such statements misleading in that they play down the very most important events in evolution, those where qualitatively new levels are attained. Such an event is much more than the simple transformation of one type of social system into another. It is the generation of a new form at a higher level of integration. That is not attained by the mere cumulation of changes. Such generative events seem to involve some sort of "saltation" or "discontinuity," and some new kinds of relationships among components.

In an article entitled "Darwinism and the Expansion of Evolutionary Theory", Stephen Jay Gould (1982) speaks of "hierarchical theory" as challenging reductionist claims. He argues that selection works simultaneously and differently upon individuals at a variety of levels, and
that stability is fostered when there is negative interaction between levels while rapid change is fostered when there is positive interaction between levels. "If we abandoned the 'either-or' mentality that has characterized arguments about units of selection, we would...gain a deeper understanding of nature's complexity through the concept of hierarchy" (Gould 1982:386). If such understanding is important for biological evolution, it is even more important for sociocultural evolution. In biological evolution, strictly speaking, the only processes that can still occur are the transformations, physical and behavioral, of existing forms. In the latter case only is it still possible to generate a genuinely new supersystem, at a higher level of integration.

MODELS FOR DESCRIBING GENERATIVE PROCESSES

The complexity of the evolution of systems requires for its understanding formal models that can take into account (1) those hierarchical arrangements of components, (2) the relations among components at different levels, and (3) whatever it is that gives the appearance of discontinuity between levels. There are several theoretical approaches that hold promise of aiding in the effort to understand such evolution. It is worthwhile to review three of these approaches briefly here: (a) catastrophe theory; (b) theory of dissipative structures; and (c) network models from graph theory.

Any discussion of catastrophe theory must first apologize for the name that has unfortunately tended to adhere to the mathematical theory presented by Rene Thom (1974) as "structural stability and morphogenesis." It has nothing in common with that much older paleontological theory once intended to account for sharp changes in flora and fauna by reference to physical disasters. It does, however, intend to describe apparent discontinuities occurring in otherwise continuous phenomena, and is therefore of considerable interest to us in that it might help us to see how a "qualitatively distinctive" system might be generated out of the interactions of a number of components at a lower level.

There are as yet not many anthropological applications of catastrophe theory, but some are discussed in Renfrew
and Cooke (1979). David S. Weaver (1980) uses Thom's "cusp" model to help resolve the differences between theories of gradual or "instantaneous" evolutionary change relating to Australopithecine divergence and Neandertal differentiation.

I hasten to repeat that transformations from one form to another at the same level are not the same as the generation of a new kind of unit at a higher level. The transformation of generalized Australopithecines into gracile omnivores on the one hand and robust herbivores on the other, is not nearly so complex as the generation of a new social system out of the interactions among component units. Still, if catastrophe theory provides models useful to the understanding of transformations of that kind, that appear to be discontinuous because they involve cumulative changes in a set of interacting variables such that relatively sudden transformations occur, it may well provide models for changes that result in recognition of a new system at a higher level.

Another formal approach to similar problems was stimulated by the work in the field of chemistry of Ilya Prigogine and his collaborators (Glansdorff and Prigogine 1971, Nicolis and Prigogine 1977). Their work is generally referred to under the rubrics "self-organizing systems" and "dissipative structures." As Erich Jantsch (1980) put it, in introducing a symposium on the subject at the 1980 meeting of the American Association for the Advancement of Science, "The emerging picture is that of a non-equilibrium universe which creates its own order and complexity". Peter M. Allen (1980), who works with Prigogine at the Free University of Brussels, but who has applied these models to market systems and transportation systems, sees this work as introducing a new paradigm of evolution providing a new basis of understanding essential for the modeling of complex systems. "This offers a new perspective in which the interdependencies of the different variables (at various levels) of the system give rise to its self-organization, where structure and organization can be created as well as destroyed as the system evolves. The evolution of such systems involves both determinism dictated by equations relating the chosen variables, and the chance or indeterminancy that accompanies moments of instability.
when structural changes can occur" Allen and Sanglier 1981).

In an earlier version of their paper, Allen and Sanglier (n.d.:4) said:

This view of self-organization takes into account the "collective" dimension of individual actions, and emphasizes the possibility that individuals acting according to their own particular criteria may find that the resulting collective vector may sweep them in an entirely unexpected direction, involving perhaps qualitative changes in the state of the system. We are far from the "invisible hand" of Adam Smith, and this results from the fact that for nonlinear systems the "whole" is not given trivially by the sum of the parts.

Another set of models which will prove useful in understanding the evolution of complex systems is provided by graph theory. Although it has so far been difficult to build dynamic models using graph theory, its potential for handling the hierarchical structuring of complex systems gives reason for great hope.

Harary and Batell (1981 have recently published an attempt to develop "a precise logical definition and an abstract mathematical model of system based on graph theoretic concepts" which they hoped would "provide a firm basis for realistic and verifiable predictions". (36). They define a "nested graph" in which the points of the graph at a given level are themselves graphs at lower levels, and they identify types of graphs at these different levels by a notation system paralleling Bertrand Russell's theory of types of sets. In application, this model will make it feasible to differentiate the levels at which data are dealt with, for, as they put it, "The conclusions drawn by considering the data as a whole can be in marked contrast to the results obtained by an examination of the data separately for some set of subgroups" (1981:36). Harary and Batell (1981:36-37) provide quite explicit steps to guide potential users of their approach to systems analysis. In summary:
1. determine the target set of the hypothesis;
2. determine the levels of the structure;
3. analyze the structure at the highest level
4. analyze the structure at the next highest level;
5. examine the interconnection between the levels

Here I should add that another pair of network scholars, anthropologist Brian Foster working with mathematician Stephen Seidman, has been using a similar approach, called "hypergraph theory" to study overlapping subsets as non-dyadic relations in complex systems (Seidman and Foster 1981).

Whatever specific set of concepts is used, I am sure that graph theory will soon permit the construction of network models that, used in conjunction with formal theories of generative processes such as the theory of self-organization, will help us understand not only how complex systems function but also how they are generated.

LECTRONICS REVOLUTION

The dynamic instability that I believe characterizes the current national/international scene and out of which a new system is being generated at a supranational level if integration can easily be related to the technical developments that are widely referred to as the 'electronics revolution'. We are all experiencing this revolution, in our homes and families (through television, video games and solar appliances), at our work (through the growth of computer-generated report forms, work processing, incredible automation, and other uses of computers), in our national affairs (through such events as accurate prediction of elections before the polls are closed), in our international relations (through reliance on "mutually assured destruction" and the "strategic defense initiative" or "star wars" plan), and in our extra-terrestrial existence (fictionally through "E.T." at the movies, but also through genuine space exploits which
have sustained human beings in space for remarkable long periods of time).

I certainly do not have to cite all the details, the speed of calculation of modern computers, the amount of human controlled electronic equipment in space, the numbers of people on this earth and just off it who can instantaneously and simultaneously receive messages or instructions, etc. But I do want to call attention to some implications of the electronics revolution for our subject, sociocultural integration above the level of the nation-state. I put these in two main categories: (a) implications relating to communication within and among organizations; and (b) implications relating to the study of such organizations.

First, the implications relating to communication among organizations. The massive data base management systems that major corporations now have at their disposal for studying markets, transportation problems, even political situations, and their increased capacity to communicate electronically with related corporations anywhere in the world, using satellite systems, gives them considerable advantage over other social units. Compare the capabilities of ITT or United Technologies with those of cities, or counties, or even medium-sized nation-states. Electronic communication, so comprehensive now, worldwide and beyond, reduces the importance of geographic distance, reduces the importance of locality and territoriality. This has practical significance for the companies and the states and the cities and the persons involved, and, as we will point out directly, must be recognized by social scientists who study them as well.

This brings us to the second set of implications of the electronic revolution, the implications relating to the study of organizations. If electronic data processing and telecommunications are important for the day to day operations of multinational firms and other actors in the supranational system, they are having or at least should have comparable effects on our ability to study the system. We, too, can use data base management systems; we, too, can use computers whose rapidity makes it possible for us to deal with complex multiple networks and solve the kinds of complex nonlinear problems involved in
the analysis of self-organizing systems. In accounting for the rapid rise of "network thinking" in anthropology, I (1978) argued that the recent scholarly interest in network analysis is due in part to theoretical developments, but arose in large part because we are able to do the calculations now that we could not have done at all just a few year earlier. In the 1970's, such a serviceable computer as an IBM 370 could handle five million instructions per second, and we thought it was great; in the 1980's the CDC Cyberstar handles a hundred million instructions per second. Philip Abelson and Allen L. Hammond (1977) wrote in a special issue of Science, "The electronics revolution is making (an increasing reservoir of scientific and technical) knowledge more readily available, extending intellectual powers often by many orders of magnitude while facilitating greatly the accumulation of more knowledge" (p. 1085).

Here, I must call special attention to the situation I referred to earlier, regarding the lessening importance of distance in communication. Almost universally, sociologists and anthropologists have regarded distance as an indicator of communication potential and, in the absence of contradictory evidence, as evidence of communication. This continues in many network studies, where, for example, if two actors are within the same geographic area they are considered related. Clearly, to the extent that telecommunications change that situation, any analysis based on that assumption will be in error. For example, one might inquire whether, in studies such as that of Evans (1979) on "dependent development" in Brazil, the grouping of "local" capitalists together, differentiating them from international capitalists, is based on real evidence of their communication, or does it just assume that cocommunication is a function of geography?

URBAN INSTITUTIONS, MULTINATIONAL CORPORATIONS, AND NATION-STATES: NEW INTERRELATIONS AND NEW SYSTEMS

What evidence is there of a genuinely new system at a level of integration above the level of nation-state? I had enough evidence twenty years ago to report to the 1962 annual meeting of the American Anthropological Association the following:
The several hundred mining companies operating in southern Africa are integrated through a series of relationships that focus on some of the larger among them -- this system I have elsewhere called the Cape-to-Katanga team. Then, in a variety of ways, these corporations are linked with governments. Many of the connections are simply those of parent company to subsidiary, but the relationships most crucial to the whole system, providing its most important characteristic, are those based on overlapping membership in key groups (1962:2).

The data I had then, in 1962, led me to identify a pattern in the interlocking: "...roughly, the units which are most similar in function and therefore most prone to compete need the highest degree of interlocking. Those that are functionally disparate can rely more on the market principle in their relations, while the similar companies must create the conditions for cooperation on the basis of reciprocity" (1962:3). As an example of the latter I cited the case of Rhokana and Rhodesian Selection Trust, two companies alike in their emphasis on mining in the African Copperbelt, avoiding the temptation to compete by interlocking heavily through a third company, Mufulira Copper Mines. The sixteen-man board of Mufulira was nearly filled by nine directors from Rhodesian Selection Trust and six directors from Rhokana. As an illustration of the other kind of relationship, more "functional," I cited the position of Tanganyika Concessions, Ltd., which not only owned much of Union Minière du Haut Katanga, which it shared with the Societe Generale de Belgique, but also owned the Benguela Railway in collaboration with the Portuguese government (Figure 1).

The general pattern was clear to me then, and still seems valid today: between firms that are functionally complementary there already exists something like organic solidarity; between those that do not need each other in a transactional way, a relationship of reciprocity is developed by the mechanism of interlocking directorates. Also, it was clear twenty years ago that the boundaries of this supranational system were not sharp. But, instead of concluding from that that there was no system at all, I
Figure 1. Perspectives on the supranational integration of the mining industry of southern Africa. From Wolfe 1962a. There have been many changes in particular companies since that time, but the connectedness illustrated prevails.
drew a conclusion influenced by my ethnographic experience with societies lacking state structures. Ambiguity of boundary is a characteristic of such systems, and may be seen as having adaptive value in that it permits expansion when conditions are right and tends to conserve its mass when conditions are adverse. Tracing the interconnections among the groups involved revealed circles within circles and circles intersecting circles. One could not say, at any point, this is where the system ends, all these are in, all those are not.

Since that time, and especially since 1972, other scholars have looked at much corporate interlocking (Berkowitz 1982, Burt 1983, Fennema and Schijf 1979, Mariolis 1982, Mizruchi 1982, Riner 1981). Most of these limit their studies to American firms or to interlocking European firms. When they do deal with international issues, what they find tends to corroborate my original view of what is going on: Corporations are linking in a system of relationships that functions beyond the jurisdictions of the nation-states to which economic statisticians seem wedded.

In a methodologically sophisticated study, Joel Levine (1972) used a multidimensional scaling technique to map the "spheres of influence" evidenced by corporate interlocking among fourteen banks and seventy industrial corporations in America. These 84 corporations form a completely and highly connected network, just as I would have predicted. Further, the paths that connect the banks to one another are short, at most two steps (from bank "a" through industrial "a" to bank "b" and from bank "b" through industrial "b" to bank "c"). In his "gnomonic map" (Figure 2), the corporate interlocks are translated into distances, the industrials most strongly linked to a bank being found near that bank in the "three-dimensional" space represented. From an empty center, one diverges in the direction of Morgan Guaranty if one is Atlantic Richfield, or in the direction of Chase if one is Burlington Industries. Or, one splits the angle between those two if one is linked to both, as in Singer. So the major banks tend to dominate "sectors" of the entire sphere.
Figure 2. Gnomonic map of sphere of influence Adapted from Levine 1972
Later, Levine and Roy (1979) applied similar methods to data on directorates of 797 American corporations. They found interlocking common, and the whole highly connected (at least 724 completely connected). More than half of all possible pairs are connected in paths of length three or less. They summarize: "The network of corporations and directors appears to be as intricately and tightly tied together as is a small community with its multiplicity of cross-cutting ties" (354). They used various techniques to search for an "elite," that is, to see whether the observed connectivity was dependent on some subset of critical nodes. Even taking the banks out, on the grounds of the earlier studies that showed industrials primarily connected by banks, did not significantly alter the connectedness. Then they systematically removed, one by one, the corporations that had the most connections. The whole network changed very little because most of those linked through each one that was removed had alternative connections. "The large-graph, short-linked phenomenon we have observed," they said, "does not break up under this massive destruction of its parts" (p. 356). Indeed, that is what I would have expected, and what I said, in 1962.

In the past few years more technical studies of the networks of interlocking directorates have made improvements of a mathematical nature, but nothing that affects interpretation markedly (Mariolis 1982, Berkowitz 1982, Bonacich and Domhoff 1981, and Mizruchi 1982).

Fennema and Schijf (1979) and Reed 'Riner' (1981) provide interesting overall reviews of the literature on interlocking directorates. Unfortunately for our interest here, much of the literature starts with, and never gets above, the perspective of individual firm-to-firm relations, and deals poorly, or not at all, with the whole, either as a system or as a structured network. Despite the paucity of structurally oriented studies of corporations interlocking internationally, Riner (1981), who came to the work with a supranational perspective, is led to make some interesting observations:

In 1965 the first Eurodollar crisis demonstrated that corporations participating in the supranational network had acquired control of
sufficient resources to challenge the sovereignty of the local economy in even the largest nation-states. Coincident with the initiation of a global communications network through the launching of the Early Bird satellite and the first widely publicized steps toward global inventory and planning through Volkswagen's funding of the Club of Rome, 1965 recommends itself as the closing date of the post-classic period of capitalism and the effective emergence of the supranational level of sociocultural integration" (p. 170).

To the degree that there is a supranational system, the actors within it come under its influence while their dependence on other systems of which they are also a part declines correspondingly. Those actors may be social units of many kinds -- business firms, of course, but also nation-states, cities, families, and individuals. There is quite a bit of evidence on the relations between corporations and states, because those issues have been the object of much deliberate study (see Wolfe 1977 and 1980 for many references). Less prominent in the literature are studies of the involvement of families and persons and cities. I was impressed some years ago by the work of Burton Benedict (1968) on family firms in economic development, even though he does not reach directly toward the supranational level. Greenfield, Strickon and Aubey (1979) include in Entrepreneurs in Cultural Context studies that are relevant. Also, some work by Larissa Lomnitz (1980) comes close to dealing with issues that I consider important for an understanding of a supranational system. Ted Downing (1981) presented a paper intriguingly titled, "The Internationalization of Capital: Mrs. Olsen and Juan Valdez: Thoughts on Exploitation in Agriculture." Among many other interesting observations Downing makes this one:

In Oaxaca and elsewhere, the focus upon IC (Internationalization of Capital) and its impact on local level peoples diminishes the importance of peasant, cultural area, and regional ethnographic studies. As the internationalization of capital penetrates into the Mexican hinterlands, coffee
producers become more similar to one another and to coffee producers in Africa (and Brazil) than to non-coffee producing peasants in their own culture areas (p. 18).

Even in the work of Peter Evans (1979:11), who does not share my belief that the development of the supranational system weakens territorially-based institutions such as the state, there is evidence of effects on families and persons. The "national industrial bourgeoisie," which he finds "alive and well," operate increasingly in collaboration with international capital so that, in his words, "the gap separating the local capitalists who are able to play a role in shaping the process of accumulation from those who are not in a position to do so grows larger" (p. 11). Clearly the gap among locals grows because the cosmopolitans among them are being integrated into the supranational system.

I must emphasize as a major point: nation states are becoming weaker relative to the other actors in the supranational system. It is not just that peripheral states are weak, but also that so-called center states are weakening. I dealt with that twenty years ago in terms of the decolonization experience, using as a primary example the fact that Belgium and the Congo "governments" were both weakened relative to the network of multinational firms operating in their common supranational environment. Speaking more generally, there is evidence that the United States, celebrated often as the Center par excellence, is really not so powerful that it can control much in this supranational environment. C. Fred Bergsten (1982), somewhat of an expert in matters of international economic relations, recently wrote on this issue: "The United States has become heavily dependent on the world economy. At the same time, the ability of the United States to dictate the course of international economic activities has declined sharply" (1982:11). He continues, "The share of (international) trade in the U.S. gross national product has doubled during the past decade" (p. 12). And then, "Another key development that has contributed to the erosion of U.S. international economic power, and in fact that of all national governments, is the emergence of major non-national actors in the international economic
process. The multinational corporations now account for perhaps $2 trillion of all off-shore production. Private international banking arrangements and so-called Eurocurrency markets recycle the bulk of the OPEC surpluses, now running at about $100 billion annually. So private entities, often operating outside the direct control of any government, have reduced sovereign power in general and that of the United States in particular." (p. 13).

On the role of cities in the supranational system, I noted earlier that the Southern Anthropological Association Key Symposium in 1980 was devoted to the subject of cities in hierarchical perspective. That symposium was published under the title, Cities in a Larger Context, edited by Thomas W. Collins (1980). My paper in that symposium went into some detail on the changing relations among states, cities, and multinational firms, concluding that in general cities and firms were gaining at the expense of states. Other papers there are similar, for example, that by Carol Hill on Atlanta as an international city, that by Jack Rollwagen using the concept of World System, and that by Douglas Uzzell on complex community issues at the Mexican-American border.

Before concluding, I need to say something about the World System approach, mentioned in passing more than once (see Chirot and Hall 1982 for a recent review and extensive bibliography). From the name of the approach, one would expect considerable relevance to the issue of the generation of a supranational system above the level of nation-states. Still, I have not found their concepts helpful. For one thing, world-system authors seem totally market-oriented instead of social system oriented. Secondly, the world-system authors see everything that is happening now as simple continuation of the development of capitalism, gradual growth of the world market over four centuries, instead of seeing the current spurt of activity as a qualitative leap to a different level of integration. Third, despite the name, world-system authors seem quite nation-oriented, country-oriented, thinking in terms of national participation in the world economy and national economic development, instead of recognizing that nation-states are only one among several
types of actors in the supranational system. When they speak of "structure" of the world-system they are referring to their classification of countries into the abstract categories of center, periphery, and semiperiphery. Instead of permitting the structure to arise from the data, as structure tends to do when one uses network models, World System authors spend an inordinate amount of effort trying to decide whether a given country is in or is not in one of their predetermined categories. Further, the center-periphery terminology perpetuates a geographic image that is hardly appropriate for the supranational system as I see it. In short, I haven't found much use for the world system model in my attempts to understand the continuing evolution of sociocultural systems above the level of the nation-state. The facts they report are certainly important, but their theory seems inconsistent with the dynamics of the current world situation and inconsistent with the structure that I see developing at this level.

CONCLUSIONS

Data on the relations among corporations, nation-states, cities, families, and individuals can now be analyzed with the help of network models from graph theory and dynamic nonlinear models of generative processes, toward the end that we will be able to appreciate the evolutionary significance of the development of a supranational system.

The development of this supranational system has many implications for the anthropology of business. The relations among the business corporations involved in the supranational system are not simply governed by principles of a free market. All organizations in the system are not equally accessible to one another. Exchanges and other communications follow pathways through the network, pathways of relationships already established by precedent or pathways being tentatively inaugurated in attempts to reduce risks in an unstable organizational environment. Corporations maneuver to put themselves in advantageous positions relative to others in the system. Corporations play multiple parts in an increasingly integrated sociocultural network that includes other kinds of actors as well. Like these other actors,
business corporations make decisions by processing information from their environment. If that environment is, as I believe it is, an evolving system such as has never been seen before, then their actions have an impact on that evolution. Business corporations, and we who study them, have an awesome responsibility to assess that changing environment adequately.

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