General System(s) Theory: The Promise That Could Not Be Kept

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General System(s) Theory (GST) has failed to deliver because of its own basic assumptions. Hierarchy compels us to impersonalize all social interaction, thus making it impossible to realize ourselves. Concreteness overemphasizes the single organization and determinism as well. Competition returns us to the mechanistic tradition GST initially sought to escape. Finally, GST remains tied to "laws" of growth which promise only our destruction. American Indians knew better.

Few concepts ever burst on the intellectual scene with so much promise as General System(s) Theory (GST). Holding out the hope that for the first time we could discover a truly general theory of organization, GST promised deliverance from the despised mechanistic tradition which had reduced individual human beings to atoms which fly aimlessly from one random occurrence to another and, along the way, have no meaningful relationships with each other. The classic notion of mechanism implied that the "whole" was only the sum of its parts, nothing more, and would "behave in exactly identical fashion no matter how often those parts were disassembled and put together again" [2, p. 27]. The parts never were modified by each other, nor by their own past, so mechanistic models had nothing to say of growth,

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evolution, or purpose; all they offered was static equilibrium. GST seemed ready to overcome these problems.

Words such as "wholeness," "holistic," "organismic," and "gestalt," were given renewed prominence by GST, as were notions of interdependence and mutual interaction [15, p. 45]. The "organism" was something which had both a significant past and a purposeful future—one in which the individual human being could be fully accommodated. General Systems Theory's contributions to modern organization theory have been immense; beginning with the "human relations" school, the notion that organizations were "social systems" became paramount, and at least a generation of theorists promised to transform organizations into warm and friendly communities [11, p. 52]. From Mayo's researchers at Western Electric to Philip Selznick, Warren Bennis, and countless others, we seemed to have an alternative to the mechanistic thinking of Taylor and Simon. GST has not delivered, however, and we must seek out explanations for its failure to do so.

One way to begin is by looking at the so-called "universals," which GST adherents assumed to apply to all organized systems. The biological heritage of GST, as opposed to the derivation of mechanistic thinking from physics, produced the "organic laws" of growth, differentiation, hierarchical order, dominance, control, and competition. Over time, so it was thought, these could be translated into mathematical terms. Furthermore, so went the argument, GST easily could deal with associated, but somewhat dichotomous, concepts; "maintenance and change" could be incorporated, and so could "preservation of the system and internal conflict" [15, p. 196]. To be sure, these had to be balanced or reconciled; neither "change" nor "internal conflict" could be permitted to destroy the system. From all this we could search out "goals" on a system-by-system basis, and the principal one turned out to be "survival." This biological thinking led us to believe we could discover wholeness by comparing what happened in one system with what occurred in others, without considering how entire systems might affect each other. We could compare, in other words, a system of bacterial cells to a system of human beings (e.g., a formal organization), but without worrying all that much about how cells and humans affected each other. GST assumed, then, an infinite number of relatively "closed" systems, even while trumpeting its ability to deal with "open" ones. This led to a series of anomalies which are the focus of this essay and which have had the effect of pointing us backwards instead of providing us with a vision of the future.

GST advocates have been unable to see, because their paradigm provents them from seeing, that their *a priori* assumptions, especially those of hierarchy, concreteness, and competition, could have only the effect of preventing us from realizing the stated objectives of GST itself. Hierarchy, the assumption that all organized social interaction occurs between "superiors" and "subordinates," compels us to *impersonalize* our relationships with each other, thus making it impossible for us to realize our *selves*, or *beings*. Concreteness, the notion that any given system can be defined generally in terms of itself, encourages us to focus on the *single* organization and, in the bargain, forces us to accept a deterministic outlook which leaves little room for the individual. Competition, an assumption derived in some measure from the mechanistic outlook of Adam Smith, returns us to the despised tradition we sought to escape. Finally, GST has been tied to "laws" of exponential growth which promise only the destruction of us all if we do not seek alternatives to it. The arguments follow in order.

Hierarchy, Post-Feudalism, and Alienation

Given the assumption, or organic law, of hierarchy, GST advocates (and most of the rest of us) failed to notice that the earlier change of Western society from feudalism to post-feudalism made it impossible for us to avoid mechanistic concepts. Indeed, I argue here that the combination of post-feudalism and what we term "democracy" only reinforced the mechanistic tradition. It is not significant to decide when the shift from feudalism to post-feudalism occurred, aside from noting that it was after nation-states had been organized by monarchs who viewed their realms as private businesses and themselves as agents of the Almighty.¹ Thomas Hobbes attempted to sever this connection between government and religion by arguing, in the seventeenth century, that the sovereign should be an absolute, impartial, impersonal, and artificial one (an individual or an assembly) which could maintain the peace by preventing humans from constantly warring with each other. If he said nothing about elections as we think of them now, his concept was secular and very modern; the "sovereign" was comprised of citizens acting out roles as rulers, not serving as agents of God.² His notions of impersonality and artificiality were important ingredients of the shift to post-feudalism, and they are the guiding notions of contemporary organizations.

In feudal systems, superior-subordinate relationships were personal relationships; despite the degrading nature of these social ties, they included the notion that persons were mutually responsible to each other (lords should help serfs in need). Hobbes' artificial sovereign, while

¹Dwight Waldo, "Some Thoughts on Alternatives, Dilemmas, and Paradoxes," in his (ed), *Public Administration in a Time of Turbulence* (Scranton: Chandler, 1971). The conclusions come from Waldo's searching out of the longer history of public administration; his initial point was that the organizational structures we know were designed by the likes of Louis XIV and Frederick the Great, the issue being how much of the original premise remains?

² On the argument that Hobbes actually is a founding father of representative government, see Harvey C. Mansfield, Jr., "Hobbes and the Science of Indirect Government," *American Political Science Review*, LXV (March 1971), pp. 107-08. In a forthcoming book, I argue that all the prominent "democratic" theorists we have studied over the years (Aristotle, Rousseau, et al), used the same organization theory, one identical to Hobbes. This is far more significant than the differences in their assumptions about the nature of man, or so I conclude. On the nature of man approach, see William G. Scott and David K. Hart, "The Moral Nature of Man in Organizations: A Comparative Analysis," Academy of Management Journal, 14, 2 (June 1971), pp. 241-255.

comprised of citizens, could have no *personal* responsibilities for other citizens, and so it is in the common organizational forms of post-feudalism. All of us "act out" the specialized "roles" assigned us, thus transforming relationships between persons into interactions between *nonpersons*. What occurs in formally organized interaction turns out to be worse than simple alienation; *it is as if we simply did not exist at all.* We have tended (mistakenly) to associate alienation only with industrial capitalism. Whatever Marx's contributions to social thought, he turned our attention toward relationships between ownership and labor rather than toward those between superiors and subordinates. We failed to see that hierarchy, division of labor, obedience, and command, were and are much more important than capitalism as the source of alienation. We are learning only now, perhaps a century after beginning to think about it, that a shift in ownership from "private" to "public" does nothing to alleviate alienation, because this change alone has no effect on hierarchy.³

Because we believe we seek equality, we constantly tell ourselves that we are free and independent citizens and that we associate with each other on that basis, but nonhierarchical association is possible only outside all formally organized social interaction. To preserve the fiction of "democracy," we end up reemphasizing the concept of "role," but this returns us to a mechanistic concept. As roles, we remain on our treadmills; even the status we acquire is assigned to our roles, not to our selves. In most cases (families, public agencies, corporations), we feel uncomfortable with this loss of our identities, so we seek to repersonalize our relationships with others, and GST provides some basis for doing so. This has the effect, unfortunately, of suspending us somewhere between feudalism and postfeudalism, and three examples illustrate the dangers therein. The Mafia emphasizes the "family," but its leaders make post-feudalistic decisions to remove certain individuals for the sake of family survival. Professional athletes are the feudalistic property of owners, but the latter make postfeudalistic decisions to dispose of the athletes for the "good of the team." Corporate superiors and subordinates become "sensitized" to each other (if the budget permits such training), but the former then must decide which of the latter are to be promoted or dismissed. Hierarchy stands in the way everywhere; it makes feudalism, post-feudalism, and a combination of the two equally intolerable. For example, we cannot repersonalize even the two-person family unless we abandon the concept of hierarchy.

For GST, then, to adopt hierarchy as one of its organic laws is to

³ "It ought . . . to be plain that command depends not on ownership but on the division of labor in detail . . . The command structure of a nationalized industry is, in essentials, no whit different from that of private industry, hedged about though it invariably is by the trappings of constitutionalism (joint consultation). It is at last plain to see that capitalism in industry is one thing, command in industry quite another." Graham Wootton, *Workers, Unions, and the State* (New York: Schocken Books, 1967), Ch. III. Wootton concludes Engels grasped this point; Marx did not.

eliminate its usefulness as an operational theory of organizations. The social systems we know cannot become "communities" unless we abandon hierarchy or, alternatively, design an updated version of feudalism. We have come closer to the latter than we are prone to think; everyday jargon is full of phrases such as "the old man" and "the organizational family," which imply patriarchy. Sometimes we think about using conventional models of "democracy" in organizations to get around this, as in worker self-management schemes. But, if workers are to "elect" their managers, this can only reinforce "role" and mechanistic concepts. Thus, even representative government as we know it seems incompatible with GST, but the attempt to reconcile the irreconcilable goes on. When we turn to concreteness and survival, things get worse.

Concreteness and System Survival

GST advocates have sought to make the "wholeness" of the individual compatible with organizational "wholeness"; among others, Bertalanffy has made much of the *active personality system* as a new "model of man" [15, pp. 192-193]. However, organizational survival tends to emphasize the integrity of the single organization, and it introduces a determinism which inevitably reduces the individual to a position of lesser importance. Given their addiction to the hierarchical ordering of systems, GST proponents almost inadvertently have sacrificed the individual for the sake of the larger system, something that is clearest of all where nation-states are concerned.

The nation-state stands virtually alone as the human organization which has the wherewithal to bring to bear every conceivable instrument of violence to insure its own survival and growth. Bertrand Russell, noting that any organization is an "organism, with a life of its own, and a tendency to growth and decay," added that the nation-state had an "instinct for selfpreservation" [10, pp. 157-158]. Others, concerned with the future of the United States, have observed that "America is not exempted from the historical imperatives, the laws of life and decay" [12, p. 52]. Those seeking a general theory of international politics (only another general theory of organizations) concluded that it is only empirically realistic that individuals of different philosophies (Acheson and Dulles, Churchill, and Bevin) pursued the same foreign policies [14]. Despite the gloomy Hobbesian (Theory X) view of human nature, there is reason to think the violence used to insure nation-state survival is not a reflection of natural man at all, but is *learned behavior* which the larger system forces upon him.⁴ For this reason, it

^{*}Roderic Gorney, *The Human Agenda* (New York: Simon and Schuster, 1968, 1972), Ch. 3. While I would not want to overstate the argument here, it seems possible we have been overpopularizing the notion that *all* animals, including man, are inherently aggressive and prone to destroying each other for the sake of preserving "territoriality," etc., and Konrad Lorenz and Robert Ardrey have become almost household words. Gorney's argument, to the contrary, is that animals of the same species are by nature *cooperative*, and that *only* man has devised systems which make organized violence seem "natural" *within a species*. If the hierarchical orders of other animals are more "feudalistic," they are less destructive of themselves.

seems to me, students of international politics (and some GST adherents as well) have shied away from GST implications.

Scholars who lived through the Hitler years in Europe, especially those who came to the United States and exerted a profound influence on intellectual trends here, came to fear that organismic thinking had provided a normative conceptual framework for Germanic notions of nationalism, patriotism, and Lebensraum, the doctrine that the 1000-year Reich inevitably was destined to spread across the heartland of Eurasia. One example is Hans Morgenthau's theory of international politics, based on clear definitions of such phenomena as "national interest" and "national character." Having flirted with essentially organismic concepts, Morgenthau then disavowed organicism, arguing that power itself was a purely psychological relationship between the minds of individual men [5]. Bertalanffy himself raised the same problem, arguing that to view the nation-state as an "organism on a superordinate level" was to provide the "foundation for a totalitarian state, within which the human individual appears to be an insignificant cell in an organism or an unimportant worker in a beehive" [15, p. 35]. This problem hardly is limited to the nation-state.

To echo Sheldon Wolin's complaint of 12 years ago, huge formal organizations such as General Motors, the Pentagon, and public universities, engage themselves in forms of violence which are only less obvious, not less threatening, to their members and to others affected by them [16]. Philip Selznick remains the most articulate of organismic theorists, and his approach to institutional survival and cohesion places those values well above all others. For the individual corporation, the economic concept of "externalities" has played a major part in permitting us to avoid the implications of organismic thinking. Any costs, social costs in particular, that can be transferred to some other organization or to society as a whole, are perceived to be of no concern to the corporation. Those of us assigned to universities should be more aware than we are of how this works; those denied tenure, often because of budgetary restrictions alone, are for practical purposes being declared unemployable for life because the entire market is tight. Those of us who remain *inside* accept our incremental pay raises each year while remaining largely unconcerned about the fate of these newly defined "externalities." Everyday determinism is incorporated in such phrases as "I'm sorry, but you must be fired for the good of the organization." GST, in other words, encourages us to accept pretty much as "givens" the basic outlines of social systems as we find them, because of the assumption that whatever we see is largely the result of a "natural" evolution. This can introduce fundamental contradictions, and I know of no better example than economics.

The Mechanistic Tradition of Economics

In the classical mechanistic worldview, all phenomena in the world were perceived as the products of chance, of the aimless play of atoms governed by inexorable laws of causality [15, p. 45]. Adam Smith was indeed one of the classic thinkers in this tradition, although we have given this less attention than we should. The equilibrium model of the "unseen hand" remains as good an example as we have of the *nonrational* mechanistic system. While few would argue that "perfect competition" ever has been achieved anywhere, it remains a driving ideal of economics; many of us still assume that as a theory, it is logically coherent. It is not, and that is why it never has delivered on its promises, cannot now deliver, and never will deliver. To examine the logic of competition is to understand why.

In a perfectly competitive market, all companies have an interest in a higher price, but no company can set prices higher than its competitors. Each company also wants to sell as much as it can, and it increases its output as long as the cost of producing each new unit is less than the market price. Increasing output does not represent a common interest, for the more units other companies sell, the lower the price and income for any given firm. Yet each company continues to produce because, by definition, its output alone has no effect on the market. If one company, correctly estimating that the output of all firms cannot be sold at a price which will yield profits for all, acts to reduce its output, this only makes things worse for that company; its own income falls along with all the others. What this means is that the "equilibrium" of classic competition cannot occur in any situation other than one of constantly and infinitely increasing demand. Unless this is present, in the form of customers willing and able to buy the output, prices fall until producers cannot recover their costs. The downward spiral and the accompanying social chaos are arrested only by government assistance in the form of price supports, tariffs, or quotas [8, pp. 9-10]. "Perfect competition," in other words, is a logical impossibility.

The typical example is agriculture—we have plowed crops under, stored our overproduction, paid farmers not to farm, and provided price supports. The typical sequence completed its cycle in the egg industry in 1972. High prices in 1969 and 1970 encouraged farmers to stock up on hens in anticipation of high profits; the market was glutted 2 years later, eggs could not be sold for what it cost to produce them, and the government faced a choice among undesirable alternatives. One of them, the widespread and subsidized slaughter of hens, narrowly was defeated in the Senate, and the search for something better was renewed. Now, surely we can define a "market" (producers and consumers of a product) as a "system," but it is one which, by our definition of it, is *collectively nonrational*, for we define it as only the aggregate of countless individual and isolated decisions made by producers and consumers.

To put it mildly, this poses a problem for organization theorists who count themselves as followers of GST. The individual organization searches for its own "purpose," presumably through some form of "rational" analysis, but within a larger system which must remain nonrational by definition. The organic system (corporation) is part of a mechanistic supersystem (market); we can effect an overall outcome in the larger system (by stimulating purchasing power), but what happens to a single producer cannot be the outcome of conscious planning. And so it is; we invent explanations of "efficiency" and "inefficiency" to distinguish between companies which "succeed" and others that "fail," but this inherent systemic tendency toward overproduction and social chaos makes the failure of an individual company an essentially random event. It is only a little better in market systems dominated by a few companies, the oligopolies; while they manage to restrain production to what can be sold, with the aid of government stimulation, their market systems are not explicitly planned ones, for we have a network of public policies and conceptual thinking which defines the planning of production (by companies producing the same thing) as conspiracy.

We may be on the verge of discovering why it is that the "equilibrium" postulated by theories of perfect competition always has been impossible to realize. Economists have tended not to analyze market systems (microeconomics, the subfield which deals with markets, concentrates on the single firm because that is the only planning unit), and GST proponents, usually "renaissance men" who range widely in many fields, have tended to follow this lead (while not questioning the conventional wisdom of their original field). This has been comfortable up to now, because the anomalies of economic competition have been obscured by the presumed "success" of continued growth. But, what if growth must cease or be severely curtailed?

Systems, Growth, and the Future

Growth stands on the threshold of becoming the greatest global issue in at least a century; the forthcoming dialogue will make it clear that no country will be affected more than this one, and few theories will be affected more than GST as we have known it up to now with respect to social systems. A Secretary of the Treasury, President Nixon's chief administrator of our massively revised economic policies, found it necessary early in 1972 to use the forum of a White House Conference to reject the concept of "zero net growth," for the President's program required growth—especially in the automobile industry [6]. However, only a few weeks later, the same President's principal environmental adviser, admitting his speech "might make some waves," used an out-of-town podium to call for a "national debate on the desirability of limiting growth" [7]. Those versed in the art of evaluating "trial balloons" were left to ponder if one or both statements had been cleared in advance with the White House. What seems reasonably

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certain (as this is written in August 1972) is that both Presidential candidates will avoid the issue during the campaign. Not only is it unmanageable at a time when many worry about unemployment figures, but we have no conceptual framework for dealing with it. Yet, it seems likely that the victorious candidate will have to deal with the issue in 1973 and probably will set in motion by 1974 policies designed to restrain growth—and all this after having won the election partly on the basis of promises to increase growth.

There is no space here to survey the burgeoning literature on the problems of growth; suffice it to note that political scientists and economists, not to mention organization theorists, have been avoiding the issue because their conventional wisdoms cannot cope with it. While GST casually has mentioned "growth, maturity, and decay" for years, little more than that has been done; the implicit assumption usually is that those let go by one system (e.g., the university) will be accommodated by growth of the larger system. The best summary statement of the problem facing us has been produced by a distinguished group of British intellectuals [13]:

The principal defect of the industrial way of life with its ethos of expansion is that it is not sustainable. Its termination within the lifetime of someone born today is inevitable—unless it continues to be sustained for a while longer by an entrenched minority at the cost of imposing great suffering upon the rest of mankind. We can be certain, however, that sooner or later it will end (only the precise time and circumstances are in doubt), and that it will do so in one of two ways: either against our will, in a succession of famines, epidemics, social crises and wars; or because we want it to—because we wish to create a society which will not impose hardship and cruelty upon our children—in a succession of thoughtful, humane, and measured changes. We believe that a growing number of people are aware of this choice, and are more interested in our proposals for creating a sustainable society than in yet another recitation of the reasons why this should not be done.

There will indeed be a "systems" debate, but it will turn on the question of whether the planet Earth can be conceptualized as a "closed" or "open" system. Advocates of the latter approach will attempt to keep our attention riveted on outer space; they will lure us with the newest version of the frontier philosophy which will tempt us to anticipate colonization of other planets. The "closed" system proponents will respond that even if other planets or galaxies are inhabitable, the economic growth on Earth required to make the voyages would have the effect of destroying us while our own space vehicles are enroute to new destinations. It is not immediately necessary to take a position on the question of Earth as a "closed" or "open" system. We probably must conceptualize some degree of openness if we are to take into account the probability that some of our internal technological activities might damage the "nature" of the universe, guite aside from the question of colonizing space. The point is that in narrowing the definition of "externalities," we have no choice but to think of the consequences of our decisions for everything and everybody. How might we approach this task?

The perspective argued here is that GST is only a reductionist version of a larger stream of thought, and that the reductionism has distorted beyond

recognition that larger view. To some extent this is the outcome of academic specialization, for most of us spend our lifetimes looking at things which by any common-sense definition are only parts of some larger whole. When we examine interdependence within these parts (as GST encourages us to do within formal organizations), we overlook the interdependence between the parts-conceptualized as the interdependencies within the larger system. Some of our weightiest thinkers have contributed to this reductionism because, I think, they have placed too high a value on mathematical precision. For example, Karl Deutsch, seeking to rise above the limitations of classic models of mechanism and organism, nevertheless complains that the wide-ranging "process" thinkers (Kant, Hegel, Marx, Toynbee) have provided us with models lacking "inner structure and quantitative predictability" [2, p. 79]. However this is discounted by probabilities, it remains a longing for some form of determinism. Yet, it seems to me that process models are the only ones which offer the hope of identifying the "whole" and, while it may seem difficult to believe at first, one of the classic process thinkers belongs to the modern history of organization theory—Mary Parker Follett.

In her clearest example of interdependence and process thinking, Follett described the interaction of a tennis game. When one player serves and the other returns, the third stroke is determined not only by the second but, at least in part, by the nature of the original serve. Each new stroke becomes a composite history of all previous ones, in the formula she described as "I-plus-the-interweaving-between-you-and-me, meeting youplus-the-interweaving-between-you-and-me, etc.," and she constantly invented words in the attempt to describe what she had in mind. Among these words were the terms interweaving, interpenetrating, interlacing, interknitting, intermingling, reciprocal response, and activity-between.⁵ "I am an individual," she argued, "not so far as I am apart from, but as far as I am a part of other men" [3, p. 62]. This led her to define loyalty as something not given by one person to another, but as something both give to the "whole," the "situation," the "relation" which includes the two. "Authority" in any group process was something inherent only to the process. situation, or relation, not an individual [3, p. 59]. Everything, in other words, is part of something else.

To look at things "relationally" is to return to a line of thinking mentioned sometimes, but not often, in GST;⁶ it is more traceable to Hegel,

⁵ For a summary of Follett's thinking which includes the tennis example, see Elliot M. Fox, "Mary Parker Follett: The Enduring Contribution," *Public Administration Review*, XXVIII (November/December 1968), pp. 520-529.

^o Both "relation" and "process" are mentioned, e.g., in Walter Buckley, "Society as a Complex Adaptive System," in his (ed), *Modern Systems Research for the Behavioral Scientist* (Chicago: Aldine, 1968), pp. 490-513. In this treatment, however, concepts of "competition," "cooperation," and "conflict," are dealt with as though they were equally valid. This reflects, I think, the tendency of GST proponents to be somewhat less normative than they should be. Simply to accept "competition" as a potential universal is, by implication, to assume war between nation-states as a given.

Leibniz, and Spinoza. If, in Hegel's words, "knowledge can be only set forth fully . . . in the form of a system," and if Spinoza built upon Aristotle's definition of "substance" as that which is capable of independent existence, then the only definable "whole" is something on the order of "substance." "nature," or "God." This worldview requires an observer to change from perceiving relatively independent factors or organisms related to each other to perceiving the particular way in which all these factors or organisms are related to each other within each one of them; "to conceive of things as 'relations' is simply to interiorize this interdependence in the thing itself."7 If this seems at first glance a monumental task, it need not be, but it requires an abrupt departure from the almost inadvertent reductionism of GST. Organismic theorists tend to use the "system-environment" dichotomy in ways which "overconcretize" the single system (organization) while overgeneralizing its relations with other systems, and without taking into account how those other systems actually function within the single system. Some relatively simple examples are in order.

- As implied earlier, GST advocates are wide-ranging and interdisciplinary, but only up to a point. They tend not to question the premises of the several disciplines with which they attempt to work and, as Harold Sprout once said in my presence, they do not meet the full requirements of interdisciplinary activity. To do that, he said, one "must get fully inside the mind of another." GST thinkers have yet to challenge, confront, and come completely to grips with the assumptions of all the disciplines they use, *including their individual disciplines*. For example, among "systems thinkers," Deutsch does not really question at length the premises of conventional politics, nor does Boulding question those of conventional economics.
- 2. Biologists, and all those concerned with the environment for that matter, are learning that "food-chain" conceptualizations are far more significant than patterns within any single species. The catch phrase, "you are what you eat" may be intellectually significant, and economists and environmentalists may discover together that the threatened extinction of whales (an international scandal) is traceable to the systemic nature of competitive economics.
- 3. All of us in administration, especially public administration, are well aware of the "interagency committee," the "task force," or the "temporary organization" for that matter. What we fail to conceptualize is that if, say, five individuals come together from five agencies to form such a group, each individual actually functions within six organizational systems; he is a member of his permanent organization, the committee, etc., as well as the other four permanent systems. On a global scale, for example, when Nixon and Chou En-lai hold extended discussions in Peking, each functions *inside* the other's political system.

⁷ Bertell Ollman, Alienation: Marx's Conception of Man in Capitalist Society (Cambridge: At the University Press, 1971), Ch. 3 and Appendix. This is an unconventional critique of Marxist thinking, one which defines Marx as a "Relational" theorist and which, from my perspective, makes Marx totally respectable. It follows, of course, that this approach to Marxism never has been implemented.

From an organization theory perspective, then, the beginning points are not all that difficult to describe. We should proceed with the explicit articulation of what might be termed transorganizational systems; this amounts to extrapolating the organizational diagrams of, say, Rensis Likert, to the larger universe of which they are parts, and beginning to conceptualize the innumerable interactions within and between systems.8 It is as if we visualized a map of the world which contained none of the nation-state boundaries with which we are familiar, or for that matter none of the pyramidal organizational charts within which we live (and are repressed). We then would draw on the globe all of the systems we could discover. We might find ourselves viewing "millions of cobwebs" overlapping and penetrating each other, each system describable as a cluster of relations between systems [1, pp. 8, 15, and 45]. This is emerging in the study of international politics as the concept of transnationalism and. without something like it, we cannot even begin to deal with such phenomena as multinational corporations. In this far-reaching enterprise, GST cannot help-at least not in its present form.

I do not suggest for a moment that all those who consider themselves to be general system(s) theorists would acknowledge this assessment of what they do a valid one. They form too disparate a group to be labeled as subscribing to a monolithic point of view. Yet, their search for universals has led them all too quickly to adopt a somewhat deterministic outlook which, combined with their acceptance of such notions as hierarchy and competition as "laws," can be dangerous. Some of them recognize as much; Ervin Laszlo worries that the development of "higher level supersystems in the sociocultural sphere" may, if it leads to a single unit world, leave individuals "more and more deeply imbedded in complex hierarchical structures." He rejects this outcome, of course, on grounds that man cannot be "natural" (in the way Laszlo would prefer man to be "natural") in such circumstances. So, insists Laszlo, correlations between inputs and outputs cannot be conceptualized as "deterministic" ones. While certain functions will have to be carried out, it will be left to "volunteers" to fulfill them; the "system as a whole" is determinate, but the "relationships of the parts" is not [4, pp. 111-113]. Thus, the fatal flaws of GST stand clearly outlined.

In organizational terms, nothing could be more familiar. "Volunteers" are free to participate in carrying out the decisions made by others. It simply is assumed that every individual's choice will add up to some form of collective rationality and purpose. In attempting to escape the implications of hierarchy, GST propels us backward into the old mechanistic

⁸ Likert's draft MS for his next book, which I have had the privilege of perusing, indicates that Likert now thinks in terms of all sorts of systems, not only corporations; the end product may include designs for universities, major urban areas, and the like. In effect, Likert's draft MS contains a political theory.

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tradition from which it promised us escape. Indeed, Laszlo's prescription is nothing more than a shorthand version of market economics, the most mechanistic model of all. Yet the growth crisis will be resolvable only by conceptualizing and then operationalizing global market systems, and not competitive ones, on a product-by-product basis. The objective is the survival of all, not merely some, and all must share in that undertaking. After all, the GST approach offers us—in the final analysis—the grim pursuit of our own death, and some of the "laws" it has accepted up to now seem guaranteed to make *that* prediction come true. Even the old mechanistic approach is better than that, and so we must continue the search for the humanism we cannot find except, perhaps, in process thinking. For those of us in the United States, it is worth pondering that from this perspective, our "advanced" culture is more primitive than that of the Indians we displaced. *There* is a systems approach!

REFERENCES

- 1. Burton, J. W., Systems, States, Diplomacy, and Rules (Cambridge, Mass.: University Press, 1968).
- 2. Deutsch, Karl W., The Nerves of Government (New York: Free Press, 1963).
- 3. Follett, Mary Parker, The New State: Group Organization the Solution of Popular Government, 5th ed. (New York: Longmans Green, 1926).
- 4. Laszlo, Ervin, The Systems View of the World (New York: George Braziller, 1972).
- 5. Morgenthau, Hans J., Politics Among Nations (New York: Knopf, 1956).
- 6. New York Times (9 February 1972).
- 7. New York Times (30 March 1972).
- 8. Olson, Jr., Mancur, The Logic of Collective Action (New York: Schocken Books, 1968). 9. Parade (16 July 1972), Ch. 1.
- 10. Russell, Bertrand, Power: A New Social Analysis (New York: W. W. Norton, 1938).
- 11. Scott, William G., and Terence R. Mitchell, Organization Theory: A Structural and Behavioral Analysis (Homewood, Ill.: Richard D. Irwin, 1972).
- 12. Stillman, Edmund, and William Pfaff, America and the End of the Postwar World (New York: Coward McCann, 1952).
- 13. The Ecologist (London: January 1972).
- 14. Thompson, Kenneth W., "Toward a Theory of International Politics," American Political Science Review, XLIX (September 1955).
- 15. von Bertalanffy, Ludwig, General System Theory (New York: George Braziller, 1962).
- 16. Wolin, Sheldon, Politics and Vision (Boston: Little, Brown, 1960), Ch. 10.

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