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THE STRUCTURE OF INTERNATIONAL ORGANIZATION: CONTINGENCY, COMPLEXITY, AND POST-MODERN FORM*

by John Gerard Ruggie

1. INTRODUCTION

A generalized malaise, dissatisfaction, and disaffection appears to pervade international organizations today. Whether their task is security, whether trade and finance, human rights or economic development, it seems to be felt that organizations, particularly at the global level, are not preventing as well, nor fostering and accomplishing as well, what they had been hoped to prevent, foster, and accomplish. Factors cited as being responsible include the entire array of possible organizational shortcomings, such as ineffective and unimaginative leadership, flabby secretariats, inter-agency competition and lack of coordination, the dominance of "political" factors, and so forth. Organizationally, the reshuffling of units, the introduction of decision-making techniques, and the adopting of planning methods, are only a few of the many recommended correctives.[1] Politically, the disaffection may come to express itself in a gradual withdrawal of support, especially on the part of the advanced industrial states from global organizations.

These analyses, recommendations, and responses must be given serious consideration, if the many tasks of intergovernmental organizations are to be better fulfilled. It is rather peculiar, however, that even those organizational arrangements which have succeeded in processing members' demands, and which do effect some measure of influence upon their members, such as the EEC, are not becoming the kinds of entities once expected (or feared). Sensing that this is due to more fundamental factors, the French Minister of Labor has recently noted:

> It could at one time be believed that international organisations would permit the creation of a world order of which they would be both the guardians and the guarantors, that national governments would gradually hand over to them their powers, their essential functions and, finally, even their sovereignty. In fact, even in the most advanced international organisation, I mean, of

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[1] Note, for example, the recent "Jackson Report" on UN development programs. (*A Study of the Capacity of the United Nations Development System*, (Geneva: United Nations, 1969)).

course, the European Economic Community, this has not been so.[2]

This suggests, if we may generalize from the Minister's reflections, a growing appreciation that the image of international order, on the basis of which contemporary international organizations are visualized and evaluated, no longer captures or accounts for the processes and institutions it is intended to capture and account for. And, this appears to be particularly true of the processes and institutions generated by the advanced industrial states, states from whose historical experience the image first developed. For they are themselves groping toward the definition and the creation of post-industrial, if not post-modern, forms of social, economic, and political organization. Thus, while various organizational shortcomings may well be responsible for international organizational *inefficiency* today, it might be suggested that their *inefficacy* is due to a more fundamental and conceptual shortcoming.

This is the proposition we pursue. We shall first want to demonstrate the precise nature of our dominant image of international order, which is said to be becoming inadequate and irrelevant, and to show how it came to be what it is. An analysis of the processes the image is intended to order follows, and its inability to order them leads to a recommendation for complexification. Some consequences of the dismemberment of this dominant image, for peace, peace-keeping, and peace-research, conclude the present paper.

2. INTERNATIONAL ORDER: THE DOMINANT IMAGE

Historically, to the recurrent quest for peace, for justice, for liberty as well as security, solutions of various sorts have been proposed. The most familiar to us is the "associational": that through the proper organization or association of human groupings these ends can be achieved.[3] What is of concern here is that groupings are arranged according to basic ordering principles, and exhibit an overall form or structure. "Structure is both a logical and an architectural conception: the recognition of an order among individual pieces in which the pieces are illuminated by their total arrangement."[4] Those who have concerned themselves with the organization or association of states have generally shared both the logical and the architectural dimensions of an image of international order, of a set of principles which might come to order interstate activities and of the overall form these ordered activities might come to exhibit. Some have sought to advance this

[2] This citation is from an interesting and reflective address to the International Labour Conference, Fifty-sixth Session, Geneva. See the *Provisional Record*, 13, pp. 224–228. I thank Professor Harold K. Jacobson for directing me to this reference.

[3] In the context of peace research, see Johan Galtung's analysis of the "associative" approach, in "On the Future of the International System," *Journal of Peace Research*, IV (1967) #4. Galtung means "making peace by getting groups *closer* to each other . . . " (p. 306, emphasis added). For a further discussion of this and various different approaches to peace and to the study of peace, see Kenneth N. Waltz, *Man, the State and War* (New York: Columbia University Press, 1959). My own use of the term here is in the broader sense of looking to *arrangements* between groups to further these ends, even if the arrangements are designed to keep the groups apart.

[4] See Jacob Bronowski's stimulating discussion, "The Discovery of Form," in *Structure in Art and in Science*, Gyorgy Kepes (ed), (New York: George Braziller, 1965); the citation is from p. 59.

image; others have abhorred it and proposed alternatives. Some have thought its manifestation in international life to be inevitable, whereas others have found it unachievable. These mutually exclusive views notwithstanding, the underlying image of international order is shared.

By image of international order, then, is meant basic definitions and conceptions of: (1) political space, or of the character of the *units* in international organization; (2) how these units might be related or *structured* into a global whole; and (3) the overall *form* such a system would come to take. Given this definition, our dominant image of international order is easily recognized by all: it is that of a hierarchy of evermore inclusive, but previously mutually exclusive social groupings, ranging from locality, province, nation-state, region, to some type of global arrangement. Moreover, the various groupings are thought to be held together internally by associational ties of differing and competing strengths, and externally by authority relations in the form of a pyramid.

My concern with this image is as a structural—that is, logical and architectural—paradigm only. Among those "holding" the image I include not only those who *favor* it, but all who use it *as a cognitive reference* map; whether to show that actuality is or is not approximating the image, or whether to argue that either the image or actuality is good, bad, or indifferent. Seen as such, the image has been, and is, so widely held that it would be an unnecessary burden to adduce specific textual citations here. It dates back at least as far as the eighteenth century peace projects, and is still very much with us today. Rousseau the associationalist exhorts the creation of such an order, and Rousseau the dissociationalist argues for isolation lest such an order *be* created. Kant derived implications from the image which he feared, and was therefore led to construct alternate systems of association. Nineteenth century liberals would have thought the materialization of an institutional expression of the image unnecessary and dangerous; their twentieth century counterparts have thought it desirable and have sought it. Almost without exception and questioning, it has pervaded contemporary thinking about international organization as well.[5]

For obvious reasons, in the contemporary literature students of integration have expressed this image most explicitly. As suggested to them by the image,

[5] For a general view of eighteenth century peace projects, see M. S. Anderson, *Europe in the Eighteenth Century*, 1713–1783 (London: Longmans, 1961), Chapter 8. The conflicting views on Rousseau are expounded by, respectively, Waltz, in *Man, the State and War*, and Stanley Hoffmann, *The State of War* (New York: Praeger & Sons, 1965). Kant's arguments are best expressed in *Zum Ewigen Frieden*, of which a number of editions and translations are in existence. On nineteenth and twentieth century liberals, consult Waltz's book again. Whether the image is an accurate characterization of contemporary international relationships is a question raised by, but not answered in, Inis L. Claude, Jr., *Swords into Plowshares* (New York: Random House, 4th Ed., 1971), Chapter 1. Finally, the image, as it expresses itself in the "dependent variable" in the study of international integration, has come to be questioned by, for example, Ernst B. Haas, "The Study of Regional Integration: Reflections on the Joy and Anguish of Pretheorizing," *International Organization*, XXIV (Autumn 1970), Part I.

some have come to expect the progression from one level of socio-political organization to the next "highest";[6] others have made the various processes by means of which such a progression is or is not coming about objects of study.[7] But the language of scholars with concerns quite different from that of integration betrays the influence of the image as well. The international order is continually being described as being "subsystem dominant," as opposed to being governed from above.[8] Moreover, it is described as being decentralized, for "there is still no central power in the international system."[9] Or, international politics is conceived of as "politics in the absence of government," that is, far more anarchoid than the hierarchically structured state.[10] There is virtually no end to such characterizations.[11]

Thus, this shared image has been so very basic to our thinking about international organization, that it appears odd to repeat it at length here. Yet we

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[6] Note, for example, Etzioni's thesis that

> The long-run trend toward integration seems to be for functions, authority and loyalties to be transferred from smaller units to larger ones; from states to federations; from federations to supranational unions; and from these to super-systems.

(Amitai Etzioni, "The Dialectics of Supranational Unification," *International Political Communities* (Garden City, New York: Anchor Books, 1966), p. 147.)

[7] A prominent definition of integration in the international organization literature has been: the process whereby political actors in several distinct national settings are persuaded to shift their loyalties, expectations, and political activities toward a new and larger center, whose institutions possess or demand jurisdiction over the pre-existing national states.

(Ernst B. Haas, "International Integration—The European and the Universal Process," *International Political Communities*, p. 94.)

Haas has recently expressed dissatisfaction with his own prior definition, now preferring something of this nature:

> The study of regional integration is concerned with explaining how and why states cease to be wholly sovereign, how and why they voluntarily mingle, merge, and mix with their neighbors so as to lose the factual attributes of sovereignty while acquiring new techniques for resolving conflict between themselves."

("The Study of Regional Intégration: Reflections on the Joy and Anguish of Pretheorizing," p. 610.) This stab at a new definition is part of a critical examination and evaluation of past work and, in my view, represents an attempt to escape the constraints of the basic structural paradigm of integration, as implied by the dominant image of international order.

[8] This phrase is common currency in the literature, but Morton Kaplan may be credited with first using it systematically. (*System and Process in International Politics* (New York: John Wiley, 1957), p. 17).

[9] Stanley Hoffman uses these terms in explicating various aspects of his notion of "the world political system," in "International Organization and the International System," *International Organization*, XXIV (Summer 1970), p. 393.

[10] This is the old-fashioned way of making essentially the same point. The citation is from W. T. R. Fox, "The Uses of International Relations Theory," in Fox (ed), *Theoretical Aspects of International Relations* (Notre Dame: Univ. of Notre Dame Press, 1959), p. 35.

[11] This is not to say that conscious attempts to avoid statements of this sort are not to be found in the literature. In addition to those cited in the present paper, one such attempt is Johan Galtung's "A Structural Theory of Integration," *Journal of Peace Research*, V (1968), No. 4. In it Galtung explicates a number of possible processes and, therefore, a number of possible end-states of asscoiation and integration between states.

are also beginning to share the exasperation when emerging structures of international organizational arrangements defy our expectations. This sentiment is again best expressed by the French Minister of Labor. Seeking to describe such structures, he likens them to Merleau-Ponty's philosopher, as being "never entirely in the world, and never entirely outside it."[12]

The image has seemed self-evidently correct. More than that, its roots are deeply embedded in the historical experience of the advanced industrial societies, as well as in the cognitive structure exhibited by modern analytic thought, and such roots are not easily severed. Abnegating the image, then, would entail demonstrating that its historical and psychological foundations undermine, rather than reaffirm it, and that as a conception of political form it cannot hope to express or to guide contemporary processes of interstate organization. The following discussion is intended to demonstrate just that.

First, as a structural paradigm, the image has certain obvious correspondences to the modern state: an extraordinarily successful form of socio-political organization, persisting in time and space; which succeeded in orienting political life into its orbit over the course of centuries through the establishment of permanent institutions of justice, taxation, security, and representation; which came to acquire prestige and authority as a result of the success of these institutions, and as it subsequently captured the attention and the loyalty which previously had gone to other groupings; and which came to *contain* similar but smaller forms within it.[13] While being obvious, these correspondences between the image and the modern state do not themselves provide a warrant for its extrapolation to other and different forms of organization *beyond* the state. In any case, such an extrapolation would prove historically incorrect.[14]

But, what is more, even at the level of the modern state, the correspondences are of a *structural* nature only: the *process* of the emergence of the modern state does not conform to the dynamics the image imputes. The modern state was not simply the product of prior jurisdictions coming together at a "higher" level, as the following indicates.

Much of the political map of medieval Europe presented an exceedingly complex and "intricate puzzle of partial and overlapping sovereignties."[15] For example,

A king of France might send letters on the same day to the count of Flanders,

[12] Cited in note 3.

[13] This characterization is based upon the superb little volume by Joseph R. Strayer, *On the Medieval Origins of the Modern State* (Princeton: Princeton University Press, 1970).

[14] One of the "main findings" of Karl W. Deutsch and his associates in *Political Community and the North Atlantic Area* (Princeton: Princeton University Press, 1957) speaks to this point:

> Another popular belief that our findings make more doubtful is that the growth of a state, or the expansion of its territory, resembles a snowballing process, or that it is characterized by some sort of bandwagon effect, . . . In this view, as villages in the past have joined to make provinces, and provinces to make kingdoms, so contemporary states are expected to join into ever larger states or federations. . . . Our findings do not support this view. (p. 24)

[15] Garrett Mattingly's *Renaissance Diplomacy* (Baltimore: Penguin Books, 1955), does much to unravel this puzzle; the citation is from p. 23.

> who was definitely his vassal but a very independent and unruly one, to the count of Luxemburg, who was a prince of the Empire but who held a money-fief (a regular, annual pension) of the king of France, and to the king of Sicily, who was certainly a ruler of a sovereign state but was also a prince of the French royal house.[16]

Much the same was still true of Europe two centuries later, on the eve of the Renaissance:

> Kings made treaties with their own vassals and with the vassals of their neighbors. They received embassies from their own subjects and from the subjects of other princes, and sometimes sent agents who were in fact ambassadors in return. Subject cities negotiated with one another without references to their respective sovereigns.[17]

Arranged as an intricate puzzle of overlapping units, and, further, torn by schisms of religion and doctrine, and plagued by endemic warfare, society nevertheless also saw itself as one: the "West", "Christendom", *res publica Christiana.* The oneness never found adequate institutional expression,[18] this having been prevented by difficulties of travel, communication, and local and regional differences. And, though the sense of unity "compels recognition", it

> eludes precise and satisfactory statement. *Modern* attempts to define it are likely to seem pedantic and remote from actuality . . . The easiest thing to say about the unity of Christendom is that it was complex and protean, sensitive to change and adaptable to circumstances . . . [19]

A hint of the sense of unity of this protean structure is to befound, however, in what bordered on a common body of law. For our purposes, most noteworthy is that it was considered to be *jus gentium*, the law *of* nations, valid for all within the commonwealth. Following Westphalia, one no longer spoke of the law of nations, but of *jus inter gentes*, or law *between* nations.[20] The unity is recognized once it is shattered! At one and the same time, then, the protean structure came to be differentiated, and its units reordered in the form of the modern state.

In sum, to conceive of the advent of the modern state solely as the coming together of previously mutually exclusive jurisdictions, at a new and "higher" level, is itself a *graphic* illustration of the simplifying tendencies of the dominant image at work. For, the process included both disaggregation and aggregation, simplification and complexification, differentiation and integration. This is not a process the image readily captures. And its failure to do so—even while drawing upon the very experience as a source—undermines the image.

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[16] Strayer, *On the Medieval Origins . . .*, p. 83.

[17] Mattingly, *Renaissance Diplomacy*, p. 23.

[18] This is the view of Mattingly, who feels that "pope and emperor alike were more important as symbols than as rulers . . . " (p. 18).

[19] Mattingly, p. 16; emphasis is added to draw attention to the influence of *modern* conceptions of order in describing the medieval system.

[20] On the significance of this difference, see Leo Gross, "The Peace of Westphalia, 1648–1948," in *International Law & Organization*, Richard A. Falk and Wolfram F. Hanrieder (eds), (Philadelphia, J. B. Lippincott, 1968).

There is, in addition, a second foundation to contend with. Cognitive psychologists have found that "the order of sensory fields . . . shows a strong predilection for particular kinds of conceptual figures," and have referred to these as "preferred conceptual figures," or "conceptual good figures."[21] Although *the* most preferred of the good figures are more simple still,[22] as a structural paradigm our image of international order enjoys the status of one such figure, that of the *tree*. A tree, mathematically, is a partially ordered collection of sets (. . . previously mutally exclusive social groupings), with every two sets having a least upper bound (. . . arranged hierarchically), and with any two upper bounds of a given set being comparable, that is, with one being an upper bound of the other (. . . in the form of a pyramid).[23]

According to the law of prägnanz, cognition will tend toward good figures "embracing such properties as regularity, symmetry, simplicity and others,"[24] as our analysis of international organization tends toward the image. They serve as "symbolic templates," those "extrinsic sources of information in terms of which human life can be patterned,"[25] and are not readily relinquished. Experiments have shown that even when maintaining the good figure of the tree complicated assigned tasks, experimental subjects nevertheless clung to it;[26] related experiments have indicated that incorrect but good conceptual figures are relinquished only after many failures.[27]

[21] This is Köhler's finding, as cited in Clinton De Soto and Frank Albrecht, "Conceptual Good Figures," in Robert P. Abelson, *et al.* (eds), *Theories of Cognitive Consistency: A Sourcebook* (Chicago: Rand McNally, 1968), p. 504.

[22] The *most* favored of the good figures are those of linear, end-anchored, and single orderings. While such structures repeatedly recur in the social sciences—in theories of political and economic development, community power, social stratification—as ordering principles of international organization we appear to have given them up along with the Great Chain of Being.

[23] For the formal definition, presented algebraically and graph-theoretically, see Morris F. Friedell, "Organizations as Semilattices," *American Sociological Review*, 32 (February 1967), p. 47.

[24] The law of präganz was introduced by Koffka in 1935, and is cited in De Soto and Albrecht, "Conceptual Good Figures," p. 504.

[25] This citation is from Clifford Geertz' excellent analysis, "Ideology as a Cultural System" in David Apter (ed), *Ideology and Discontent* (New York: The Free Press, 1964), p. 62.

[26] Christopher Alexander reports such experiments in "A City is Not a Tree," *Architectural Forum, 122* (April 1965, May 1965), on p. 60 of the second instalment.

While he makes no reference to them, Alexander's declaration illuminates the structuralists' quest for *underlying formal structural properties* in conceptual and social organization, and he does so with a clarity they have yet to achieve. (But see, in addition, Claude Lévi-Strauss, "Social Structure," in Lévi-Strauss, *Structural Anthropology* (Garden City: Doubleday Anchor, 1967), pp. 269–319.)

[27] References to these experiments may be found in Clinton De Soto and Frank Albrecht, "Cognition and Social Orderings," in Abelson, *et al.* (ed), *Theories of Cognitive Consistency*, pp. 531–538. As an illustration, consider the following anecdote:

> Some years ago various zoologists and psychologists made intensive studies of dominance relations (peck rights) among birds. They learned that if bird *A* dominated bird *B*, and *B* dominated *C*, it was quite possible that *C* dominated *A*. The explanation was not too difficult—the birds established enduring dominance on the basis of the rather chancy outcomes of pair-wise encounters, a process which ensured that the resulting social structure was asymmetric and complete, but not that it was transitive. But when they tried to describe these

There is no direct evidence as to the precise origins of conceptual good figures, hence we cannot say with confidence how we came to acquire our image of international order. As a general paradigm of social structure, there are grounds for inferring, from cognitive psychology and from anthropology, that it is a peculiarly modern construct.[28] And as an image of the international ordering of stages, as we know them, it stands to reason that it could not have existed prior to the advent of the modern state. Thus, the image may itself be an integral part of the vast matrix of social and psychological changes by means of which we mark the beginning of modern systems, systems whose processes are now undergoing profound change, and systems whose forms are now becoming unglued.

In sum, neither its historical nor its psychological roots particularly buttress our image of international order; instead, they rather undermine it. It remains to be shown that the image is incapable of capturing contemporary processes of international organization. To this end, the precise ordering principles of the image are briefly reviewed; some fundamental dynamics of international organization are demonstrated; and the nature of the discrepancy between the two is commented upon, in the section which follows.

3. CONTEMPORARY PROCESSES OF INTERNATIONAL ORGANIZATION

The Image: A Review

By image of international order is meant definitions and conceptions of the units in international organization, how these might be structured into a global whole, and the overall form such a system would come to take. We commonly define the units in terms of territorially distinct spaces, which either *contain* one

([27] Continued)

pecking orders which were not orderings, the scientists showed dismay and difficulty. They spoke of "pecking out of order," "curious exceptions," "irregularities," "imperfect orderings," "lack of a hierarchy," "polygonal dominance," "cyclic necking," "triangular pecking," and "complex, triangular hierarchies." None of these terms adequately characterizes the birds' social structure.

(De Soto and Albrecht, "Conceptual Good Figures," p. 508). In sum, the *expectation* of a transitive ordering led to the invention of a convoluted vocabulary rationalizing its non-occurrence.

In this connection, one is tempted to speculate whether the expectation of tree-like structures is responsible for the proliferation of categories on the part of the integrationists, including not only the classical spill-over and its reverse, but encapsulation, build-up, retrench, muddle about, spill-around, spreading effects, backwash effects, and—presumably if all has gone well—transcendence.

[28] On the simplifying nature of modern constructs in general, consult Seymour J. Mandelbaum, "Consistency, Creativity, and Modernization," in Abelson, *et al.* (eds), *Theories of Cognitive Consistency*, pp. 539–543. As a social structural paradigm, the image would be incomprehensible to the medieval mind (See Mattingly, *Renaissance Diplomacy*) as well as to the so-called savage mind (See Claude Lévi-Strauss, *The Savage Mind* (Chicago: University of Chicago Press, 1966)). Finally, for a titillating discussion of the impact of single-point perspective upon modern constructs, consult Marshall McLuhan, *The Gutenberg Galaxy* (Toronto: University of Toronto Press, 1962).

another or are *disjoint* and sovereign.[29] Further, at the level of international organization; relationships between disjoint and sovereign units are characterized by the extent to which joining at higher levels has (or has not) taken place, with international organization coming to imply organization *above* states. Finally, the concepts employed to express the resulting form portray it in terms of the extent to which comparable upper bounds are approximated.

That these conceptions are inadequate is attested to by puzzled reactions to the emerging structural configuration of international organization; but the power of the dominant image is attested to, in turn, by difficulties in devising new perspectives. Thus, as we offer one analysis of the processes of international organization here, the aim is not so much to demonstrate that the discrepancy between the image and actuality is vast. But, more importantly, it is hoped that clues to the future structure of international organization may be found as a result of the exercise.

The Processes: An Analysis

The processes of international organization—*when* a task comes to be performed jointly, and *how* joint performance of tasks comes to be organized—are contingent upon, most fundamentally, the propensity of states to organize the production and/or regulation of goods and services internationally. Yet there will exist situations which will not allow states to simply act out such propensities, when the objectives and capabilities of one will begin to interact with those of others in the pursuit of specific tasks. What we might refer to as functional interdependencies may come to modify the impact of the general propensities of states, in sum. But, finally, even within areas of functional interdependence, the demand for and commitments to international organization differ considerably, so that the processes of international organization may be said to be contingent upon a more generic factor as well, upon what we shall refer to as issue-type.

Each of these three is briefly pursued below.

(i) *The Propensity for International Organization*

Examining one state's general propensity to organize the production and/or regulation of goods and services internationally, with all other factors remaining constant, I have argued elsewhere that it will be the resultant of the interplay among

[29] This is completely analogous to another way of defining a tree: "A collection of sets forms a tree if and only if, for any two sets that belong to the collection, either one is wholly contained in the other, or else they are wholly disjoint." (Alexander, "A City is Not a Tree," I. p. 59). Alexander goes on to say that the "enormity of this restriction is difficult to grasp. It is a little as though the members of a family were not free to make friends outside the family, except when the family as a whole made a friendship." (II, p. 58).

Yet, traditionally, we have defined the nature of community in precisely these terms: "We do not ordinarily speak of an individual as belonging "to more than one community, except in so far as a smaller community of which he is a member is included in a larger of which he is also a member." (Louis Wirth, "World Community, World Society, and World Government," in *Social Processes in International Relations*, L. Kriesberg (ed), (New York: John Wiley, 1968), citing R. Park and E. W. Burgess' classic *Introduction to the Science of Sociology* (Chicago: Univ. of Chicago Press, 1921), p. 163).

several factors.[30] Such a propensity may be said to increase, first, as a state discovers the lack or the inadequancy of one, or of both, of two basic resources: (1) physical capabilities, or (2) knowledge of cause/effect relations underlying either a problem or its solution. These may lack simply because they are insufficient for a given task, or because of the nature of the definition of property rights, which may place the source of the problem within the jurisdiction of another. But, second, producing goods and services jointly with others will itself pose problems for a state, in the sense that it will involve interdependence costs. These costs are reckoned in such terms as circumscribed options and loss of autonomy, and the attempt will be made to keep them to the minimum level necessary. Hence,

1. The propensity for international organization is determined by the interplay between the need to become dependent upon others for the performance of specific tasks, and the general desire to keep such dependence to the minimum level necessary.

Further, introducing additional factors into this basic equation, I have demonstrated and illustrated that:[31]

2. There exists an inverse relationship between the ratio of international/national task performance and the total *level* of national resources a state possesses.
3. There exists an inverse relationship between the ratio of international/national task performance and the proportion of national resources a state decides to devote to the performance of a given task.
4. Over time, as (or if) national capabilities increase and become sufficient to perform a given task, the propensity for international organization (in that instance) decreases.

And,

5. Built into the international performance of any given task is a process of encapsulation, which will end in the situation of no further commitments to and no further increase in scope or capacity of the collective arrangement.

Thus, the propensity for international organization is the resultant of the interplay of several factors, and will change as these change. At any one point in time, states will differ among themselves in terms of these propensities. And, states with differing propensities will differ in their demands for international activities and in their commitments to international arrangements. Most basically, then, the processes of international organization will be contingent upon, and the forms of international organization differentiated by, such basic propensities.

[30] This discussion of states' propensities to organize internationally is based upon John Gerard Ruggie, "Collective Goods and Future International Collaboration," *American Political Science Review*, LXVI, No. 3 (forthcoming, September 1972). That analysis concerns itself with the basic dynamics of international organization; the present piece was intended, as its sequel; to infer some of the organizational and structural consequences of the basic dynamics.

[31] The following propositions were illustrated, in "Collective Goods and Future International Collaboration," by the analysis of development assistance and of research and development expenditures.

(ii) *Functional Interdependence*

Nevertheless, situations will differ in the extent to which such general propensities can simply be acted out, in the extent to which the objectives and capabilities of one state will interact with those of others, in the pursuit of specific tasks. For example, developments in science and technology are said to be of such a nature that states find they must collaborate internationally much more than in the past, and that it will become "mandatory for nations to reach agreements that constrain their freedom of action."[32] Likewise, economic relations, particularly among the highly industrialized states, are said to "require compatible efforts on the part of official and non-official groups in diverse societies."[33] Finally, the problems posed by the economic and social development, or lack thereof, of the Third World, have long been seen as requiring collaborative efforts. Processes and forms of international organization, in sum, will depend not only upon general propensities to collaborate; they will be determined not simply by objectives and capabilities, but also by the interaction of objectives and capabilities in different areas of functional interdependence.

If this is so, areas of functional interdependence ought to differentiate the programmatic activities of international organizations and of officials within them; we see, in the tables below, that they do. Some areas of concern and activity of international planners are displayed in Table 1. Inquired into, in interviews, were programmatic concerns with future developments, with factors not directly related to their specific area of activities (such as externalities and exogenous factors of various sorts), and with operationalizing general principles into specific programs. This total group consisted of three subsets: a group of "science planners"—engaged in planning activities in meteorology, telecommunications, and general science policy; a group of "development planners"—concerned with general questions of economic development of the Third World, and/or associated with the Second Development Decade; and a group of "economic planners"—concerned with trade, general economic affairs, labor, and the economics of public health. Their respective responses appear in Table 2. Comparing mean scores for the three sectors, we see that they do indeed differ, and that the differences are systematic. The rank ordering is identical in all three areas of concern, with science planners scoring highest, development planners next, and with economic planners lowest in each case.[34]

[32] Eugene B. Skolnikoff, "The International Implications of Future Technology," prepared for delivery at the 66th Annual Meeting, American Political Science Association, Los Angeles, September 1970, p. 28.

[33] Edward L. Morse, "The Transformation of Foreign Policies: Modernization, Interdependence, and Externalization," *World Politics*, XXII (April 1970), p. 377.

[34] The interviews upon which the Tables are based were conducted by Professor Ernst B. Haas, during the summer of 1968. I want very much to thank him for the use of his notes, and for his time in coding them. There are some obvious shortcomings to the data, which might be noted, particularly the small and non-random nature of the sample (i.e., only those officials, in non-European Community agencies, who were available, could be interviewed). Nevertheless, we sought to make the data as reliable as was possible.

TABLE 1: Areas of Concern of International Planners

Analytical Questions	Positive responses as % of Total (N=27)
CONCERN WITH FUTURE	
Are forecasts made?	74%
Are technological changes considered as a variable?	22
Are scientific breakthroughs considered as a variable?	7
Are exogenous factors (i.e., those *other* than the factors of direct concern to the planner) considered as a variable?	11
Are multi-variate scenarios used?	0
Are prescriptive forecasts made?	4
CONCERN WITH NON-TECHNICAL CONSTRAINTS	
Are exogenous factors of any kind included in plan?	59
Is there an awareness of the possibility of a lack of congruence between technological, economic, social, and political trends and factors?	37
Are social factors considered as being prior to economic?	22
Are political norms an explicit part of the planning process?	0
Are ethical norms an explicit part of the planning process?	0
Is one, or are several future states of affairs posited as being desirable and/or requisite in the plan?	15
CONCERN WITH OPERATIONALIZATION OF PLAN	
Are strategic lower-level goals, with appropriate action sequences determined (i.e., is there a macro-micro link)?	33
Is research being done to determine strategic goals and action paths?	22
Are operational goals (by sectors, regions, countries, etc.) being established?	74
Is research being done to derive operational goals from higher-level ones?	41
Are specific policies being worked out to implement these goals?	56
Is research being done to determine appropriate policies?	30

Source: Interviews conducted by Ernst B. Haas in Europe during the summer of 1968 (unpublished).

In sum, areas of functional interdependence do appear to differentiate the programmatic activities of officials in international organizations. We infer, then, that there may be circumstances under which the processes and forms of international organization depend upon more than simply the propensities of states to organize internationally; functional interdependencies may come to modify the impact of such propensities.

(iii) *Issue-Types*

The fact is, however, that even *within* areas of functional interdependence, states' demands for and commitments to organizational arrangements differ vastly. This has been said to be so of as specific a charge as conducting research and develop-

TABLE 2: Areas of Concern of International Planners: Mean Scores, by Sector of Planning

Planning sector	Areas of concern			
	Future	Non-technical constraints	Operationalization of plan	
All	.20	.22	.43	N=27
Economic planning	.10	.18	.33	N=10
Development planning	.17	.24	.40	N= 9
Science & technology planning	.35	.25	.56	N= 8
Maximum score = 1.0				

Source: TABLE 1

ment in atomic energy, space, and physics in the West European setting:

> A glance at existing arrangements or programme commitments shows that it is no longer possible to approach the Euratom, ESRO or CERN programmes from the same angle and even less possible to compare them.[35]

Within issue-area differences in some instances may well be as great or greater than *between* issue-area differences. So that in terms of its respective impact upon states' objectives, priorities, capabilities, and general predicament, and hence upon states' propensities and subsequent international activities, a "technological issue" may resemble an "economic issue" much more than it does a second "technological issue."

To discern such differences we must develop a conceptualization of issues that is more generic than one resting upon substantive differences, such as exist between trade, economic development, science and technology. A more generic conceptualization would cut across substantive differences of this sort, and would classify issues according to the manner in which, and the extent to which, they affect the basic configuration of states' objectives, priorities, capabilities, and general predicament—what we will refer to as a state's behavior-setting, in short. *Issue-types*, then, would consist of those groups of issues having similar effects upon the behavior-settings of states.

Such effects may be characterized in any number of fashions.[36] As an illustration, and because it captures an exceedingly important dimension of the behavior-settings of advanced industrial states, it is here suggested that different issues or developments be categorized according to their impact upon the *complexity* of states' behavior-settings. Of specific developments and issues—such as developments in technologies which allow direct TV broadcasting or the manipulation of

[35] Louis Villecourt, "Forms of Cooperation," in *Problems of Science Policy* (Paris: OECD, 1968), p. 146.

[36] For example, in the "Collective Goods . . . " article I chose to characterize these effects in terms of the collective dimension the behavior of states might exhibit, and then drew inferences for the nature of international organization on the basis of how the behavior of one state affects and is affected by the behavior of others.

climatic conditions, the increasing decision-making domain of business enterprises or the increased sensitivity of capital to opportunities elsewhere—we ask whether and how they affect the level of *complexity* of the configuration of factors a state must deal with. Issues of similar type, then, are those which have a similar impact upon the level of complexity—irrespective of their substantive differences. And, as the extent and level of complexity of states' behavior-settings change, their general propensity to organize activities internationally will become modified. As a result, demands for and commitments to international activities are further differentiated by, and contingent upon, issue-types.

As suggested by another formulation,[37] I propose to operationalize the concept of complexity as follows. The degree of complexity will be defined as being a function of:

1. *The number of relationships* (N_{R_i}) existing with others, which is important for the balance of loads and capabilities of communication channels;
2. The variety of the relationships (V_{R_j} with others, which is important because differentiation has to be coordinated;
3. The *degree of interdependence* these relationships exhibit (D_{R_k}), which is important because it may constrain policy objectives, limit the effectiveness of certain policy mechanisms, while eliminating others altogether.

The over-all complexity (C_X) of a behavior-setting of any given state, say (A), is then defined as

$$C_A = f(N_{R_i}, V_{R_j}, D_{R_k}),$$

and issues ($I_1, I_2, \ldots, I_n$) are categorized in terms of their impact upon the three components of C_A.[38] Finally, (A)'s demands for and commitments to international arrangements will vary further still, as C_A varies.

Summary

As they have been characterized, the processes of international organization are contingent upon, and the forms of international organization differentiated by, a number of factors. The first and most general of these were said to be states' general propensities for the internationalization of tasks and activities. Defined

[37] A similar definition, but of intra-organizational complexity, was formulated by Todd R. LaPorte, in the context of our Berkeley Complexity Collegium. Much of my own thinking stems from participation in that exciting venture, which Professor LaPorte led. His definitions are presented and explicated as an introductory chapter, "Organized Social Complexity as an Analytical Problem," to the volume (in progress) *Social Complexity: Challenge to Politics and Policy*. The contributions to that study, including my own, examine our various intellectual and institutional traditions in an attempt to evaluate their efficacy in coping with problems of social complexity.

[38] Of any specific issue or activity, I_n, we would ask three questions: (1) will it change the number of relationships existing with others, or, essentially, will (A) require the participation of others as a result of the emergence of I_n? (2) Must the variety of relationships existing with others change, i.e., will I_n require novel types of relationships, or will existing kinds suffice? (3) What degree of interdependence will result, and how will it constrain policy objectives, mechanisms, or policies? According to the response to each of these three, a measure of the impact of I_n upon the complexity of (A)'s behavior-setting is arrived at.

in terms of the interplay between national objectives and priorities, levels of capabilities and resources, calculation of interdependence costs, and so forth, these specify what a particular state will *seek* to do. States with differing propensities were said to differ in their demands for and commitments to international activities and arrangements. Yet, within sets of states, so defined, functional interdependencies may come to modify the impact of initial propensities, adding a further dimension to the contingency and differentiation of the processes and forms of international organization. Finally, among the *same* set of states as defined by general propensities, and *within* areas of functional interdependence, demands for and commitments to international activities and arrangements may come to vary further still, depending upon the impact of specific issues upon such factors as the complexity of states' behavior-settings.

The dominant image of international order, we noted above, imparts certain simplifying characteristics to our conceptions of political space, relations, and overall form. On the basis of our analysis here, we are now in a position to more fully describe some fundamental discrepancies between the image and the world it seeks to account for.

The Image Revisited

First, if there is a determining spatial dimension to the units being analyzed, that dimension is not territoriality and the units are not disjoint. Instead, the determining spatial dimension our discussion suggests is a behavioral one, where space is thought of as that which acts as a reference point for behavior, which both distinguishes units through differentiation and associates them by contiguity. Propensities, functional interdependencies, and issue-types define *behavior-spaces*; it is these which distinguish and associate states; and within such spaces, units are inter-connected and memberships are overlapping.

Second, the relations associating the units into a whole are highly contingent and discontinuous, existing at different levels of activities and commitments. If there is a "direction" to the pattern of organization, or the principles of structuring, it does not seem to be a movement towards either "higher" or more inclusive levels of authority, as these terms are usually understood. Not organization *above* states, but an enormously complex and rather fundamental *re-ordering* of political space and *re-structuring* of public authority *across* states appears to be the general pattern of the future. As with the emergence of the modern state, these are not phenomena the image readily captures.

Finally, the overall forms these processes will come to take do not approximate comparable upper bounds, the synthesis at the zenith. To possible structural representations of future organizational arrangements between and across states, we briefly turn below.

4. INTERNATIONAL ORDER: FUTURE IMAGES

No structural paradigm of politics is inevitable, but many come to outlive their efficacy because structural paradigms are not part of the normal discourse of the

political scientist. That is, these attract our attention as objects of study only once phenomena have tended *beyond* the normal. This must be the case today. For, the general puzzlement with emerging structural characteristics of international organization is being followed by attempts to alter and to reject the dominant image altogether. One such attempt seeks to devise an institutional framework for the maintenance of a "moderate international system."[39] The form exhibited by such a system would be a "multi-hierarchical" one. Existing hierarchies of power would be less distinct, have more layers, include regional decentralization, and, most importantly, would actually consist of "a number of functional hierarchies that will overlap but be much more diversified than the traditional hierarchy based essentially on military might."[40] This would be expected to occur within the framework of an "increasing pooling of sovereignties" for the exercise of specific tasks.[41] But this "multi-hierarchical" system is not an alternative to the structural paradigm of the dominant image; it essentially *multiplies* it in different geographical and functional areas.

Another attempt was informed by the early experiences of sector-specific integration in the European Community. The emerging structural configuration was said to resemble a "jagged mountain range," where "peaks would identify the culminating points of national and supranational decision-making systems, and differences in height and mass would represent differences in competence and power."[42] The jagged mountain range is clearly preferable to a single peak. But it does not escape the dominant image either; it *generalizes* it.

Neither the multiplication nor the generalization of the dominant image will suffice; much like Vladimir and Estragon these cling to the idea of the materialization of a *single* form, even while the lessons of events suggest that the *vanishing* of single forms is the essence of the processes we concern ourselves with.

The re-ordering of political space and restructuring of public authority across states is actor specific and issue-specific, hence asymmetrical and discontinuous. New loci are neither territorial nor institutional, but behavioral, and within them authority is shared, pooled, redistributed, or withheld, depending upon such considerations as we have described above. Such loci exhibit various kinds and levels of interdependence and complexity, are heteromerous but overlapping, and include elements of *several* forms, including the familiar tree, full lattices, and the "asym-

[39] Stanley Hoffmann, *Gulliver's Troubles, or the Setting of American Foreign Policy* (New York: McGraw Hill, 1968), pp. 356, ff; and, Hoffmann, "International Organization and the International System," pp. 400, ff. In the former this system is presented as a likely development; in the latter as "normative political analysis."

[40] Hoffmann, "International Organization . . . ," p. 410.

[41] *Ibid.*

[42] Walter Yondorf, *Europe of the Six: Dynamics of Intergration* (unpublished Ph.D. dissertation, University of Chicago, 1962), pp. 111–19; cited by Leon Lindberg and Stuart A. Scheingold, *Europe's Would-Be Polity* (Englewood Cliffs: Prentice Hall, 1970), p. 308, as a candidate for capturing the structural configuration of the Communities.

metrical overlap"[43] of the semi-lattice.

It has been my purpose to attempt to dismember a dominant image, and to suggest where and how clues to emerging structural arrangements are to be found. Below we conclude as we began: with puzzling organizational problems.

5. IN CONCLUSION, SOME CONJECTURES

As they have here been characterized, the basic processes of international organizational change are reinforced by and multiplied in other social settings, so that changes in international organization appear to be part of a larger matrix of general social organizational change. This matrix would include international relations in general, particularly as affected by various cross-national and transnational communications, interactions, relationships, and identifications, which have been described as resulting from the advanced industrial societies "*growing out of* their nation-states which even become like strait jackets for them."[44] But much the same is being said of the various subsystems of these societies, the polity, the economy, and of their cities as well.[45] We appear to be witnessing, then, a broader *devolution* of existing forms of social organization, among which the modern state, as judged by its interstate organizational arrangements, is only one. This will have some rather fundamental consequences for at least one variant of peace research.

In political science, one framework for peace research has traditionally been international organization. A basic motivation of students of international organization has been finding associationalist means to foster the outbreak of peace, or examining whether existing trends facilitate or retard such an eventuality. Taking conflict resolution within the modern state as their model, the expectation has been held that the growth of organizations above states, and/or supranational integration, would be attended by new techniques for conflict resolution internationally. The evolution of collective actors—how they come to be established, how they come to acquire and to expand their tasks, or how they fail to do so—constituted the framework for subsequent discussions of the possibilities for peace and peacekeeping. But according to the perspective developed here, the evolution of collective actors will at worst be stunted and at best be highly discontinuous. In either

[43] The "asymmetrical regional overlap" is one of the three possible outcomes to the regional integration process that Haas suggests be utilized "as provisional points in the future on which we fix our analytical attention." ("The Study of Regional Integration," p. 634) The other two are the "regional state," which conforms to the tree, and the "regional commune," which confirms to the full lattice structure.

[44] Galtung, "On the Future of the International System," p. 312.

[45] I do not wish to rehearse the various arguments offered in the spotty literature on the "post-industrial" society. One particularly interesting piece, on the "revolution that is unhitching the social processes of urbanization from the locationally fixed city and region," does deserve special mention. In it, Melvin Webber concerns himself with "urbanization beyond the city," and describes the city as a "life-space that is not defined by territory and [which] deals with problems that are not local." ("The Post-City Age," *Daedalus*, 97 (Fall 1968), pp. 1091–1110; the citations are from pp. 1092 and 1099.

case, insofar as the evolution of collective actors implies continuity and growth, it does not appear to be the most efficacious framework. Instead, for questions of peace and peacekeeping, we might begin to look toward the discontinuous, asymmetrical, heteromerous and overlapping loci that the *devolution* of existing structures appears to imply, and to derive from this new framework new hypotheses for the future.

If the ungainly form our perspective seems to entail taps at least *some* significant emerging structural properties of international organization, we might profitably use it as a baseline for some brief conjectures depicting one set of possibilities regarding peace and peace-keeping.

There are no grounds for speculating whether conflict might come to be more or less frequent as such a system emerges; we generally do tend to think, however, that basic and rapid change of any kind increases the likelihood and incidence of conflict. The structural characteristics we have described *do*, however, have implications for the impact of conflicts upon the system as a whole.[46] First of all, the emerging system appears to be based upon various and varying mutualities of dependence, of both possibilities and constraints. That these are varying implies that an egalitarian interdependence will not become a system-wide attribute. But different types of interdependence will come to characterize relations within clusters of states. Second, such a system will reduce the formation of "clear fronts," or clear and generalized patterns of division, with behavior coming to be governed by rules which are more specific to particular kinds of issues, rather than by generalized responses. The more intense the mutualities of dependence, the more likely this development will be. Hence, it too will characterize relationships within clusters of states more than inter-cluster relationships. Nevertheless, behaviorally-defined clusters of states will not be coterminous as to membership, objectives, ideologies, and so forth; there will exist overlapping and multiple memberships, as we have argued.

Such a structural configuration may be seen as increasing the possibility of isolating conflicts, of keeping conflictual relations self-contained, and not letting them determine other kinds of relationships. For better or worse, states will come to tolerate conflict, and to learn to live with the ambiguity of engaging in serious conflict over one kind of issue while, at one and the same time and with the same state(s), behaving "normally" over others. In sum, it may well become a more conflictual world, but it will be one less seized by conflict.

Attempts by international organizations to mediate conflicts, particularly attempts by the UN to become involved in various peace-making or peace-keeping capacities, will become less successful in such a system, *if* past performance can be used as a guide for future possibilities. In the past, UN involvement in international disputes and conflicts has been determined by a number of *environmental* configura-

[46] Without agreeing with all of them, I have sought to ask of these structural characteristics the extent to which they further or retard what Galtung calls the three "associative conditions of peace." (See, "On the Future of the International System," p. 308). The conditions are only partially and imperfectly met.

tions, but not, in general, by the merits of a particular case itself. In other words, how a dispute interacted with different kinds of environmental cleavages, at any given point in time, led to UN involvement, or lack thereof, and not whether a case *inherently* merited involvement.[47] Two trends we have here sketched will increase the uncertainty surrounding UN involvement attempts. First, the environment lacks clear fronts and cleavages which, in the past, served as guides for organizational behavior. Second, and more significantly, as disputes come to be isolated, the possibility of bringing other issues to bear in the process of coalition formation decreases, and mobilizing the organization becomes a more difficult task. For the UN, this was already beginning to be a problem in the early sixties; since 1965, the number of disputes with fatalities not referred to the UN has exceeded the number of those referred.[48]

In sum, not only a new focus for international organization, and a new framework for peace-research as a part of international organization, but also new criteria for allowing and evaluating peace-keeping activities by international organizations must be sought. To put it differently, and more generally, the structural characteristics of the emerging system, and not of the dominant image, must come to guide our thinking; else we shall continue to exhibit puzzlement and look to the reshuffling of organizational units and the adoption of decision-making techniques as "solutions" to the "problem" of fundamental institutional transformation.

[47] I base this summary upon a simulation of UN involvement in international disputes over a twenty year period, from 1945–1965. It is presented in John Gerard Ruggie, "Contingencies, Constraints, and Collective Security: Simulating UN Involvement in International Disputes," in Martin Landau (ed), *Organization Theory, Comparative and International Administration* (Durham: Duke University Press, in press).

[48] From a study by Ernst B. Haas and J. S. Nye, in progress.