COMMENTS ON THE THEORY OF ORGANIZATIONS*

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This is an attempt to sketch in very rough form what seem to me some of the central concepts and problems of organization theory. In the first section I have tried to define the field of organization theory and to indicate with some care what justification there is for regarding it as a distinct area of theory, related to, but by no means identical with, the theory of small groups and the theory of social institutions. The comments in the second section on subject-matter areas simply spell out the implications, many of them perhaps obvious, of the central argument of the first section.

This paper is concerned with all kinds of organizations, and not simply with those that fall within the area of public administration. This definition of the scope of organization theory reflects my own conviction that there are a great many things that can be said about organizations in general, without specification of the particular kind of organization under consideration. Moreover, even if we were interested solely in governmental organizations, I believe that a great deal can be learned from the comparison of their characteristics with those of other kinds of organizations, and from attempts to explain the similarities and differences that are found. Neither of these statements denies the existence of numerous and important phenomena that are peculiar to governmental organizations or the need for theory in public administration to deal with these phenomena.

THE SUBJECT OF ORGANIZATION THEORY

Human organizations are systems of interdependent activity, encompassing at least several primary groups and usually characterized, at the level of consciousness of participants, by a high degree of rational direction of behavior toward ends that are objects of common acknowledgment and expectation. Typical examples of organizations are business firms, governmental administrative agencies, and voluntary associations like political clubs.

In complex enterprises the definition of the unit is not unambiguous—a whole agency, a bureau, or even a section in a large department may be regarded as *an* organization. In such a nest of Chinese blocks the smallest multi-person units are the primary groups; the largest are institutions (e.g., "the economic system," "the state") and whole societies. We will restrict the term "organization" to systems that are larger than primary groups, smaller than institutions. Clearly, the lower boundary is sharper than the upper.

Complexity in any body of phenomena has generally led to the construction

of specialized theories, each dealing with the phenomena at a particular "level." Levels are defined by specifying certain units as the objects of study and by stating the propositions of theory in terms of intra-unit behavior and inter-unit behavior. (Cf. the sequence of elementary particle-atom-molecule in physics and the sequence: gene-chromosome-nucleus-cell-tissue-organ-organism in biology.)

Not every arbitrarily selected unit defines a suitable level for scientific study. The most important "unities" that make a level an appropriate one for theory construction and testing appear to be the following:

(a) The units at the level in question should exhibit a high degree of internal cohesion relative to their dependence on each other. Under these circumstances we can discover generalizations about the internal properties of the individual units as quasi-isolated systems (e.g., propositions about communications patterns among component primary groups of an organization). We can also discover approximate generalizations about the relations between units as wholes (e.g., propositions about competition between two organizations).

(b) The units should exhibit internal properties that are different (or depend on different mechanisms) from those that predominate in the internal properties of sub-units at the next level below (e.g., the determinants of the volume of communication between members of two different primary groups in an organization should be distinguishable in important respects from the determinants of the volume of communication between members of a single primary group).

These two tests are not intended as metaphysical assertions about "wholeness" or "emergent" properties, but simply as criteria determining whether, in fact, verifiable propositions can be constructed employing the units in question as approximations to the full complexity of nature. Even if at some stage in inquiry we should be able to reduce the propositions of theory at one level to those at the next lower level—as the theory of gases has been reduced to statistical mechanics—the former propositions would still retain their usefulness for purposes of application and economy of statement. Indeed, the value of both sets of propositions is enhanced by their translatability from the one to the other.

Human organizations would seem to qualify to a high degree as suitable units defining a level of analysis of systems of human behavior. With respect to the first criterion stated above, the most superficial observation shows that the boundaries between organizations have real behavioral significance, and that it is meaningful, in first approximation, to state propositions about the relations between organizations regarded as wholes. (I trust that I have made clear that no notion of "group mind" is implied in this last statement.)

With respect to the second criterion, I believe that enough is known about the psychological mechanisms that are primarily responsible for cohesion and interdependence in the primary group to show that these mechanisms cannot easily account for the corresponding phenomena in the larger organized aggregates; and that there are important organizational phenomena that do not have exact counterparts at the primary group level. A number of examples of

these mechanisms and phenomena, which are central to organizations but absent from or of lesser importance to primary groups, will be given in the next section.

But why speak of *a* level of organization theory? Do we not need as many levels as there are structural layers between primary groups and institutions? I think not, because I do not believe that these various levels are distinguishable to an important extent in terms of the second criterion suggested above —i.e., there are no important new mechanisms to be discovered at these successive levels. The propositions of organization theory can probably be stated with systematic ambiguity so as to refer indifferently to the relations of divisions within a bureau or the relations of bureaus within a department. As small differences in degree begin to approach qualitative significance at the upper end of the scale, we have probably already reached the level of institutional theory. In the future, of course, the results of research may force us to revise this assumption and to introduce additional levels of theory.

MAJOR PROBLEM AREAS

The study of organizations has hardly progressed to the point where a definitive list can be constructed of the major areas for research. The following list was arrived at primarily by considering which characteristics of organization— particularly those distinctive ones that identify the level of organization theory —require dissection and explanation. I have not tried to construct watertight categories, and it will become evident that several of the items represent different ways of looking at the same problem. Until we know what frames of reference are going to be the most useful for organization theory, it will surely be desirable to retain alternative frameworks, and to take considerable pains to develop means for translating from one framework to another.

1. *The process of decision-making in organization.* A language for the description of decision-making processes appears to offer considerable promise as a framework for the study of organizations. The central notion is that a decision can be regarded as a conclusion drawn (though not in any strict logical sense) from premises; and that influence is exercised by transmitting decisions, which are then taken as premises for subsequent decisions.

When the problem of influence is stated in these terms, our attention is called to some features that are not prominent in other formulations. We see, for example, that the process may depend not only upon interpersonal relations between influencer and influencee, but also upon the structure and accepted rules of transformation of the language employed by them. One can begin investigation here by posing such questions as how influence is transmitted in an organization between professional groups that employ different problem-solving technologies, e.g. accountants and engineers. Work on organization theory utilizing this framework could probably soon be related, in a mutually beneficial way, to research on the sociology of knowledge and on the psychology of the problem-solving process.[1]

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[1] The relation between organizational behavior and individual decision-making and problem-solving processes is discussed in the author's *Administrative Behavior* (New York,

2. *The phenomena of power in organizations.* A characteristic feature of the mutual influence of organization members upon one another is that this influence exhibits striking asymmetries—as, for example, in the superior-subordinate relationship. These asymmetries appear to be what we have chiefly in mind in using such terms as "power" and "authority." The following are a number of important research tasks in this area:

a. A fully operational definition of power and methods for observing and measuring power relationships is not yet at hand, but would seem fundamental to the description of organizational behavior.

b. More needs to be learned about the motivational basis of power in organizations, including the roles of sanctions, identifications, and attitudes of legitimacy in the acceptance of authority. Progress has been made in the study of the analogous phenomena in primary groups (e.g., work on leadership and on group morale),[2] but it is not obvious that the mechanisms of influence within the primary group tell all, or even most, of the story of influence processes in larger organized aggregates.

c. In elaboration of the last point, the distinction between the "formal" and the "informal" in organizations appears to lie, in part, in differences between the psychological bases of cohesion that are involved. When we refer to power as formal, what we appear to mean is that internalized attitudes toward legitimate authority provide the motivation for acceptance of the relationship. While feelings about legitimacy undoubtedly play a role in primary group relationships, I would conjecture that they take on additional importance when they serve as a substitute for the immediate experience of approval and disapproval in face-to-face relationships.[3]

d. Another mechanism that is important in the transmission of influence in organizations is the interlocking of primary groups through the dual membership of supervisory employees. In general, each supervisory employee is a member both of a group in which he is formal leader and of another in which his

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1947), Ch. 5. My researches in the decade since this connection occurred to me have steadily deepened my conviction that a very deep relation—not by any means analogical or metaphorical—exists between decision processes in organizations and the processes described by Gestalt psychologists in their study of the problem-solving process. Since the purpose of this paper is to state problems, not to solve them, I will have to be content here with this simple statement of my belief.

[2] For an introduction to the literature, see Harold Guetzkow (ed.), *Groups, Leadership, and Men* (Pittsburgh, 1951), and "Human Relations Research in Large Organizations," *Journal of Social Issues*, Vol. 7, no. 3 (whole number), 1951.

[3] An overreaction from the excessive emphasis on formal organization in the earlier work on organization theory has led, in the last two decades, to an almost equally serious neglect of the importance of attitudes toward legitimacy. The same overreaction—from legalistic analyses of the state in terms of "sovereignty" to a pure power-politics approach to political behavior—has occurred in the other areas of political science as well. (Lasswell and Kaplan, for example, in *Power and Society* (New Haven, 1951) come very close to treating legitimate authority as an epiphenomenon that has no independent influence on the development of a system of political behavior.) With the reconstruction of "legitimacy" as a psychological, rather than a legal concept, the way is now open to a reconciliation of the formal and the informal (legitimate authority and power) within a behavioral framework.

immediate superior is formal leader. The principal research problems here are to determine the behavior patterns that are adopted by executives in these "cross-pressure" situations; and, if there are several such patterns, to find what determines which one will be adopted. The same questions need to be answered with respect to the "staff" man who, because he is attached to a "line" unit, also has potential or actual membership in two primary groups. It remains to be seen whether cross-pressures produce the same behavior in these organizational situations as in the other social situations where they have been studied.

3. *Rational and non-rational aspects of behavior in organization.* Organizations are the least "natural," most rationally contrived units of human association. But paradoxically, the theory of an organization whose members are "perfectly rational" human beings (capable of unlimited adaptation) is very nearly a perfectly vacuous theory. It is only because individual human beings are limited in knowledge, foresight, skill, and time that organizations are useful instruments for the achievement of human purpose; and only because organized groups of human beings are limited in ability to agree on goals, to communicate, and to cooperate that organizing becomes for them a "problem."[4]

Organization theory is centrally concerned with identifying and studying those limits to the achievement of goals that are, in fact, limits on the flexibility and adaptability of the goal-striving individuals and groups of individuals themselves. The entrepreneur of economic theory is limited only by constraints that are external to himself and his organization—the technology—and by the goal-striving of individuals whose interests are not identical with his. Administrative man is limited also by constraints that are part of his own psychological makeup—limited by the number of persons with whom he can communicate, the amount of information he can acquire and retain, and so forth. The fact that these limits are not physiological and fixed, but are instead largely determined by social and even organizational forces, creates problems of theory construction of great subtlety; and the fact that the possibilities of modifying and relaxing these limits may themselves become objects of rational calculation compounds the difficulties.

In this general area of research, promising suggestions as to the direction in which we might move are contained in oligopoly theory and game theory (formulation of the "outwitting" problem),[5] and in sociological speculations about the self-confirming prophecy. I would single out the following areas for special attention:

a. Identification of the limits of rationality. We need a more complete and systematic taxonomy of the constraints, internal to the system of social action, that serve as limits to the attainment of goals. This would lead to empirical research on the questions: (i) under what circumstances particular constraints

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[4] This point is also elaborated upon in *Administrative Behavior.* See particularly pp. 39–41, 80–84, 96–102, 240–44.

[5] See John von Neumann and Oskar Morgenstern, *Theory of Games and Economic Behavior* (Princeton, 1944), especially Ch. 2.

do and do not operate, including inter-cultural uniformities and differences, and (ii) under what circumstances the modification or removal of particular constraints becomes an object of rational calculation.

b. Theory of organizational innovation and change. Plans are regarded as "utopian" when their implementation would require changes in internal constraints that are thought to be unchangeable. Essentially, utopian plans are rejected because "you can't change human nature" in those respects that would be essential to achievement of the plan. Research is needed as to the criteria that are applied by human beings in planning situations to determine which of the behavior variates they will regard as variable (i.e., subject to rational determination), and which as fixed (i.e., constraints on goal attainment).

c. Reification of groups. The limit of human understanding in the presence of complex social structures leads human beings to construct simplified maps (i.e., theories or models) of the social system in which they are acting, and to behave as though the maps were the reality. To the extent that such maps are held in common, they must be counted among the internal constraints on rational adaptation. What we have just said applies, of course, to all systems of classification which, by determining when situations are "similar" and when "different," provide the individual with the social definition of the situation.

My earlier comments about the relation of "formal" organization to attitudes of legitimacy can be generalized in terms of this notion of social classification. The process of organizing involves, among other things, securing acceptance by the organization members of a common model that defines the situation for them, and provides them with roles and expectations of the roles of others, and with commonly accepted classificatory schemes. Attitudes of legitimacy probably provide a principal motivational base for the organizing process.

What is needed here is study of the factors that determine how an organization will be perceived by the persons in it, how the mode of perception affects behavior, and what the effects are of a greater or lesser degree of sharing of such perceptions.

4. *The organizational environment and the social environment.* Members of an organization generally come to it already equipped with the mores of the society in which it operates. To what extent can and do organizations develop and inculcate mores that are distinct from the mores of the society? To what extent are there in a society *generalized* mores about behavior in organizations that provide the basis for the operation of the individual organizations in the society (e.g., generalized mores about superior-subordinate roles)?

Organization theory has been largely culture-bound through failure to attack this problem.[*] The theory of bureaucracy as developed by Max Weber and his followers represents the furthest progress in dealing with it. The historical data appealed to by the Weberians need supplementation by analysis of contemporary societies, advanced and primitive. A comparison of intra-cultural uniformity and variation in organization patterns with inter-cultural

[*] Cf. Robert A. Dahl, "The Science of Public Administration: Three Problems," *Public Administration Review*, Vol. 7, pp. 1-11 (Winter, 1947).

uniformity and variation would provide the evidence we need to determine to what extent the cooperative patterns in organizations are independent of the mores of cooperation of the society.

5. *Stability and change in organizations.* Any theory of the movement of a system of organizational behavior through time must take account of the apparent stability exhibited by organizations. From every evidence, this stability must be an extremely complex phenomenon. It may rest in part on the kinds of bonds, which we might refer to as non-rational, that have been observed in the primary group; it may depend in part on the rational calculations of members that their interests are served by the organization. It is because the role of these, and possibly other, bases of stability needs to be explored that I offer the following suggestions:

a. It is possible that systems in which the "non-rational" type of stabilizing mechanism predominates will behave in a qualitatively different fashion from those in which the "rational" type of stabilizing mechanism prevails. If, by construction of models embodying the two types of mechanisms, a qualitative difference could be deduced, the way would be open to empirical assessment of the importance of the two mechanisms.[7]

b. The work that has been done to date on the theory of the "rational" mechanism would suggest that stability in this case depends on certain relations between the aspiration levels of members and their achievement levels. If so, we can draw on the psychological research that has already been done on these latter phenomena to design experiments and field studies that would test whether this is, indeed, one of the mechanisms involved in stability.

c. We may borrow the economists' term "entrepreneur" to refer to an individual who specializes as a broker in finding mutually acceptable terms on which a group of persons can be induced to associate, or to continue association, in an organization.[8] We need research to determine what the role is of entrepreneurship, so defined, in the process of organizational activity. I conjecture that there are some close relationships both with the "middleman" notion, introduced in topic 2 d, and with the kind of stability mechanisms discussed in 6 b. Study is also needed of whether the uniqueness or non-uniqueness of the acceptable terms of association is an important determinant of the amount of authority

[7] For further discussion of these mechanisms in the context of mathematical models, see Herbert A. Simon, "A Formal Theory of Interaction in Social Groups," *American Sociological Review*, Vol. 17, pp. 202–11 (April, 1952), and "A Comparison of Organization Theories," *Review of Economic Studies*, forthcoming.

[8] I believe that this usage does not do too much violence to the term, at least as it is used by economic historians and those concerned with the dynamic theory of the firm, e.g., Schumpeter. In terms of this definition, entrepreneurship is not peculiar to business concerns but is present (and, I believe, to the same important extent) in governmental and voluntary organizations as well. Examples of important entrepreneurs in governmental, non-profit, and voluntary organizations would be William Alanson White, Gifford Pinchot, William Rainey Harper, Clarence Streit—the list is inexhaustible. Anyone attempting to describe the roles of men like Charles Merriam and Louis Brownlow within the fields of political science and public administration can hardly avoid using the concepts of entrepreneurial theory.

that can be exercised over organization members. This relationship has been exhibited in some formal models, but it needs empirical verification.

d. The two topics just discussed get very close to the heart of the processes of bargaining and the formation of coalitions, insofar as these processes involve rational calculation of advantage.[*] The formal apparatus of game theory appears to provide an appropriate language of theory formulation, and, on the empirical side, some of the problems could probably be examined by means of relatively small-scale laboratory experiments.

e. Another aspect of survival and stability is the question of how organizations adapt themselves to uncertainty and incomplete information. In the past two decades this has been a favorite topic of economists,[10] but only in the last five years has there been much attention to the two aspects of greatest importance to organization theory: (i) reduction in the impact of uncertain events by retention of "flexibility" and (ii) the role of a stable social environment as a means of providing predictability to the individuals who are a part of it.

Under the first heading, research is needed as to the implications of particular ways of organizing behavior for the adaptability of the organization under changing, unpredictable circumstances. Under the second heading, research is needed as to the existence and nature of mechanisms in social organizations that are analogous (in the sense of performing the same function) to the homeostatic mechanisms of organisms. Whether organizations are adaptive and possessed of homeostatic mechanisms is an empirical question, but one which, in all probability, can be answered in the affirmative. But the important theoretical issue is the nature of the mechanisms—a question that is not solved by reference to the organismic analogy. Moreover, while primary groups and social institutions may also exhibit homeostasis and adaptivity, there is no reason to believe that the mechanisms involved are the same ones that produce these phenomena in organizations. Functional equivalence does not imply structural equivalence.[11]

6. *Specialization and the division of work.* The division of work and the design of the organizational communications system have in the past been the central concerns of persons interested in organization theory for purposes of application. The question usually asked is: "How do we divide the work, and what channels of communication do we establish in order to operate efficiently?" For purposes of research, the question is more properly stated: "What are the consequences for organizational activity of dividing the work one way rather

[*] The process that Philip Selznick refers to as "cooptation" fits in here also. See his *TVA and the Grass Roots* (Berkeley, 1949).

[10] See the excellent survey of the economic literature in Kenneth J. Arrow, "Alternative Approaches to the Theory of Choice in Risk-Taking Situations," *Econometrica*, Vol. 19, pp. 404–37 (Oct., 1951).

[11] This last proposition is an important part of our justification, in the first part of this memorandum, for the study of "levels." The issues involved are discussed with great sophistication by T. C. Schneirla, "The 'Levels' Concept in the Study of Social Organization in Animals," in John J. Rohrer and Muzafer Sherif (eds.), *Social Psychology at the Crossroads* (New York, 1951).

than another, or employing one set of communications channels rather than another?"

The last half of the question (communications) is best answered in terms of the frames of reference of topics 1 and 2. The subject of the division of work requires further comment. We are considering, of course, not only the question of specialization of the individual organization member, but also the allocation of tasks to whole organization units—in fact, it is the question of specialization among the larger aggregates rather than specialization within the primary group that is the proper concern of organization theory. We are equally concerned with "vertical" specialization—i.e., allocation of decision-making functions to various status and authority levels in an organization—and with "horizontal" specialization—i.e., fixing the jurisdictional boundaries of coordinate organizational units.

a. Current theories of specialization in organization (excluding the "human relations" approach to the primary group) are largely derived, via the scientific management movement, from Adam Smithian notions that specialization is a means to efficiency, and hence to effective competition. There has been little examination of the alternative Durkheimian idea that specialization is a means of *protection* from competition.[12] The research problem suggested by the contrast is to examine in what respects specialization (and what kinds of specialization) increases organizational stability; in what respects it jeopardizes stability; and to what extent these considerations enter into decisions about specialization. The problem is also related to 5 e in that certain forms of specialization may make an organization less dependent on what other organizations do, and hence may provide a means for dealing with uncertainty.

b. The consequences of specialization depend on the constraints discussed in topic 3. It is an important question as to how far specialization is determined by constraints external to the organization—the technology of its activities— and how far it is determined by internal constraints—the psychological and sociological limitations upon rational adaptation. (The situation is even a bit more complicated because the technology—in the sense of the physical, chemical, biological, etc., processes involved in the organization's activity—is not independent of the state of technological knowledge, and the latter may, in turn, be interdependently related to the forms of social specialization that prevail.) In almost every city, the fire department is a recognized organization unit, and in almost every steel mill, the blast furnace department. Here are examples of specialization that appear to be dictated by the technology—the units are "natural" in this sense. On the other side we find units that are "natural" in the sense of being specialized to handle socially-defined purposes, which, in turn, depend on the processes of reification discussed in 3 c (e.g., the Children's Bureau). Research into the theory of specialization making use of the framework suggested in topic 3 is needed to clarify these issues, and to formulate and test propositions about the consequences of specialization.

[12] My former colleague, Victor A. Thompson, first pointed out to me the significance of this distinction.

c. The relationship between specialization and the internal constraints on rational adaptation is two-way. The division of work may be determined, partly or wholly, by such constraints; it will in turn create constraints. That is, the form of specialization will be a major determinant of the frames of reference, skills and knowledge, identifications and foci of attention of organization members. Probably this is the most promising viewpoint from which to tackle the non-rational aspects of formation of group identifications (or "interests" in the political sense) and the effects of such identifications upon inter-group processes (cf. 5 d on the "rational" aspects).

d. Problems of vertical specialization are closely related to topics 1 and 2. In applied organization theory, the questions are usually stated in terms of "centralization" and "decentralization."

This list of research areas illustrates, I think, that the phenomena of organization constitute an important level of theory—a level that is encompassed neither by the usual conceptualizations of small-group processes nor by those of the more macroscopic analyses of cultures and institutions.

The characteristics of this level that give it its particular "flavor" are the following: (a) its focus is on relations among interlocking or non-interlocking primary groups rather than on relations within primary groups; (b) it is largely concerned with situations where *zweckrationalität* plays a large role relative to *wertrationalität* (as compared with the study either of small groups or of cultures); (c) in these situations the scheme of social interaction becomes itself partly a resultant of the rational contriving of means and the conscious construction and acting out of "artificial" roles; and (d) explanation of phenomena at this level requires the closest attention to the fluid boundaries of rational adaptation, including the important boundaries imposed by group frames of reference, perceptual frameworks, and symbolic techniques. In contrast to these characteristics, the level of primary group theory must pay much more attention to the personal values that are emergent from the process of group interaction itself, the acculturalization of individuals to the group, and the particular forms of cohesion that arise out of face-to-face interaction and individual sensitivity to group approval.

It would be wrong, of course, to insist that none of the primary group phenomena are relevant to inter-group relations, or vice versa. Nevertheless, the important work that has been done on small groups in the past generation—much of it involving the observation of groups that were part of larger organizational structures—has contributed very modestly to the solution of the problems of organization theory.