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ORGANIZATIONAL INNOVATIONS IN CRISIS-
RELEVANT GROUPS

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**ORGANIZATIONAL INNOVATIONS IN
CRISIS-RELEVANT GROUPS**

by

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The following reports from the first of a two-phase study of change in crisis-relevant organizations brought about by the possibility or occurrence of civil disorder.* Based upon some preliminary observations of selected urban police and fire departments, this first phase summarizes a middle range theoretical model¹ developed in an effort to capture the process of change when charter is threatened in an indeterminant environment. The second phase (presently ongoing) empirically examines and refines the model.**

As stated, the model is based on studies of change in crisis-relevant organizations as adaptations to the problems posed by the possibility of civil unrest. Organizationally, we suggest that change can be conceptualized as an intelligence processing activity,² i.e., bringing technical and political information to bear upon the definition and elaboration of problems and the execution of solutions to meet these problems. The concepts, assumptions, and basic and derived propositions are presented in sequential fashion. This will be followed by some brief discussion of the conceptual logic of the model.

The Model

Concepts

1. **Organization:** A purposive system of differentiated human activity which is structurally integrated in the form of a unique problem-solving whole.³ Organizations have the following analytical dimensions: organization charter, resources and technology, activities, normative structure, power structure, status structure, authority structure, environmental relationships.⁴
2. **Organization-environment:** The sum product of an organization's linkages with individuals, groups, publics, other organizations, and the physical setting.⁵
3. **Change: The Objective Phenomenon:** A relatively permanent alteration in the internal elements and/or external environmental relationships of an organization resulting from the effect of a change agent(s), within a specified space-time context.⁶

*This study is part of the work being done at the Disaster Research Center, The Ohio State University.

**The second phase of the study is presently ongoing and its conclusions will be presented in subsequent papers.

4. **The Process of Change:** An intelligence processing organizational activity in which information and other forms of knowledge are brought to bear in the definition of problems, selection of alternatives, and choosing courses of action to solve these defined organizational problems.⁷

Assumptions

1. As problem solving social systems, organizations attempt to approach rationality in a dynamic and uncertain environment. In effect, they attempt to ascertain cause/effect understanding of organizational domain.⁸
2. Organizations facing environmental uncertainty and threat to charter will change as an adaptive response to meet that threat.⁹
3. Organizations facing environmental uncertainty and threat to charter require intelligence to bring about organizational changes.¹⁰

Axioms

1. The greater the environmental threat to charter, the greater the need for organizational change.
2. The greater the environmental threat to charter, the greater the need for intelligence.
3. The greater the need for organizational change, the greater the need for intelligence.¹¹

Basic Propositions

1. The greater the environmental threat to charter, the greater the organizational intelligence.
2. The greater the organizational intelligence, the greater the organizational change.
3. The greater the comparative reference linkages, the greater the organizational intelligence.
4. The greater the organizational intelligence, the broader the range of problem solving.

5. The greater the organizational intelligence, the more complex the process of organization change.

Derived Propositions

6. The greater the environmental threat to charter, the greater the degree of organizational change. (Deduced from 1 and 2)
7. The greater the environmental threat to charter, the greater the comparative reference linkage. (Deduced from 1 and 3)
8. The greater the environmental threat to charter, the broader the range of problem solving. (Deduced from 1 and 4)
9. The greater the environmental threat to charter, the more complex the process of organization change. (Deduced from 1 and 5)
10. The greater the comparative reference linkage, the greater the organization change. (Deduced from 2 and 3)
11. The greater the number of alternatives of action considered, the greater the organization change. (Deduced from 2 and 4)
12. The more complex the process of organization change, the greater the organization change. (Deduced from 2 and 5)
13. The greater the comparative reference linkage, the broader the range of problem solving. (Deduced from 3 and 4)
14. The greater the comparative reference linkage, the more complex the process of organization change. (Deduced from 3 and 5)
15. The broader the range of problem solving, the more complex the process of organization change. (Deduced from 4 and 5)

Discussion

Requirements of brevity render it impossible to discuss the operationalization or measurement of the variables incorporated in the model. A brief discussion of the logic of the approach will therefore have to suffice. With regard to proposition 1, when charter is threatened the objectives of the organization become problematic and its relationship to the environment altered and unstable. We argue that an increasing amount of intelligence is brought to bear under these conditions. The uncertainty and threat must

be evaluated and understood, possible courses of action elaborated, and decisions made as to appropriate types of response. All this requires increasing amounts of intelligence. In the case of police and fire departments, the possibility of civil disturbance was a direct environmental impingement upon the charter of these organizations. This was a new contingency, at least partly undefined, to which some adaptation was required. In order to prevent or minimize associated problems, intelligence resources concerning the development of policies, plans and procedures, training, etc. was necessitated.

With regard to proposition 2, at the more abstract level, we suggest that organizations with large amounts of intelligence employed in decision making will be adaptive, changing organizations. This is akin to Burns and Stalker's distinction between mechanistic and organic forms of organization.¹² High intelligence organizations are more amenable to fluid environments, have a more elaborate technology, and will more readily change its structures and activities to meet new contingencies. In this particular study we therefore hypothesize that those police and fire departments having greater amounts of intelligence related to the phenomenon of civil unrest will show objectively greater amounts of change.

Proposition 3 deals with a particular type of interorganizational relationship. From Evan's discussion of organization sets,¹³ comparative reference linkages refer to relations between organizations having similar charters and perhaps similar structures and activities as well. In the context of this particular study, comparative reference relationships are other police or fire agencies with which the focal departments have been in contact. Our reasoning in this proposition is that since these comparative reference organizations have similar environmental problems, they require similar kinds of knowledge for their operation. Therefore those organizations having many such relationships have available intelligence resources which can be employed in organizational activities.

With regard to proposition 4, we reason that increased amounts of intelligence broadens the range of problem solving. For example, the definition or elaboration of a problem may reveal underlying complexity. Various courses of action not previously considered are likely to become possibilities with increased intelligence. There has been a growing body of information within the safety network concerning response to or prevention of civil disturbance which has emanated from various sources such as journals, associations, meetings, seminars, government agencies, and various police and fire departments as they develop their own programs. This intelligence deals with numerous aspects of the problem and has relevance for policy, planning, training, operations, and community relations in these organizations. We suspect that those departments utilizing substantial amounts of this information would give consideration to more courses of action in the development of changes.

As was mentioned in discussing proposition 4, there has been a growing body of intelligence concerning civil unrest which has been accessible to police and fire departments. Some departments have utilized rather substantial amounts of this intelligence in incorporating changes in various aspects of their operations. In turn, in the development of organizational changes, variable numbers of organizational incumbents and subunits have become involved, various types of activities have been performed, and variable amounts of time have been expended. In effect, the process of change varies along a continuum which can be conceptualized as relatively simple to increasingly complex. The key point in proposition 5 is the hypothesized positive association between degrees of intelligence and complexity of the process of change. With increasing intelligence there is more data to be processed, the likelihood of more individuals and organizational subunits being involved, and more time spent in the interpretation and evaluation of intelligence as well as the development of changes.

Propositions 6 through 15 are straightforward logical derivations from the basic propositions in the model. The 15 propositions represent a closed system. This has been done arbitrarily as any of a number of factors could have been included propositionally. The most prominent would be the inclusion of structural variables, e.g., the larger the organizations, the more complex the process of change. The assumption is that variables such as these are not as crucial as those in the model, i.e., they may complement the above interdependent factors but do not remove or "explain away" these relationships. Yet efforts should be made to control these variables so that explained variance is not unnecessarily obfuscated. In conclusion, we feel that the system of propositions is distinctly organizational and captures the key elements of the process of change without violating any assumptions about the individual decision maker. We view the organization as an intelligence processing decisional entity. In this case, objective change is the product of this process. We feel that the model is relevant for not only the discussed organizations, but also other cases where planned change is at issue conceptually. We trust that this judgment can be evaluated through our own as well as other research.

Footnotes

1. The model is middle range in that there are a small number of basic and derived propositions; this allows for well specified research questions which can be treated more efficiently. See Robert Merton, Social Theory and Social Structure (Glencoe: The Free Press, 1949).
2. Of primary heuristic value in the perspective of organizational intelligence processing has been the work of Harold Wilensky, Organizational Intelligence (New York: Basic Books, Inc., 1967). He suggests that intelligence represents the gathering, processing, and communicating of the technical and political information used in the decision making process. There is no coherent body of "intelligence literature" as such. There are a few discussions in which the notion of intelligence and its processing is relatively explicit. See for example William Dill, "Impact of Environment Upon Organizational Development," in Sidney Mailick and Edward Vann Ness (eds.), Concepts and Issues in Administrative Behavior (Englewood Cliffs, N.J.: Prentice-Hall, 1962), pp. 94-115. John Friedman, "A Conceptual Model for the Analysis of Planning Behavior," Administrative Science Quarterly, vol. 12 (1967), pp. 225-252. John T. Dorsey, "A Communications Model for Administration," Administrative Science Quarterly, vol. 2 (1957), pp. 307-324.
3. This definition, of course, reflect considerable influence from the organizational literature. A particular intellectual debt has been the work of Bakke. See E. Wight Bakke, "Concept of the Social Organization," in Mason Haire (ed.), Modern Organization Theory (New York: John Wiley and Sons, 1959), pp. 19-73.
4. The work of Bakke has been particularly instructive in the development of these conceptual components. These eight dimensions are presented and elaborated in an earlier work by the author. See Gary A. Kreps and Dennis Wenger, "Organization Change in a Community Conflict Environment," Working Paper 26, Disaster Research Center, The Ohio State University, Columbus, Ohio, 1970.
5. This definition reflects several influences in the organization-environment literature. See for example William Evan, "Organization-Set: Toward a Theory of Interorganizational Relationships," in James D. Thompson (ed.), Approaches to Organizational Design (Pittsburgh: University of Pittsburgh Press, 1966), pp. 173-191; and Harold Guetzkow, "Relations Among Organizations," in Raymond Bowers (ed.), Studies on Behavior in Organizations: A Research Symposium (Athens: University of Georgia Press, 1966), pp. 13-44.
6. The definition has been excerpted from Kreps and Wenger, op. cit. The definition has been influenced by many writers; of particular import has been Neil J. Smelser, Theories of Social Change and the Analysis of Nuclear Attack (McLean, Va.: Human Sciences Research, Inc., 1967).

7. See Wilensky, op. cit.
8. Assumption 1 has had substantial popularity historically in the organizational literature and we feel quite comfortable with it as sound basic reasoning. It conveys the notion of system, system openness, and rationality which we feel are useful analytical tools for any model of organization.
9. Assumption 2 indicates first, the fact that the charter of an organization can be threatened by forces in the environment. Thus civil disturbance posed a threat to the charter of police and fire departments. Second, we assume that organizations will adapt when charter is threatened. This is a logical extension of the notion of rationality. The conceptual underpinnings of this assumption come most directly from the work of Bakke, op. cit., who presented the notion of charter, and Thompson, who elaborated the concept of environmental uncertainty and organizational efforts to control it. See James D. Thompson, Organizations In Action (New York: McGraw-Hill, 1967).
10. Assumption 3 suggests that organizations require resources to bring about change. And one of these requisites is intelligence as we have defined it. The broader assumption is that certain requisites must be met if organizations are to act at all. Among these are human and material resources employed in organizational technology. This, of course, is one of the basic dimensions of organization we presented and intelligence is quite logically one resource of organizational activity.
11. It would be possible to label the following three axioms as additional assumptions in that they are not offered for testing, are direct extensions of the preceding assumptions, and are assumed to be true. However, we designate them as axioms (or premises) because they more directly underlie the basic and derived propositions to follow. In other words, it is upon these axioms that the interrelated system of propositions are based.
12. See Tom Burns and G. M. Stalker, The Management of Innovation (London: Tavistock, 1961).
13. See Evan, op. cit.