CONCLUSION

I am aware that there are unclarities and difficulties of considerable importance in these five varieties of alienation (especially, I believe, in the attempted solution of "self-estrangement" and the idea of "meaninglessness"). But I have attempted, first, to distinguish the meanings that have been given to alienation, and second, to work toward a more useful conception of each of these meanings.

It may seem, at first reading, that the language employed—the language of expectations and rewards—is somewhat strange, if not misguided. But I would urge that the language is more traditional than it may seem. Nathan Glazer certainly is well within that tradition when, in a summary essay on alienation, he speaks of our modern ". . . sense of the splitting asunder of what was once together, the breaking of the seamless mold in which *values, behavior,* and *expectations* were once cast into interlocking forms."[28] These same three concepts—reward value, behavior, and expectancy—are key elements in the theory that underlies the present characterization of alienation. Perhaps, on closer inspection, the reader will find only that initial strangeness which is often experienced when we translate what was sentimentally understood into a secular question.

[28] Glazer, *op. cit.,* p. 378 (italics added).

"BUREAUCRACY" AND "RATIONALITY" IN WEBER'S ORGANIZATION THEORY: AN EMPIRICAL STUDY

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Seven of Max Weber's ideal-typical specifications for "rational bureaucracy" are reformulated as a system of three "bureaucratic" and four "rational" variables. It is proposed that (a) bureaucratic variables are positively associated; (b) rational variables are positively associated; but that (c) rational variables are negatively associated with bureaucratic variables. This hypothesis is supported by a comparative analysis of 150 formal organizations in 150 non-industrial societies, using data largely from the Human Relations Area Files. Implications of the findings are explored for, first, the use of the concept "informal organization;" and, second, the development of a general organizational model. Such a model is proposed in outline and illustrated from the descriptive industrial sociological literature.

MAX WEBER'S "split personality" as sociologist, on the one hand, and transcendental idealist historian, on the other, has from time to time occasioned comment in the literature.[1] This duality of posture in Weber's work appears in particular to have had some rather interesting consequences for the lines along which contemporary organization theory has developed. It is the purpose of this paper to discuss some of these consequences, together with certain problems to which they lead, and to explore a possible solution to these problems through a small empirical study.

[1] See Talcott Parsons, *The Structure of Social Action,* Glencoe: Free Press, 1949, pp. 601–610.

The dual nature of Weber's approach is perhaps nowhere so apparent as in his use of ideal types in the analysis of administrative structure. From a sociological point of view, his specifications for the "rational bureaucracy" superficially resemble the categories of a model. Yet on closer scrutiny they prove to be alleged concrete attributes, rather than variables or categories in a classificatory scheme. And, indeed, from a transcendental idealist point of view, Weber himself treats ideal types as substantive conclusions rather than methodological tools. In this sense, his specifications for the "rational bureaucracy" represent not so much a system of analytical categories as they do an attempt to capture the "spirit" of contem-

porary administration.[2] Despite their partially metaphysical character, however, Weberian ideal types have a definite empirical flavor. Consequently they have proved highly useful in empirical work, and of course have exercised a well-recognized influence on contemporary organization theory.

Certainly few will deny that such influence has been on the whole extremely fortunate. But at the same time it has not been without drawbacks. The legacy of Weber is probably in great part responsible for the extreme degree to which organization theory has had to face problems of flexibility. For however ingenious and perceptive they may be, ideal types cannot be applied directly to the analysis of empirical data. Instead, the investigator must either recast the ideal type as a model by reformulating its specifications as a system of interrelated variables, or rest content to study the respects in which actual cases do not conform to it. The second alternative has been the one usually followed, and has lead to the development of an extensive body of theory dealing with "informal organization"—namely, departures from ideal-typical "rational bureaucratic" characteristics.

Such development itself, however, has produced a mounting body of evidence which suggests that some attention might fruitfully be given the first alternative—that of attempting to recast the original ideal type as a model. For it appears that many informal behavior patterns can at least partially be accounted for by problems which seem inherent in the formal (in this context, the ideal-typical) structure. Moore, for example, indicates that the formal structure itself provides sufficient conditions for the development of certain informal behavior patterns, pointing out that formal planning is always necessarily incomplete, that standard problems arise which lead to a body of accumulated precedent, and that formal structure provides the framework within which most informal interaction takes place. Similarly, Blau stresses the development of informal patterns of behavior as a result of repeated adaptations of the organization to constantly changing conditions. From a somewhat different perspective, March and Simon indicate that this problem can be approached from the viewpoint of latent consequences of motivational devices, presenting an interesting comparison of the models which they find implicit in the work of Merton, Selznick, and Gouldner in this regard.[3]

Findings of this kind cast some doubt on the long run advisability of maintaining a rigid distinction between "formal" and "informal" administrative behavior; they suggest an altogether different approach, involving a general model which would provide an explicit context within which these various "adaptive" mechanisms could be presumed to operate. It was believed that a reformulation of Weber's original ideal-typical attributes as variables, together with an attempt to establish their actual empirical interrelationships, might provide the desired flexibility and thus prove to be a fruitful step toward the construction of such a model. Accordingly, seven of Weber's ideal-typical "rational bureaucratic" characteristics are reformulated below as rough "present *versus* absent" variables. Subsequently, the extent to which they are all likely to be present together in any formal organization is investigated through a comparative analysis of 150 organizations engaged in the production of material goods in 150 different nonindustrial societies. The societies were selected according to Murdock's criteria for his "World Ethnographic Sample." One organization was then drawn at random from those in each society on which data were available. The principal source of data was the Human Relations Area Files.[4]

CONCEPTS, HYPOTHESES, AND RESULTS

A *formal organization* is defined as any social group engaged in pursuing explicit

[2] Parsons, *loc. cit.;* also Carl J. Friedrich, "Some Observations on Weber's Analysis of Bureaucracy," in Robert K. Merton, *et al.,* editors, ***Reader in Bureaucracy,*** Glencoe: Free Press, 1952, pp. 27–33.

[3] See, respectively, Wilbert E. Moore, *Industrial Relations and the Social Order,* New York: Macmillan, 1951, pp. 273–293; Peter M. Blau, *Bureaucracy in Modern Society,* New York: Random House, 1956, p. 57; James G. March and Herbert A. Simon, *Organizations,* New York: Wiley, 1958, pp. 34–82.

[4] George Peter Murdock, "World Ethnographic Sample," *American Anthropologist,* 59 (August, 1957), pp. 664–687; George Peter Murdock, Clellan S. Ford *et al., Outline of Cultural Materials,* New Haven: Human Relations Area Files, 1950.

announced objectives through manifestly coordinated effort. Weber's "rational bureaucracy" is conceived as such an organization, which, however, possesses as well other characteristics. Seven of these characteristics have been selected for study, and reformulated operationally as follows: [5]

A. An *hierarchical authority structure* is considered to be present if the organization possesses three or more levels of authority.[6]

B. A *specialized administrative staff* is reported if any number of the organization is concerned solely with activities other than physical work.[7]

C. Rewards are considered to be *differentiated according to office* whenever this is reported as being the case, either with respect to the amount or kind of reward.

D. An organization is deemed to possess *limited objectives* if, in the case of the sample used here, it is exclusively concerned with the production of material goods.

E. A *performance emphasis* is considered to be present if the amount of reward to members is an any respect dependent on quantity or quality of work done.

F. *Segmental participation* is considered present if participation is based on any kind of mutual limited agreement.

G. *Compensatory rewards* are reported if members of higher authority distribute rewards to members of lower authority in return for participation.

The above reformulation, together with the idea that the variables involved do not always necessarily vary together in the same direction, was suggested by the work of Weber himself. An examination of Weber's writings reveals that organizations which he characterizes as "bureaucratic" are distinguished by an hierarchical authority structure, an administrative staff, and differential rewards according to office. These characteristics therefore are designated the *bureaucratic* elements of formal organization. Limited objectives, a performance emphasis, segmental participation, and compensatory rewards, however, do not occur in all of Weber's forms of "bureaucracy," but only in the "rational-legal" type. For this reason, these four characteristics are termed the *rational* elements of formal organization. One of Weber's main points, in effect, is that rational characteristics do not invariably tend to be associated with bureaucracy. On the contrary, he finds such a combination to be rare, except in contemporary Western society. Much of his work is devoted to exploring the historical conditions which made possible this peculiar combination of organizational features. A precise hypothesis of opposition between bureaucratic and rational elements in formal organization, however, is not clearly explicit in Weber's work. But in an examination of Weber's theory of the routinization of charisma, Constas finds such an hypothesis to be implicit, reaching the conclusion (allowing for some terminological differences) that established bureaucratic characteristics tend to be dysfunctional for the institutionalization of rationality.[8]

Thus the specific hypothesis may be proposed that, in formal organizations, mutual positive associations tend to exist between bureaucratic elements and also between rational elements, but that rational elements tend to be negatively associated with bureaucratic elements. The following table gives the values of Q (Yule's coefficient of

[5] These variables, adapted from specifications alleged by Weber in various parts of his work to apply to "rational bureaucracy," are not necessarily those conventionally cited in this connection, nor are they intended to exhaust all those given by him. See T. Parsons, editor, *Max Weber: The Theory of Social and Economic Organization* (translated by A. M. Henderson and T. Parsons), New York: Oxford, 1947, pp. 225–226; *From Max Weber: Essays in Sociology* (translated and edited by H. H. Gerth and C. W. Mills), New York: Oxford, 1946, pp. 196 ff.; *General Economic History* (translated by F. Knight), Glencoe: Free Press, 1950, pp. 95–96.

[6] Organization charts were reconstructed from ethnographic descriptions, and the number of authority levels counted. In an earlier formulation, the concept "bureaucracy" was defined in this manner. But it has subsequently seemed desirable to give "bureaucracy" a broader denotation, as is done below. See Stanley H. Udy, Jr., " 'Bureaucratic' Elements in Organizations: Some Research Findings," *American Sociological Review,* 23 (August, 1958), pp. 415–418.

[7] In strict Weberian terms, this staff *is* the "bureaucracy." It is treated here, however, simply as one of a number of possible formal organizational characteristics.

[8] Helen Constas, "Max Weber's Two Conceptions of Bureaucracy," *American Journal of Sociology,* 52 (January, 1958), pp. 400–409.

MUTUAL ASSOCIATION OF SEVEN "RATIONAL BUREAUCRATIC" CHARACTERISTICS IN 150 FORMAL ORGANIZATIONS

	A	B	C	D	E	F
B	+.79*					
C	+.79*	+.70*				
D	−.29	−.66*	−.16			
E	−.12	−.27	+.40	+ .66*		
F	−.12	−.88*	−.28	+1.00*	+.75*	
G	+.29	−.62*	+.23	+ .35	+.72*	+.61*

association) resulting from an investigation of the mutual association of the seven relevant organizational characteristics in the sample of 150 formal organizations. An asterisk (*) indicates a chi square significant at the .05 level.

It is evident from inspection of the table that the results lend general support to the hypothesis. They are also consistent with the theory advanced by Constas. The seven characteristics sort themselves quite neatly into two sets, composed of bureaucratic and rational elements, respectively. The three bureaucratic characteristics are all positively associated with one another. The four rational characteristics are likewise all positively associated. The general pattern of associations between sets, however, is negative; none of the three apparent exceptions is statistically significant.

IMPLICATIONS

These findings have implications for the use of the concept "informal" in organizational analysis, as well as for further model construction. Behaviorally, the concept "informal organization" has been used to refer to deviations from patterns described by a Weberian ideal type construct. The conceptual analysis presented here indicates that "informal organization" thought of in this way is an artifact which disappears when ideal types are abandoned in favor of a system of variables. The results strongly indicate, moreover, that it is a misleading artifact, since its apparent prevalence is enhanced by the ways in which the variables involved happen to be related. The major problem becomes one of discovering precise interrelationships among such variables, rather than comparing the characteristics of "informal" with "formal" organization.

On the other hand it should be noted that the concept "informal" has been used also in a different, normative, sense, to denote the status of activities not prescribed by official organizational rules. The present findings do not suggest condemnation of this usage, but they do raise some questions as to its application. The "official—unofficial" distinction not only cuts across the present analysis, but also cross-cuts the original ideal type, strictly speaking, in that the content of official rules is logically independent of organizational behavior. Thus from the viewpoint of model construction this distinction is unstable, since behaviorally similar organizations can vary greatly in terms of the content of their official rules. Hence, although the "official—unofficial" distinction is unquestionably useful for certain restricted purposes, it may be highly misleading as a general theoretical orientation.

Serious questions, therefore, can be raised as to the long-run usefulness of the "formal—informal" dichotomy, except where it is used narrowly to mean "official—unofficial." And cautions are in order with respect to this latter usage in the construction of behaviorally centered models.[9]

As an alternative to the "formal—informal" dichotomy, the results of the present study suggest the core of a general model of formal organization, as stated by the following three propositions:

1. The technological nature of the task being performed determines the levels of both bureaucracy and rationality at which the organization must minimally operate.

2. Bureaucracy and rationality tend to be mutually inconsistent in the same formal organization.

3. In the face of such inconsistency, accommodative mechanisms arise which result in the continued operation of the organization at some level of efficiency.

The first proposition is based on findings

[9] For more comprehensive discussion of the problems of the concept "informal," see Henry W. Bruck, "The Concept 'Informal' in Organization Theory," paper read at the annual meeting of the Eastern Sociological Society, 1955.

reported and discussed elsewhere; [10] the second results from the present study. The third proposition is reached from the first two through a "functionalist" line of reasoning and demands further explanation. Given further knowledge of the actual processes involved in the presumed conflict between bureaucratic and rational elements, it should be possible to isolate "accommodative mechanisms" and to systematize their total range of variation. For the present, however, it is possible to give only more or less persuasive empirical examples which seem amenable to the interpretation suggested. Argyris and Gouldner, for instance, independently report that the combination of segmented, specialized work with a close, authoritarian supervisory style leads to interpersonal tensions among organization members. Gouldner concludes that the use of general, impersonal rules partially accommodates this conflict by lowering the visibility of bureaucratic power relations. Such accommodation, however, is incomplete; furthermore, imposition of the rules in itself is likely to involve tensions of its own. Other accommodative mechanisms thus may be expected; Argyris lists seven patterns which possibly are amenable to this interpretation: turnover, frenetic attempts to climb the organizational ladder, "goldbricking," rate setting, growth of cliques, development of personal defense mechanisms, and increased stress on material rewards for work. [11]

These examples—which could be readily multiplied—are intended merely to be illustrative. They do offer some evidence, however, that the model suggested is realistic and provides a unifying context for many apparently diverse phenomena which are commonly observed in organizational research. The principal variables which emerge in the system are: (a) the minimum level of bureaucracy, as technologically determined; (b) the minimum level of rationality, as technologically determined; (c) the degree of accommodation necessary between bureaucracy and rationality at some level of efficiency (d). The state of (a) and (b) determines (c) for given values of (d); (c) is presumably composed of several commensurable dimensions, each of which represents possible alternative patterns which are to some degree substitutable one for another.

It would seem, therefore, that Weber's original ideal type can be made to serve as a basis for the construction of a model which accounts for a much wider range of phenomena than Weber is generally credited as having considered—phenomena which frequently have been treated in ad hoc fashion as "informal" characteristics. Such a model, however, is more complex than might first appear, since empirical investigation reveals that a Weberian ideal-typical "rational bureaucracy" is likely to be unstable as a social system. Research is currently being directed toward a more operational specification of the variables suggested, as well as a more detailed explication of their interrelationships.

[10] Stanley H. Udy, Jr., *Organization of Work: A Comparative Analysis of Production among Nonindustrial Peoples,* New Haven: HRAF Press, 1959, pp. 36–54; also Udy, "The Structure of Authority in Nonindustrial Production Organizations," *American Journal of Sociology,* 54 (May, 1959), pp. 582–584.

[11] Chris Argyris, *Personality and Organization,* New York: Harper, 1957, pp. 54–79, 118–119; and Alvin W. Gouldner, *Patterns of Industrial Bureaucracy,* Glencoe: Free Press, 1954, pp. 231–245. See also March and Simon, *op. cit.,* pp. 44–46; and William J. Goode and Irving Fowler, "Incentive Factors in a Low Morale Plant," *American Sociological Review,* 14 (October, 1949), pp. 618–624.