INDUSTRIAL SOCIOLoGY: THE STUDY OF ECONOMIC ORGANIZATIONs*

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Industrial sociology is a field of applied sociology, and has grown mainly out of interests in such issues as productivity, motivation, and unionization. In many cases, however, the theoretical relevance of the studies is evident, and often it is explicitly discussed by those who conducted the research. "Overcoming Resistance to Change," a frequently quoted study, is a case in point: while the problem studied is how to introduce frequent changes into the system of production in a pajama factory without reducing productivity, it is discussed from the point of view of its contributions to Kurt Lewin's field theory. The studies of Mayo, Roethlisberger, Whyte, Warner, and many others have a theoretical perspective, and are not predominantly focused on practical problems. The applied nature of industrial sociology is revealed not so much in a lack of theoretical implications of the various studies as in a lack of conceptual codification and of systematic delimitation of the field. The accumulation of studies in this area seems now to have reached the stage at which one may attempt to offer such a systematic delimitation and to spell out the main dimensions of the field.3

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An important justification for this effort is that a successful conceptual delimitation of industrial sociology will make research in the field more economical. When it can be shown that an applied field is congruent with a theoretical area, and to determine its systematic boundaries, it becomes possible to see its relations to other fields of study (such as political sociology) and to make use of their hypotheses and concepts. Thus industrial sociologists have had a better understanding of the process of supervision and the role of the foreman since the concept of leadership, taken from other areas, has been introduced. Military sociology, on the other hand, has benefited from the idea of informal organization, first used by industrial sociologists. Such “translations” of concepts are not possible unless it becomes clear that soldiers and officers on the one hand, and workers and foremen on the other, are phenomena that have some elements in common. This is where theory enters into applied fields. It will be attempted below to point out some general parallelisms between industrial sociology and other areas of study, in order that sets of concepts and hypotheses can be translated. And another reason for attempting to spell out the theoretical dimensions of a field is that this effort may fulfill the function that Mendeleev’s table fulfilled in chemistry: it may help to point out the missing elements, the uncovered, neglected areas.

Such an attempt as here described should not be either too inclusive or too exclusive of the work already performed in the field. Thus if we should define industrial sociology as the study of the relationship between rational and non-rational elements, we would be too inclusive, since this definition would include many major research areas that industrial sociologists have never studied and are not in their realm, as for instance the sociology of science...
and the study of administrative behavior (in all organizational structures, not only in industry). On the other hand, if we should define industrial sociology as the study of the social relationships in industry, the definition would be too exclusive, for it would leave out many relevant and significant studies in the field which have taken into account the industry's social environment and its influence on the relationships within the industry.

I would like to suggest that what is usually regarded as industrial sociology can be fruitfully conceived of as a branch of organizational sociology. Industrial sociology has an implicit delimitation which, when made explicit and somewhat rearranged, fits neatly into the model of organizational sociology.

The latter is concerned with roles, and with processes of interaction, communication, and authority, that are specialized in serving specific social goals. Thus it studies civil service as pursuing the goals set by the government; and industry as creating goods and services, or as making profit. It has a relatively well developed theoretical model based on Max Weber's theory of bureaucracy, which has been significantly remodeled and improved by supplementing the study of rational aspects with the study of non-rational and irrational aspects of organizations.4

Organizational sociology is potentially able to develop sound bases for a generic as well as a comparative study of organizations,5 and it has greatly benefited from the interchange of concepts and hypotheses among its various sub-fields. Thus, while there are


5 See the studies collected in R. K. Merton et al., eds., Reader in Bureaucracy (Glencoe, Ill., 1952); and P. M. Blau, Bureaucracy in Modern Society (New York 1956).
many significant differences between a church, an army, a university, a factory, and a trade union, sociologists have found it helpful to treat all these organizations as having common problems that may serve as a basis for a generalized discussion of organizations and also for differentiating the various organizational structures. The various types of organizations seem to have common functional problems, but different structural solutions, though fortunately the number of alternative solutions seems to be limited, and this makes a fruitful study of the field possible. Considering the present state of knowledge in this area, the following discussion of some of the common problems and alternative solutions must be very tentative.

All organizational structures, for example, have to face the problem of recruiting, training or socializing, and motivating their personnel, that it may function in accordance with the organization's regulations and norms. All organizations have to create and maintain among their personnel a motivation adequate to the role expectations of the organizational structure. Many of the studies on leadership, informal organization, small groups in organizational structures, morale, and other phenomena deal with this set of problems. Another element common to all organizational structures is the dynamic relationship among the organization's goals, inner needs, and need to adapt to a changing environment.

These common problems, as well as many others, can serve also as a basis for differentiation, that is, for classification and comparison of the various organizations. Thus one of the common functional problems of all organizations is the need to obtain resources from the outside, through exchange, taxation, or private endowments. For the analysis of certain organizational processes (such as efficiency, social control, services to the clientele) it is of interest to compare organizations according to the ways they obtain their resources. Again, all organizations have some goals they serve.

or pretend to serve, and therefore are confronted with the problem of creating and maintaining some personal commitment to these goals in at least part of their personnel. These commitments may be established and reinforced by coercion, material sanctions, or social and symbolic rewards or deprivations. Which type of sanction is mainly applied is an important characterizing factor in the comparative study of organizations.

Presumably the subject matter of industrial sociology is industry. But "industry" seems to be a concept with no direct sociological meaning, and it is difficult to specify a theoretical orientation along its lines. The term "industry" has been taken over from commonsense language, economics, and the census of occupations, without sociological scrutiny. It has been used mainly in two ways: as synonymous with factory; and as covering any large-scale employment of labor and capital.

In the first use industry is seen as the manufacturing unit. Sociologists who have used the term in this manner have called industrial sociology "plant sociology." This seems to be a too exclusive delimitation. There are many studies that fruitfully apply the ideas and concepts of industrial sociology to the study of offices, transportation, restaurants, and grocery stores, and to exclude these organizations from industrial sociology seems a rather arbitrary decision.

The second use of the term is widespread. Industry, according to Webster, is "any department or branch of art, occupation, or business; especially, one which employs much labor and capital and is a distinct branch of trade," or, in economics, "systematic labor or habitual employment." The census follows the same

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lines and classifies every field of full-time work as industry, including public administration, professional services, education, and private household work. All these demarcations of the field are obviously much too inclusive.

Therefore I suggest a middle way, the delimitation of industrial sociology to an area of sociological study of economic organizations, as these will presently be defined. Thus industrial sociology will include the study of offices, restaurants, and other economic organizations that are not factories, but will exclude the study of universities, schools, hospitals, and other non-economic organizations. Many industrial sociologists seem to have implicitly drawn the lines of the field in this way.

The proposed delimitation has an additional advantage: it classifies organizations according to a systematic conceptual scheme. Were we to classify study areas according to their subject matter, we would end up with an endless and unsystematic list: a sociology of industry, of financial institutions, of offices, services, mining, agriculture, and what not. For the purpose of systematizing an applied field we have to find an analytical base for delimiting it, which means in the present case an analytical basis on which organizational sociology can be subdivided.

That basis is provided by the functions that an organization fulfills for society, or for the social unit in which it is embedded. In line with Talcott Parsons' analytical scheme of four functional problems (or phases), organizations may be roughly differentiated in the following way: adaptive organizations (industries, financial institutions); political organizations (government agencies, political parties, trade unions); integrative organizations (clubs, some voluntary associations); and "cultural" organizations (churches, schools, universities). While most organizations serve more than one function, one function usually dominates, and thus it is possible to classify organizations according to their primary function.

The typology can be further refined by classifying organizations according to their primary and secondary functions. For instance, though most trade unions can be seen as political organizations,
because of their power element, it would perhaps be more accurate to regard American trade unions, at least until recently, as having an economic-political orientation, and many European trade unions as political-ideological ("cultural") organizations. Similarly, industries can be meaningfully classified as having two functional orientations. Some, such as the small industries in the United States at the beginning of the century, are relatively close to the classical model of pure economic organizations. Others are economic-political, as for instance most monopolies and some industries in newly developed countries. Some will have to be classified as political-economic organizations, as for example public industries in countries and during periods in which the spoils system and other non-economic political considerations prevail and predominate over considerations of production and profit.

If this functional typology of organizations is adopted, the category closest to what is known as industrial sociology is that of adaptive (economic) organizations. This raises two questions: first, how to distinguish between economic and non-economic organizations; second, how to determine what is an organization's primary or dominant orientation and what is its secondary one.

Economic organizations are those whose primary aim is to produce goods and services, to exchange them, or to organize and manipulate monetary processes. The profit motive as an institutionalized primary goal may often serve as a helpful empirical indicator, but it is not reliable because, on the one hand, some schools, hospitals, and social clubs are geared mainly to the maximizing of profit, while on the other hand, publicly owned or managed industries may not be profit oriented.

The dominant orientation can be determined in several ways. What is considered to be the legitimate primary orientation can be established by communicating with the appropriate group of

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9 See Shin Kon-Heng, *China Enters the Machine Age* (Cambridge, Mass., 1944); also Odaka and Raino in note 20, below.

people. What the dominant functions actually are may be determined by studying the goals that receive the preponderance of efforts, funds, and time. It would be even better to study critical decisions and the incidence of conflicts between two or more sets of considerations: if economic considerations are usually decisive, this may be considered an indicator of the dominant orientation. From this point of view the study of top management decisions is very significant, because secondary or even tertiary orientations may dominate on the lower levels.

Another clue may be gained from the structure of the hierarchy. In most economic organizations, technological considerations are usually subordinated to economic criteria and there is no room for the domination of expert perfectionism and pure technological achievement that cannot be geared to production under the existing economic conditions, or those predicted for the near future. This is reflected in the fact that those who make economic decisions are usually in higher positions of authority than the experts. In universities, on the other hand, where serving the goals of knowledge and following such "unproductive" interests as basic research are considered one of the main aims, and where economic considerations (such as decisions concerning the allocation of funds) are subordinated to these "expert" considerations, it is legitimate, and according to this analysis also functional, to subordinate the administration to the "experts," for instance to the academic senate or other faculty bodies. Thus by studying the distribution of activities, critical decisions and incidences, conflict situations and organizational hierarchies, we can determine which orientation is primary, which secondary, and so on.

If it is agreed that industrial sociology be defined as a part of organizational sociology, dealing specifically with those organizations whose primary function is economic, it remains to consider how the generic concerns of organizational sociology apply to the study of economic organizations in particular. It will be seen that industrial sociologists have already studied some of the areas that legitimately belong to the field, but have neglected others.
Organizational sociology focuses on the study of organizations from four levels or points of view. On the first level, organizations are studied as social units, and interest here is divided between the study of the formal and the informal structure. The formal dimension, often studied by administrators, is in itself of little interest to the sociologist of organizations. The latter usually focuses on the informal relations and their connection to the formal system. He is interested in the formal only as it impinges on the social process and sets a stage for the more "real" processes of interaction.

On the second level the study of organizations deals with the relation of an organizational structure as a unit to other organizational structures and to non-organizational social units (collectivities), such as families, communities, ethnic groups, social classes, and the society.

On the third level organizations are studied from the point of view of their relations to what would be called, in Parsons' frame of reference, personality and culture. The organization-personality studies are concerned with the interrelationships between the needs of the organizational structure and the needs of the personalities of the actors; problems of motivation and involvement, mentioned above, are cases in point. The study of the relations of organizations to cultural systems focuses on two main concerns. Some scholars are interested in value orientations, and inquire into the sources of the legitimation of authority and into the dynamic relations between the ideals and goals of the organization and the needs of the organizational structure itself. Others are more interested in the ways in which knowledge (mainly scientific knowledge) is recruited and institutionalized within the organization. Other aspects of culture, such as myth, are also studied in relation to organizational behavior.\(^\text{11}\)

The fourth level, the relations between organizations and their environment, has thus far received relatively little attention, but

theoretically there is place for this focus of interest. It would include the study of relationships between organizational behavior and the biological and physiological capacities and needs of the actors, and the study of the respective adaptations between the organization and its geographical-physical environment.

Not all of these levels are of equal interest to sociologists, and not all of them have been equally explored. As regards the actual study of organizations, it can be said—and this is applicable also to the sociology of economic organizations—that most studies tend to focus on the organizational unit and the interrelations among its elements, and tend to neglect its relations to other social units, even such significant ones as other organizations and collectivities. The emphasis is often on the generic characteristics and processes of organizational units, rather than on the specific structures and processes of the various organizational subtypes. These points will be extensively illustrated in the following discussion of how the four levels of interest apply specifically to the study of economic organizations.

**Economic Organizations as Social Units**

Study of the formal structure of economic organizations—the division of labor and the lines of communication and authority—is conducted mainly as part of the study of administration. Although this type of investigation is relatively well developed in regard to some kinds of organizations, such as hospitals, its application to economic organizations leaves much to be done. Often it is assumed that because the latter are close to the generic model of organization, there is little need to study the specific nature of their administrative structure. Therefore the sociologist, though interested mainly in the relationship between the formal and the informal aspects, is quite often compelled to spell out the nature of the formal structure he is dealing with.12

Analysis of the informal structure of economic organizations is one of the most important contributions of industrial sociology to the study of organization in general. The findings of Mayo, Roethlisberger, Dixon, Whyte, Homans, K. Lewin, and many others are too well known to be repeated here. It seems more fruitful to point out the directions in which these findings have to be further elaborated, since there is a strong tendency to repeat the work already done and to ignore other areas.

One such area is very similar to that neglected by the administrative studies: the specific nature of the informal aspects of economic organizations. We know by now that informal organization exists and influences the functioning of industries as well as armies, schools, and churches. But we know little about the significant differences in the amount of informal organization, or about the different ways in which informal factors function in various organizational contexts. We can make guesses. We may presume, for instance, that informal organization in the army is much more developed than in a bridge club, because army life is more encompassing (includes more spheres of life)—that, other things being equal, the more encompassing an organization, the more involving and powerful its informal organization. It may well be that different economic organizations have different types of informal organizations; thus in a small industry the informal organization of the workers may be more strongly related to that of the foremen, and even to that of the management, than in a larger industry, and similar differences may exist between a unionized and a non-unionized plant. But all such possibilities are necessarily speculations, as so few comparative studies exist.

Even such a basic question as the conditions under which informal organization of workers supports, withholds support from, or is hostile to management, striving to undermine the formal structure, has not been satisfactorily answered. Whereas we know something about "human relations" factors, such as two-way com-

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communication, leadership by the supervisor, participation, it seems that the study of other factors, such as distribution of rewards, the cultural background of workers, the social structure of the community, and many further structural factors that affect workers' attitudes to work and management, is relatively neglected.\(^{14}\)

The same holds true for the study of informal relations and groups on various levels in the hierarchy of economic organizations. A great deal of repetitious research is conducted on groups of workers, but relatively little is known about informal relations in middle and top management. The difficulties of studying primary relations on these levels are obvious, but the extra effort may be rewarded by an extra premium in terms of significant findings, for these elites occupy crucial positions in the organizational structures and the decision-making processes.\(^{15}\)

Examination of the relations between the two aspects of organization, the formal and the informal, constitutes a source of many interesting insights into the functioning of organizations, and has become an integral part of the approach of industrial sociologists to economic organizations. Thus we need not discuss it here.

Most industrial sociologists regard the factory as a social system; some even go so far as to see it as a "small society." But it is not enough to state that an industry is a social system, because the same is true of a family, a community, and a nation. What has


to be explored is the specific nature of those social systems that are economic organizations, the characteristics that distinguish them from other social systems. It may well be that the differentiating line is to be found in the nature of the integration of rational and non-rational (or instrumental and expressive) elements. Moreover, some industries seem to be not a "small society," but a part of other systems—for example, part of the social system of a community. In these cases some basic functions, which every social system or sub-system has to fulfill in order to exist, are carried on for the industry by the community.

ECONOMIC ORGANIZATIONS AND OTHER SOCIAL UNITS

The significance of studying inter-organizational relationships, especially those between economic and non-economic organizations, has lately been emphasized by economists as well as by students of administration. But the examination of inter-organizational relationships from a sociological point of view leaves much to be desired. Even the relations between two organizations that are often studied—corporations and trade unions—are frequently seen from a legal or economic point of view, only rarely from a sociological perspective; also, many of the studies on this subject are merely descriptive and suffer from a lack of theoretical sophistication. Relations between corporations and other organizations are rarely studied.

Thus as regards specifically economic organizations, we know very little about the sociological meaning of their relations with one another—for example, the relations between financing and

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manufacturing institutions; the role of inter-organizational mobility; the functions of social contacts among the economic elites in maintaining informal monopolistic price regulations and "price leadership." And we know even less about the relations between economic and non-economic organizations. After centuries of abstract arguments concerning the influence of governmental control on economic organizations, there are only a handful of sociological studies on the subject, many of which are predominantly concerned with the sociology of law\textsuperscript{18} and not with the study of inter-administrative relations.\textsuperscript{19} When one turns from the Western world and studies industries and other economic organizations in newly developed countries or in countries of the Soviet orbit,\textsuperscript{20} one can make little progress, however, without taking into account at the very least the relations among economic organizations, governmental agencies, and political parties.

In turning now to the relations between economic organizations and collectivities, it should be repeated that by the latter term is meant social groups that have strong elements of solidarity, such as families, communities, ethnic groups, social classes, and society as a whole. All economic organizations are partial systems, in the sense that they do not regulate all the basic needs of the actors. Therefore they are always embedded in collectivities, which serve

\textsuperscript{18} See, for example, D. Bell, "Taft-Hartley: Five Years After," in Fortune, vol. 46 (July 1952); A. H. Mills and E. Brown, From the Wagner Act to Taft-Hartley (Chicago 1950).

\textsuperscript{19} This subject is discussed by Amitai Etzioni, "Administrations and the Consumer," in Administrative Science Quarterly, vol. 3, no. 2 (September 1958). Of special interest in this connection are the bodies discussed by Robert E. Cushman, The Independent Regulatory Commissions (New York 1941).

certain social and symbolic requirements. Economic organizations differ according to the degree and ways in which they are related to these collectivities.

The collectivities provide at least elementary socialization and exercise a considerable degree of social control over the behavior of their members, also in their role as organizational personnel. Thus the meaning of the pay check depends on the attitude of the worker's family and neighbors, his status in the community, and so on. Some industrial sociologists, following certain of Durkheim's and Mayo's ideas on the disintegration of collectivities, have expected the industry to take over the social functions of the collectivities, by becoming a community and a family to the worker. In recent years, however, industrial sociologists seem to agree that workers' peer groups are supplementing rather than substituting for collectivities. There are not enough studies that focus on this subject, or on the relationship between work groups and other collectivities. We have a number of studies on the relationship between industrial organizations and families, ethnic groups, or communities, but while most of these contribute a great deal

to our understanding of workers and of the functioning of economic organizations, they stimulate our interest in this field more than they satisfy it.

Organizations are not only related to collectivities; they are also in collectivities, in the sense that a factory is in a community and the NAM and AFL-CIO are in the American society. It is not easy to spell out exactly what this "being in" means. From the legal point of view it means that the laws and regulations of the political organs of the collectivity apply to the organization that is in it. But this is only a formal aspect of the more basic phenomenon: economic organizations are integrated with other organizations, and into the society, through collectivities.

Warner demonstrated this when he showed that the relations between the upper and lower classes in a community have an integrative effect on the work relations among managers and workers recruited from these classes. The power structure and the net of instrumental relations in the industry are embedded in the net of solidaric relations of the community. The managers, who are also the leaders of the community, display more than mere economic "exploitative" interests in the workers, and the latter have ways and means, other than grievances and strikes, of conveying their feelings and needs to management and of exerting pressure on it. When this balance is disturbed by a transference of the center of power outside the community's solidaric framework, first a "pure" power relation emerges (the strike occurs), and then a new balance on the national level between a trade-union center and an employer is established, with the directing aid of a government agency (the State Board of Arbitration and Conciliation). Gouldner reports a similar case in which relations in the community impinge on the labor-foremen relations in the industry, and describes the disturbance caused by the interference of an external center of power.

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23 Gouldner, *Patterns . . .* (cited above, note 4), and *Wildcat Strike* (Yellow Springs, Ohio, 1954).
A full multi-factor analysis, which would take into account all of the major organizational structures and all the significant collectivities to which organizations are related and in which they are embedded, may be far beyond the reach of industrial sociology at its present state. But a study of the interrelations of three or more organizations and collectivities, instead of the traditional examination of the relationship between corporations and trade unions, does not seem to be an exaggerated demand.

As for the relations between economic organizations and society as a whole, this is one of the most significant as well as best covered fields of sociology. It was one of the main interests of Marx and Weber, to name only two. Modern society is often said to be characterized by the supremacy of economic units, institutions, and values. Since the term industry is loosely applied, it is only one step further to speak of modern society as "industrial society" and to call its study "industrial sociology." The historical and psychological reasons for this use of the term are of no interest here, as they cannot justify this doubtful extension. It obscures the fact that its subject matter is a major type of society and hence involves a general theory of societies and not a theory of social units or organizations within society. It obscures also the fact that modern society is characterized by many traits, and the supremacy of economic institutions is only one of them; modern society would be better described as characterized by the supremacy of rational values and institutions. The term "modern," since it is associated with the supremacy of science, technology, and secular ideology, no less than with the supremacy of the market system and industry as a mode of production, is preferable to the term "industrial," which brings up mainly economic associations.24

Similarly, in order to avoid identifying the study of society (sociology) with the study of economic organizations (industrial

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24 For a discussion of the nature of modern society see Talcott Parsons, "Some Principal Characteristics of Industrial Societies," paper prepared for the Conference on Soviet Society sponsored by the Joint Committee on Slavic Studies, Arden House, April 1958.
sociology), the study of “industrial societies” as such should be conceived of not as part of industrial sociology but as a study in itself, the study of modern societies. Industrial sociology has a direct interest in the study of society only in the following cases: first, when the problem is the relations of economic organizations to other organizations and to collectivities, and the extent to which society regulates or directs these relations; and second, when there is direct interaction between economic organizations and integrative structures of the society itself, as in the political organs of modern society.25

ECONOMIC ORGANIZATIONS, PERSONALITY, AND CULTURE

We turn now from the study of economic organizations on the social level to the study of such organizations as related to two other systems, those of personality and culture in Parsons’ sense of the terms. The industrial sociologist is not expected to be an expert in the study of these systems in themselves; he is interested in them to the degree that they impinge directly on the functioning of economic organizations.

First, as to personality, the role is the smallest unit for organizational analysis; it is also the unit that links psychological to structural-functional analysis.26 Role analysis takes into account not only the needs of the personality but also the place of the actor in the system, that is, his social position and what it means for him in terms of role expectations.27 Thus, for instance, if we were to ask what it would mean for an economic organization if


26 For discussions of the relationships between sociology and psychology see Talcott Parsons, The Structure of Social Action (Glencoe, Ill., 1949) pp. 769-70, and The Social System (Glencoe, Ill., 1951) p. 552.

a large number of its personnel had "authoritarian personalities," we would have to consider the roles assigned to such people. The answer would differ considerably according to whether they were assigned to unskilled jobs or foremen roles, to top management positions or to staff or line positions.

Certain types of roles seem better fitted to certain personality types than to others. In other words, different persons will gain different rewards and suffer different deprivations from the same role. Therefore, with a given group of people and a given cluster of roles, the allocation of people can be made in alternative ways, some of which would cause more personal or structural tensions than others. As economic structures are relatively rational, the possibility of controlling these tensions, as well as the effort to do so, is relatively great. Hence the analysis of these processes is a major challenge to industrial sociology, and many significant insights have been gained through comparative role analysis.28

But this type of analysis, which regards roles as units, is only the first step. The next is studying the relationship of roles to one another, analyzing their mutual influence and interaction and, finally, their integration into role clusters. The focus of interest can be on a certain role—such as how the relationship between staff and line influences the role of the foreman, or how the role of the steward reflects on that of the foreman—or it can

be on the pattern of interrelation of different roles, such as the division of labor and authority, nets of communication, and the like. This seems to be one of the most promising areas of organizational sociology.

As for the relations between economic organizations and culture, the studies that belong in this category may be roughly divided into two groups: studies on the relationship between industrialization and value systems, such as religions and ideologies (this was one of the major foci of Weber's interest, and has never since been abandoned by sociologists); and studies focusing on the dynamic relationship between goals and organizational processes. In the latter group Michel, for example, was interested in the degree to which an established organization fails to realize its original goals. In his "Theory of Opportunism" Barnard dealt with the same problems, demonstrating the need to compromise ideals and goals in order to maintain the organization and enable it to adapt to changes in the environment. Selznick, who studied these problems perhaps more intensely and directly than any other sociologist, analyzed in his most recent work the function of ideals, "mission and role," of the organization, and the processes of organizational adaptation and their repercussion on the organization's goals, especially when they are what he called "precarious values." This is clearly one of the most provocative areas of study, and a significant source for the understanding of organizational processes.

Economic Organizations and Their Environment

Environment as understood here consists of non-social and non-
psychological entities: the biological-physiological processes of the human body and the geographical-physical surroundings in which it lives. In this area of analysis there exist, for example, a considerable number of studies in industrial medicine, concerning the medical implication of certain occupational roles. But so far these studies have been of very little interest to the industrial sociologist, and in general the ecology of organizations is a field that has yet to be established. There may be good reasons for this relative lack of interest, for organizations may be relatively less bound to ecological factors than other social units, such as communities and neighborhoods. On the other hand, in the few existing studies dealing with ecological placement of the workers in the factory, interesting findings have been reported, even though these studies are concerned mainly with the ecology of small groups in organizations rather than with that of organizations as a whole.

The ecology of economic organizations may develop as a field of high interest, for these are more influenced by their need to adapt to the environment than are most organizations. Gouldner has shown very interesting differences in social and power structures between work groups inside a mine and those working on the surface, where there was no danger factor. Environment often influences the time cycle of work, which in turn has many repercussions on the nature of the organization, the rewards and deprivations caused by the work, and even the nature of unionization and strikes. Thus we would like to have studies in which such industries as construction, which is sporadic,82 and farming, which still depends partially on "nature," are compared with industries where work is continuous (as in most industries) or where its fluctuations depend more on human regulation.

The differentiation of work according to the time cycle it requires is important from the point of view of possibilities for breaking the work process. Some jobs, such as steel casting, require continuous action, while others allow breaks; some require

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82 See Richard R. Myers, "Inter-Personal Relations in the Building Industry," in Applied Anthropology (Spring 1946).
a high degree of punctuality, such as certain railroad jobs. All such factors seem to have important repercussions—still to a large degree unknown—on the workers and on the structure of economic organizations. The ecological nature of work impinges also on the proportions of unskilled, semi-skilled, and skilled workers that the industry can employ, as well as on the ratio of white-collar to blue-collar workers, and of administrative to professional personnel. The study of the interrelations between environment and economic organizations has remained almost untouched since the determinist theories of ecology were refuted.

In brief, organizational sociology studies the generic characteristics of organizations as well as the differentiating features of various subtypes of organizations, classified according to their functional nature. Industrial sociology can be fruitfully conceived of as the study of economic organizations, and thus fitted into the general theoretical model of the study of organizations. It seems useful to codify the findings of organizational studies on four levels: the organization as a social unit; its relations to other social units; its relations to personality and to culture; and (less extensively studied so far) the ecology of organizations. Whether this somewhat abstract classification of organizations and of levels and dimensions of study will be of help to industrial sociology, or even, as would be preferable, to the sociology of economic organizations, will be determined only by further research.