

Organizations as Natural Systems

To administer a social organization according to purely technical criteria of rationality is irrational, because it ignores the nonrational aspects of social conduct.

PETER M. BLAU (1956)

Although the natural system perspective developed in large measure from critical reactions to the inadequacies of the rational system model, it should not be seen as merely providing a critique of another perspective. Rather, it defines a novel and interesting view of organizations that deserves to be considered and evaluated in its own right. As in our discussion of the rational system approach, we begin by identifying those more general or basic ideas common to natural system advocates and then briefly examine selected schools within this perspective.

IMPORTANT VERSUS DISTINCTIVE CHARACTERISTICS

Whereas the rational system theorists conceive of organizations as collectivities deliberately constructed to seek specific goals, natural system advocates emphasize that organizations are, first and foremost, collectivities. While the rational system perspective stresses those features of organizations that distinguish them from other types of social groups, the natural system theorists remind us that these distinguishing characteristics are not their only characteristics (Gouldner, 1959: 406). Indeed, they are not the most important characteristics.

We have already seen that much is made by rational system theorists of goal specificity and formalization as characteristics differentiating organizations from other types of collectivities. Natural system theorists generally acknowledge the existence of these attributes but argue that other characteristics—characteristics shared with all social groups—are of greater significance. Take first the matter of organizational goals and goal specificity.

Goal Complexity

Organizational goals and their relation to the behavior of participants are much more problematic for the natural than the rational system theorist. This is largely because natural system analysts pay more attention to behavior and hence worry more about the complex interconnections between the normative and the behavioral structures of organizations. Two general themes characterize their views of organizational goals. First, there is frequently a disparity between the stated and the “real” goals pursued by organizations—between the professed or official goals that are announced and the actual or operative goals that can be observed to govern the activities of participants. Second, natural system analysts emphasize that even when the stated goals are actually being pursued, they are never the only goals governing participants’ behavior. They point out that all organizations must pursue *support* or “maintenance” goals in addition to their output goals (Gross, 1968; Perrow, 1970: 135). No organization can devote its full resources to producing products or services; each must expend energies maintaining itself.

These distinctions, though useful, do not go quite far enough. They do not capture the most profound difference between these two perspectives on organizational goals. The major thrust of the natural system view is that organizations are more than instruments for attaining defined goals; they are, fundamentally, social groups attempting to adapt and survive in their particular circumstances. Thus, formal organizations, like all other social groups, are governed by one overriding goal: survival. Gouldner emphasizes this implication of the natural system perspective:

The organization, according to this model, strives to survive and to maintain its equilibrium, and this striving may persist even after its explicitly held goals have been successfully attained. This strain toward survival may even on occasion lead to the neglect or distortion of the organization’s goals. (1959: 405)

A dramatic example of this tendency is provided by the National Foundation for Infantile Paralysis, which suffered the misfortune of selecting a disease for which a cure was found, forcing it to shift its focus to other diseases and change its name (Sills, 1957). Under many conditions, organizations have been observed to modify their goals so as to achieve a more favorable adjustment. In their longitudinal study of a sample of several hundred charitable nonprofit organizations in Minneapolis studied between 1980 and 1994, Galaskiewicz and Bielefeld (1998) observed that during an economic downturn, although some organizations stayed true to their mission and employed retrenchment tactics as necessary, many others opted to change their mix of products and services and seek alternative sources of funding. It is because of such tendencies that organizations are not to be viewed simply as means for achieving specified ends, but as ends in themselves.

Two types of explanations have been proposed to account for the survival instincts of organizations. The first, and more elaborate, argues that the organizations are social systems characterized by a number of needs that must be satisfied if they are to survive. This view is linked to a broader theoretical framework known as functional analysis, which we briefly describe later in this

chapter. Other theorists reject such assumptions as being anthropomorphic at worst and unnecessary at best. They suggest instead that one does not have to posit a survival need for the collectivity itself. It is sufficient to assume that some participants have a vested interest in the survival of the organization. Because the organization is a source of power or resources or prestige or pleasure, they wish to see it preserved and include among their own goals that the organization itself be protected and, if possible, strengthened. This view is developed by the conflict theorists.

One of the earliest and most influential analyses of how some participants seek to preserve an organization even at the sacrifice of the goals for which it was originally established is that provided by Robert Michels (1949 trans.), a contemporary of Weber's writing in pre-World War I Germany. His analysis of the changes that occurred in the largest socialist party in Europe, Germany's Social Democratic party, is rightly regarded as a classic. This work is most famous for its formulation of "the iron law of oligarchy," which equates the processes by which complex administrative work is carried out in an organization with the transfer of power from rank-and-file members to a small coterie of leaders. "Who says organization, says oligarchy" (see Chapter 12). Of particular interest for present purposes are Michels's views on the consequences of these oligarchical tendencies for the professed goals of the organization. The leaders of the party continued to give lip service to its revolutionary objectives, but over time became increasingly conservative, reluctant to risk the gains they had achieved or to endanger the party, which was their source of strength. Michels gloomily concludes:

Thus, from a means, organization becomes an end. To the institutions and qualities which at the outset were destined simply to ensure the good working of the party machine (subordination, the harmonious cooperation of individual members, hierarchical relationships, discretion, propriety of conduct), a greater importance comes ultimately to be attached than to the productivity of the machine. Henceforward the sole preoccupation is to avoid anything which may clog the machinery. (1949 trans.: 390)

Michels's analysis points to the importance of power and conflict processes in organizations: if the interests of the rank-and-file members diverge from those of the leaders, the former are likely to be sacrificed.

Another way of viewing differences in the uses of goals by rational and natural system analysts is suggested by Brunsson (1985). He argues that the rational system decision-making model is in fact rational only if attention is focused on the decision itself as outcome. If instead we attend to actions (goal implementation) as outcome, then a more "irrational" decision process produces better results. Irrational decision processes speedily remove alternative possibilities and overestimate probabilities of success attached to the chosen alternative in order to structure participants' expectations, eliminate conflicts, and mold commitment to the selected course of action. Rational system theorists emphasize the normative structure and so focus on decisions—designs or proposals for action—as if they were the principal outcomes. Natural system theorists stress the behavioral structure and are more interested in examining what is done rather than what is decided or planned. Commitment and motivation

loom as more salient variables than search and choice if action rather than "talk" (e.g., a decision) is the focus.

Informal Structure

Just as the ends that organizations are designed to serve are not pure and simple and specific in the view of the natural system analysts, neither are the structures that exist to attain them. The natural system theorists do not deny the existence of highly formalized structures within organizations, but they do question their importance, in particular, their impact on the behavior of participants. Formal structures purposefully designed to regulate behavior in the service of specific goals are greatly affected—supplemented, eroded, transformed—by the emergence of *informal* structures. As first discussed in Chapter 1, we equate formal structures with those norms and behaviors that are designed to operate independently of the characteristics of the individual actors. Informal structures are those based on the personal characteristics and relations of the specific participants. Thus, for example, formal authority refers to a collection of control rights that are available to and exercised by all incumbents of a given position, such as supervisor or teacher; whereas informal authority would indicate those rights that are acquired by a particular supervisor or teacher because of his or her special qualities or interpersonal ties. Obviously, one of the clearest ways to distinguish empirically between the formal and the informal elements in a given situation is to observe what happens to beliefs and behaviors when there is a change in personnel.

Natural system analysts emphasize that there is more to organizational structure than the prescribed rules, the job descriptions, and the associated regularities in the behavior of participants. Individuals are never merely "hired hands" but bring along their heads and hearts: they enter the organization with individually shaped ideas, expectations, and agendas, and they bring with them distinctive values, interests, and abilities.

Expressed through interaction, these factors come together to create a reasonably stable informal structure. One of the most important insights of the natural system perspective is that the social structure of an organization does not consist of the formal structure plus the idiosyncratic beliefs and behaviors of individual participants but rather of a formal structure and an informal structure: informal life is itself structured and orderly. Participants within formal organizations generate informal norms and behavior patterns: status and power systems, communication networks, sociometric structures, and working arrangements.

In the early studies exploring informal structures, it was presumed that these informal relations characterized only the lower strata of the organization; managers and executives were thought to be immune to such developments. But empirical studies by Dalton (1959) and others dispelled such notions. Also, early studies emphasized the dysfunctional consequences of the informal structures, viewing them as reflecting private and irrational concerns that impeded the implementation of the rational formal design. Thus, Roethlisberger and Dickson equated the formal structure with the "logic of cost and efficiency" while the informal structure expressed the "logic of sentiments" (1939: 562–64). Later analysts emphasized the positive functions performed

by informal structures—in increasing the ease of communication, facilitating trust, and correcting for the inadequacies of the formal systems (Gross, 1953).

Greater appreciation for the functions of informal systems was coupled with increasing skepticism that formalization was conducive to rationality. Natural system analysts emphasize that formalization places heavy and often intolerable burdens on those responsible for the design and management of an organization. No planners are so foresighted or omniscient as to be able to anticipate all the possible contingencies that might confront each position in the organization. Attempts to program in advance the behavior of participants are often misguided, if not foolhardy. Such programming can easily become maladaptive and lead to behaviors both ineffective and inefficient, giving rise to the “trained incapacity” that Veblen (1904) called attention to long ago and for which some organizations have become notorious (Merton, 1957: 197–200). Further, formal arrangements that curtail individual problem solving and the use of discretion undermine participants’ initiative and self-confidence, causing them to become alienated and apathetic. Such restrictive arrangements not only damage participants’ self-esteem and mental health but also prevent them from effectively contributing their talents and energies to the larger enterprise (Argyris, 1957; McGregor, 1960). In sum, natural system analysts insist that highly centralized and formalized structures are doomed to be ineffective and irrational in that they waste the organization’s most precious resource: the intelligence and initiative of its participants.

Functional Analysis

Functional analysis served as an important underpinning for the work of some of the most influential natural system analysts. The origins of this widely used model are to be found in the work of a group of British social anthropologists, most notably Malinowski and Radcliffe-Brown. Merton’s essay (1957: 19–84) is the most influential statement of this approach in sociology, while Stinchcombe (1968: 80–129) provides a valuable guide to the logical structure and causal imagery of functional arguments. The paradigm is complex, and there are many variants; nevertheless, its central features can be quickly summarized. As Stinchcombe (1968: 80) notes, a functional explanation is “one in which the consequences of some behavior or social arrangement are essential elements of the causes of that behavior.”

The existence of some practice or behavior is explained in terms of its consequences—the functions it performs—rather than by reference to its origins. A number of natural system theorists implicitly or explicitly adopt an organic imagery, in which the organization is treated as a social system with certain needs or requirements that must be met if it is to survive. Just as the human body requires a continuing flow of oxygen, a need met by the lungs and circulation of blood, social systems are presumed to require the development of mechanisms to meet their needs to gather and circulate relevant information to decision makers. All functional explanations assume that the ends or consequences attained are “homeostatic” variables: the system remains in equilibrium so long as certain conditions are maintained.

Most analysts employ functional arguments in a rather casual manner rather than as a rigorous explanation. To be a valid functional explanation, it

is not sufficient simply to show that a given practice is associated with the desired consequence. In addition, the analyst must identify the causal feedback loop by which the forces maintaining the structure are themselves activated by forces threatening the equilibrium (Stinchcombe, 1968: 88). As Elster (1983) notes, most functionalists are content to argue “as if” rather than to “demonstrate that” such forces are at work.

Even though few sociological theories of organizational stability and survival achieve this level of logical rigor, many of our most important insights into the nature of organization structure and process have their origins in functional reasoning.

SELECTED SCHOOLS

As with the rational system perspective, the natural system perspective constitutes an umbrella under which a number of rather diverse approaches can be gathered. While they share certain generic features, they differ in important particulars. We discuss briefly four influential variants of the *social consensus* subtype—Mayo’s human relations school, Barnard’s conception of cooperative systems, Selznick’s institutional approach, and Parsons’s AGIL model. Then we briefly describe work employing the *social conflict* model.

Mayo and the Human Relations School

Hawthorne effect. It is not possible to recount in detail the famous series of studies and experiments conducted at the Hawthorne plant of the Western Electric Company outside Chicago during the late 1920s and early 1930s. This research is meticulously described by Roethlisberger and Dickson (1939) and given its most influential interpretation by Elton Mayo (1945). Mayo, along with Roethlisberger, was a member of the Harvard Business School faculty. Trained as an industrial psychologist, his early work grew out of the scientific management tradition established by Taylor. Like Taylor, Mayo studied individual factors affecting work, such as fatigue, in an attempt to determine the optimum length and spacing of rest periods for maximizing productivity. The early research in the Hawthorne plant followed the scientific management approach: the researchers set about to determine the optimal level of illumination for the assembly of telephone relay equipment. Mayo summarizes the surprising results:

The conditions of scientific experiment had apparently been fulfilled—experimental room, control room; changes introduced one at a time; all other conditions held steady. And the results were perplexing.... Lighting improved in the experimental room, production went up; but it rose also in the control room. The opposite of this: lighting diminished from 10- to 3-foot-candles in the experimental room and the production again went up; simultaneously in the control room, with illumination constant, production also rose. (1945: 69)

The researchers were in confusion. Other conditions were run with similar inexplicable results. In desperation, they decided to ask the workers themselves

what was going on and learned that the workers were so pleased to be singled out for special attention that they had tried to do the best they could for the researchers and for the company. The "Hawthorne effect" was discovered. Although this effect has been variously interpreted, a summary translation of its lessons might be stated: Change is interesting; attention is gratifying!

Additional studies carried out by the Harvard group—the second relay-assembly group, the mica-splitting test room, the bank-wiring observation room—all served to call into question the simple motivational assumptions on which the prevailing rational models rested. Individual workers do not behave as "rational" economic actors but as complex beings with multiple motives and values; they are driven as much by feelings and sentiments as by facts and interests. They do not behave as individual, isolated actors but as members of social groups exhibiting commitments and loyalties to colleagues stronger than their individualistic self-interests. Thus, in the bank-wiring observation room, workers were observed to collectively set and conform to daily work quotas—group norms restricting production—at the expense of their own higher earnings. And informal status hierarchies and leadership patterns developed that challenged the formal systems designed by managers (see Roethlisberger and Dickson, 1939: 379–447; Homans, 1950: 48–155). At the social psychological level, the Hawthorne studies pointed to a more complex model of worker motivation based on a social psychological rather than an economic conception of man.¹ At the structural level, the studies discovered and demonstrated the importance of informal organization.

In drawing general conclusions from this work, Mayo adopted a reactionary intellectual stance: he emphasized the evils of industrialism and nostalgically longed for the stability and socially cohesive ways of the pre-industrial past (see Guillén, 1994; Trahair, 1984). Later researchers discarded this metaphorical pathos but pursued the insights of Mayo and associates regarding the complexity of human motivation and the importance of informal structure.

The Hawthorne trunk gave rise to a rich assortment of research and reform offshoots, each of which has produced many individual branches. The major research issues pursued include studies of work groups, leadership behavior, and the impact of worker background and personality on organizational behavior. Reform measures include the use of personnel counselors, leadership training, job redefinition, and participation in decision making. Each of these interests merits a brief description; all of them are still flourishing.

Research offshoots. The discovery of informal group processes in organizational settings both stimulated and received impetus from the study of *small-group behavior* carried on by social psychologists and sociologists. Among the former, Likert (1961) and Katz (Katz et al., 1951), together with their colleagues at the Institute for Social Research, University of Michigan, were particularly influential; among the latter, Homans (1950) and Whyte (1951; 1959)

were effective in analyzing group processes in organizational settings. A few analysts, such as Sayles (1958), attempted to understand how organizational factors affected the number, types, and tactics of groups that emerged, but most focused not on the determinants but on the consequences of group membership—for example, the impact of group cohesiveness on individual conformity to production norms (Roy, 1952; Seashore, 1954).

From the human relations perspective, *leadership* is conceived primarily as a mechanism for influencing the behavior of individual subordinates. Early studies sought a set of leadership traits that would stimulate individual performance in the service of organizational goals. Thus, studies by White and Lippitt (1953) reported that participants in experimental task groups performed more effectively under "democratic" than "laissez-faire" or "authoritarian" leaders. Other research stressed the relational aspects of leadership. For example, a series of studies conducted at the Ohio State Leadership Studies Center (Stogdill and Coons, 1957) isolated two basic dimensions of leadership behavior: *consideration*, the extent to which trust, friendship, and respect mark the relation between the supervisor and his or her workers; and *initiating structure*, the degree to which the supervisor is a good organizer who can "get the work out." These dimensions were observed to vary independently, and in general, the more effective leaders—that is, the leaders whose subordinates performed better and had higher morale—were those who scored high on both dimensions.

Later efforts emphasized that leadership characteristics vary with the nature of the situation (Fiedler, 1964; 1971) and the specific needs or motivations of the individual subordinates (Cartwright, 1965). Studies by Pelz (1952) suggested that a supervisor's relation to his or her own superior—specifically, the extent of his or her influence upward—is a powerful determinant of the supervisor's influence over his or her own subordinates. Likert (1961) built on this finding to create his model of the supervisor's critical function as a "linking pin" relating lower to higher levels of the hierarchy. Most of these leadership studies ignored the effects of incumbency in a formal office on an individual's influence, either by overlooking this aspect of the situation or by deliberately holding it constant—for example, by studying differences in leadership behavior among all first-line supervisors in a given office or factory situation (Katz and Kahn, 1952).²

From the very beginning, human relations analysts emphasized the great variability of *individual characteristics* and behaviors and insisted on the relevance of these differences in understanding organizational behavior. Early research demonstrated that such officially irrelevant differences as race (Collins, 1946), class (Warner and Low, 1947), and cultural background (Dalton, 1950) had strong effects on allocation to work roles and organizational behavior. These studies are important forerunners of the more recent interest in the relation between stratification and organizations, which we discuss in Chapter 8.

¹ Blau (1964: 210) has pointed out that "although managerial authority in organizations contains important leadership elements, its distinctive characteristic, which differentiates it from informal leadership, is that it is rooted in the formal powers and sanctions the organization bestows upon managers." It is in keeping with the natural system perspective to ignore this distinctive component of leadership in formal organizations. (We examine it in Chapter 11.)

² After inspecting the results of the bank-wiring observation room study at the Hawthorne plant, Mayo concluded: "It is unfortunate for economic theory that it applies chiefly to persons of less, rather than greater, normality of social relationships. Must we conclude that economics is a study of human behavior in non-normal situations, or alternatively, a study of non-normal human behavior in ordinary situations?" (1945: 43)

Many of the lessons learned by the human relations researchers were codified by Douglas McGregor in his influential book, *The Human Side of Enterprise* (1960). McGregor emphasized that the most significant differences between classical (rational system) management theory, which he labeled "Theory X," and the human relations approach, termed "Theory Y," was the nature of the assumptions made about human actors. Principal assumptions underlying Theory X were:

- Individuals dislike work and will seek to avoid it (p. 33)
- Therefore, "most people must be coerced, controlled, directed, threatened with punishment to get them to put forth adequate effort toward the achievement of individual objectives" (p. 34)
- "The average human being prefers to be directed, wishes to avoid responsibility, has relatively little ambition, wants security above all" (p. 34)

By contrast, human relations theory was constructed on the assumption that:

- Most individuals do not "inherently dislike work... the expenditure of physical and mental effort in work is as natural as play or rest" (p. 47)
- "External control and threat of punishment are not the only means for bringing about effort toward organizational objectives" (p. 47)
- The most significant rewards are those associated with "the satisfaction of ego and self-actualization needs" (p. 47-48)

One constructs very different kinds of organizational structures depending on which set of assumptions is embraced.

Reform efforts. The human relations school has also given rise to much activity directed at changing organizations—modifying and improving them as social environments. The original Hawthorne researchers were themselves interested in pursuing practical applications of their findings. Stressing the positive relation in their studies between worker satisfaction and productivity, they sought techniques to improve the adjustment and morale of individual workers. One approach involved the introduction of a set of *personnel counselors*, distinct from the line hierarchy, whose task it was to listen sympathetically to workers' complaints (Roethlisberger and Dickson, 1939: 189-376, 590-604). The interviewing techniques devised for this program contributed to the development of nondirective counseling techniques now in wide use.

Another change strategy devised by the human relations school stressed the importance of *supervisory skills* in promoting worker morale. Supervisors required special training if they were to become more sensitive to the psychological and social needs of their subordinates. Mayo (1945), influenced in part by Barnard, stressed the important role to be performed by supervisors and managers whose social function it was to elicit cooperation among workers—cooperation that could not be assumed to be automatic (Bendix and Fisher, 1949). Thus, the human relations approach helped to spawn many diverse efforts in leadership training, from simple attitude-change efforts to more intensive Bethel-type sensitivity or T-group training (see, e.g., Blake and Mouton, 1964; National Training Laboratories, 1953).

Yet another reform approach focused on the need to redefine and enlarge the role definitions specified for workers. Contrary to the assumptions of the rational system model, the human relations group stressed the dangers of excessive formalization with its emphasis on extreme functional specialization. *Job enrichment*, or at least job rotation, was advocated as a method of reducing the alienation and increasing the commitment and satisfaction of workers performing routine work (Herzberg, 1966; Waring, 1991).

Still other reformers stressed the importance of worker *participation in decision making* within the organization, particularly in decisions directly affecting them. Although the notion of linking participation to motivation and commitment was given encouragement by the Hawthorne studies, more direct support came from the experimental and theoretical work of Lewin (1948) and his colleagues (e.g., Coch and French, 1948). From the outset and continuing to the present, however, attempts to encourage participation by workers in organizational decisions has received more attention and support in Europe than in the United States (Jaques, 1951; Blumberg, 1968).

Critics. Virtually all of these applications of the human relations movement have come under severe criticism on both ideological and empirical grounds. Paradoxically, the human relations movement, ostensibly developed to humanize the cold and calculating rationality of the factory and shop, rapidly came under attack on the grounds that it represented simply a more subtle and refined form of exploitation. Critics charged that workers' legitimate economic interests were being inappropriately deemphasized; that actual conflicts of interest were denied and "therapeutically" managed; and that the roles attributed to managers represented a new brand of elitism. The entire movement was branded as "cow sociology": just as contented cows were alleged to produce more milk, satisfied workers were expected to produce more output (see Bell, 1960: 238-44; Bendix, 1956: 308-40; Landsberger, 1958; Braverman, 1974: 139-51; Waring, 1991).

It is argued that in spite of the label "human" relations, humanizing the workplace was viewed not as an end in itself, but primarily as a means to increasing productivity. It was not until well into the 1960s that employee well-being came to be recognized as a valid objective of organization design, and even then and up to the present time, this emphasis has been stronger in Europe than in U.S. organizations and organization theories (Kahn, 1990).

The ideological criticisms were the first to erupt, but reservations raised by researchers on the basis of empirical evidence may in the long run prove to be more devastating. Several decades of research have demonstrated no clear relation between worker satisfaction and productivity (see Brayfield and Crockett, 1955; Schwab and Cummings, 1970); no clear relation between supervisory behavior or leadership style and worker productivity (see Hollander and Julian, 1969); no clear relation between job enlargement and worker satisfaction or productivity (see Hulin and Blood, 1968); and no clear relation between participation in decision making and satisfaction or productivity (see Cotton, 1993; Seibold and Shea, 2001). In those cases where positive relations among these variables were observed, the causal direction may be opposite to that predicted: productivity producing satisfaction (Porter and Lawler, 1968) or productivity influencing supervisory style (Lewin and Craig, 1968), rather

than vice versa. Even the original Hawthorne results have been reanalyzed and challenged (Carey, 1967; Franke and Kaul, 1978; Jones, 1990; 1992).

Our brief survey of the human relations school cannot do justice to the variety of theoretical implications, empirical studies, and practical reform efforts it has generated. Guillén (1994) argues that there is evidence to show that the human relations programs and techniques had a substantial impact in both reducing conflict and increasing productivity in U.S. industrial firms between 1930 and 1960, in part because they were adopted and promoted by the rapidly developing personnel profession. In terms of intellectual impact, it is only a small exaggeration to suggest that the academic field of industrial sociology first saw the light of day at the Hawthorne plant, with Mayo serving as midwife. Moreover, sociological work on organizations well into the 1960s was shaped primarily by the human relations model—whether it was attempting to verify and elaborate the model or attacking its shortcomings and biases. And all of the thousands of studies concerned with motivation, morale, and leadership either have been directly stimulated by or are indirectly beholden to a tiny group of workers who kept increasing their output even though the lights were growing dimmer.³

Barnard's Cooperative System

At the same time that Mayo and his associates were conducting their studies and extrapolating from them to underline the importance of interpersonal processes and informal structures, Chester I. Barnard was developing his own views of the nature of organizations. Barnard was not an academic but an executive who served as president of New Jersey Bell Telephone company. Although Barnard's major book, *The Functions of the Executive* (1938),⁴ was a very personal work reflecting his rather distinctive views and concerns, he was in regular contact with the human relations group at Harvard, including Mayo and Roethlisberger. Barnard's influence on the field has been great, in part because his treatise was one of the first systematic attempts to outline a theory of organization available to U.S. readers, since Weber's work had not yet been translated. Barnard's ideas contributed to human relations approaches and provided a foundation both for Selznick's institutionalist views (discussed next) and for Simon's theory of decision making (see Chapter 2). The institutional economist Oliver Williamson (1990: 4) regards Barnard as a key figure in generating "the new science of organization."

Barnard stressed that organizations are essentially cooperative systems, integrating the contributions of their individual participants. As noted in our review of organizational definitions in Chapter 1, Barnard defined a formal organization as "that kind of cooperation among men that is conscious, deliberate, purposeful" (p. 4).⁵ Political scientists such as Simon and March and

³For a more extensive summary of the human relations work, see Katz and Kahn (1978) and Waring (1991). Perrow (1986: 79–114) provides a review and highly critical assessment.

⁴Unless otherwise indicated, all references in this section are to this work.

⁵Like many natural system theorists, Barnard defined organizations so as to emphasize their rational system features—their distinguishing features—but then concentrated on other, more generic aspects in his analysis.

economists such as Arrow and Williamson embraced and elaborated on Barnard's view of organizations as arising from the limitations of individuals—physical, but more important, cognitive constraints—organizations serving to both inform and channel decision making (see Chapter 2).

Barnard also emphasized that organizations rely on the willingness of participants to make contributions. Participants must be induced to make contributions—a variety of incentives can be used to motivate them to do so, including material rewards, opportunities for distinction, prestige, and power—and make them in sufficient quantities, or the organization cannot survive.⁶

Thus, Barnard (1938) attempts to combine and reconcile two somewhat contradictory ideas: goals are imposed from the top down while their attainment depends on willing compliance from the bottom up. This view of accepted direction is developed most fully in Barnard's conception of authority. He argues that it is a "fiction that authority comes down from above" (p. 170), noting the many situations in which leaders claim authority but fail to win compliance. This is because authority depends ultimately on its validation from the response of those subject to it: "the decision as to whether an order has authority or not lies with the persons to whom it is addressed, and does not reside in 'persons of authority' or those who issue these orders" (p. 163). Still, some types of orders have a greater "potentiality of assent of those to whom they are sent" (p. 173). These are orders that are products of a well-designed and integrated communications system that links all contributions in a purposeful cooperative framework.

At first thought it may seem that the element of communication in organization is only in part related to authority; but more thorough consideration leads to the understanding that communication, authority, specialization, and purpose are all aspects comprehended in coordination. All communication relates to the formulation of purpose and the transmission of coordinating prescriptions for action and so rests upon the ability to communicate with those willing to cooperate. (p. 184)

This conception of an organization as a purposefully coordinated system of communications linking all participants in such a manner that the purposes of superiors are accepted as the basis for the actions of subordinates became the foundation for Simon's theory of decision making, as described in Chapter 2.

Barnard's views thus contain many ideas that are consistent with a rational system conception of organizations. What sets them apart is his insistence on the nonmaterial, informal, interpersonal, and, indeed, moral basis of cooperation. Material rewards are viewed as "weak incentives" that must be buttressed by other types of psychological and social motivations if cooperative effort is to be sustained. As for informal organization, Barnard argued that "formal organizations arise out of and are necessary to informal organization; but when formal organizations come into operation, they create and require informal organizations" (p. 120). Informal structures facilitate communication, maintain

⁶Simon later adopted and elaborated upon Barnard's "contributions-inducements" theory of organizational equilibrium. We review these developments in Chapter 7.

cohesiveness, and undergird "the willingness to serve and the stability of objective authority" (p. 122). Interpersonal ties at their best create a "condition of communion": "the opportunity for commandship, for mutual support" forming the "basis of informal organization that is essential to the operation of every formal organization" (p. 148).

But the most critical ingredient to successful organization is the formation of a collective purpose that becomes morally binding on participants. Developing and imparting a mission is the distinctive function of the executive.

The distinguishing mark of the executive responsibility is that it requires not merely conformance to a complex code of morals but also the creation of moral codes for others. The most generally recognized aspect of this function is called securing, creating, inspiring of "morale" in an organization. This is the process of inculcating points of view, fundamental attitudes, loyalties, to the organization or cooperative system, and to the system of objective authority, that will result in subordinating individual interest and the minor dictates of personal codes to the good of the cooperative whole. (p. 279)

On the one hand such views sound quaint and hopelessly old fashioned; they have been subjected to scathing attack by critics such as Perrow (1986: 62-68), who scoff at Barnard's moral imperialism and point out the duplicity inherent in "willing" cooperation that is managed from above. But other scholars, such as Selznick, built on Barnard's recognition of the motivating power of purpose and the ways in which organizational structures and procedures themselves become infused with value (to follow). In addition, many of the themes initiated by Barnard have become highly fashionable in recent decades as students of organizations rediscover the importance of *organizational cultures* shaped by zealous managers supplying strongly held values to their members. Barnard is the godfather of contemporary business gurus, such as Tom Peters (Peters and Waterman, 1982; Peters and Austin, 1985), who advocate the cultivation of "strong cultures." We discuss these neo-Barnardian developments in Chapters 9 and 11.

More so than his contemporaries, Barnard did give some attention to the environment. His conception of organizations as systems of consciously coordinated *activities* rather than persons allows him to recognize that individuals "stand outside all organizations and have multiple relations with them" (p. 100). And, more generally, he recognizes that many organizations are "incomplete, subordinate, and dependent" (p. 98), thus acknowledging the power of external ties and forces. However, unlike the open system theorists, he did not systematically pursue these insights (Scott, 1990a).

Consistent with the natural system framework, however, Barnard recognized the existence of organizational forces even more powerful than purpose:

⁷A collection of essays edited by Williamson (1990) celebrates the fiftieth anniversary of the publication of *The Functions of the Executive* as a number of organizational scholars appraise Barnard's intellectual legacy and continuing influence. For a general review of his managerial career and analysis of his impact on organization theory, see W. G. Scott (1992).

Finally it should be noted that, once established, organizations change their underlying purposes. They tend to perpetuate themselves; and in the effort to survive may change the reasons for existence. (p. 89)

The necessity of survival can override the morality of purpose.

Selznick's Institutional Approach

Philip Selznick, a student of bureaucracy under Merton at Columbia, but an intellectual descendant of Michels and Barnard, developed his own unique natural system model—which has recently been refurbished and elaborated on to constitute an influential approach to the analysis of organizations known as institutional theory (see Chapter 5). We restrict attention here, however, to Selznick's seminal early contributions and to the related work of his immediate intellectual followers. Unlike Barnard, Selznick did not present his approach in one single, unified statement, but scattered his ideas through several books and articles. We attempt to provide a short but coherent sketch of his framework.

For Selznick, "the most important thing about organizations is that, though they are tools, each nevertheless has a life of its own" (1949: 10). He agrees with the rational system analyst that the distinguishing characteristic of formal organizations is that they are rationally ordered instruments designed to attain goals. However, these formal structures can "never succeed in conquering the nonrational dimensions of organizational behavior" (1948: 25). The sources of these nonrational features are (1) individuals, who participate in the organization as "wholes" rather than acting merely in terms of their formal roles; and (2) organizational structures that include the formal aspects but also the complex informal systems that link participants with one another and with others external to the official boundaries. Organizational rationality is constrained by "the recalcitrance of the tools of action": persons bring certain characteristics to the organization and develop other commitments as members that restrict their capacity for rational action; organizational procedures become valued as ends in themselves; the organization strikes bargains with its environment that compromise present objectives and limit future possibilities (1949: 253-59).

Although Selznick's early work emphasized the constraints imposed by individual and environmental commitments, his later work increasingly recognized that these same processes could be a source of strength. In some cases, participants came to share a common set of commitments and a unity of purpose that could create a formidable weapon (Selznick, 1952). The underlying theme stressed the importance of *institutionalization*: the processes by which an organization "takes on a special character" and "achieves a distinctive competence or, perhaps, a trained or built-in incapacity" (Selznick, 1996). Thus, institutionalization refers to a morally neutral process: "the emergence of orderly, stable, socially integrating patterns out of unstable, loosely organized, or narrowly technical activities" (Broom and Selznick, 1955: 238). Selznick argued that the most significant aspect of institutionalization entailed the process by which structures or activities became "infused with value beyond the technical requirements at hand" (Selznick 1957: 17).

Selznick views organizational structure as an adaptive organism shaped in reaction to the characteristics and commitments of participants as well as to influences from the external environment. He explicitly embraces a functional form of analysis, explaining:

This means that a given empirical system is deemed to have basic needs, essentially related to self-maintenance; the system develops repetitive means of self-defense; and day-to-day activity is interpreted in terms of the function served by that activity for the maintenance and defense of the system. (1948: 29)

Insisting that the overriding need of all systems "is the maintenance of the integrity and continuity of the system itself," Selznick attempts to spell out certain more specific "derived imperatives," including the security of the organization as a whole in relation to its environment, the stability of lines of authority and communication, the stability of informal relations within the organization, and homogeneity of outlook toward the meaning and role of the organization.

Institutional commitments develop over time as the organization confronts external constraints and pressures from its environment as well as changes in the composition of its personnel, their interests, and their informal relations. No organization is completely immune from these external and internal pressures, although the extent of institutionalization varies from one organization to another.

To examine these processes Selznick proposes that, rather than following the lead of experimental psychologists who study routine psychological processes, we should imitate the clinical psychologists who examine the dynamic adaptation of the organism over time. Instead of focusing on the day-to-day decisions made in organizations, we should concentrate on those critical decisions that, once made, result in a change in the structure itself. The pattern of these critical decisions, viewed over time, results in the development of a distinctive character structure for each organization, just as an individual's critical decisions and typical mode of coping with problems give rise to the development of a distinctive personality (Selznick, 1957).

Following Barnard, Selznick believes that leadership can play a critical role in this evolutionary process. Leaders, unlike mere managers, can define the mission of the enterprise. It is their responsibility to choose and to protect its distinctive values and "to create a social structure which embodies them" (1957: 60). Among the critical decisions confronting any enterprise are the selection of a social base—what clientele or market to serve; the selection of central personnel; and the determination of the nature and timing of formalization of structures and procedures. Selznick thus invites us to observe the process by which an organization develops its distinctive structures, capacities, and liabilities; he proposes, in sum, that we carry out a "natural history" of organizations.

If we examine some of the empirical work stimulated by Selznick's institutional model, we will obtain a clearer picture of both the strengths and weaknesses of the proposed approach. Selznick's most famous study is of the Tennessee Valley Authority (TVA), a decentralized government agency created during the depression to improve the economic status of the entire Tennessee Valley, a chronically depressed, flood-ravaged region. Massive federal

funds—at least by the standards of the 1930s—were provided to support a broad-gauged attack on the problems of the area. Flood control, hydroelectric power, and soil conservation were to be provided in an integrated manner. Top agency officials were located at the site, not in far-off Washington, so that officials would be less inclined to impose solutions from above but would work in a democratic fashion with the local inhabitants and community agencies in developing acceptable projects (Lilienthal, 1944).

As we would expect, Selznick (1949) focuses on the "internal relevance"—the consequences for the agency—of these policies. He points out that the democratic ideology not only served to recruit and motivate talented participants but also enabled the New Deal agency to gain access to a suspicious and conservative area. Agency officials employed co-optation as a strategy to gain legitimacy and political support. *Co-optation* is a mechanism by which external elements are incorporated into the decision-making structures of an organization: in the case of the TVA, local leaders were recruited to participate in the agency's decision-making and advisory bodies. This tactic ensured that the agency would enjoy local political support for its programs. Such support, however, comes at a price: local leaders exchanged support for influence on the agency's programs and goals. As a consequence, some public interest goals were subverted to serve private interests. For example, improved land values surrounding water projects that were supposed to benefit the public often fell into private hands, and reforested land intended as watershed was taken over by lumber interests.⁸

Selznick's analysis set the pattern for a number of similar studies that examined the ways in which the original goals of an organization can be displaced or undermined. Thus, Clark's (1956) study of an adult education program in Los Angeles argues that its professed goals of providing cultural and intellectual programs could not be realized because of its marginal organizational and institutional status. Because the program lacked full legitimacy, only those parts of it that could attract large numbers of students were retained, with other academically valuable but less popular offerings losing out to an "enrollment economy." And Zald and Denton (1963) describe the transformation of the YMCA from a religious organization performing rehabilitative and welfare services for the urban poor into a social and recreational center for suburban and middle-class young people.

These and related studies exhibit several common features. The analyst focuses on the administrative history of the organization: the structural features and programs of the organization are viewed as changing over time in response to changing conditions. The methodology employed tends to be that of the case study, and heavy reliance is placed on the analysis of organizational documents and interviews with informants knowledgeable about the organization's history. Given this approach, most of the organizations selected for study have been relatively recently founded. Selznick (1957: 142) insists that he is interested not in recounting the history of any given organization for its own sake but in seeking "to discover the characteristic ways in which types of insti-

⁸A reanalysis of the data concerning the early development of the TVA by Colignon (1996) utilizes a conflict model to provide a somewhat divergent interpretation of the agency's formative years.

tutions respond to types of circumstances." However, this interest in generalization is somewhat at odds with the intensive case-study approach. Cohen points out: "As the desire to explain more and more aspects of a single study, situation, or phenomenon increases, the possibility of using this explanation outside the situation for which it was created approaches the vanishing point" (1972: 402).

Thus, in these earlier uses of the institutional approach, a rather consistent pattern emerges. Fundamentally, analysts sought to explain changes in the goals of the organization—not the professed goals, but the ends actually pursued, the operative goals. The general mode of explanation is similar to that offered by Michels: to increase their own security, organizational participants modify controversial goals in the face of hostile environments. As Perrow notes, the literature spawned by the approach—to which Perrow himself contributed (see Perrow, 1961)—takes on an "exposé" character: "The major message is that the organization has sold out its goals in order to survive or grow" (1986: 163). This early work stimulated by Selznick's conception appears to go out of its way to inspect the seamy side of organizational life, although in doing so it perhaps served as a useful antidote to the paean to organizational rationality being sung during this era by some overexuberant rational system theorists.

However, with time, this negative emphasis has been tempered by more constructive concerns about the ways in which precarious values can be protected. Selznick himself, as we have noted, began to emphasize that leaders could and should act to defend and, if necessary, reinterpret and renew the mission of their organization (1957). And Clark (1970; 1972) turned his attention to examining how such "distinctive" and successful colleges as Antioch, Reed, and Swarthmore managed to survive and to preserve their special character. This broadened research agenda has gained a number of adherents. Not only is Selznick's work recognized as providing important underpinnings for the institutionalist perspective, which has garnered much attention in the most recent decades, but his concern for the role of leaders in making critical decisions and in defining institutional values has contributed to the current interest in strategic decision making and the creation of organizational cultures. We consider these developments in later chapters, especially Chapters 9 and 11.

Parsons's AGIL Schema

Working in the grand theory tradition, in a long and productive career of scholarship, Harvard scholar Talcott Parsons attempted to revive and synthesize works by the leading European sociological theorists (see Alexander, 1983, vol. 4). One of his projects involved the perfecting of a general analytic model suitable for the analysis for all types of collectivities—from small, primary groups to entire societies (see Parsons, 1951; Parsons, Bales, and Shils, 1953; Parsons, 1966). He first applied the model to formal organizations in two papers published in the late 1950s and collected in his book on societies (1960). More so than other analysts working within the natural system tradition, Parsons developed a very explicit model detailing the needs that must be met if a social system is to survive. The model is identified by the acronym *AGIL*, from the first initial of each of the four basic needs:

Adaptation—the problem of acquiring sufficient resources

Goal attainment—the problem of setting and implementing goals

Integration—the problem of maintaining solidarity or coordination among the subunits of the system

Latency—the problem of creating, preserving, and transmitting the system's distinctive culture and values

In addition to being applicable to all types of social systems, the schema may be applied at more than one level in analyzing a given type of system. Thus, Parsons applies his model to organizations at the ecological, the structural, and the social psychological levels. Linkages across these levels are also stressed.

First, at the ecological level, Parsons relates organizations to the functioning of the larger society. Applying *AGIL* at the societal level, Parsons suggests that subordinate social units such as organizations can be classified according to their social function (see Table 3-1). For example, economic organizations such as firms function to meet the adaptive needs of the larger society. As Parsons (1960: 19) points out:

What from the point of view of the organization is its specified goal is, from the point of view of the larger system of which it is a differentiated part or subsystem, a specialized or differentiated function.

Because of this functional linkage, the place or role of the subsystem is legitimated within the value system of the overarching social order, and it may expect to receive societal approval and resources in accordance with the relative value placed in the society on the particular functions it performs.

Shifting down to the structural level of analysis, Parsons notes that each formal organization may also be analyzed as a social system in its own right, and each must develop its own differentiated subsystems to satisfy the four basic needs. Thus, each organization must develop structures that enable it to adapt to its environment and must mobilize resources needed for its continued op-

TABLE 3-1 Parsons's Typology Based on Societal Functions

<i>Societal Function</i>	<i>Organizational Type</i>	<i>Examples</i>
Adaptation	Organizations oriented to economic production	Business firms
Goal attainment	Organizations oriented to political goals	Government agencies Other organizations that allocate power, such as banks
Integration	Integrative organizations	Courts and the legal profession Political parties Social-control agencies
Latency	Pattern-maintenance organizations	Cultural organizations, such as museums Educational organizations Religious organizations

eration. Arrangements are also needed to enable the organization to set and implement its goals. To solve its integrative problems, an organization must find ways to command the loyalties of its members, enlist their effort, and coordinate the operations of its various sectors. And mechanisms must be developed to cope with latency problems, to promote consensus on the values that define and legitimate the organization's output and system goals.

While Parsons does not insist that a specific structural unit will develop to manage each of these functional needs, he does argue that structural differentiation will tend to occur along these divisions. Functional imperatives generate the fault lines along which a social structure becomes differentiated. The explanation for this linkage between functional requirements and structural arrangements is simply that the various functional needs are somewhat in conflict, so that efforts directed at solving one functional problem interfere with efforts directed toward the others.⁹ Differentiation reduces social frictions. Specifically, energies devoted to adapting the organization to its environment partially conflict with efforts toward goal attainment—a problem emphasized by Selznick and his colleagues—and efforts directed toward integration—a tension emphasized by Bales (1953)—and so on. A structural "solution" to these tensions is to create roles and subsystems focused on each problem area. For example, Bales and his colleagues argue that in informal groups the inherent tensions involved in goal attainment (for example, winning the game) versus integration (for example, providing satisfaction for all participants) is partially resolved by the emergence of a "task" leader, who specializes in directing and controlling goal attainment activities, and a "socio-emotional" leader, who specializes in motivating members and reducing tensions (Bales, 1953; Slater, 1955). And in formal organizations, specialized departments and roles—supervisors, maintenance workers, personnel counselors, inspectors—emerge to carry out the multiple, and somewhat conflicting, functions.

This solution only simplifies the definitions of individual roles and subsystems and does not, of course, eliminate the incompatibilities: these are merely pushed to a higher level of the system for resolution. For example, at the level of the informal group, Bales (1953) argues that the differentiated leader roles provide a stable basis for group functioning only if the two leaders form a coalition of mutual support. At the organizational level, Lawrence and Lorsch (1967) have argued that organizations characterized by a higher level of structural differentiation are in greater need of integrative and conflict-resolution mechanisms (see Chapter 4).

Moving toward a more micro or social psychological level, Parsons again employs the AGIL schema, arguing that each subsystem within the organization itself comprises finer subdivisions that can be distinguished in terms of the

⁹Parsons's reasoning at this point is illuminated by knowledge of the intellectual origins of the AGIL schema. His conception of these system problems grew out of his work on the "pattern variables"—basic value dichotomies representing the dimensions along which structures can be analytically described. The pairs of opposing values—universalism-particularism, affectivity-affective neutrality, ascription-achievement, and specificity-diffuseness—were cross-classified, producing the four system needs. For example, values identified as most appropriate for solving the problem of adaptation are universalism, affective neutrality, achievement, and specificity. At the opposite extreme, values appropriate for improving integration are particularism, affectivity, ascription, and diffuseness (see Parsons, 1951; Parsons, Bales, and Shils, 1953).

functional requirements. However, as these applications become excessively complex and esoteric, we will not pursue them here.

Like many natural system models, Parsons's framework emphasizes a set of functional needs that all social systems must satisfy in order to survive. As noted, this approach emphasizes the similarities between organizations and other types of social systems. But unlike other natural system models, Parsons's formulation also provides a clear basis for distinguishing between organizations and other social systems. Parsons states, "As a formal analytical point of reference, primacy of orientation to the attainment of a specific goal is used as the defining characteristic of an organization which distinguishes it from other types of social systems" (1960: 17). Within the Parsonian framework, this definition implies more than the widely shared view that organizations tend to pursue specific goals. Parsons calls attention to the relative importance placed on the goal-attainment subsystem in organizations. That is, organizations are social systems placing greater priority on those processes by which goals are set and resources are mobilized for goal attainment than is the case in other social systems.

Parsons's theoretical model has been employed by some, but not many, researchers to guide their empirical studies of organizations. Georgopoulos (1972) has adapted it in his analysis of hospitals, and Lyden (1975) makes use of it in his study of public organizations. Of course, Parsons's generalized social system paradigm has had considerable impact on the work of sociologists (see Alexander, 1983, vol. 4), and many of his specific concepts and ideas have influenced work in the area of organizations, as we document in later chapters.

We restrict ourselves to only a few general comments in assessing Parsons's contributions. On the positive side, his work aims at developing and perfecting a limited set of abstract concepts that can then be adapted for use in examining the structure and functioning of diverse social groupings. Using the same generic concepts helps us to see similarities in social structure and process across systems that appear to be quite different (Scott, 1970). Also, more than those of other natural system theorists, Parsons's framework is quite comprehensive, encompassing the formal and rational aspects of organizations as well as the informal. Further, Parsons is more explicit than other functional theorists in identifying the system needs that must be served for survival. Finally, Parsons emphasized the importance for organizations of their connections to wider societal frameworks of norms and values. In this manner, he anticipated the interests of contemporary institutional theorists (Scott, 2001: 25–27). (See Chapter 6.)

Problems with the Parsonian approach are numerous, but perhaps its most important limitation is that his formulation tends to be more of a highly abstract conceptual framework than a substantive theory. We are provided with numerous concepts that suggest but are not clearly related to empirical indicators, and are given relatively few testable propositions. The functional paradigm underlying the approach does provide some implicit hypotheses—such as that structural differentiation will occur along the lines separating differing functions—but such predictions are difficult to test.¹⁰

¹⁰Alexander (1983) provides an overview of Parson's overall contributions to social theory, while Landsberger (1961) offers a useful description and critique of Parson's model as it applies to organizations.

Early Exemplars of the Social Conflict Model

As previewed in Chapter 1, the natural system perspective exhibits two subtypes: the social consensus and the social conflict variants. Both have their adherents although the consensus version has always had more support among U.S. scholars while the social conflict version enjoys greater receptivity in Europe. Both are grounded in general sociological theory with applications made to organizations, the conflict version developing later than the consensus model.

Conflict theory traces its origins most directly to the writings of Marx (1954 trans.; 1963 trans.), although a number of conflict scholars claim Weber and Michels as early progenitors because of their recognition that organizations are systems of domination serving the interests of those holding power. This school emphasizes the extent to which participants' interests diverge and values of stakeholders conflict. Change is seen to be as natural and common as is stability, and much of the stability of social order results from the dominance of one group or coalition of interests over others, not to be mistaken for unity or harmony of interests. A fully developed Marxist theory of organizations did not emerge until the 1970s following the appearance of open systems models (we review this later work in Chapter 7) but conflict models appeared much earlier. We briefly comment on four influential examples of this work.

As already noted, Dalton (1950; 1959) was among the first to extend the concept of informal organization beyond the study of workers to include managers. His work is based on extended participant observation—"the aim is to get as close as possible to the world of managers" (1959: 1), and as a consequence, we learn much more about the behavioral than the normative structure, the unofficial world of power struggles rather than the official realm of rules and organizational charts. He studied four organizations over a ten-year period—three factories and a department store. Dalton concludes: "If our cases are typical, then conflict is typical." Conflict is not depicted as abnormal or pathological. "Conflict fluctuates around some balance of the constructive and disruptive" (p. 263). Rather than adopting "bureaucratic theory" that assumes that members of the organization are relatively inert and ready to follow the intent of rules," he recognizes the "active seeking nature of man, his ancient and obvious tendency to twist the world to his interests" (p. 165). Dalton depicts in elaborate detail the multiple bases of conflict arising within organizations: between departments, between higher and lower ranks of line officials, between staff and line officers, between cliques, and between personalities.

As a member of Columbia University's pioneering cohort of organizational students, Gouldner (1954) attempted to uncover some of the tensions in Weber's theory of bureaucracy. Picking up on Weber's (1947 trans.: 329) statement that "any given legal norm may be established by agreement or by imposition," Gouldner insisted that these two processes would lead to quite different consequences. In his study of a gypsum factory, he identified several classes of rules varying in degree of consensus or conflict and examined the implications of these differences for the managers and workers involved. Gouldner also raised other questions about Weber's schema:

First, to whom did the rules have to be useful, if bureaucratic authority was to be effective? Secondly, in terms of whose goals were the rules a rational device? Whose

end did they have to realize to operate effectively?... Had he [Weber] focused on the factory bureaucracy with its more evident tensions between supervisor and supervised, as this study shall, he would have been immediately aware that a given rule could be rational or expedient for achieving the ends of one stratum, say management, but might be neither rational nor expedient for the workers. (1954: 20-21)

To assume that organizations are rational instruments for the pursuit of goals ignores the question of whose goals are being served. It assumes that there is consensus rather than conflict over goals. More generally, to adopt an approach that posits the existence of "organizational goals" masks the reality that the goals served by organizations are selected by individuals and may favor the interests of some parties over those of others (see Chapter 11).

One of the most important early comparative studies in organizations, conducted by Bendix (1956), examined the variable nature—across time and space—of managerial ideologies. Building on the insights of both Marx and Weber, Bendix contrasted social class—"the universal tendency of men who are similarly situated socially and economically to develop common ideas and to engage in collective action" with bureaucracy—"the universal tendency of men who are employed in hierarchical organizations to obey directives and to identify their own interests and ideas with the organization" (p. xx). How is this possible? Bendix argues:

Employers, entrepreneurs, and managers typically act in such a way as to combine these tendencies. To safeguard and advance their interests they will join with others like them in the collective actions of a social class. But within each of their separate economic enterprises they will use their authority to have the workers identify their ideas and interests with the enterprise rather than with each other. Ideologies of management are attempts by leaders of enterprises to justify the privilege of voluntary action and association for themselves, while imposing upon all subordinates the duty of obedience and the obligation to serve their employers to the best of their ability. (1956: xxi)

Different ideologies are developed to fit varying circumstances. Bendix contrasts the ideologies developed by managerial elites during the time of industrialization in England and in imperial Russia, contrasting these with the twentieth-century ideologies utilized in the United States and in the Soviet Union. Among the ideologies justifying managerial control examined in the United States are scientific management and human relations (Bendix, 1956: 274-340).¹¹

The most explicit early application of Marxist theory to organizations was provided by the German theorist, Dahrendorf (1959 trans.) who, as noted in Chapter 1, attempted to revise Marx's arguments by insisting that the basis of power in modern society was no longer ownership of the means of production, which was increasingly in the hands of widely dispersed stockholders, but oc-

¹¹Bendix's classic book has recently been reissued with additional material and a helpful introductory essay by Guillén (see Bendix, 2001).

cupancy of managerial and executive positions within organizations. In explicit contrast to Taylor, Parsons, and others emphasizing "social integration," Dahrendorf elaborated a theory of organizations built on an assumption of the existence of socially structured conflicts of interest.

Scholars proposing a social conflict model of organizations were a distinct minority, particularly among students of organizations in the United States, and they remain so to this day. Nevertheless, the concerns they addressed are real: conflict and change are a part of organizational life no less than consensus and stability. Interest in these issues developed rapidly in the 1970s and has been reactivated recently by feminist and critical theorists. We consider these developments particularly in Chapters 7 and 11.

SUMMARY AND TENTATIVE CONCLUSIONS

Divergent views. Whereas the rational system model focuses on features of organizations that distinguish them from other social groupings, the natural system model emphasizes commonalities among organizations and other systems. The natural system theorists do not deny that organizations have distinctive features, but they argue that these are overshadowed by the more generic systems and processes shared by all social collectivities. Thus, the specific output goals of organizations are often undermined or distorted by energies devoted to the pursuit of system goals, chief among which is the concern to survive. The formal aspects of organizational structure that receive so much attention from the rational system analysts are treated as faded backdrops for the "real" informal structures, imbued with human frailties and agency. More generally, whereas the rational system model stresses the normative structure of organizations, the natural system model places great emphasis on the behavioral structure. And where the rational system perspective stresses the importance of organizational structure over individual interests and capabilities, the natural system perspective reverses these priorities—so much so that Ben-El-Mechaieq labels this orientation as one portraying "people without organizations" (1959: 266).

Most of the early theorists who shaped the natural system perspective embrace a functional model of analysis, although they vary considerably in how explicitly and how fully they pursue its development. The human relations analysts tend to be less overt and less consistent in their use of this model than do Barnard, Selznick, or Parsons. All schools within the consensus branch of the natural system framework presume the existence of certain needs that must be met if the system is to survive, and all direct attention to discovering the mechanisms by which these needs are satisfied. This is less so with the conflict models, although some versions emphasize the "functions" of social conflict for attaining and preserving social order (Coser, 1956).

Varying views of the environment appear to be associated with the natural system theorists. Most of the human relations analysts simply overlook it as a factor. Like the early rational system theorists, they concentrate on the internal organizational arrangements and their effects on participants, treating

the organization, in effect, as a closed system. This neglect is especially striking in the case of the Hawthorne studies, conducted during the 1930s in the depths of the Great Depression. In the bank-wiring observation room study, for example, the workers' efforts to restrict production were viewed as irrational conformity to group norms. Given the larger economic situation, however, these activities appear to be a perfectly rational response to the threat of being laid off (see Landsberger, 1958: 58; Blau and Scott, 1962: 92-93). Indeed, during the period of the research, many layoffs occurred at the Hawthorne plant; in fact, the bank-wiring room study had to be discontinued because so many workers were let go! (Roethlisberger and Dickson, 1939: 395).

Barnard takes more account of the environment than does the human relations group (see Scott 1990a). He shows awareness that organizations must attract participants by providing them with inducements, indeed, that they must compete with other organizations attempting to attract their services and loyalties. Moreover, he recognizes that a given individual participates in many cooperative groups simultaneously, so that his or her involvement in any single organization is both partial and intermittent. It is undoubtedly such insights that cause Barnard to emphasize the importance of obtaining contributions and inspiring commitment. However, Barnard does not explicitly conceptualize the environment or examine the extent to which organizations vary in their environmental locations.

Selznick and his students, by contrast, do explicitly consider the environment in their analyses of organizations. However, their view is a highly selective one: the environment is perceived primarily as an enemy, as a source of pressures and problems. In most of the pioneering studies in this tradition, the organization is viewed as confronting a hostile environment. Organizing occurs against the environment.

In the work of Parsons we begin to have a more balanced view of the environment. Parsons recognized the importance of the organization-environment relation, the organization being viewed as a subsystem within a more comprehensive societal unit, and the environment seen more as a stabilizing element sustaining and legitimating the organization in its special mission than as a source of resistance. In these ways, Parsons anticipates the view of the open systems theorists.

Both rational and natural systems theorists tend to embrace a substantialist conception of organizations: organizations are viewed as things or entities (whether mechanistic or organic). Moreover, these early theorists embraced what Emirbayer (1997) defines as a "self-action" conception of organization—one of two subtypes of a substantialist conception. Theorists as diverse as Weber and Barnard emphasized the ability of organizations to act independently and focused on those features that distinguish them from other types of social structure. Organizations are viewed as durable, coherent, independent entities, capable of self-action.

As with the rational system theorists discussed in Chapter 2, our discussion of natural system theorists in the current chapter follows the story only up to the early 1960s. We will see the concerns of natural system theorists reflected in the work of many contemporary analysts, in particular, organizational ecologists and evolutionary theorists (Aldrich, 1999).

Accounting for the differences. Two quite different perspectives on organizations—the rational and natural system perspectives—have now been described. How could two such different viewpoints have arisen? Several explanations have been offered.

Lawrence and Lorsch (1967: 163–84) propose that some of the differences in perspective were produced by variations in the experience and background of the analysts themselves. They point out that among the rational system or “classical” theorists, as they label them, Fayol, Mooney, and Urwick were all practical men with managerial experience. Taylor’s training was as an industrial engineer. By contrast, among the natural systems theorists, Mayo, Roethlisberger, Selznick, McGregor, Parsons, Bendix, Dalton, Gouldner, and Dahrendorf were all from academic backgrounds, with experience largely in the university. (Exceptions to this division were, on the one side, Weber, who was a university professor [although, in terms of lifestyle and experience he is more accurately described as a recluse scholar] and Gulick, who was also an academic. On the other side, of course, was Barnard, a company executive.) Lawrence and Lorsch argue that divergent backgrounds shaped the reactions of these analysts to organizations. Coming from the relatively nonhierarchical arrangements of a university, the natural system analysts were prone to react negatively to the formalism of an industrial plant and inclined to attribute their own needs for autonomy to workers.

A second explanation offered is that the two types of analysts concentrated on different types of organizations. The rational system analysts were more likely to investigate industrial firms and state bureaucracies, while the natural system analysts tended to focus on service and professional organizations—schools, hospitals, and voluntary organizations, such as the YMCA. Since the degree of formalization and of goal specificity varies greatly across the spectrum of organizations, it is quite possible that rational system analysts concentrated on the more highly structured end of the continuum and the natural system analysts, the less structured.

Lawrence and Lorsch extend the argument regarding different types of organizations by asserting that these differences develop because the organizations are operating in different types of environments. They conclude:

In simplified terms, the classical [rational system] theory tends to hold in more stable environments, while the human relations [natural system] theory is more appropriate to dynamic situations. (Lawrence and Lorsch, 1967: 183)

This important thesis is introduced at this point to be elaborated in Chapter 5 and elsewhere throughout the remainder of this volume.

Deeper differences. Although differences in the analysts’ backgrounds or in the particular organization on which they chose to focus may account for some of the variance in the two perspectives, it is our view that these points of view represent more fundamental divisions than are suggested by these explanations. Underlying the perspectives are quite basic divergences in moral and philosophical views and assumptions.

Natural and rational system theorists base their approaches on differing assumptions about human nature: the interests that guide and the factors that

motivate behavior in organizations. Natural system theorists posit a more expansive, social, and motivationally complex actor than do rational system analysts. Also, theorists from the two schools hold differing conceptions of the actual and the proper relation of individual participants to organizations. Rational system theorists argue that only a subset of behaviors of participants are relevant to the organization. Natural system theorists expand the definition of organizationally relevant behavior to include a broader range of an individual’s activities and attitudes. They do so on two grounds: (1) such behaviors have an impact on the task behavior of participants and hence are empirically relevant to an understanding of organizational behavior; and (2) organizations as social contexts affect the participant’s well-being, a situation that has normative significance to anyone concerned with bettering the human condition. Many natural system theorists point to the dysfunctions arising from the partial inclusion of participants and argue, partly on moral grounds, that organizations should take more responsibility for the well-being of the “whole person.” These arguments are not without merit, but all of the morality is not on one side. Rational system theorists insist that rational–legal structures developed in part out of efforts to place limits on the demands superiors could make on their subordinates. The development of formal role definitions—definitions of the limits of a participant’s obligations—was an important step in increasing and protecting the freedom of individuals. Whether the organization’s purview should incorporate more or fewer facets of the lives of its participants is a basic philosophical difference separating the two perspectives.

Further, the two approaches are characterized by quite divergent views of the fundamental nature of social systems. These differences are reflected in the contrasting imagery and metaphors employed by the two schools. For the mechanistic model of structure of the rational system perspective, the natural system substitutes an organic model. Rational systems are designed, but natural systems evolve; the former develop by conscious design, the latter by natural growth; rational systems are characterized by calculation, natural systems by spontaneity. Let us regard these images of social structure as being of recent vintage, Wolin (1960: 352–434) reminds us that they have a long history in political and social thought. The view of organizations as economic, technological, efficient instruments is associated with the work of such social theorists as Hobbes, Saint-Simon, and Lenin—the precursors of Taylor, Weber, Fayol, and Simon. The view of organizations as communitarian, natural, non-rational, organic systems may be traced back to the social theories of Rousseau, Proudhon, Marx, Burke, and Durkheim, the intellectual ancestors of Mayo, Barnard, Selznick, Parsons, Gouldner, and Bendix. With such lengthy and distinguished pedigrees, it is unlikely that either of these two lines of thought will soon end, or that their differences will be quickly resolved.