Organizations and Organizing

Rational, Natural, and Open System

Perspectives

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The Subject Is Organizations; The Verb is Organizing

The recurrent problem in sociology is to conceive of corporate organization, and to study it, in ways that do not anthropomorphize it and do not reduce it to the behavior of individuals or of human aggregates.

Guy E. Swanson (1976)

Organizations play a leading role in our modern world. Their presence affects—some would insist that the proper term is *infects*—virtually every sector of contemporary social life. This book is about organizations—what they are and what they do, how they have changed, and how people have thought about them and studied them.

One theme of the book is commonality. Organizations share certain features that differentiate them from other social forms. Students of this field believe that we can understand much about a specific organization from knowing about other organizations. Understanding how a factory functions can illuminate the workings of a hospital; and knowledge of a software company can help us understand the workings of a prison. A second theme is diversity. Although organizations may possess common, generic characteristics, they exhibit staggering variety—in size, in structure, and in operating processes. What kinds of organizations exist also varies over time. Just as organizations vary, so do those who study them. Students of organizations bring to their task varying interests, tools, and intellectual preconceptions. Some study individuals and groups in organizational contexts, while others examine organizations as basic units in themselves. Still others see the character of a nation's organizations as providing insights into its overall social structure. And some scholars focus primarily on the structural attributes of organizations, whereas others emphasize the processes that reproduce and change them.

In this chapter we introduce three influential perspectives as competing definitions of organizations. We have our first encounter with rational, natural, and open system conceptions. The subsequent three chapters are devoted to an intensive examination of these perspectives, which have shaped and continue to govern our understanding of organizations.

THE IMPORTANCE OF ORGANIZATIONS

Ubiquity

Organizations are perhaps the dominant characteristic of modern societies. Organizations were present in older civilizations—Chinese, Greek, Indian—but only in modern industrialized societies do we find large numbers of organizations performing virtually every task a society needs in order to function. To the ancient organizational assignments of soldiering, public administration, and tax collection have been added such varied tasks as discovery (research organizations); child and adult socialization (schools and universities); resocialization (mental hospitals and prisons); production and distribution of goods (industrial firms, wholesale and retail establishments); provision of services (organizations dispensing assistance ranging from laundry and shoe repair to medical care and investment counseling); protection of personal and financial security (police departments, insurance firms, banking and trust companies); preservation of culture (museums, art galleries, universities, libraries); communication (radio and television studios, telephone companies, the U.S. Postal Service); and recreation (bowling alleys, pool halls, the National Park Service, professional football teams).

How many organizations are there, exactly? Until very recently, even highly "organized" societies such as the United States did not keep accurate records on organizations per se. We kept close watch of the numbers of individuals and the flow of dollars but gave less scrutiny to organizations. It was not until the 1980s that the U.S. Bureau of the Census launched a Standard Statistical Establishment List for all businesses, distinguishing between an establishment—an economic unit at a single location—and a firm or company a business organization consisting of one or more domestic establishments under common ownership. In 2002, the U.S. Census Bureau reported the existence of 7.2 million establishments, comprising nearly 5.7 million firms. Impressive as these numbers are, they do not include public agencies or voluntary associations, which may be almost as numerous. Tax records suggest there are perhaps two million tax-exempt nonprofit organizations, of which upwards of 400,000 are sizable nonreligious organizations required to file with the IRS, including charities, foundations, political organizations, and other nongovernmental organizations (NGOs).

The first attempt to create a representative national survey of all employment settings in the United States was carried out during the early 1990s by a team of organizational researchers (Kalleberg et al., 1996). To conduct

this "national organizations study," Kalleberg and associates developed an ingenious design to generate their sample. Because no complete census of organizations existed, they began by drawing a random sample of adults in the United States who were asked to identify their principal employers. As a second step, data were gathered by telephone, from informants in the organizations named as employers, regarding selected features of each of these employment settings, in particular, human resources practices. This procedure resulted in a random sample of employment organizations (establishments), weighted by size of organization (Kalleberg et al., 1996). Their results indicate that, as of 1991, 61 percent of respondents were employed in private sector establishments, 27 percent in the public sector, and 7 percent in the nonprofit sector (1996: 47).

Even though organizations are now ubiquitous, their development has been sufficiently gradual and uncontroversial so they have emerged during the past few centuries almost unnoticed. The spread of public bureaucracies into every arena and the displacement of the family business by the corporation "constitutes a revolution" in social structure, but one little remarked until recently.

Never much agitated, never even much resisted, a revolution for which no flags were raised, it transformed our lives during those very decades in which, unmindful of what was happening, Americans and Europeans debated instead such issues as socialism, populism, free silver, clericalism, chartism, and colonialism. It now stands as a monument to discrepancy between what men think they are designing and the world they are in fact building. (Lindblom, 1977: 95)

Organizations in the form that we know them emerged during the seventeenth to eighteenth centuries in Europe and America, during the period of political and economic expansion occasioned by the Enlightenment period. Not only did organizations rapidly increase in number and range of applications, but they also underwent a transformation of structure as formerly "communal" forms based on the bonds of kinship and personal ties gave way to "associative" forms based on contractual arrangements among individuals having no ties other than a willingness to pursue shared interests or ends (Starr, 1982: 148).

Source of Social IIIs?

The increasing prevalence of organizations in every arena of social life is one indicator of their importance. Another, rather different index of their significance is the increasing frequency with which organizations are singled out as the source of many of the ills besetting contemporary society. Thus, writing in 1956, C. Wright Mills pointed with alarm to the emergence of a "power elite" whose members occupied the top positions in three overlapping organizational hierarchies: the state bureaucracy, the military, and the larger corporations. At about the same time, Ralf Dahrendorf (1959 trans.) in Germany was engaged in revising and updating Marxist theory by insisting that the basis of the class structure was no longer the ownership of the means

of production, but the occupancy of positions that allowed the wielding of organizational authority. Such views, which remain controversial, focus on the effects of organizations on societal stratification systems, taking account of the changing bases of power and prestige occasioned by the growth in number and size of organizations.

A related criticism concerns the seemingly inexorable growth in the power of public-sector organizations. The great German sociologists Max Weber (1968 trans.) and Robert Michels (1949 trans.) were among the first to insist that a central political issue confronting all modern societies was the enormous influence exercised by the (nonelected) public officials—the bureaucracy—over the ostensible political leaders. An administrative staff presumably designed to assist leaders in their governance functions too often becomes an independent branch with its own distinctive interests (Skocpol, 1985).

Other criticisms point to the negative consequences of the growth of organizations in virtually every area of social existence. Borrowing from and enlarging on a theme pervading the thought of Weber, these critics decry the rationalization of modern life-in Weber's phrase, the "disenchantment of the world" (1946 trans.: 51). Organizations are viewed as the primary vehicle by which, systematically, the areas of our lives are rationalized—planned, articulated, scientized, made more efficient and orderly, and managed by "experts." (See, for example, Mannheim, 1950 trans.; Ellul, 1964 trans.; Goodman, 1968; Galbraith, 1967; Ritzer, 1993; Schlosser, 2001).

A prosaic but powerful example is provided by the worldwide success of fast-food chains-the "McDonaldization of Society" (Ritzer, 1993)-which has rationalized food preparation, depersonalized employee-customer relations, and stimulated the growth of mass production techniques in agribusiness:

The basic thinking behind fast food has become the operating system of today's retail economy, wiping out small businesses, obliterating regional differences, and spreading identical stores througout the country like a self-replicating code. America's main streets and malls now boast the same Pizza Huts and Taco Bells, Gaps and Banana Republics, Starbucks and Jiffy-Lubes, Foot Lockers, Snip N' Clips, Sunglass Huts, and Hobbytown USAs. Almost every facet of American life has now been franchised or chained. From the maternity ward at a Columbia/HCA hospital to an embalming room owned by Service Corporation International . . . a person can now go from the cradle to the grave without spending a nickel at an independently owned business. (Schlosser, 2001: 5)

These critics thus add their voices to others who have called attention to the ways in which organizational structures damage the personalities and psyches of their participants. Alienation, overconformity, and stunting of normal personality development are among the consequences attributed, not to such special cases as prisons and concentration camps, but to everyday, garden-variety organizations (see Argyris, 1957; Maslow, 1954; Whyte, 1956). And with the predominance of the service economy has come the increasing

"commercialization of human feeling" in jobs such as flight attendant or salesperson, which require projecting a happy face regardless of one's true feelings (Hochschild, 1983)—or simulated hostility, in the case of bill collectors and criminal interrogators (Rafaeli and Sutton, 1991).

Large organizations have long been subject to criticism, either because they are alleged to be rule bound, cumbersome, and inefficient (Mises, 1944; Parkinson, 1957) or because they are believed to take advantage of their size and resulting power to exploit others. Perrow (1991) asserts that large organizations increasingly "absorb" society, internalizing functions better performed by communities and civic society. And critics such as Korten (2001) point with alarm to the increasing power of the multinational corporations as they search for cheap labor, despoil the environment, and disrupt the continuity of stable communities.

We attempt to evaluate such criticisms of organizations at appropriate points throughout this volume. Here we simply note that these wide-ranging accusations and concerns regarding the pervasive negative consequences of organizations provide further testimony to their importance in the modern world.

As Media

In addition to their being mechanisms for accomplishing a great variety of objectives and, perhaps as a necessary consequence, the source of many of our current difficulties, organizations have yet another important effect on our collective lives. This effect is more subtle and less widely recognized, but it may be the most profound in its implications. It is perhaps best introduced by an analogy: "The medium is the message." This twentieth-century aphorism was coined by Marshall McLuhan to focus attention on the characteristics of the mass media themselves-print, radio, movies, television-in contrast to the content transmitted by these media. McLuhan defines media very broadly as "any extension of ourselves"; elaborating his thesis, he notes, "The message of any medium is the change in scale or pace or pattern that it introduces into human affairs" (1964: 23, 24).

McLuhan's thesis appears to be more clearly applicable to our subject organizations—than to any specific media of communication. First, like media, organizations represent extensions of ourselves. Organizations can achieve goals that are quite beyond the reach of any individual—from building skyscrapers and dams to putting a person on the moon. But to focus on what organizations do may conceal from us the more basic and far-reaching effects that occur because organizations are the mechanisms—the media—by which those goals are pursued. A few examples suggest some of these unanticipated and, often, unrecognized organizational effects.

• The Federal Aviation Administration (FAA) and the North American Aerospace Defense Command (NORAD) had developed protocols for working together in the case of a hijacking but failed to take into account a scenario in which the hijacked aircraft would not be readily identifiable, would not allow time to utilize appropriate

chains of command within the two agencies, and would not take the traditional form of taking hostages to an alternative destination but convert the aircraft into a guided missile. (National Commission on Terrorist Attacks Upon the United States, 2003) The events of 9/11, 2001, provided a catastrophic exception.

- Although we seek "health" when we visit the clinic or the hospital, what we get is "medical care." Clients are encouraged to view these outputs as synonymous, although there may be no relation between them. In some cases, the relation can even be negative; more care can result in poorer health (Illich, 1976).
- While most of us believe schools are designed to increase the knowledge and skills of student participants, their major function may well be the indirect effects they have in preparing students to assume a compliant role in the organizational society: to learn how to be dependable employees (Bowles and Gintis, 1977).
- Organizations may exert only weak effects on the activities of their participants but still exert influence in situations because they embody and exemplify purposeful and responsible action. They depict rationality, enabling providers to offer an acceptable account of how resources were used and policies pursued (Meyer and Rowan, 1977).

To suggest that our organizational tools shape the products and services they produce in unanticipated ways and, in some cases, substitute "accounts" for outcomes indicates the quite substantial impact that organizations have on individual activity. However, even this expanded view does not reveal the full significance of these forms.

As Collective Actors

Organizations are not only contexts influencing the activities of individuals—they are actors in their own right. As collective actors, they can take actions, use resources, enter into contracts, and own property. Coleman (1974) describes how these rights have gradually developed since the Middle Ages to the point where now it is accurate to speak of two kinds of personsnatural persons (such as you and me) and collective or juristic persons (such as the Red Cross and General Motors). In the United States, although the corporation is regarded as a legal fiction, it has many of the same rights as

¹These developments were associated with and facilitated by changes in legal categories and codes (see Coleman 1974). Lawyers' practices also reflect the distinction in a revealing way, as described by Heinz and Laumann (1982). They point that that much of the variation in current legal practice is accounted for by

one fundamental distinction—the distinction between lawyers who represent large organizations (corporations, labor unions, or government) and those who represent individuals. The two kinds of law practice are the two hemispheres of the profession. Most lawyers reside exclusively in one hemisphere or the other and seldom, if ever, cross over the equator. (1982: 379)

It is also instructive that layers who represent collective actors rather than natural persons are the more powerful, prosperous, and prestigious segment.

nonfictional human beings, including free speech and, in some cases, the right to bear arms. The social structure of the modern society can no longer be described accurately as consisting only of relations among natural persons; our understanding must be stretched to include as well those relations between natural and collective actors, and between two or more collective actors. In short, we must come to "the recognition that the society has changed over the past few centuries in the very structural elements of which it is composed" (Coleman, 1974: 13).

Theoretical Significance

To this point, we have assembled a variety of evidence and arguments to support the case that organizations merit attention. All of these claims relate to their social significance: their ubiquity, their impact on power and status, their effects on personality and performance. A different kind of rationale for justifying the study of organizations points to their sociological significance: the contribution their study can make to our understanding of the social world. Organizations provide the setting for a wide variety of basic social processes, such as socialization, communication, ranking, the formation of norms, the exercise of power, and goal setting and attainment. If these generic social processes operate in organizations, then we can add as much to our knowledge of the principles that govern their behavior by studying organizations as by studying any other specific type of social system. In general, all processes—communication, socialization, decision making are more highly formalized in organizations. It is our belief that the study of organizations can contribute to basic sociological knowledge by increasing our understanding of how generic social processes operate within distinctive social structures.

Moreover, as detailed below, organizations themselves exist only as a complex set of social processes, some of which reproduce existing modes of behavior and others that serve to challenge, undermine, contradict, and transform current routines. Individual actors are constrained by, make use of, and modify existing structures. In The Sociological Imagination, C. Wright Mills (1959) described the role of the social scientist as making sense of the intersection of biography and history in social structure. When organizations are the characteristic structures in society, understanding how they operate can shed much light on the biographies of their participants. Consider social stratification—how equal (or unequal) is the distribution of wealth and income in society. The hiring, pay, and promotion policies of organizations can explain why some are paid tens of millions of dollars per year while others are unemployed, why some have health insurance and child care while others do not, why some achieve high executive positions while others hit a "glass ceiling." The Great Migration of African Americans from the rural South to the industrial North, beginning around the time of the First World War, was encouraged by the hiring policies of automakers and other manufacturers in

Detroit, Chicago, and elsewhere. The Civil Rights Movement and federal enforcement of equal employment opportunity statutes beginning in the 1960s facilitated advancement of people of color into higher level positions in business. And the presence of African Americans at top levels in organizations shapes those organizations' employment practices and their degree of engagement with social issues, such as the AIDS pandemic. Put another way, one cannot understand how social mobility happens in contemporary society without understanding the employment practices of organizations.

More broadly, contemporary history plays itself out in and through organizations. Economic development occurs through a combination of governmental policies (public organizations) and the actions of those that create and run private organizations. Multinational corporations and international nongovernmental organizations (INGOs), ranging from the World Bank to Friends of the River, increasingly determine the ways in which economic development and societal modernization is pursued. While historians continue to tell history through the biographies of so called great men and women, it may perhaps be more appropriate today to tell history through stories of interactions among its great (and not-so-great) organizations.

ORGANIZATIONS AS AN AREA OF STUDY

Emergence of the Area

The study of organizations is both a specialized field of inquiry within the discipline of sociology and an increasingly recognized focus of multidisciplinary research and training. It is impossible to determine with precision the moment of its appearance, but it is safe to conclude that until the late 1940s, organizations did not exist as a distinct field of social inquiry. Precursors may be identified, but each lacked some critical feature. Thus, there was some empirical research on organizations by criminologists who studied prisons (Clemmer, 1940), political analysts who examined party structures (Gosnell, 1937), and industrial sociologists who studied factories and labor unions (Whyte, 1946). But these investigators rarely attempted to generalize beyond the specific organizational forms they were studying. The subject was prisons or parties or factories or unions—not organizations. Similarly, in the neighboring disciplines, political scientists were examining the functioning of legislative bodies or public agencies, and economists were developing their theory of the firm, but they were not attempting to generalize beyond these specific forms.

Industrial psychologists did pursue such general problems as low morale, fatigue, and turnover within several types of organizational settings, but they did not attempt to determine systematically how the varying characteristics of different organizational contexts influenced these worker reactions. And although, from early in this century, administrative and management theorists such as Taylor (1911), Fayol (1949 trans.), and Gulick and Urwick (1937) concentrated on the development of general principles concerning administrative arrangements, their approach was more often prescriptive than empirical. That is, they were interested in determining what the proper form "should be" in the interests of maximizing efficiency and effectiveness rather than in examining and explaining organizational arrangements as they existed. They also focused primary attention on managerial activities and functions rather than on the wider subjects of organizations and organizing (Guillén, 1994).

It is possible to identify two important strands of work that came together to provide the foundations for organizational studies. Engineers played a central role early in attempting to rationalize approaches to work, attending to the design of both technical and administrative systems (Shenhav, 1999). This work stimulated a reactive response from a diverse collection of "human relations" scholars, principally social psychologists and sociologists, who emphasized the human and social features of organizations. Organization studies were founded on the "cleft rock" provided by joint consideration of technical, instrumental, rational emphases on the one hand and human, social, natural system emphases on the other (Scott 2004b; see also Chapters 2 and 3).

Within sociology, the emergence of the field of organizations may be roughly dated from the translation into English of Weber's (1946 trans.; 1947 trans.) and, to a lesser extent, Michels's (1949 trans.) analyses of bureaucracy. Shortly after these classic statements became accessible to American sociologists, Robert K. Merton and his students at Columbia University attempted to outline the boundaries of this new field of inquiry by compiling theoretical and empirical materials dealing with various aspects of organizations (Merton et al., 1952). Equally important, a series of pathbreaking and influential case studies of diverse types of organizations was launched under Merton's influence, including an examination of a federal agency—the Tennessee Valley Authority (Selznick, 1949)—a gypsum mine and factory (Gouldner, 1954), a state employment agency and a federal law-enforcement agency (Blau, 1955), and a union (Lipset, Trow, and Coleman, 1956). For the first time, sociologists were engaged in the development and empirical testing of generalizations dealing with the structure and functioning of organizations viewed as organizations.

At about the same time, an important interdisciplinary development was under way at the Carnegie Institute of Technology (now Carnegie Mellon University). Herbert Simon, a public administration scholar, became head of the Department of Industrial Management in 1949; assembled an eclectic group of political scientists, economists, engineers, and psychologists; and encouraged them to focus their energies on building a behaviorally oriented science of administration. Following Simon's lead, emphasis was placed on decision making and choice within organizations (Simon, 1997). The unrealistic assumption of a single, towering entrepreneur,

rational and all-knowing, that dominated economic models of the firm was replaced first by the view of intendedly rational but cognitively limited actors (March and Simon, 1958), and subsequently by models emphasizing the multiple and competing objectives of participants in organizations (Cyert and March, 1963). Economic models of administrative behavior were modified and enriched by the insights of psychologists and political scientists.

These central and other related efforts gave rise to the identification of a new area of study-organizations, an area defined at a level of theoretical abstraction sufficiently general to call attention to similarities in form and function across different arenas of activity, and a subject matter that exhibited sufficient diversity and complexity to encourage and reward empirical investigation. The key elements for creating a new arena of scientific study were in place. As Alfred North Whitehead, the astute philosopher of science, observes:

All the world over and at all times there have been practical men, absorbed in "irreducible and stubborn facts": all the world over and at all times there have been men of a philosophical temperament who have been absorbed in the weaving of general principles. It is this union of passionate interest in the detailed facts with equal devotion to abstract generalization which form the novelty of our present society. (1925: 3-4)

Accompanying the creation of the new subject area was a search for appropriate intellectual ancestors to provide respectability and legitimacy— Machiavelli, St. Simon, Marx, and Weber were obvious candidates. And more recent forebears, such as Taylor, Barnard, Mayo, and Follett, were rediscovered and reprinted. Also included were Lillian and Frank Gilbreth, who collaborated to find ways to improve work efficiency in factories (Gilbreth and Gilbreth, 1917) but also employed similar techniques at home, celebrated in the book and movie Cheaper by the Dozen.

After about a decade of empirical research and theory development, three textbook treatises—by March and Simon (1958), Etzioni (1961), and Blau and Scott (1962)—provided needed integration and heightened interest in the field. Also, a new journal, Administrative Science Quarterly, beginning publication in 1956 under the editorship of James D. Thompson, emphasized the interdisciplinary character of the field.²

COMMON AND DIVERGENT INTERESTS

Common Features

What features do all organizations exhibit in common? What are the general organizational issues analysts began to perceive among the great diversity of specific goals and structural arrangements? Most analysts have conceived of organizations as social structures created by individuals to support the collaborative pursuit of specified goals. Given this conception, all organizations confront a number of common problems: all must define (and redefine) their objectives; all must induce participants to contribute services; all must control and coordinate these contributions; resources must be garnered from the environment and products or services dispensed; participants must be selected, trained, and replaced; and some sort of working accommodation with the neighbors must be achieved.

In addition to these common operational requirements, some analysts have also emphasized that all organizations are beset by a common curse. All resources cannot be devoted directly to goal attainment; some—in some cases a high proportion—of the resources utilized by any organization must be expended to maintain the organization itself. Although organizations are viewed as means to accomplish ends, the means themselves absorb much energy and, in the extreme (but perhaps not rare) case, become ends in themselves. And, organizations must find ways of combining and harmonizing features associated with the work flow-technologies, equipment, skills, knowhow, communication of task information—with features associated with the human/social features—motivation, dealing with differing interests, authority and status matters, equity and distribution issues.

There is a convergence of interest around these common features, but we must not overlook the many bases of divergence. These include differences among the organizations themselves as objects of study, differences in the interests and backgrounds of those who study organizations, and differences in the level of analysis at which inquiry is pitched.

Divergent Features

Diverse organizations. Organizations come in a bewildering variety of sizes and shapes. The largest of them are immense. Although the exact numbers depend on how the boundaries are defined, the largest organizational units found in modern society are often the military services. The People's Liberation Army of China employs 2.3 million persons, and the U.S. Department of Defense employs roughly 1.4 million. The largest of the U.S. military services, the Army, employed approximately 733,000 employees in 2004—500,000 active duty military personnel and 233,000 civilians. An additional 320,000 served in the U.S. Army Reserve. Large organizations also exist within the civilian world. The state railroad of India, Indian Railways, employs 1.6 million people to transport 5 billion passengers per year. The

²Other brief histories of the development of organizations as an identifiable field of inquiry are offered by March (1965: ix-xvi) and Pfeffer (1982: 23-33). An entertaining, if jaundiced, view of the evolution of organization theory is provided by Perrow (1973). Summaries of the contributions of major organizational theorists together with brief biographical information have been assembled by Pugh and Hickson (1996); and Augier and colleagues (Augier, March, and Sullivan, 2005) provide a useful discussion of the rise of organization studies and its migration into professional schools of management.

British National Health System employs 1.3 million. And in 2005 the largest U.S. corporate employer, Wal-Mart Stores, employed 1.7 million. The largest manufacturer, General Motors, was substantially smaller at 325,000. Indeed, of the ten largest U.S. corporate employers in 2005, six were in sales and services, while four were in manufacturing, and two of these-GE and IBM-derived most of their revenues from services. This reflects broader trends in the composition of the labor force as the United States has moved from a manufacturing to a service or postindustrial economy (see Figure 1-1). In 1990, employment in retail surpassed that in manufacturing, while manufacturing dipped below state and local government in 2002. Yet the United States still accounted for 23.8 percent of the world's value-added in manufacturing in 2004—about the same as its share twenty years earlier. Employment in manufacturing is declining worldwide due in large part to productivity gains, just as agricultural employment shrank in previous decades. Indeed, while the number of manufacturing jobs in the United States saw a large decline from 1995 to 2002, China lost proportionally even more.

Most workers in this country are employees of someone else, while about 7.5 percent of the workforce is self-employed. And more workers are employed by fewer and larger companies than in the past. In 1900, 42 percent of the workforce was spread among 5.7 million farms. By 2002, about half the workforce was employed by firms with 500 or more employees, and Wal-Mart Stores alone now has more paid employees than all U.S. farms combined.

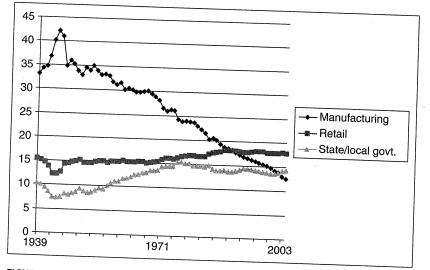


FIGURE 1–1 Proportion of the Nonfarm Labor Force Employed in Manufacturing, Retail, and Local Government, 1939–2003. *Source:* U.S. Bureau of Labor Statistics.

Size, however, should not be equated with success. Perhaps for a time in the industrial age size, as measured by employees or productive capacity, was instrumental to success (survival, profitability), but such an association is ill-suited to the postindustrial era. Recent years have seen efforts to restructure and downsize many of the corporate giants. Among them, AT&T, GM, and Ford employed over 2 million people in 1980, a number that shrank to roughly 700,000 (and falling) in 2005. Conversely, one of the largest corporate enterprises in the United States is Manpower, a temporary services firm, which reported placing 2 million employees in temporary assignments in 2004. Still, most productive and innovative businesses are often small or intermediate in size.

In an age when giant organizations seem to dominate the landscape, it is important to emphasize that small organizations are actually in the majority: in 2002, 88 percent of all employing organizations in the United States employed nineteen or fewer individuals. And the predominant ownership form remains the sole proprietorship, with more than 13.8 million such organizations reporting income in 2002, compared to 1.3 million partnerships and 2.8 million corporations. Of course, the corporation far outstrips the other forms in assets, employees, and earnings. These employment organizations also vary greatly in the types of goods and services provided: from coal mining to computers, from fortune telling to futures forecasting.

Large numbers of people are employed in the public sector. In 2002, in the United States, over 21 million individuals—about one out of every six nonfarm workers—were employed in federal, state, and local governments. The number of units or agencies involved is difficult to determine because of the nested character of governmental forms. The United States Government Manual (U.S. Office of the Federal Register, 2006) provides organizational charts and brief descriptions of the principal agencies. It currently numbers almost 700 pages! Federal employees make up only about 13 percent of all governmental officials, the vast majority of whom are employed at the state (5 million) and local levels (13.6 million), where there exists great variation in organizational arrangements (Littman, 1998).

The gender composition of the workforce has also changed greatly in a relatively short period. In the 1940s women made up only about 20 percent of the workforce. By 2004, over 46 percent—nearly half—of all workers were women. Put another way, the proportion of women aged 25–44 in the paid labor force increased from 18 percent to 76 percent between the beginning and end of the twentieth century. Moreover, by 1997 women owned 26 percent of U.S. firms.

While for-profit forms provide the lion's share of employment in the United States, nonprofit charitable organizations provide an important alternative mode of organizing. In 2004, nearly 825,000 public charities and 103,000 private foundations were in existence. Roughly 12.5 million individuals, or 9.5 percent of all workers, were employed in nonprofit organizations as of 2001.

An important trend visible during the past three decades in the United States is a reduction in the attachment of workers to specific employers.

The proportion of workers employed by the same organization for more than ten years has dropped to roughly 30 percent, and the proportion of workers in "nonstandard" work arrangements—for example, independent contractors, part-time employees workers of flicted with

tors, part-time employees, workers affiliated with temporary help agencies—approached 31 percent of female workers and 23 percent of male workers in 2001 (Mishel, Bernstein, and Allegretto, 2005). While many workers appreciate the new flexibility afforded by these changes, others suffer from increased

insecurity and the absence of regular job benefits. (see Chapter 7.)

Employing organizations do not exhaust the list of organizational forms. Robert Putnam (2000: 59) reports that just under 70 percent of Americans claimed membership in at least one voluntary organization in the early 1990s. The number and variety of such forms is large and includes labor unions, political parties, professional societies, business and trade associations, fraternities and sororities, civic service associations, reform and activist groups, and neighborhood organizations. Two "slices" into this world suggest how diverse it is. A vertical slice, extracting only one occupational group, doctors of medicine, reveals over 380 specialty associations listed in the Directory of Medical Specialists. A horizontal slice, an attempt to compile a detailed list of all voluntary associations in Birmingham, England, reported 4,264 such organizations (Newton, 1975).

In addition to size and sector, organizations vary greatly in structural characteristics. The relatively flat authority and control structure found in many voluntary associations and software design companies stands in sharp contrast with the multilayer hierarchy of a military unit or a civil service bureaucracy. And both seem relatively clean and simple in comparison with the project team or matrix structures found in research and development units of high-tech companies. Much attention has recently been directed to "network" or alliance forms: cooperative connections among formally independent organizations that enable them to enjoy simultaneously the benefits associated with being small, such as rapid response, and with those of being large, such as economies of scale (see Chapter 11).

Some organizations are capital intensive, placing most of their resources in machinery and automated equipment. Others invest heavily in the "human capital" of their workforce, selecting highly qualified personnel, underwriting their further, specialized training, and then struggling to keep them from carrying off their expertise to some other company. Some organizations directly employ most of the personnel who carry on the activities of the enterprise; others contract out much of their work, even the functions of general management.

Organizations also vary greatly because they relate to and draw on different surrounding environments. Public agencies differ from private firms, even when they carry on the same kinds of work, because they function in different institutional contexts. It matters considerably whether you operate to satisfy the demands of many decentralized customers or one centralized oversight bureau or multiple political constituencies. Much of what we know about organizations is drawn from organizations operating in the second

half of the twentieth century in capitalist, democratic societies—and in one such society in particular, the United States. Only recently have there been extensive efforts to examine the structure and operation of organizations in different times, using historical documents, and in different kinds of societies (see Chapter 13).

Large-scale organizations devoted to the pursuit of specialized goals developed in the United States during the middle of the nineteenth century. Many of the characteristics we associate with modern organizations—the specialized equipment, the sizable administrative hierarchy, the collection of specialists—first appeared in association with the development of the railroads. The "managerial revolution" occurred in response to the problems of scale and scope, of distance and tight scheduling posed by railroads (Chandler, 1977). Organizations developing at this time were different in structure from those arriving later. The unified structures soon gave way to diversified and conglomerate forms, which in turn are being replaced by more flexible, network arrangements (see Chapter 13). More generally, as Stinchcombe (1965) first observed, organizational forms exhibit distinctive structures that reflect the times in which they were created. Thus, at any given time, much of the diversity exhibited by a collection of organizations is due to the varying conditions present at the time of their birth (see Chapter 13).

Although researchers have often portrayed the organizations of their home country—often the United States—as somehow "typical," the globalization of the organizational research enterprise has documented the wide variety of forms that have flourished around the world. Different cultural, legal, and historical patterns have produced quite varied configurations of national institutions, and with them divergent forms of organizations, from the *heiretsu* networks of Japan to the postsocialist forms of Hungary and China to the bank-centered capitalism of Germany. Comparisons of the economic trajectories of the United States, China, Germany, and Japan make clear that many different approaches to organizing are consistent with economic vibrancy. Moreover, these forms do not sit still: the system of lifetime employment came under increasing stress in Japan in the postbubble years of the 1990s, while banks increasingly unwound their corporate ownership positions in Germany during the same period. Among all of the other sources of variation, we must not overlook temporal, regional, and cultural factors.

Diverse research interests and settings. Another basis for divergence in work on organizations resides in the interests, training, and employment settings of those who study organizations. As already noted, researchers from different disciplines vary to some extent in the kinds of organizations they choose to study. Political scientists primarily focus on political parties and state administrative structures, economists on business firms, sociologists on voluntary associations and on nonprofit agencies engaged in social welfare and social-control functions, and anthropologists on comparative administration in non-Western, colonial, and developing societies. Disciplinary

differences remain even when a single type of organization is selected for study: specialists tend to look not only at different objects but also at different aspects of the same object. Thus, the political scientist will be likely to emphasize power processes and decision making within the organization; the economist will examine the acquisition and allocation of scarce resources within the organization and will attend to such issues as productivity and efficiency; the sociologist has quite varied interests, but if there is a focus it will likely be on status orderings, on the effect of norms and sentiments on behavior, and on organizational legitimacy; the psychologist will be interested in variations in perception, cognition, and motivation among participants; and the anthropologist will call attention to the effects of diverse cultural values on the functioning of the system and its members. The study of organizations embraces all these interests, and students of organizations work to develop conceptual frameworks within which all of these topics and their interrelations may be examined. And organizational analysts attempt to specify what is distinctive about power or status or motivation or cultural processes because they occur within the context of organizations.

A more general basis of divergence among those who study organizations is between those with a practice orientation—studying organizations in order to improve their performance—and those who treat organizations as objects of interest in their own right. This distinction dates from the very origins of the study of organizations and their management. Frederick Taylor (1911) took a bottom-up, engineering approach, seeking to rationalize work systems by dividing them into the smallest tasks, organizing the sequencing of tasks to maximize throughput, and combining tasks into jobs and jobs into departments. This approach lives on to this day-consider, for instance, the methods of "business process re-engineering." Henri Fayol (1919/1949) took a top-down, managerial approach to dividing and coordinating complex work systems. In both cases, the aim was prescriptive, to advise management. Subsequent social scientists, particularly those in the "human relations" tradition as exemplified by the famous Hawthorne Studies, sought to humanize the workplace and encouraged attending to employees as human beings with complex needs beyond just a paycheck. But again, the organization was viewed as a context in which work got done, an instrument to achieve particular ends, rather than a distinct social system of its own.

Other theorists, starting with Barnard (1938) and Selznick (1948), focused on the organization itself as an adaptive social system. Research in this tradition is driven more by theory than by a quest to provide immediately useful advice. This approach is evident in its choice of problems and of variables. Particular concepts—authority, legitimacy, institutionalization—are of interest because of their place in theoretical arguments, not because of their practical significance. Such basic research is more likely to focus on the independent variables—on understanding the effects of certain concepts of interest—than on the dependent variables and to be aimed at testing particular arguments. Conversely, practical research is driven by an interest

in solving some identified problem—low morale or productivity, high turnover—and is willing to incorporate any and all kinds of variables, whether economic, psychological, or cultural, that may shed light on it.

Since Vannevar Bush coined the terms "basic research" and "applied research" in 1944, they have been viewed as distinct poles of science—Bush even went as far as to say that "applied research invariably drives out pure." But Stokes (1997) argues that this dichotomy is inaccurate. Rather, basic and applied represent two distinct dimensions, forming a two-by-two matrix. In Bohr's quadrant, research seeks fundamental understanding, with no consideration for practical applications (that is, high on basic, low on application). In Edison's quadrant, research is oriented strictly toward practical applications for individuals, groups, or society, with no concern for fundamental knowledge (high application, low basic). Pasteur's quadrant is high on both dimensions—it is a quest for fundamental knowledge inspired by use. (Research with neither knowledge nor practical use in mind would include laboratory training for students.) Louis Pasteur's research in the mid-1800s documented that the transfer of microorganisms, rather than spontaneous generation, caused infectious diseases, and his work created both a revolution in basic medicine and in health practices (including, of course, pasteurization). Stokes argues that such a quest for knowledge inspired by use—that is, Pasteur's quadrant—has generated some of the most significant advances in science since the Second World War, and thus that basic and applied are not only compatible, but also complementary. Problem-driven work, in short, can produce good science.

In organization studies, problem-driven research is research that takes its cue from questions in the world and answers them using organizational paradigms, rather than pursuing questions arising strictly out of the paradigms themselves. One reason for the productivity of problem-driven research is that it is much more likely to be interdisciplinary: real-world problems do not respect disciplinary boundaries. Organizational problems can implicate psychology, sociology, political science, economics, and anthropology, and thus organization theory stands at the crossroads of these disciplines, to the mutual benefit of all of them. On the other hand, as organizational research increasingly moved into professional schools—particularly business schools—beginning in the 1970s, the contexts of study have become increasingly narrowed to for-profit settings, a development that reduces variance among the types of organizations studied and, we believe, impedes examination of the full range of forms available for organizing.

Diverse levels of analysis. Apart from the variety of conceptual schemes and orientations that guide inquiry and differences in research settings, investigators differ in the level of analysis at which they choose to work (Blau, 1957). For present purposes, the level of analysis is determined by the nature of the dependent variable, the object of theoretical analysis—that is, by

whether primary attention is given to the behavior of individuals, of organizations, or of systems of organizations. Thus, the basic levels are

- The social psychological level, focusing on the behavior of individuals or interpersonal relations involving individual participants within organizations. At this level, organizational characteristics are viewed as context or environment, and the investigator attempts to explore their impact on the attitudes or behavior of individuals. Such a perspective is exemplified by the work of Katz and Kahn (1978) and of Weick (1969; 1995).
- The organizational level, focusing on the structural features or processes that characterize organizations. Here, the major concern is to explain the structural features and social processes that characterize organizations and their subdivisions. The investigator working at this level may focus on the various subunits that make up the organization (for example, work groups, departments, authority ranks) or may examine various analytical components (for example, specialization, communication networks, hierarchy) that characterize the structural features or operational routines of organizations, or examine the behavior of the organization itself as a collective actor. Researchers working at this level include Blau and Schoenherr (1971), and Pfeffer and Salancik 1978).
- The *ecological* level, focusing on the characteristics or actions of the organization viewed as a collective entity operating in a larger system of relations. At this level, the analyst may choose either to examine the relation between a specific organization or class of organizations and the environment (e.g., Hannan and Freeman 1989; Pugh and Hickson, 1976) or to examine the relations that develop among a number of organizations viewed as an interdependent system (e.g., DiMaggio and Powell 1983; Laumann and Knoke, 1987).

Admittedly, distinguishing among these three levels of analysis is somewhat arbitrary.³ Many more refined levels of analytical complexity can be identified as one moves from organizational-individual to societal-organizational relations. Nevertheless, if only to remind us of the complexity of the subject matter and the variety of aims and interests with which analysts approach it, the three levels are helpful in providing a rough gauge for distinguishing among broad categories of studies.

Early research on organizations was conducted almost exclusively at the social psychological level. The structural level of analysis became prominent in the early 1960s and continues to be heavily utilized by sociologists. The ecological level was the last to develop, emerging in the late 1960s, but it is at this level that much of the intellectual excitement and energy that characterizes the field during the past four decades has transpired.⁴

Yet another base of divergence among those who study organizations is the *theoretical perspective* employed by the analyst. However, this is, in our view, such

³The most commonly employed levels distinction is that between "micro" and "macro" organizational studies. The former is equivalent to the social psychological level; the latter encompasses both the structural and the ecological levels.

⁴Our "ecological" level is meant to broadly encompass all approaches in which the organization is viewed as an actor in a larger system of related actors and systems. As we discuss in Chapter 5, it include both "dyadic" models of organization-environment relations as well as more systemic models in which the environment itself is seen to be organizations, for example into populations or fields of organizations.

a fundamental difference that it provides the basic themes around which we have organized this volume. Whether the analyst employs a *rational, natural,* or *open system* perspective, or some combination, is viewed as central to interpreting the work. Chapters 2, 3, and 4 are devoted to reviewing these perspectives, while later chapters explicate the ways in which they have subsequently been developed and combined.

Because so much of our attention in succeeding chapters will be devoted to emphasizing divergent perspectives, it is prudent in the next section to return to explicate the theme that all organizations share some basic characteristics.

THE ELEMENTS OF ORGANIZATIONS

If asked to draw a map of their organization, many people will draw an organization chart, as shown in Figure 1–2.

Organization charts are enormously useful but convey only a small part of what we mean by "organizations." There have been many models that render the diversity and complexity of organizations manageable by focusing on a few central dimensions—somewhere between an organization chart and an actual organization. For our initial discussion, we use Figure 1–3 adapted from Nadler and Tushman's "congruence framework" (1997). Let us briefly consider each element.

The Essential Ingredients

Environment. Every organization exists in a specific physical, technological, cultural, and social environment to which it must adapt. No organization is self-sufficient; all depend for survival on the types of relations they establish with the larger systems of which they are a part. Environments are all those significant elements outside the organization that influence its ability to survive and achieve its ends. The environment can be seen as a store of resources as well as a source of opportunities and constraints, demands and

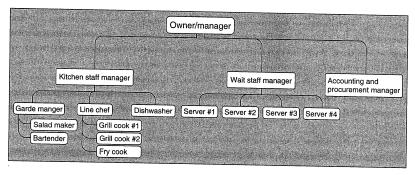


FIGURE 1-2 Generic organizational chart.

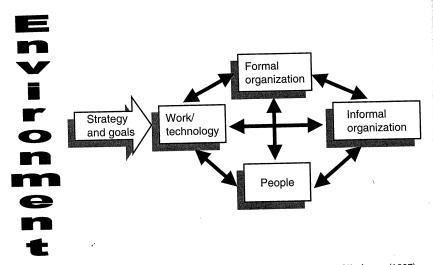


FIGURE 1-3 Congruence Model of Organizations, adapted from Nadler and Tushman (1997).

threats. It includes the clients, constituents, or customers that the organization serves and the providers of resources it requires to do so.

Students of corporate strategy have developed a framework for analyzing resource environments using the tools of industrial economics. Porter's (1980) "five forces" framework, which we describe in Chapter 12, describes the factors that make industries more or less attractive. These forces include the bargaining power of buyers or clients (which is high to the extent that they are few in number and/or well organized), the bargaining power of suppliers, the barriers to entry by new competitors that seek to serve the same customers, the existence of substitute products that serve the same function as the focal organization's products, and the intensity of rivalry among existing competitors. All of these elements combine to influence how profitable (or, conversely, how competitive) an industry is. Similarly, resource dependence theory, which we describe in Chapter 9, analyzes how resource exchanges with the environment create power/dependence relations among organizations, and how organizations respond to their situation of power or dependence (Pfeffer and Salancik, 1978). And network analysts such as Burt (1980) provide means to measure these power/dependence relations explicitly; network approaches are described in Chapter 11.

To these elements we would add several more. Governmental bodies can create both opportunities and constraints through regulation, through their ability to enhance or stifle demand for the organization's outputs, and in myriad other ways. The broader cultural milieu, including institutional arrangements, shapes both the ends and the means of organizations, a theme taken up in Chapter 10. And all of these elements can change over time: organizational environments are dynamic as discussed in Chapter 12.

Strategy and Goals. Strategy describes the choices organizations make about which markets or clients the organization intends to serve, the basis on which it competes in its domain (that is, the distinctive way it seeks to provide its outputs), the specific tactics the organization employs, and the output goals it sets for itself. Organizations do not simply pop up in an environment—their creators often choose which domains they will operate in, based on how attractive those domains might be. This will not always be the case, of course: public school systems usually have only limited control over which students and which geographic areas they will serve, and what level of financial resources they will have available. Within these constraints, however, organizations determine a particular way to do what they do. One typology distinguishes among three broad strategic types: prospectors focus on creating innovative products and services in order to shape their domain; defenders focus less on innovation and more on developing efficiencies in their internal processes; and analyzers combine these approaches by maintaining a combination of established products/services while also regularly updating with new offerings (Miles and Snow, 1994). An alternative typology distinguishes between a low-cost approach, focused on high volume and efficient production; differentiation, or providing products/services recognized as being unique; and focus, oriented toward serving a particular geographic or customer segment particularly well (Porter, 1980). We describe organizational strategies and how they link to the environment in Chapter 12.

Given a broad strategy, organizations have particular tactics that they use to pursue that strategy, which might be seen as intermediate or ground-level goals and approaches. And finally, organizations often set particular output objectives for themselves, such as "Increase students' average scores on standardized tests by 10 points within three years" or "Lower employee turnover to $10\ percent$ per year" or "Increase earnings by 15 percent per year." Chapter 8describes how goals, power, and control interact within organizations, while Chapter 12 discusses organizational performance.

Work and Technology. In order to pursue particular strategies, organizations have to perform particular critical tasks effectively to transform the organization's goals into realities. What is required to provide personalized and effective service to clients is different from what is required to produce the highest volume at the lowest cost. Work describes the tasks that the organization needs to accomplish given the goals it has set for itself. It includes the character of the work flows and the level of interedependence among the parts of the organization, which is a theme we take up in Chapter 6; the types of skills and knowledge required of participants; and the constraints that the work imposes on the organization, such as particular quality or timing requirements.

We include in this component technology, broadly construed. To focus on the technology of an organization is to view the organization as a place where energy is applied to the transformation of materials, as a mechanism for

transforming inputs into outputs. The connotations of the term *technology* are narrow and hard, but we will insist that every organization does work and possesses a technology for doing that work. Some organizations process material inputs and fabricate new equipment and hardware. Others "process" people, their products consisting of more knowledgeable individuals, in the case of effective school systems, or healthier individuals, in the case of effective medical clinics. Still others process primarily symbolic materials, such as information or music. The technology of an organization is often partially embedded in machines and mechanical equipment but also comprises the technical knowledge and skills of participants.

All organizations possess technologies, but organizations vary in the extent to which these techniques are understood, routinized, or efficacious. Some of the most interesting theoretical and empirical work has focused on the relation between the characteristics of technology and the structural features of organizations. This work is described and evaluated in Chapter 6.

Formal Organization. Organizations codify more or less explicitly how they do their work and how their parts relate to each other. We label this the formal organization and include elements such as human resource practices (including hiring and compensation policies), the design of jobs, and the overall organization structure. We define the concept of formalization in the next section and discuss its implications for organizing in Chapter 2.

Human resource practices describe how participants are recruited, what kinds of rewards they receive, and what kinds of careers they have once inside the organization, including the promotion ladders offered (if any). Recruiting and retaining members is a central task for any kind of organization, as is getting them to contribute once they have showed up. Some organizations have elaborate methods of socialization and training to bring members up to speed, and equally elaborate structures to retain them for extended periods, including health insurance, pensions, and other benefits. Other organizations treat employment as, in effect, a day-to-day agreement. We describe these alternative arrangements and their rationale in Chapter 7.

Job design describes what tasks are done as part of a single job. Adam Smith famously argued for the advantages of highly divided labor by describing a pin factory, which—by dividing the tasks of creating a pin into eighteen different discrete operations—vastly increased the daily output of finished pins. Frederick Taylor (1911) systematized this insight with his method of "scientific management" in the early part of the twentieth century, and Henry Ford brought it to fruition at the Highland Park assembly line that made Model Ts in Detroit. An unfortunate side effect, of course, was that the highly divided tasks were mind-numbingly repetitive and boring, a fact that was not lost on subsequent commentators, who lamented the seemingly inevitable trade-off between meaningful work and productivity. Organizational psychologists working in the 1960s and 1970s argued that intrinsically motivating work led to more productivity and that jobs could be enlarged and enriched

in ways that produced both intrinsic interest and high productivity (e.g., Hackman and Oldham, 1980).

Organization structure groups together jobs into larger units, such as teams and departments, and analyzes authority relations and patterns of formal communication among participants and units. These choices are summarized and depicted in the familiar organization chart that we began this section with. Prominent organization designs include the functional form, in which jobs are grouped into departments or "functions" (e.g., engineering, manufacturing, sales); the multidivisional form, in which different geographic areas, products, or services each have a separate functional form whose managers in turn report to a corporate headquarters unit; and a matrix form, in which the organization has a simultaneous hierarchy by function and by project or program. We discuss these and other forms in more detail in Chapter 6.

Informal Organization. Not all aspects of the organization are captured by the organization chart, of course. The informal organization refers to the emergent characteristics of the organization that affect how the organization operates. This includes the organization's culture, norms, and values; social networks inside and outside the organization; power and politics; and the actions of leaders.

Culture describes the pattern of values, beliefs, and expectations more or less shared by the organization's members. Schein (1992) analyzes culture in terms of underlying assumptions about the organization's relationship to its environment (that is, what business are we in, and why); the nature of reality and truth (how do we decide which interpretations of information and events are correct, and how do we make decisions); the nature of human nature (are people basically lazy or industrious, fixed or malleable); the nature of human activity (what are the "right" things to do, and what is the best way to influence human action); and the nature of human relationships (should people relate as competitors or cooperators, individualists or collaborators). These components hang together as a more-or-less coherent theory that guides the organization's more formalized policies and strategies. Of course, the extent to which these elements are "shared" or even coherent within a culture is likely to be highly contentious (see Martin, 2002)—there can be subcultures and even countercultures within an organization. These issues are discussed in Chapter 8.

Social networks are the informal connections among individuals that often arise out of work patterns but can have a large influence beyond them. As individuals seek others out for advice, or to have lunch, or to look for information or favors, their person-to-person ties evolve into a social structure that can be quite consequential for things ranging from individual career advancement to the creation of innovative products or services. Chapter 11 describes the origins and influence of networks in and around organizations.

Because organizations involve exchanges of resources, sharing information, and trading favors, they become "markets for influence and control," as

Pfeffer and Salancik (1978) put it. Power and politics arise more or less spontaneously in organizations as individuals and subunits pursue agendas and as the resource environment around the organization changes. As Chapter 8 describes, power can both enable organizations to get things done, and hinder useful changes. Thus, it is an important dimension to consider when analyzing organizations.

People. Organizational participants make contributions to the organization in return for a variety of inducements, as Barnard (1938) and Simon (1997) emphasize. All individuals participate in more than one organization (recall that, by definition, organizations are specialized in their purposes), and the extent and intensiveness of their involvement may vary greatly; the decision as to who is to be regarded as a participant is thus often a difficult one and may legitimately vary with the issue at hand. For example, a single individual may simultaneously be an employee of an industrial firm, a member of a union, a church member, a member of a fraternal lodge or sorority, a "member" of a political party, a citizen of the state, a client of a group medical practice, a stockholder in one or more companies, and a customer in numerous retail and service organizations.

Several characteristics of the individuals comprising an organization are relevant. These include their knowledge and skills and how they fit with the tasks they perform; their needs and preferences; and the broader background they bring with them to the organization. The demographic characteristics of participants—for example, their age, gender, and ethnic distributions—also have important consequences for many aspects of organizational structure and functioning. We explore these implications in Chapter 7.

Finally, leaders and their actions can have an important influence on organizations—although as Khurana (2002) points out in Searching for a Corporate Savior: The Irrational Quest for Charismatic CEOs, this influence is often less than observers imagine! Both initial strategies and structures, and the composition of the organization's management team, often reflect the experiences, preferences, and even whims of founding leaders, and such individuals have an ongoing influence on how organizations operate—for better or worse—as we describe in Chapter 12.

Each of these organizational elements—environment, strategy and goals, work and technology, formal organization, informal organization, and people—represents an important component of all organizations. Indeed, each element has been regarded as being of surpassing importance by one or another analyst of organizations. However, the chief value of the congruence model is as a graphic reminder that no one element is so dominant as to be safely considered in isolation from the others. Organizations are, first and foremost, *systems* of elements, each of which affects and is affected by the others. Strategies are not the key to understanding the nature and functioning of organizations, no more than are the people, the formal structure, or the

technology. And no organization can be understood in isolation from the larger environment. We will miss the essence of organization if' we insist on focusing on any single feature to the exclusion of all others.

A Corrective Argument; From Structure to Process

While, as noted, we will discuss throughout this volume the various ingredients of organization just introduced, we also want to point out two important limitations to this approach and begin to introduce an alternative formulation. First, the Nadler and Tushman model, as well as related approaches, tends to perpetuate the dualism that distinguishes structure, whether formal or informal, from people and their actions. Second, the entire model is highly static, privileging elements and structures over actions and processes. The social theorist Anthony Giddens (1979; 1984) has proposed an alternative theoretical model that seeks to overcome both of these limitations in his theory of structuration. This argument reminds us that social structures only exist to the extent that people act in ways to reproduce ongoing patterns of action.⁵ Social structures are comprised of rules or schema (models for behavior) and resources (both material and human) which acquire their meaning and value from the schema applicable to them. Actions always take place within an existing structure of rules and resources: these structures provide the context for action. On the other hand, actions work to reproduce as well as to alter existing structures: structures are the product of human action. As Giddens elaborates:

Every process of action is a production of something new, a fresh act; but at the same time all action exists in continuity with the past, which supplies the means of its initiation. Structure thus is not to be conceptualized as a barrier to action, but as essentially involved in its production, even in the most radical processes of social change. (1979: 70)

This conception of the "duality" of structure helps to overcome the age-old debates between freedom and order. More specifically, it works to correct sociological arguments, which are overly determinist, assuming that individual actors have little choice or autonomy, but also challenges psychological (and economic) assumptions that actors are free to make any choice that suits them or to act in unconstrained ways.

Giddens's formulation also reinforces the need to take a more dynamic view of social structure and behavior. Rather than focusing on a stable, static, cross-sectional view of an organizational structure, it reminds us to consider the ways in which moment by moment, day by day, and year by year, structures are undergoing transformation, thereby providing new and different opportunities

 $^{^5}$ It is not only social structures that are subject to these processes but also social objects such as technologies. See Chapter 6.

for individuals making choices and taking action. These ideas will be revisited throughout this volume, but especially in Chapters 10, 13, and 14.

The Capacities of Organizations

The foregoing discussion represents an opening attempt to identify some of the key elements or ingredients of organizations: to specify their building blocks (and wheels). However, such an approach does not go far in explaining why organizations are so prevalent. What are their distinctive capacities? We briefly address this question here but will return to it again throughout the volume.

Hannan and Carroll (1995) identify a number of features that help to explain why organizations are much in demand as vehicles for conducting the myriad activities associated with modern social life.

- 1. More so that many other types of social structures, organizations are *durable*: they are designed in such a way as to persist over time, routinely and continuously supporting efforts to carry on a set of specified activities. More so than other types of social structures, they are expected to operate as long-distance runners. Attaining stability over time and in spite of shifting participants is one of the major functions of formalization, as we emphasize in Chapter 2. Durability does not necessarily imply effectiveness; organizations often persist that are deemed by many to be inept (Meyer and Zucker, 1989). And durability should not to be equated with rigidity. Some of the newer forms of organizations are designed to combine great flexibility with the maintenance of an organizational core that persists across changing combinations of personnel, structure, and even goals.
- 2. Another capacity of organizations is their *reliability* (Hannan and Carroll, 1995: 20). Organizations are good at doing the same things in the same way, over and over, and for many types of activities there are many advantages associated with this characteristic. In later chapters we will describe all the numerous mechanisms of control utilized in organizations, including formalization, authority structures, elaborate rules and routines, strong cultures, and the use of specialized machinery. All of these factors are designed in part to increase the reliability of the work activities being performed. Reliability of performance is not, of course, an unmixed blessing. To the extent that conditions change and new activities are called for, the very factors associated with effective performance may suddenly prevent an organization from changing its rules and procedures quickly enough to develop new ways of behaving. Still, for many types of activities and many situations, there are great advantages associated with the ability to produce goods and services reliably.
- 3. Organizations exhibit the trait of being accountable (Hannan and Carroll, 1995: 21; see also Meyer and Rowan, 1977). Behavior takes place within a framework of rules that provides both guidelines and justifications for decisions and activities. They establish a scaffolding of rationality that allows participants to give an accounting of their past behaviors (Scott and Lyman, 1968). In most industrial societies, this framework is connected to and supported by legal codes that define the powers and limits of organizations. Records are kept and a "paper trail" created so that, if necessary, the bases for past actions can be reviewed. The hierarchy of authority is expected, at least in part, to ensure that rules are being followed and work is performed in

accordance with agreed-on standards and procedures. Of course, not all organizations measure up to these standards: there is much evidence of both incompetence and corruption. More important, as we will learn, the type of rationality involved—formal rationality—is itself a limited and flawed basis for ensuring reasonable, let alone moral, conduct. Nevertheless, in an imperfect world, a system in which individuals attempt to operate within an explicit framework of rules nested in wider legal systems to which they are accountable, has much to recommend it.

DEFINING THE CONCEPT OF ORGANIZATION

How we define "organization" shapes how we think about the phenomenon—what we see as essential, and what we ignore as irrelevant. Few of us have difficulty viewing Toyota or Amnesty International as organizations. Stanford University or the New York Times are slightly more problematic. But what about the "global justice" movement, which stages protests at meetings of the World Trade Organization and other supranational entities? Or Freedom Wireless—a corporation consisting of four employees and six patents, whose primary source of revenue comes from suing cellphone companies for infringing on their patents? Or corporations set up in Montana by elderly couples purchasing recreational vehicles to avoid sales taxes and registration fees in their home states? Scientific theories are often sparked by analogies. Merton notes that

Gilbert begins with the relatively simple idea that the earth may be conceived as a magnet; Boyle, with the simple idea that the atmosphere may be conceived as a 'sea of air'; Darwin, with the idea that one can conceive of atolls as upward and outward growths of coral over islands that had long since subsided into the sea. Each of these theories provides an image that gives rise to inferences. To take but one case: if the atmosphere is thought of as a sea of air, then, as Pascal inferred, there should be less air pressure on a mountain top than at its base. The initial idea thus suggests specific hypotheses which are tested by seeing whether the inferences from them are empirically confirmed. (1968: 40)

By the same token, those that theorize about organizations often start from an image—an organization as a machine for accomplishing goals, or as a small society with a social structure and culture, or as an organism making its way through a resource environment (Morgan, 1986). Each highlights different aspects of organizations and encourages us to see different patterns of relationships. Differing analogies give rise to varying paradigms for examining organizations.

Consistent with the objectives of this volume, not one but three definitions of organizations will be presented. These definitions pave the way for our description and evaluation, in the next three chapters, of three major perspectives developed over the course of the twentieth century to understand organizations. We leave to later chapters the considerable task of

spelling out the implications of these differing definitions. Special attention is accorded here to the first definition because it continues to be the dominant perspective in the field, not only in guiding the work of the majority of organizational scholars but also by being embraced at least implicitly by most real-world managers and other practitioners. Moreover, this definition served to establish organizations as a distinctive field of study. The first definition underpins the *rational system* perspective on organization. Two other definitions—one associated with the *natural system* perspective and the other with the *open system* perspective—will be briefly described here and examined more fully in later chapters.

A Rational System Definition

Because a primary function of a definition is to help us to distinguish one phenomenon from another, most definitions of organizations emphasize the distinctive features of organizations—those that distinguish them from related social forms. Many analysts have attempted to formulate such definitions, and their views appear to be similar, as illustrated by the following three influential definitions.

According to Barnard,

formal organization is that kind of cooperation among men that is conscious, deliberate, purposeful. (1938:4)

According to March and Simon,

Organizations are assemblages of interacting human beings and they are the largest assemblages in our society that have anything resembling a central coordinative system. . . . The high specificity of structure and coordination within organizations—as contrasted with the diffuse and variable relations among organizations and among unorganized individuals—marks off the individual organization as a sociological unit comparable in significance to the individual organism in biology. (1958: 4)

And according to Blau and Scott,

Since the distinctive characteristic of . . . organizations is that they have been formally established for the explicit purpose of achieving certain goals, the term "formal organizations" is used to designate them. (1962: 5)

All of these early definitions point to the existence of two structural features that distinguish organizations from other types of collectivities.

1. Organizations are collectivities oriented to the pursuit of relatively specific goals. They are "purposeful" in the sense that the activities and interactions of participants are coordinated to achieve specified goals. Goals are *specific* to the extent that they are explicit, are clearly defined, and provide unambiguous criteria for selecting among alternative activities.

2. Organizations are collectivities that exhibit a relatively high degree of formalization. The cooperation among participants is "conscious" and "deliberate"; the structure of relations is made explicit. A structure is *formalized* to the extent that the rules governing behavior are precisely and explicitly formulated and to the extent that roles and role relations are prescribed independently of the personal attributes and relations of individuals occupying positions in the structure.

It is the combination of relatively high goal specificity and relatively high formalization that distinguishes organizations from other types of collectivities. Note that both goal specificity and formalization are viewed as variables: organizations vary along both dimensions. Nevertheless, as a structural type, organizations are expected to exhibit higher levels of formalization and goal specificity than are other types of collectivities, such as primary groups, families, communities, and social movements. In general—exceptions certainly exist—families and kinship structures tend to rank relatively high on formalization but low on goal specificity (Litwak and Meyer, 1966); social movements tend to exhibit low levels of formalization combined with higher levels of goal specificity⁶, although the specificity of goals varies greatly from movement to movement and from time to time (Gusfield, 1968); and communities are characterized by low levels of both goal specificity and formalization (Hillery, 1968: 145–52).

We arrive, then, at the first definition, associated with the rational system perspective: organizations are collectivities oriented to the pursuit of relatively specific goals and exhibiting relatively highly formalized social structures. Note that this definition focuses not only on the distinctive characteristics of organizations, but also on their normative structure. In Chapter 2 we consider the development and significance of this perspective on organizations.

A Natural System Definition

Gouldner (1959) reminds us that the distinguishing features of a phenomenon are not its only characteristics and, indeed, may not be the most important ones. Although organizations often espouse specific goals, the behavior of participants is frequently not guided by them, nor can they be safely used to predict organizational actions. Similarly, formal role definitions and written rules may have been developed, but all too frequently they exhibit little or no influence on the behavior of members.

⁶Beginning in the 1980s, analysts of movements began to place more emphasis on their organizational features—for example, the extent to which they are guided by a full-time, paid staff and have regularized mechanisms for obtaining resources and recruits and for setting goals. Like many other phenomena in modern society, social movements, if they endure, morph into social movement organizations (Zald and McCarthy, 1987).

Thus, if the behavioral structure is attended to, rather than the normative structure—if we focus on what participants actually do rather than on what they are supposed to do—the first definition of organizations can be quite misleading.

Focusing attention on the behavioral structure produces a view of organizations quite different from that proffered by the rational system theorists. The goals pursued become more complex, diffuse, differentiated, and subject to change; participants appear as motivated by their own interests and seek to impose these on the organization. It is recognized that the organization itself is a major asset, a valuable resource to be captured. Rather than being only a means, an instrument to pursuing other ends, the maintenance and strengthening of the organization becomes an end in itself. Informal and interpersonal structures are seen to be of greater importance than are formal structures, which often serve only as a decorative facade concealing the "real" agenda and structure. And power is recognized as stemming from many sources other than occupancy of a formal position.

Hence, a second definition of organizations, useful for viewing them as natural systems, is suggested: organizations are collectivities whose participants are pursuing multiple interests, both disparate and common, but who recognize the value of perpetuating the organization as an important resource.

The natural system view emphasizes the common attributes that organizations share with all social collectivities. And because organizations are not set apart from other social systems, they are viewed as subject to forces affecting all such systems. In particular, we find replicated in this perspective the two contrasting versions of the bases of social order in the sociological literature at large: one emphasizing social consensus, the other, social conflict. The first, social consensus, version emphasizes a view of collectivities as comprised of individuals sharing primarily common objectives. The assumption underlying this conception is that social order (of any type) is a reflection of underlying consensus among the participants; that organizational stability and continuity reflect the existence of cooperative behavior and shared norms and values. This widely held and influential view of the basis of social order is generated in the writings of Durkheim (1961 trans.) and Parsons (1951), among others, and reflected in the organizational theories of Barnard (1938) and Mayo (1945), among others. The contrasting social conflict version views social order as resulting from the suppression of some interests by others. Order results not from consensus, but from coercion, the dominance of weaker by more powerful groups. And analytic attention is devoted not to the appearance of consensus, but to the reality of underlying conflicts, which provide a basis for understanding instability and change. The sociological progenitors of this view include Marx (1954 trans.) and Coser (1956). Applications to organizations are provided by such theorists as Gouldner (1954), Bendix (1956), and Collins (1975).

In Chapter 3 we review the development of the basic assumptions of the natural system perspective and examine the competing consensus and conflict models.

An Open System Definition

The previous definitions tend to view the organization as a closed system, separate from its environment and encompassing a set of stable and easily identified participants. However, organizations are not closed systems, sealed off from their environments, but are open to and dependent on flows of personnel, resources, and information from outside. From an open system perspective, environments shape, support, and infiltrate organizations. Connections with "external" elements can be more critical than those among "internal" components; indeed, for many functions the distinction between organization and environment is revealed to be shifting, ambiguous, and arbitrary.

All three perspectives agree that if an organization is to survive, it must induce a variety of participants to contribute their time and energy to it. However, open system theorists emphasize that individuals have multiple loyalties and identities. They join and leave or engage in ongoing exchanges with the organization depending on the bargains they can strike-the relative advantage to be had from maintaining or ending the relation. Viewed from this perspective, participants cannot be assumed to hold common goals or even to routinely seek the survival of the organization. Thus, much of the work of organizing entails hard bargaining and "horse training"—as well as creating affective ties and common interpretive systems—as participants attempt to form and re-form transitory coalitions.

An open system perspective is less concerned with distinguishing formal from informal structures; instead, organizations are viewed as a system of interdependent activities. Some of these activities are tightly connected; others are loosely coupled. All must be continuously motivated—produced and reproduced—if the organization is to persist. The arrival of this perspective triggered the elaboration and elevation of levels of analysis. No longer was the single organization the privileged unit of analysis. Rather, analysts recognize that many organizational phenomena are better understood and explained by viewing individual organizations as representatives of a given type of structure, or by viewing organizations as components in larger systems of relations. The open system perspective is associated with the development of studies aimed at understanding organizational sets, populations, and fields-topics we pursue in subsequent chapters.

Also, the open system perspective stresses the importance of culturalcognitive elements in the construction of organizations. Nothing is more portable than ideas—conceptions, models, schemas, and scripts. Organizations swim in this cultural soup and continuously adopt and adapt these templates, intendedly and inadvertently.

We arrive, then, at a third definition, useful for viewing organizations as open systems: organizations are congeries of interdependent flows and activities linking shifting coalitions of participants embedded in wider material-resource and institutional environments.

The open system perspective is explicated in Chapter 4.

Why Three Perspectives?

It is no doubt unsettling to be confronted so early with three such diverse views of organizations. But better to know the worst at the outset! The definitions are quite different in that they not only encompass somewhat divergent types of collectivities but also emphasize different facets of a given organization. But this is precisely why they are useful. Definitions are neither true nor false but are only more or less helpful in calling attention to certain aspects of the phenomenon under study. With the assistance of these definitions, and the more general perspectives with which they are associated, we can expect to see and learn more about organizations than would be possible were we to employ a single point of view. As we proceed, we will call attention to the remarkably varied portraits painted by theorists embracing each of the conceptions. Each has its own charms as well as its own blemishes; and each carries its own truth as well as its own biases.

We describe rational, natural, and open systems as *perspectives* or *paradigms* because in each case we are dealing not with a single, unified model of organizational structure, but rather with a number of varying approaches that bear a strong family resemblance. Thus, our concern will be with three types of approaches or three schools of thought, the notion of perspective serving as a conceptual umbrella under which we gather the related views. To add further to the complexity, the three perspectives partially conflict, partially overlap, and partially complement one another.

An understanding of these perspectives is valuable for several reasons. It is very difficult to comprehend or to fruitfully utilize the large literature on organizations without knowledge of the differing perspectives underlying this work. Why do some investigators assume that organizational goals are central and obvious whereas others presume that goals are dispensable and cannot be taken at face value? Why does one analyst assert that organizations have great difficulty in changing their structures while another assumes that change is easy and continuous? These are the kinds of issues that cannot be understood without knowledge of the underlying perspectives that frame the work. Also, we should expect to receive help not only in making sense out of past studies but also in examining contemporary efforts of organizational analysts. For although these perspectives emerged at different times, later perspectives have not succeeded in supplanting earlier ones. The perspectives continue to guide and inform work in the field.

The perspectives should be understood in two senses. On the one hand, they are historical products—systems of ideas and practice that developed and held sway in specific times and circumstances. To completely divorce them from their context would be a mistake, since much of their meaning is historically situated. But at the same time, the perspectives selected are not just of historical interest. Each has shown great resilience and has been invented and reinvented over time so that each has persisted as an identifiable, analytic model. In our discussion, we try to do justice to both moments: the historically specific versions and the underlying analytically enduring features. In their pure form, the perspectives share many of the features of paradigms as described by Kuhn in his influential essay on scientific revolutions. Kuhn describes *paradigms* as "models from which spring particular coherent traditions of scientific research" (1962: 10). Rational, natural, and open system perspectives are, in this sense, organizational paradigms.

SUMMARY

Organizations are important objects of study and concern for many reasons. They are vital mechanisms for pursuing collective goals in modern societies. They are not neutral tools because they affect what they produce; they function as collective actors that independently possess certain rights and powers. Both as instruments and as actors, organizations are alleged to be the source of some of contemporary society's most serious problems. Organizations encompass generic social processes but carry them out by means of distinctive structural arrangements.

Although an interest in organizational forms and processes may be traced far back in history, an institutionalized field of scholarly inquiry focusing on the creation and empirical testing of generalized knowledge concerning organizations did not emerge until after 1950. This development was fashioned primarily on a foundation that recognized both the technical and rational features of organizations as well as their human and social aspects. Hence from the beginning the field of organizational studies has been highly interdisciplinary.

Organizations are studied for many purposes and from many points of view. Important bases of divergence include variation among types of organizations, differences in disciplinary background of the investigators, whether research is addressed to more immediate and applied problems or seeks longer-term basic understanding, and level of analysis selected. Three levels of analysis are identified: social psychological, organizational structural, and ecological. It is possible to identify a set of ingredients common to all organizations as well as to identify some of their distinctive capacities as one type of social structure.

Three contrasting definitions of organizations have arisen, each associated with one of three perspectives on organizations: the rational, natural, and open system. The first definition views organizations as highly formalized collectivities oriented to the pursuit of specific goals. The second definition views organizations as social systems, forged by consensus or conflict, seeking to survive. And the third definition views organizations as activities involving coalitions of participants with varying interests embedded in wider environments. The three definitions frame analytically useful, if partial, views of organizations based on differing ontological conceptions. And all three perspectives, albeit in varying combinations, continue to guide and influence the ways we think about organizations and organizing.

Organizations as Rational Systems

A well-designed machine is an instance of total organization, that is, a series of interrelated means contrived to achieve a single end. The machine consists always of particular parts that have no meaning and no function separate from the organized entity to which they contribute. A machine consists of a coherent bringing together of all parts toward the highest possible efficiency of the functioning whole, or interrelationships marshalled wholly toward a given result. In the ideal machine, there can be no extraneous part, no extraneous movement; all is set, part for part, motion for motion, toward the functioning of the whole. The machine is, then, a perfect instance of total rationalization of a field of action and of total organization. This is perhaps even more quickly evident in that larger machine, the assembly line.

JOHN WILLIAM WARD (1964)

From the rational system perspective, organizations are instruments designed to attain specified goals. How blunt or fine an instrument they are depends on many factors that are summarized by the concept of rationality of structure. The term rationality in this context is used in the narrow sense of technical or functional rationality (Mannheim, 1950 trans.: 53) and refers to the extent to which a series of actions is organized in such a way as to lead to predetermined goals with maximum efficiency. Thus, rationality refers not to the selection of goals but to their implementation. Indeed, it is perfectly possible to pursue irrational or foolish goals by rational means. Captain Ahab in Melville's classic Moby Dick chases the white whale across the seven seas musing; "All my means are sane, my motive and my object mad." Nazi Germany provides a more terrible, nonfiction example. Adolf Hitler's insane objective of eradicating Europe's Jewish population was efficiently pursued by hosts of functionaries like Adolph Eichmann. He took the goal as given and worked faithfully to rationally bring it about, illustrating in Arendt's (1963) phrase, "the banality of evil." It is essential to keep in mind the restricted definition of rationality used within the rational system perspective.