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# Five Basic Parts of the Organization

In Chapter 1 organizations were described in terms of their use of the coordinating mechanisms. We noted that, in theory, the simplest organization can rely on mutual adjustment to coordinate its basic work of producing a product or service. Its *operators*—those who do this basic work—are largely self-sufficient.

As the organization grows, however, and adopts a more complex division of labor among its operators, the need is increasingly felt for direct supervision. Another brain—that of a *manager*—is needed to help coordinate the work of the operators. So, whereas the division of labor up to this point has been between the operators themselves, the introduction of a manager introduces a first *administrative* division of labor in the structure—between those who do the work and those who supervise it. And as the organization further elaborates itself, more managers are added—not only managers of operators but also managers of managers. An administrative *hierarchy* of authority is built.

As the process of elaboration continues, the organization turns increasingly to standardization as a means of coordinating the work of its operators. The responsibility for much of this standardization falls on a third group, composed of *analysts*. Some, such as work study analysts and industrial engineers, concern themselves with the standardization of work processes; others, such as quality control engineers, accountants, planners, and production schedulers, focus on the standardization of outputs; while a few, such as personnel trainers, are charged with the standardization of skills (although most of this standardization takes place outside the organization, before the operators are hired). The introduction of these analysts brings a second kind of administrative division of labor to the organization, between those who do and who supervise the work, and those who standardize it. Whereas in the first case managers assumed responsibility from the operators for some of the coordination of their work by substituting direct supervision for mutual adjustment, the analysts assume responsibility from the managers (and the operators) by substituting standardization for direct supervision (and mutual adjustment). Earlier, some of the control over the work was removed from the operator; now it begins to be removed from the manager as well, as the systems designed by the analysts take increasing responsibility for coordination. The analyst "institutionalizes" the manager's job.

We end up with an organization that consists of a core of operators, who do the basic work of producing the products and services, and an *administrative* component of managers and analysts, who take some of the responsibility for coordinating their work. This leads us to the conceptual description of the organization shown in Figure 2–1. This figure will be used repeatedly throughout the book, sometimes overlaid to show flows, sometimes distorted to illustrate special structures. It emerges, in effect, as the "logo," or symbol, of the book.

At the base of the logo is the operating core, wherein the operators carry out the basic work of the organization-the input, processing, output, and direct support tasks associated with producing the products or services. Above them sits the administrative component, which is shown in three parts. First, are the managers, divided into two groups. Those at the very top of the hierarchy, together with their own personal staff, form the strategic apex. And those below, who join the strategic apex to the operating core through the chain of command (such at it exists), make up the middle *line*. To their left stands the *technostructure*, wherein the analysts carry out their work of standardizing the work of others, in addition to applying their analytical techniques to help the organization adapt to its environment. Finally, we add a fifth group, the support staff, shown to the right of the middle line. This staff supports the functioning of the operating core indirectly, that is, outside the basic flow of operating work. The support staff goes largely unrecognized in the literature of organizational structuring, yet a quick glance at the chart of virtually any large organization indicates that it is a major segment, one that should not be confused with the other four. Examples of support groups in a typical manufacturing firm are research and development, cafeteria, legal council, payroll, public relations, and mailroom.



Figure 2-1. The Five Basic Parts of Organizations

Figure 2–1 shows a small strategic apex connected by a flaring middle line to a large, flat operating core. These three parts of the organization are shown in one uninterrupted sequence to indicate that they are typically connected through a single line of formal authority. The technostructure and the support staff are shown off to either side to indicate that they are separate from this main line of authority, and influence the operating core only indirectly.

It might be useful at this point to relate this scheme to some terms commonly used in organizations. The term "middle management," although seldom carefully defined, generally seems to include all members of the organization not at the strategic apex or in the operating core. In our scheme, therefore, "middle management" would comprise three distinct groups—the middle-line managers, the analysts, and the support staff. To avoid confusion, however, the term *middle level* will be used here to describe these three groups together, the term "management" being reserved for the managers of the strategic apex and the middle line.

The word "staff" should also be put into this context. In the early literature, the term was used in contrast to "line": in theory, line positions had formal authority to make decisions, while staff positions did not; they merely advised those who did. (This has sometimes been referred to as "functional" authority, in contrast to the line's formal or "hierarchical" authority.) Allen (1955), for example, delineates the staff's major activities as (1) providing advice, counsel, suggestions, and guidance on planning objectives, policies, and procedures to govern the operations of the line departments on how best to put decisions into practice; and (2) performing specific service activities for the line, for example, installing budgeting systems and recruiting line personnel, "which may include making decisions that the line has asked it to make" (p. 348). As we shall see later, this distinction between line and staff holds up in some kinds of structures and breaks down in others. Nevertheless, the distinction between line and staff is of some use to us, and we shall retain the terms here though in somewhat modified form. Staff will be used to refer to the technostructure and the support staff, those groups shown on either side in Figure 2-1. Line will refer to the central part of Figure 2-1, those managers in the flow of formal authority from the strategic apex to the operating core. Note that this definition does not mention the power to decide or advise. As we shall see, the support staff does not primarily advise; it has distinct functions to perform and decisions to make, although these relate only indirectly to the functions of the operating core. The chef in the plant cafeteria may be engaged in a production process, but it has nothing to do with the basic manufacturing process. Similarly, the technostructure's power to advise sometimes amounts to the power to decide, but that is outside the flow of formal authority that oversees the operating core.1

Some Conceptual Ideas of James D. Thompson Before proceeding with a more detailed description of each of the five basic parts of the organization, it will be helpful to introduce at this point some of the important conceptual ideas of James D. Thompson (1967). To Thompson, "Uncertainty appears as the fundamental problem for complex organizations, and

<sup>1</sup>There are other, completely different, uses of the term staff" that we are avoiding here. The military "chiefs of staff" are really managers of the strategic apex; the hospital "staff" physicians are really operators. Also, the introduction of the line/staff distinction here is not meant to sweep all of its problems under the rug, only to distinguish those involved directly from those involved peripherally with the operating work of organizations. By our definition, the production and sales functions in the typical manufacturing firm are clearly line activities, marketing research and public relations clearly staff. To debate whether engineering is line or staff—does it serve the operating core indirectly or is it an integral part of it?—depends on the importance one imputes to engineering in a particular firm. There is a gray area between line and staff: where it is narrow, for many organizations, we retain the distinction; where it is wide, we shall explicitly discard it.

## The Organization as a System of Flows

Given the five parts of the organization-operating core, strategic apex, middle line, technostructure, and support staff—we may now ask how they all function together. In fact, we cannot describe the one way they function together, for research suggests that the linkages are varied and complex. The parts of the organization are joined together by different flows-of authority, of work material, of information, and of decision processes (themselves informational). In this chapter we look at these flows in terms of a number of schools of thought in the literature of organization theory. We begin with the view of the organization as a system of formal authority, and then we look at it as a system of regulated flows. Both represent traditional views of how the organization functions, the first made popular by the early management theorists, and the second, by the proponents of scientific management and later the control systems theorists. Today, both views live on in the theories of bureaucracy and of planning and information systems. Next, we look at the organization as a system of informal communication, a view made popular by the human relations theorists and favored today by many behavioral scientists. The two final views-the organization as a system of work constellations and as a system of ad hoc decision processes-although not yet well developed in the literature, are more indicative of contemporary trends in organizational theory, in part because they blend formal and informal relationships in organizations.

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Each of these five views is depicted as an "overlay" on our logo. This notion of overlays is borrowed from Pfiffner and Sherwood (1960), who point out that, "The totality of these overlays might be so complex as to be opaque ..." (p. 19), but by treating them one at a time in relation to the totality, we can more easily come to understand the complexity of the whole system.<sup>1</sup>

#### THE ORGANIZATION AS A SYSTEM OF FORMAL AUTHORITY

Traditionally, the organization has been described in terms of an "organizational chart." (Borrowing from the French, I shall use the term *organigram* instead.<sup>2</sup>) The organigram shown in Figure 3–1—the first over-



Figure 3-1. The Flow of Formal Authority

<sup>1</sup>Pfiffner and Sherwood present five overlays on the "job-task pyramid" (which is really our overlay of formal authority): the sociometric network, the system of functional contracts, the grid of decision-making centers, the pattern of power, and the channels of communication. <sup>2</sup>The correct French spelling is "organigramme." lay—is symbolic, in that it is far too simple to represent any but the smallest organization that exists today.

The organigram is a controversial picture of the structure, for while most organizations continue to find it indispensable (the organigram is inevitably the first thing handed to anyone inquiring about structure), many organizational theorists reject it as an inadequate description of what really takes place inside the organization. Clearly, every organization has important power and communication relationships that are not put down on paper. However, the organigram should not be rejected, but rather placed in context: it tells us some useful things, even though it hides others. The organigram is somewhat like a map. A map is invaluable for finding towns and their connecting roads, but it tells us nothing about the economic or social relationships of the regions. Similarly, while the organigram does not show informal relationships, it does represent an accurate picture of the division of labor, showing at a glance (1) what positions exist in the organization, (2) how these are grouped into units, and (3) how formal authority flows among them (in effect, describing the use of direct supervision). Van de Ven (1976a, p. 70) appropriately refers to the organigram as the "skeletal configuration" of the organization.

While formal authority represents one very limited aspect of the complex organization, it must be studied and understood if the functioning of organizations is to be understood. As Melville Dalton (1959) notes in his insightful study of informal relationships in an American manufacturing plant, the formal structure restrains the informal in three basic ways: "First, the formal largely orders the direction the informal takes. Second, it consequently shapes the character of defenses created by the informal. And third, whether the formal is brightly or dimly existent in the blur of contradictions, it requires overt conformity to its precepts" (p. 237).

### THE ORGANIZATION AS A SYSTEM OF REGULATED FLOWS

Figure 3–2, the second overlay, shows the organization as a network of regulated flows overlaid on the logo. The diagram is stylized, as these usually are, depicting the organization as a well-ordered, smoothly functioning system of flow processes. This view was not only a favorite of early organizational theorists, but remains the dominant one in the literature of planning and control systems today. Figure 3–3 shows one elaborate version of this view, taken from Stafford Beer's book, *Brain of the Firm* (1972).

The second overlay shows the flows of work materials, information, and decision processes, but only those aspects that are *regulated*, in other words, systematically and explicitly controlled. Thus, whereas the first view of the organization described the use of direct supervision as a



Figure 3-2. The Flow of Regulated Activity

coordinating mechanism, this one describes the use of standardization. Three distinct flows can be identified in the regulated system, the operating work flow, the flow of control information and decisions, and the flow of staff information.

**The Operating Work Flow** The flow of work through the operating core is shown in simplified form at the bottom of Figure 3–2 as three sequential arrows representing, symbolically, the input, processing, and output functions. Operating work flows involve the movements of materials and information in a variety of combinations. In manufacturing firms, the work flow centers on materials that are transformed—for example, the parts that move along the assembly line—backed up by information flows such as work documents and time sheets. In contrast, many service organizations transform information, which flows in the form of documents:

In a life insurance company, for example, applications are received, examined, accepted or rejected, policies issued, policy-holders billed for premiums, premiums processed, and benefits paid. The file representing the individual policy is the focal center of the organization's work (Simon, 1957, p. 159).



Figure 3-3. One View of the Organization as a System of Regulated Flows (from Beer, 1972, p. 199)

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In retail firms, both materials and information—merchandise, cash, customer data, and so on—move in parallel systems, while in newspapers, information and materials move in separate systems—the information work flow in editorial feeds the material work flow (paper and ink) in printing. Sometimes the customer is the object of the work flow, as in hospitals and barbershops.<sup>3</sup>

The regulation of the operating work flow varies from one organization to another. Figure 3–4 shows the highly regulated flow of work, with



Figure 3-4. A Highly Regulated Work Flow (from Chapple and Sayles, 1961, p. 30)

sequential coupling, in a manufacturing assembly line. Less regulated are the flows Holstein and Berry (1970) recorded in what is known as a "job shop," a group of work stations (in this case, machines in a factory) which transfer work in a number of ways. Note in Figure 3–5 that no single transfer accounts for more than 4.4 percent of the total. Objects flow between work stations according to their individual needs for processing, as automobiles move about repair garages or people shop in department stores. In general, this leads to a more complex mixture of pooled, sequential, and reciprocal coupling. But one interesting finding of Holstein and Berry can be seen in Figure 3–5: there evolved "considerable work flow structure" (p. B325), that is, certain set patterns that most of the orders followed. In other words, as we shall see repeatedly in this book, patterns appear naturally in organizational flows and structures.

As a final note, it should be pointed out that regulated work-flow relationships, while most characteristic of the operating core, may also take place at other levels in the hierarchy. Figure 3–6 shows the regulated ex-

<sup>3</sup>See Argyris (1966) for a good description of the customer as "pacesetter" in the work flow of a trust department.



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change of information among financial and production groups at four hierarchical levels of a manufacturing firm.



Figure 3-6. An Illustration of the Regulated Control Flows (from Paterson, 1969, p. 49)

The Regulated Control Flows Officially, the formal control system regulates the vertical flows of information and decision making, from the operating core up the chain of authority. The regulated control flows are shown in Figure 3–2 as vertical channels up and down the middle line. Flowing up is the feedback information on the operating work, while flowing down are the commands and work instructions. In addition, at each level of the management hierarchy are circular arrows, indicating the decision-making role of the middle managers in the control system. Below we look at each of these aspects in turn.

Commands and instructions are fed down the chain of authority,<sup>4</sup> emanating from the strategic apex or a middle-line position, and elaborated as they flow downward. In the formal planning process, for example, general "strategic" plans are established at the strategic apex; successively,

these are elaborated into programs, capital and operating budgets, and operating plans (e.g., marketing and manpower plans), finally reaching the operating core as sets of detailed work instructions. In effect, in the regulated system the decisions made at the strategic apex set off ever-widening waves of implementational decisions as they flow down the hierarchy.

The upward control system exists as a "management information system," or MIS, that collects and codes data on performance, starting in the operating core. As this information passes each level in the hierarchy, it is aggregated until, finally, it reaches the strategic apex as a broad summary of overall organizational performance. Figure 3–6 shows some aspects of the regulated control flows in a manufacturing firm—the downward amplified planning system and the upward aggregated MIS in finance and production.

The regulated control system of the organization also includes a specification of the kinds of decisions that can be made at each level of the hierarchy. This represents, in effect, the vertical division of decision-making labor. For example, the spending authority of managers may be specified as \$1000 for first-line supervisors, \$10,000 for district managers, and so on up to the chief executive officer, who may be able to authorize expenditures of up to \$100,000 without having to seek the approval of the board of directors. Figure 3–7 shows a more elaborate example of a regulated decision system.

When we combine this notion of vertical division of decision-making labor with those of the regulated flows of information aggregated up and commands elaborated down the hierarchy, we find that managers at different levels can interrupt these flows to make decisions appropriate to their own level. This is what the circular arrows in the middle line of Figure 3–2 are meant to describe. Commands coming down the hierarchy may be stopped at a given management level and handled there, as, for example, when a president receives a complaint by a customer and sends it down to the regional sales manager for action. And information on "exceptions" decision situations that cannot be handled at a given level—are passed up the hierarchy until they reach a manager with the necessary formal authority to handle them. T. T. Paterson (1969) provides us with a number of interesting illustrations of this regulated decision system, the most graphic being in the British income tax office. Paterson speaks from experience:

Faced by an income tax problem because I have an income from writing and broadcasting and the like in addition to a salary, I decide to take my problem to the local income tax office. A young clerk sees me come in and ... comes towards the desk to receive me. I tell her I have problems and I bring out my income tax return form. She immediately answers by saying "Well, you fill this one in here, and fill that one in there" ... This cannot solve my problem and she does not know how to solve it either, whereupon she lifts up the flap



in the counter and takes me through the office into a room in which sits somebody I take to be a chief clerk, by reason of his oak desk and 10 square feet of carpet. He examines my problem and takes out a large book of rules governing income tax. I should give an answer on my return according to Section 23, paragraph A, but, unfortunately, this does not quite suit my particular case....

I am then taken into a room which belongs to someone I assume to be a chief inspector because he has a mahogany desk and the carpet is fitted to the walls. He sees that my case is unique and the answers lie between paragraphs A and B; therefore he decides (because he has the right to) that I should answer somewhere in between. . . . he makes a decision lying between the limits set by the rules. Such rules have been laid out, in the first instance, by people in the Inland Revenue in London, so as to give limits within which chief inspectors may make such new, unique decisions, or regulations which the chief clerk can obey precisely (pp. 28–29).

**The Regulated Staff Information Flows** A third aspect of the regulation system is the communication flow between line and staff, made for the purpose of feeding staff information and advice into line decision making. These flows are shown in Figure 3–2 as horizontal lines—between the line managers in the middle and the technocratic and support staff on either side. For example, a technocratic group may help a manager at a given level to elaborate plans for downward dissemination, while a support unit may help a manager to deal with an exception passed up the hierarchy. Figure 3–6 shows these types of contacts at different hierarchical levels, between accounting staff members in the technostructure and managers in the middle line.

It is, typically, the technostructure—notably the accountants and the like—who design and operate the management information system for the line managers. In addition, certain staff groups are specialized in the collection of *intelligence* information for the line managers, that is, information external to the organization. An economic analysis group may collect information on the state of the economy for the managers of the strategic apex, while a market research group may feed data on consumer buying habits to the marketing managers. The heavy arrows at the upper left and right of Figure 3–2 represent this flow of intelligence information.<sup>4</sup>

To conclude, the second overlay shows the organization as a regulated system characterized by orderly flows of materials, information, and decision processes. These include horizontal work flows in the operating core and elsewhere; upward aggregated flows of performance information and

<sup>&</sup>lt;sup>4</sup>Boulding (1962) notes that, unofficially, intelligence can be an internal function as well, used to check on the formal information filtered up the hierarchy. March and Simon (1958, p. 167) note other, more routine informational tasks that staff members perform, such as carrying information (e.g., the messenger service), preparing reports (e.g., bookkeeping), and retaining information (e.g., archives).

exceptions; downward elaborated flows of commands, these last two interrupted according to the imperatives of the regulated decision system; and horizontal information flows between staff specialists and line managers.

# THE ORGANIZATION AS A SYSTEM OF INFORMAL COMMUNICATION

Since the Hawthorne experiments, it has become increasingly clear that organizations function in far more complex ways than those suggested by overlays 1 and 2. In effect, considerable activity outside the systems of formal authority and regulated flow processes has been uncovered in the research. Centers of power exist that are not officially recognized; rich networks of informal communication supplement and sometimes circumvent the regulated channels; and decision processes flow through the organization independent of the regulated system.

For centuries observers and leaders have remarked on the distinctions between expected and unexpected behavior in organizations. The fact that the distinctions continue to be made under various names points to an apparently universal condition. From at least the time of Augustus Caesar, these dissimilarities were recognized and incorporated in the terms *de jure* (by right) and *de facto* (in fact), which are roughly equivalent to *legal* or *official* and *actual* but *unofficial*. In industry and business today one repeatedly hears the same general meaning phrased as "administration versus politics," "theory versus practice," "red tape versus working relations," "fancy versus fact," etc. (Dalton, 1959, p. 219).

Dalton defines formal or official as "that which is planned and agreed upon" and informal or unofficial as "the spontaneous and flexible ties among members, guided by feelings and personal interests indispensable for the operation of the formal, but too fluid to be entirely contained by it" (p. 219). Thus, whereas the first two views of the organization focus on the formal use of direct supervision and standardization, this one focuses on mutual adjustment as a coordinating mechanism.

Our third overlay is presented in Figure 3–8. This shows the flow of informal communication in a municipal government, taken exactly as presented by Pfiffner and Sherwood (1960, p. 291) and overlaid on our logo. In fact, Pfiffner and Sherwood's figure maps easily onto our five-part figure: the two boxes at the strategic apex represent the city council and the city manager; the middle-line position represents the assistant manager; the four operating core units are building, police, parks, and fire; the four technocratic units on the left are the civil service commission, civil service department, engineer, and planning; while the three support units on the right are attorney, library, and finance.



Figure 3-8. The Flow of Informal Communication (adapted from Pfiffner and Sherwood, 1960, p. 291)

Pfiffner and Sherwood refer to the diagram as a "Sociometric view of two (most frequent) contacts of the manager, his assistant, and department heads" (p. 291), implying that they are really exposing only the tip of the informal communications iceberg. A "sociogram" is simply a map of who communicates with whom in an organization, without regard to formal channels. This particular sociogram shows a number of interesting things. First, the top manager, as expected a central point in the flow of communication, is obviously prepared to bypass formal channels. Second, a glance at the contacts of the middle-line manager suggests that his formal rank in the hierarchy may be misleading. No contacts are shown with the operating units, even though this manager is shown in the organigram as being in charge of them. Third, the engineer at the base of the technostructure "is in a vital position, affecting organizational communication" (p. 291). This shows a further crack in the regulated system—a staff man, off to the side, occupies a position of major power.

... Hierarchical status is not the only factor of significance. The engineer is regarded as a high-status person in city governments principally because of his

professional identifications, his membership in a professional subculture. ... his high status also comes from the centrality of his functional role to the work of many other departments (pp. 290–291).

Trist and Bamforth's Coal Mine Study Before attempting to explain why informal communication is so important in the workings of the organization, it will be helpful to review one pathbreaking study of the complex relationship between formal and informal communication. Trist and Bamforth (1951), of the British Tavistock Institute, analyzed in great detail the work situation in British coal mines before and after the introduction of mechanization. In the premechanization period, the informal group was responsible for the whole task of mining the coal seam. Tasks were multiple and substitutable; the group used its own methods from beginning to end; communication was informal and within the group. In effect, the dominant mechanism for coordination was mutual adjustment.

With the advent of a new, advanced technical system, the division of labor was formalized. Workers were now separated not only in terms of the tasks they performed, but also the shift they performed them on and the place along the seam where they performed them. The informal means of communication and coordination were eliminated. Furthermore, the individual worker could no longer see his task carried to its natural completion; rather he performed a single step isolated both in place and in time.

Unfortunately, no coordinating mechanism could replace mutual adjustment. Managers were designated, but direct supervision was ineffective because of the physical distances separating of workers, the darkness, and the dangerous conditions in the mines. Standardization of work process, inherent in the new technical system, was insufficient for coordination, while standardization of outputs of individual workers was not feasible because the outputs derived only from the coordinated efforts of the members of the group. Hence, the new system destroyed the informal communication system without setting up a formal one to take its place. The result was low productivity and considerable worker alienation. Trist and Bamforth describe four defenses that the coal miners used to cope with the new situation: the establishment of small, informal work groups; failing that, "the development of a reactive individualism in which a reserve of personal secrecy is apt to be maintained" (p. 31); mutual scapegoating between people on different shifts in blaming each other for work problems; and absenteeism.

Trist and Bamforth proposed a solution that recognized both the informal social system and the formal technical system. (In a later paper, Emery and Trist, 1960, write about the "sociotechnical" system.) Work duties were reorganized to enable the new technical system to be used by miners working in small, informal, self-managed groups. Jobs were shared, informal communication took place, leadership emerged naturally within the group when needed, and performance could be measured and therefore standardized. In effect, the formal and informal systems were brought back into accord with each other. $^{5}$ 

**The Importance of Informal Communication** There are two prime reasons for informal communication in organizations, both brought out clearly in the coal mine study. One is directly work-related, the other social.

In one study, Conrath (1973) found that 60 percent of the face-to-face communication in organizations was related directly to the tasks at hand. Most work just cannot get done without some informal communication. Life is simply too complicated to regulate everything. Standardization must be supplemented with mutual adjustment, even if only to deal with unexpected change. We saw a good example of this earlier, in the dramatic failure of the Northeast Electric Grid System for lack of an effective override. Even in highly simple and stable systems, the standards cannot cover all the requirements of the work. The best illustration of this is the work-to-rule strike, a favorite ploy of workers with the most standardized jobs (such as sorting mail). Here they follow the standards to the letter, and the result is chaos. The message is that a fully regulated system, devoid of recourse to informal communication, is next to impossible. Human organizations simply cannot be made so machinelike. (The example earlier of the assembly instructions for a child's toy is one we all understand well. It is amazing how difficult it can be to put even that simple task down on paper for the layman to understand; yet it can easily be explained by someone nearby who knows how to do it.)

At the managerial levels, study after study shows that managers of all kinds favor the verbal channels of the informal system over the documents of the formal (spending 65 to 80 percent of their time in verbal contact), and that they spend almost as much of their time (about 45 percent on average) communicating outside the chain of formal authority as inside it. The regulated channels are often slow and unreliable, frequently too limited in what they carry. The soft information, intangible and speculative, is simply ignored in the formal MIS despite clear evidence that managers depend on such information. And the MIS, because it must document and then aggregate hard facts, is often too slow for the manager, reporting the open barn door long after the cow has fled. Moreover, aggregation of information in the MIS often makes what finally reaches the strategic apex so abstract and vague as to be of limited use in the making of specific decisions. In contrast to the bland documents of the MIS, the verbal channels of communication —outside the regulated flow—are rich in the data they carry to the manager.

<sup>s</sup>For another, equally detailed study by the Tavistock Institute, see Rice's (1953) analysis of work in an Indian weaving mill (and Miller's, 1975, follow-up report). Both Tavistock studies are excellent examples of "action research," in which the researchers seek both to describe an organizational situation and to improve it.

The manager can "read" facial expressions, gestures, and tones of voice, and he can elicit immediate feedback.

The result is that managers bypass the MIS to get much of their own information. They build their own networks of informal contacts, which constitute their real information and intelligence systems. Aguilar (1967), in his study of external information that managers use, notes that personal sources exceeded impersonal sources in perceived importance—71 percent to 29 percent. He quotes a senior partner in an investment banking firm on the most important source of external information for the successful executive of the large corporation: "the informal network of contacts which he has outside the company" (p. 76).<sup>6</sup>

The second reason for the existence of informal communication in organizations is *social* in nature. People need to relate to each other as human beings, whether for purposes of friendship or to let off steam.

Much informal communication may be totally independent of the work of the organization, as in the case of the social grooming ("Good morning"; "Fine, thank you") that Desmond Morris (1967) talks about in *The Naked Ape*. Other social communication is decidedly "dysfunctional," actively interfering with the work to be done. In many organizations, people override the regulated systems to advance their personal needs. They leak sensitive information to outsiders and hold back critical information from their managers. But managers, too, use information "dysfunctionally." In his book *Organizational Intelligence*, Wilensky (1967) notes the existence of clandestine intelligence systems whereby leaders gather political and ideological information on their subordinates to maintain their authority. (Ironically, he finds these systems especially strong in the most democratic organizations, simply because the leaders must know the minds of those who elected them.)<sup>7</sup>

In many cases, however, social communication turns out to be vital to the success of the organization. Trist and Bamforth's study shows that social communication at the coal face was necessary to reassure the workers in their dangerous environment, while that in the pubs helped to achieve coordination across shifts.

In his study, Dalton (1959) describes vividly the intrigues, pressures, and distortions underneath the regulated system in a manufacturing plant. Dalton's theme is that the upper levels of the organization cannot impose regulations against the will of the groups lower down. Even the foremen sometimes aided the workers in resisting regulations imposed from above.

<sup>6</sup>The points in the last two paragraphs on the manager's use of formal and informal information are developed at length, together with references to the research literature, in Chapters 3 and 4 of *The Nature of Managerial Work* and in a monograph entitled *Impediments to the Use of Management Information* (Mintzberg, 1973a, 1975). See also Aguilar's book, Scanning the Business Environment (1967).

<sup>7</sup>Some dysfunctions of the system of regulated flows will be discussed in Chapters 5 and 18.

Changes could be made only through persuasion and bargaining—essentially through recognition of the relationships between the regulated and the social systems.

**The Network of Informal Communication** The system of informal communication in the organization is multichanneled and varied, a point Pfiffner (1960) expresses well:

In place of the orderly information flow, step by step up the hierarchy, which we generally have accepted as a model, information really follows a grid of communications made up of overlapping, often contradictory and elusive channels, which really are not channels in the formal sense. Messages are mutual and compensatory, taking on the conformation of a galaxy ... (p. 129–130).

The network of informal communication may be thought of as a set of informal channels connected by "nerve centers"—individuals who stand at the crossroads of the channels. In these informal channels, individuals bypass the formal authority system in order to communicate directly. Figure 3–9 shows three cases of this. In the first, two peers communicate directly rather than through their bosses, in effect, replacing the direct supervision of the formal authority system by the mutual adjustment of the informal system. In the second case, of a diagonal nature, an individual at one level of the hierarchy communicates directly with the subordinate of a peer at a



Figure 3-9. Some Bypass Channels of Communication

lower level. In the third case, a manager is bypassed—and the scalar chain overrode—as his superior communicates directly with his subordinate, typically to avoid aggregation or distortion in the information transmitted. The use of those bypass channels is very common, at all levels in the hierarchy. Burns (1957), for example, in his study of the work of seventy-six senior and middle-level managers, concluded:

The accepted view of management as a working hierarchy on organization chart lines may be dangerously misleading. Management simply does not operate as a flow of information up through a succession of filters, and a flow of decisions and instructions down through a succession of amplifiers (p. 60).

Strauss (1962–63), who studied the purchasing agents of the operating core, wrote a detailed article on their "Tactics of Lateral Relationships." He found that the effective and high-status purchasing agents favored mutual adjustment over direct supervision and standardization: in order to resolve conflicts they had with other departments (notably engineering), they were reluctant to appeal to the boss, to rely on the rules, or to require written acceptances; instead, "to oil the wheels of formal bureaucracy" (p. 173), they relied on friendship, the exchange of favors, and their own informal political power.<sup>8</sup>

One important informal network of communication, made up of a web of bypass channels, is the "grapevine." A study by Caplow (1966) of "Rumors in War" found the grapevine to be surprisingly fast, accurate, and comprehensive, while Davis (1953, 1968), who studied the grapevine in a 600-person firm, found it to be fast, selective, and discriminating. For one quality control problem initiated by a letter from a customer, he found that 68 percent of the executives received the information, but only three of the fourteen communications took place within the chain of command (Davis, 1953, p. 48).

At the crossroads, or "nodes," of the channels of informal communication are the "nerve centers," the individuals who collect information from different channels and switch it selectively into them. Certain staff specialists emerge in this capacity due to their access to a wide variety of line managers at different levels in the hierarchy (Davis, 1953; Strauss, 1962–63). Others so emerge because they are "gatekeepers," controlling the flows of important external information into the organization. Allen and Cohen (1969) found "technical gatekeepers" in the research laboratory, bringing in scientific information, while Strauss (1962–63) found them as purchasing agents, bringing in supplier information. Other staff nerve centers sit between departments, linking them together, as in the case of the engineer who carries information between the research and marketing departments.

<sup>8</sup>See also Landsberger (1961–62) for a thorough discussion of "The Horizontal Dimension in Bureaucracy."

Finally, managers themselves serve as nerve centers (and gatekeepers), since, as we saw in Figure 2-4 and in the data cited in this chapter, they stand not only in the vertical flow of formal information, but in the horizontal flow of informal information, between analysts, support staff, other managers, and outsiders. Thus, Sutton and Porter (1968) in a study of a government office found that all of the managers (as well as 10 percent of the rank and file) served as nerve centers (in their words "liaison individuals") in the flow of grapevine information.

To conclude, we see that in sharp contrast to the order and hierarchy of the first two overlays, the third suggests the existence of much more fluid, less orderly flow processes in organizations. But all three views of how the organization functions seem to dichotomize overly the distinction between the formal and informal systems. The two systems seem to be rather interdependent: at the very least, the formal appears to shape the informal, while the informal greatly influences what works in the formal, and sometimes even reflects its shape to come. Let us, therefore, consider two views that suggest a blending of the formal and informal.

### THE ORGANIZATION AS A SYSTEM OF WORK CONSTELLATIONS

In the last overlay, we viewed the organization as a rather random set of communication channels connected by nerve centers. Now we shall see a view that suggests that this informal network is patterned in certain ways and is related to the formal authority system.

To uncover some of these patterns, let us consider first some additional evidence on informal communication in organizations. In his review article on organization theory, Scott (1961) noted that where people work closely together and share common interests, they communicate extensively and informally with each other in "cliques." These cliques are commonly found in departments that are functionally specialized and in work flows that bring people into close physical contact. Similarly, in their study of a U.S. government tax office, Sutton and Porter (1968) found that 64 percent of the grapevine communication of the members (most of them nonmanagers) was destined for people within a functional group. In contrast, Davis (1953) found that for *managers* the prime flow of grapevine communication was across functions, not within. But Burns (1957) still found the presence of cliques for managers—they spent most of their time with a small number of peers:

Perhaps the most striking of the results ... is the uniform segregation of a <sup>ce</sup>nior management group of three, usually, or four persons. Of the total time

spent in conversation with people within the concern (i.e., the factory), the general manager might spend half with the other two members of this group (p. 60).

What this evidence suggests is that people in organizations tend to work in cliques, or small peer groups, based on horizontal not vertical relationships: at the lower levels, these groups reflect functional specialization or work flow; at the managerial levels, they tend to cut across specialties or functions.

In a series of studies, Thomason (1966, 1967) supports this conclusion with the finding that the organization consists of various *distinct* communication networks, or cliques, at different levels of the hierarchy. Thomason found further that each served as the focal point for specialized information: "... the overall hierarchy becomes a composite of different subject-oriented communications networks, with the center of this network lying at the point in the hierarchy to which the subject is allowed or required to penetrate" (Thomason, 1967, p. 29).

So now a clear picture emerges: organizational members at a given level in the hierarchy deal with information that *differs in kind* from that dealt with at other levels. This is in sharp contrast with the regulated system view that all levels in the hierarchy deal with the *same* kind of information, only in a more aggregated or elaborated form: for example, the salesperson, the sales manager, and the marketing vice-president all deal with marketing information, the first with specific sales, the second with weekly totals, the third with quarterly reports. But the findings above suggest otherwise, that the issues each level addresses are fundamentally different. In effect, the organization takes on the form of a set of work constellations, quasi-independent cliques of individuals who work on decisions appropriate to their own level in the hierarchy. Thus, Landsberger (1961–62) concludes in his study of the flow of horizontal communication in organizations:

... these flows, lying on top of each other, so to speak, may be relatively independent and qualitatively different from each other. A higher-level manager may admittedly spend some of his time arbitrating between subordinates, but at least as important is the time he spends in solving with colleagues roughly at his own level problems appropriate to his own level (p. 305).

In Weick's (1976) terms, these work constellations are "loosely coupled": "The imagery is that of numerous clusters of events that are tightly coupled within and loosely coupled between" (p. 14). In effect, each work constellation has responsibility for some decisional area of the organization introducing new product lines, dealing with financial issues, bidding on contracts, scheduling production, or whatever. We would expect to find much of the informal communication and the decision making of the organization bounded within these work constellations, with the nerve centers effecting much of the communication between them and the gatekeepers gathering in much of their external information.

Once this point is recognized, all kinds of illustrations of it appear in the literature. Perhaps the clearest is that of Lawrence and Lorsch (1967, pp. 55-56), who found that production problems in plastics companies were handled at the plant manager level, while scientific problems were handled by the scientists themselves or their immediate supervisors (such as group leaders), and marketing problems fell in between, being handled by product sales managers and the like, in the middle of the sales department hierarchy. And Sills (1957) found in his study of the National Foundation for Infantile Paralysis (which ran the famous March of Dimes campaign) a clear decisionmaking division of labor between the national headquarters and the local chapters: the chapters were responsible primarily for raising funds and financially assisting polio victims, while the headquarters focused directly on the sponsorship of scientific research. This was done to ensure the coordination of research activities on a national basis, and also to preclude "the possibility that Chapters might neglect the research program in favor of the more immediately rewarding patient care program" (p. 73). Furthermore, Gustavsen (1975) finds evidence that even the board of directors acts as a work constellation: "The boards seemed ... to act within certain fields rather than as a general managerial body at 'the top' of the enterprise" (p. 36), notably in the fields of investments, mergers, and the like.

Work constellations can range from the formal to the informal, from work groups shown as distinct units on the organigram, such as the payroll department, to those in which individuals from different units converse informally to deal with certain kinds of decisions, as when researchers, industrial engineers, production and sales managers meet to plan the introduction of new products. (Of course, this group could also be quasi-formal, for example, designated as an official "standing committee.") We would, in fact, expect most work constellations in the operating core to correspond to the work flow and to be reflected as formal units on the organigram. For example, as shown in Figure 3-10, newspapers comprise four distinct operating work constellations, each functioning relatively independently but feeding into one sequentially coupled work flow. The advertising constellation that sells the advertising space and the editorial constellation that writes the material both feed their outputs to a printing constellation that produces the newspaper, and this in turn feeds a circulation constellation that distributes it. (This example comes from a study carried out under the author's supervision by management students at McGill University.9 A number of such examples will be used throughout this book.)

Similarly, in the support staff, we would expect to find a one-to-one correspondence between many of the formal work units and the work con-

<sup>9</sup>Based on a study submitted to the author in Management 420, McGill University, 1970, by Arthur Aron, Mike Glazer, Daniel Lichtenfeld, and Dave Saltzman.



Figure 3-10. Four Work Constellations in the Operating Core of a Newspaper

stellations. Each of these support units in effect constitutes such a constellation, tightly coupled within but only loosely coupled with the rest of the organization. For example, the cafeteria or the public relations department provides a rather distinct, self-contained service.

In the case of the technostructure and middle line, however, according to the evidence of Davis, Burns, and Thomason cited earlier, we would expect the work constellations to be less formal in nature, often cutting across official departmental lines. The analysts, for example, accomplish their work only by changing the work of others; accordingly, we would expect to find them forming constellations with others, notably line managers, to effect these changes. And the line managers, as noted earlier, involve themselves in complex webs of relationships—in effect, work constellations —not only with analysts but also with certain support staffers and with managers from other units.

Figure 3–11, our fourth overlay, illustrates some of the points we have been making about work constellations. It shows a manufacturing firm as a set of ten work constellations. In the operating core are three constellations coupled sequentially in the work flow and corresponding to the units on the organigram—a fabricating shop, an assembly operation, and a distribution



Figure 3-11. The Set of Work Constellations

department. Above and to the left of the operating core is the administrative production constellation, concerned with scheduling production, standardizing the manufacturing work, and handling the problems of the plant floor. It includes first-line production supervisors and analysts, such as industrial engineers and production schedulers. Immediately above this is the new product constellation, comprising middle-line marketing managers, analysts, and support staffers, such as marketing researchers and engineers from the research and development department. Off to the right, exclusively within the support staff ellipse and corresponding to the formal units on the organigram, are the plant cafeteria at the bottom, the research and development department in the middle (overlapping the new product constellation), and the public relations department near the top. Finally, two work constellations are shown connected to the strategic apex. The finance constellation links top managers and financial support staffers, while the long-range planning constellation links top managers, some board members, and highlevel analysts of the technostructure.

Of course, this overlay—like the others—is highly simplified. It shows only a few of the many work constellations to be found in any fair-sized manufacturing firm, and it does not show the many nerve centers that supply the needed coupling—however loose—between the different constellations or the gatekeepers that link each to the external environment.

To conclude, while the systems of formal authority and regulated flows depict the organization as a kind of spiral spring, made up of one type of material that gradually narrows as it rises to its apex, and the system of informal communication depicts it as a marble cake with flows in every direction, the system of work constellations describes it as a layer cake, less orderly than the spiral spring but more orderly than the marble cake.

#### THE ORGANIZATION AS A SYSTEM OF AD HOC DECISION PROCESSES

Authority and communication in organizations are not ends in themselves, but facilitating processes for the other two basic flow processes—the making of decisions and the production of goods and services. In discussing the regulated system, we dealt with the operating work flow and we looked at the flow of regulated decision processes. Now we look at decision making from a different perspective—as a rather more flexible flow of ad hoc decision processes. Here we shall see how the formal and informal aspects of organization—the formal authority, the regulated flow of information, and the flow of informal communication—all blend together to determine organizational behavior.

What is a "decision"? It may be defined as a *commitment to action*, usually a commitment of resources. In other words, a decision signals an explicit intention to act.

And how about a decision process? One thing it is not is just the selection of a course of action. Our research (Mintzberg, Raisinghani, and Théorêt, 1976) indicates that selection is often the icing on the cake, one of a series of steps leading to a decision, not necessarily the most important. A decision process encompasses all those steps taken from the time a stimulus for an action is perceived until the time the commitment to the action is made. This research suggests that those steps draw on seven fundamentally different kinds of activities, or "routines." Two take place in the identification phase of decision making: the recognition routine, wherein the need to initiate a decision process is perceived, and the *diagnosis* routine, where the decision situation is assessed. Two routines are associated with the phase of *development* of solutions: the *search* routine, to find ready-made solutions, and the design routine, to develop custom-made ones. The selection phase includes three routines: the screening of ready-made solutions, the evaluation-choice of one solution, and the authorization of this by people not otherwise involved in the decision process. A single decision process can

encompass any and all of these routines, each in fact executed a number of times.

**Categorizing Organizational Decision Processes** There is no generally accepted "typology" based on empirical research of the kinds of decision processes organizations make. What we have instead are some rather general conceptual typologies. Organizational decision processes have, for example, been categorized as programmed and unprogrammed, and as routine and ad hoc. At one extreme we have the highly standardized decision made at regular intervals and at the other extreme, the highly unstructured ones made irregularly. Decision processes have also been categorized by their functional area—new product decisions in marketing, investment decisions in finance, hiring decisions in personnel, and so on.

Decision processes have also been categorized by their importance in the organization, most commonly as operating, administrative, and strategic.

- 1. Operating decisions are taken rather routinely in processes that are typically programmed and executed quickly, almost automatically, by operators or low-echelon support staffers working individually. A lathe operator makes an operating decision when he starts or stops his machine, as does a librarian when he is asked to find a simple reference. Such decision processes generally come under the purview of the regulated system. In these processes, recognition is clearly defined, not unlike the pigeon that darts for food when a bell is rung. There is little diagnosis, or design of custom-made solutions, only a highly circumscribed search for ready-made solutions. In effect, all the phases of operating decision making—identification, development, and selection —are largely predetermined, in such terms as "if *a*, do *x*"; "if *b*, do *y*."
- 2. Administrative decisions may be considered as coordinative or exceptional. Coordinative decisions guide and coordinate the operating decisions. Many of the decisions in the administrative levels of the regulated system fall into this group, including planning, scheduling, and budgeting decisions. These decision processes are typically routine, made on fixed schedules, and are sometimes even rather programmed, although typically less so than the operating decision processes. Some are forced into functional categories—for example, those related to marketing budgets, manpower plans, and production schedules. They are made by line managers or staff analysts—sometimes the two working together—although the most programmed of them can be made by clerks in the technostructure or even by computers. *Exception* decisions are those made on an ad hoc basis but with minor overall consequences. These are nonroutine and less programmed than the first two decision processes. As such, they involve

a distinct recognition step, and their steps of diagnosis, search, and selection are typically more elaborate than for the operating and many of the coordinative decisions. They may also include the design of custom-made solutions. Exception decisions also tend to cut across functional areas; indeed, many are evoked by an event that spills over a single function, as when marketing and production managers battle about the quality of a product. An exception decision can (a) emerge at a single level in the hierarchy, as when a regular supplier goes bankrupt and the purchasing department must initiate a decision process to find a new one; (b) rise up the hierarchy for resolution, as when a customer complaint to a salesperson is sent up to the sales manager for action; or (c) descend down the hierarchy for change, as when a decision made at the strategic apex to introduce a new product line requires the plant manager to purchase new machinery and the sales manager to hire new sales personnel. In effect, the type (a) exception decision is made within a single work constellation, whereas types (b) and (c) came under the regulated decision system. It should be noted, however, that the same exception decision may be evoked in any of three ways. A sales manager may decide to hire new salespeople because the managers above him decided to introduce a new product line, because the sales personnel below him complain of overwork, or because a salesperson resigns (forcing the making of a decision unique to his level).

3. Strategic decisions are also exceptions, but by definition they are significant in their impact on the organization. Examples of strategic decisions from our own research (Mintzberg, Raisinghani, and Théorêt, 1976) include the case of a consulting firm forced to merge after losing its biggest customer, an airport that decided to develop a runway extension, and a brokerage firm that decided to buy a seat on a major exchange in order to expand. It should be noted that no type of decision is inherently strategic; decisions are strategic only in context. The introduction of a new product is a major event for a brewery, but hardly worth mentioning in a toy company. In fact, we can label the same decision as strategic, exception, and operating in different contexts: the pricing decision for a company building giant oil tankers is strategic; that for a restaurant is an exception, taken only when costs go up; while that in a printing plant is operating, taken many times a day by clerks working with standard price lists. Strategic decisions are the least routine and programmed of all the decision processes, typically taking years and involving many members of the organization, from the strategic apex and other parts. Our research indicates that strategic decision processes involve very complex intermingling of the seven routines: recognition typically involves many stimuli, most of them difficult to interpret; diagnosis is a key routine,

but not very systematic; a great deal of effort goes into the development of solutions, especially design activity, since solutions must often be custom-made; and selection also turns out to be a complex, multistage process. To add to the complexity, single strategic decisions are typically factored into many smaller decisions which are made in processes that are continually being interrupted, blocked by political and other factors, delayed or speeded up by the decision makers themselves, and forced to recycle back on themselves. A strategic decision may be evoked by a change in the environment, as when a new technical system is developed; by an exception coming up the hierarchy, as when a customer complaint indicates a major problem with an important new product; or by individual initiative, as when a manager simply decides that it is time for a new product line. In general, strategic decisions set off waves of other decisions in the hierarchy. Many exception and coordinative decisions must be made to implement them, as when a new product line requires the hiring of new staff, the buying of new machines, and the preparation of new plans, budgets, and schedules. And ultimately they result in a host of changes in the operating decision processes: that is why they are strategic.

More important than a typology of decisions is an understanding of how decision processes flow through the organization. Specifically, we need to understand how operating, administrative, and strategic decisions link together and what roles the different participants—operators, top and middle-line managers, technocratic and support staffers—play in the phases of the different decision processes. We need to know who recognizes the need to make a given kind of decision, who diagnoses the situation, who develops the solution, who authorizes it, and so on. On these points we have little evidence. There has simply been too little research on the important question of how decision processes flow through organizations. Toward the end of the book, based on our findings, we shall speculate on the answer for different kinds of structures. But for the moment, we present an example below to illustrate the organization as a system of ad hoc decision processes.

An Ad Hoc Decision Process The fifth overlay shown in Figure 3–12 presents a hypothetical example of an ad hoc decision process that involves a mix of the types of decisions discussed above. The example begins with a salesperson in the office of a customer, shown at point 1, in the operating core. The customer is dissatisfied with the product of the firm and suggests to the salesperson that it be modified. Finding merit in the recommendation, but lacking the authority to deal with it, the salesperson passes the idea up to the sales manager (2). He, in turn, sends it to the marketing vice-president (3), and the latter raises the issue at an executive meeting (4). In effect, the



Figure 3-12. The Flow of an Ad Hoc Decision Process

stimulus for the decision, having originated at the operating core, has traveled as an exception through the regulated system, up the middle line to the strategic apex. There formal recognition takes place, and the president directs the head of the operations research department to form a task force to diagnose the situation and design a solution (5). The operations research manager draws his task-force members from various units and levels: the line sales manager, a member of the marketing research staff, an analyst from accounting. Together they design the new product, each one returning to his unit to evaluate specific details, for example, cost estimates (6a) and market potential (6b). Shortly thereafter, the operations research manager presents the group's findings to the executive committee (7). This group approves the recommendation, thereby authorizing the *strategic* decision. Now the implementational stage begins, with waves of *coordinative* and exception decisions affecting every corner of the organization. For example, the advertising department develops a promotional campaign for the new product (8), and the sales manager (together with analysts) prepares new

plans and budgets, and specifies the staffing needs to effect the necessary changes in the sales department (9). One day, eighteen months after the process began, the original salesperson makes an *operating* decision—to return to the office of his customer, new product in hand (10).

Two important qualifications should be noted about this overlay. First, our story barely presents the skeleton of what really takes place when an organization introduces a new product. To show any reasonable part of the full implementation phase, for example, would make the fifth overlay hopelessly confusing. We would have lines going back and forth in every conceivable direction. A full description of the strategic decision process would take pages, not paragraphs. Little has been said about all the informal communication that necessarily accompanies such a strategic decision process, as well as the politics that inevitably result from a major change in an organization, and the many cycles, interruptions, and timing delays encountered along the way. Also, the fifth overlay only hints at the relationship between the work constellations and the decision process. In fact, that relationship is a rich one, with some parts of the process contained within particular constellations and others requiring complex interactions between them. In general, we would expect the strategic decision process to cut across many work constellations and the implementation process to be more neatly divided up among different ones.

The second qualification is that this overlay shows a "top-down" decision process, where the power for decision making remains at the top of the organization. The strategic decision process was guided from there and then implemented down the hierarchy. As we shall see later, this is one pattern of ad hoc decision processes among many. Strategic decisions may emerge anywhere in the organization, for example, in the operating core when a team of hospital psychiatrists decide to change their method of treatment. Furthermore, in some cases strategic decisions are not always so clearly delineated from implementational ones; later we shall see structures where decisions that appear to be operating in nature in fact lead to strategic change.

Despite these qualifications, the fifth overlay makes one important point which serves to conclude our discussion on how the organization functions. It shows the complex intermingling of the formal and informal flows of authority, communication, and decision processes. Only by focusing on these real flows—of authority, work materials, information, and decision processes—can we begin to see how the organization really functions. Such an understanding is an important prerequisite for a thorough understanding of organizational structure.

To conclude, we reiterate the point that each of the five systems overlays is an incomplete picture of how any real organization functions. But



Figure 3-13. A Combined Overlay: The Functioning of the Organization

however incomplete, each system explains one important aspect. And taken all together—as is done in Figure 3–13—they suggest the true complexity of the functioning of the organization, and also serve as the basic framework on which we can now build our description of organizational structuring.