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How Colleges Work

The Cybernetics of Academic Organization and Leadership

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Part One

Understanding Colleges and Universities as Organizations

Learning how colleges and universities work requires seeing them as organizations, as systems, and as inventions. When we study them as organizations, we see groups of people filling roles and working together toward the achievement of common objectives within a formal social structure. When we view them as systems, particular roles and structures seem less important, and our concern is focused on the dynamics through which the whole and its parts interact. While all systems share certain characteristics, there are differences between them as well. Biological or physical systems such as amoebas or galaxies have independent physical realities, but social systems such as institutions of higher education in large measure are symbolic inventions that exist because we believe in them. The three perspectives—organizational, systemic, and symbolic—are different but complementary. They are the topics of this first part.

Colleges and universities differ in many ways from other organizations (Baldrige, Curtis, Ecker, and Riley, 1978; Carnegie Commission on Higher Education, 1973; Corson, 1960, 1979; Perkins, 1973b; Whetton, 1984), and this book begins with a consideration of some of their unique characteristics. In
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Portions of Chapter One, I make use of the traditional method of comparing colleges with business enterprises, because of our ideas about organization and management come from studies of business firms. Identifying some of the differences between the two types of organization helps illuminate the comprehensive understanding of college and university functioning remains elusive and why their management and governance are so problematic.

The consideration of colleges and universities as systems in the scientific sense emphasizes how their parts interact with each other and with the larger systems of which they themselves are a part. The important elements of an institution, and the different patterns by which they can be combined, make institutions different even though the processes by which they function are comparable. Certain properties of systems are problems of administration inherent and intracable, and administrators must learn to cope with what they cannot control.

Chapter Three looks at the usefulness of some common sense organizational rationality, goals, and effectiveness in the context of why these ideas often are not helpful to administrators. The important thing about colleges and universities is not that administrators are presumed to make but the extent people reflect about the nature of reality. People organize systems as they come over time to agree that certain parts of the environment are more important and that some parts of interaction are more sensible than others. These agreements coalesce in institutional cultures that exert profound influence on what people see, the interpretations they make, and how they behave.

Chapter 1

Problems of Governance, Management, and Leadership in Academic Institutions

American colleges and universities are the most paradoxical of organizations. On the one hand, it has been said that “they constitute one of the largest industries in the nation but are among the least businesslike and well managed of all organizations” (Keller, 1983, p. 5). On the other hand, many believe that our institutions of higher education exhibit levels of diversity, access, and quality that are without parallel. At a time when American business and technology suffer an unfavorable trade deficit and are under siege from foreign competition, our system of higher education maintains a most favorable “balance of trade” by enrolling large numbers of students from other countries. Our system remains the envy of the world.

The apparent paradox that American colleges and universities are poorly run but highly effective is easily resolved if either or both of these judgments are wrong. But what if they are both right? Such a state of affairs would lead to several interesting speculations. For example, it might be that the success of the system has come about in spite of bad management, and that if management could somehow be improved, the system could be made even more effective than it is today. Or it might
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contrast to our traditional expectations, at least in col-

universities, management and performance are not

related. If this is true, then improvements in manage-

ment might not yield comparable benefits in organiza-

tional ac-

The concept that best reflects the ways in which ins-

stitutions of higher education differ from other organizations is gov-

ernance, and I shall use it extensively in this chapter. There is

no single and generally accepted definition of governance; it has

been variously discussed in terms of structures, legal relation-

ships, authority patterns, legal rights and responsibilities, and deci-

sion-making processes. I shall use the word governance in a very

broad sense to refer to the structures and processes through which

institutional participants interact with and influence each other

in the context of larger society. A governance system is an insti-

tution's answer—at least temporarily—to the question that became a plaintive cry during the cam-

paigns of the late 1960s and early 1970s: "Who's in charge?

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The authority to establish a college or university belongs
to the state, which exercises it by forming through statute, char-

ter, and constitutional provision an institution with a corporate

degree and a lay governing board. An uncomplicated view of

structure need go no further than this fact, because legally the

governing board is the institution (Glenny and Dalglrish, 1973).

The reality of governance today is much different from

what strict legal interpretation would suggest. In fact, "de-

centralization is spread among trustees, presidents, and faculty,

and although the legal status of the trustees has not changed,

there is ambivalence about how much power they should have"

(Carnegie Foundation for the Advancement of Teaching, 1982,
p. 72).

Trustees and Faculty. In earlier times, institutions were

small, trustees were clergymen, and administration and faculty

might consist of a president and a handful of tutors. Boards

could—and often did—exercise the full authority that they legally

possessed. Governance was not an issue; it was the will of

the board. As institutions became more complex, boards de-

lected de facto authority to presidents. And as the faculty

became more professionalized during the early part of the twen-
tieth century, much authority on many campuses, particularly

in curriculum and academic personnel matters, was further de-

lected to faculties. Some reached the point where "the faculty

tend to think of themselves as being the university. This

leaves the board of trustees with little authority over the [ma-


109).

As a result, different campus constituencies now assert

their claim to primacy in areas over which boards retain legal

obligations and responsibilities. Radical remedies to clarify gov-

ernance rights have occasionally been suggested. One such sug-

 gestion argued that the board should take back from the faculty,

authority for the curriculum, since the board has full legal re-

sponsibility for all aspects of the institution (Ruml and Mor-

rison, 1959). More recently it has been suggested that trustees

consider simplifying governance by stripping all campus groups

of governance prerogatives except insofar as they might be

granted as a privilege by the president acting as the board's ex-

clusive agent (Fisher, 1984). Proposals such as these cannot be

taken seriously, but more moderate and responsible calls for

greater trustee involvement in governance are increasing (Carne-

gie Foundation for the Advancement of Teaching, 1982).

Tensions between trustees and faculty are not new. Prob-

ably the most outspoken observer and critic of this conflict

was Thorsten Veblen ([1918] 1957), whose 1918 book The
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tions and then returned to the classroom are long since over at most institutions. As institutions become larger and more complex, knowledge of legal precedents, federal regulations, management information systems, student financial aid procedures, grant and contract administration, and many other areas of specialized expertise is needed to accomplish many administrative tasks. Faculty and administrators fill different roles, encounter and are influenced by different aspects of the environment, and have different backgrounds. The increasing numbers and importance of managers at all levels have led to the "administrated university" (Lunsford, 1970, p. 91), in which administrators are separated from the rest of the university. As a consequence, university executives and faculty find separate and isolated conclave in which they are likely to communicate only with people similar to themselves. The use of more sophisticated management techniques can make things even worse. "In a context in which faculty members feel privileged and in which they often feel oppressed beneath the weight of administrative authority, the innovations wrought by the new devices of management may widen the gulf between faculty and administration and thus intensify the antagonism, latent and overt, which has traditionally existed between the administrative and the academic cultures" (Rourke and Brooks, 1964, p. 180).

Administration and management become so complex that even those faculty who are interested in governance may not have the time or the expertise to fully understand the processes of decision making or resource acquisition and allocation that are at the heart of many governance issues. Because of these changes, administrators become identified in the faculty mind with red tape, constraints, and outside pressures that seek to alter the institution. They come to be seen by the faculty as ever more remote from the central academic concerns that define the institution. Faculty in return come to be seen by the administration as self-interested, unconcerned with controlling costs, or unwilling to respond to legitimate requests for accountability.

Normative Statements on Governance. It might be thought that uncertainty and conflict concerning governance
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The "Joint Statement" has another weakness, which has been less widely noticed: it does not fully appreciate the differences between various kinds of institutions. The diversity in American higher education is reflected in significant differences in such critical matters as purpose, size, sponsorship, tradition, and values. Policies appropriate and fruitful for one type of institution may be harmful for another. Recommendations of policies that treat "the faculty" or "the administration" as alike in all institutions, and that speak as if these groups were monolithic within institutions, ignore the reality that the background and expectations of faculty and administrators at community colleges and at research universities, for example, might well produce very different approaches to governance.

Problems of Organization

Dualism of Controls. If a college is compared to a business firm, it is possible to consider the confused relationships between boards, administration, and faculty that we have just discussed as reflecting disorganization, willfulness, or the pursuit of self-interest in preference to college interests. Corson (1960) was among the first observers to ascribe a different cause when he described the administration of colleges and universities as presenting "a unique dualism in organizational structure" (p. 43). Corson saw the university as including two structures existing in parallel: the conventional administrative hierarchy and the structure through which faculty made decisions regarding those aspects of the institution over which they had jurisdiction. This dual system of control was further complicated by the fact that neither system had consistent patterns of structure or delegation. The faculty governance structure on every campus was different, and each administration seemed to "have been established to meet specific situations in particular institutions or to reflect the strengths and weaknesses of individuals in various echelons" (p. 45).

The two control systems not only were structurally separate but were based on different systems of authority as well (Etzioni, 1964). In most business organizations, major goal activities are directed and coordinated by a hierarchy of adminis-
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To decide questions such as what products should be what number, and with what characteristics. Those rank rely on administrative authority, derived from position in the organizational structure, to direct the actions. These organizations also have need for experts not involved in coordinating the institution's goal activities. The experts rely on professional authority to provide knowledge and judgment in one or more professional or judgments are individual acts that are not governed activities of others.

Administrative authority is predicated on the control and direction of activities by superiors; professional authority is on autonomy and individual knowledge. These two authority are not only different but in mutual dissonance in business organizations, the administrative line refers the primary goal activities of the institution, and professionals provide secondary support activities and services. Conflict caused by the incompatibility of administrative authority is resolved by recognizing the power of administrative authority. But in professional organizations such as colleges and universities, the resolution is far more problematic. These organizations have staffs composed entirely of professionals who produce, apply, preserve, evaluate knowledge (Etzioni, 1964) and who are also for setting organizational goals and maintaining standards of performance (Scott, 1981). Etzioni suggests that "administrative authority is suitable for the major goals in private business, in professional organizations, it is in charge of secondary activities; they administer to the major activities carried out by professionals. In the professional, to the extent that there is a staff-line relationship "professionals should hold the major authority and administrative secondary staff authority" (p. 81). This reversal of roles seen in other settings makes the organization of colleges and universities difficult to understand.

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Clarity and agreement on organizational mission are usually considered a fundamental princi-ple for establishing systems of accountability. It is commonly stated that "in a business corporation there is always one quantifiable measure of performance . . . the rate of earnings on the capital invested. Because dollar profits are both the objective of the activity and the measure of performance, the operation of the company is keyed to accountability for the profit achieved" (Besse, 1973, p. 110). This relationship between performance and profit can then be translated into systems for identifying responsibility, measuring costs, and preparing periodic reports and analyses.

Although it is too simple to say that the mission of a business enterprise is to make money, that assertion contains an underlying truth that to a great extent provides a clarity of purpose and an integration of management that are absent in higher education. As colleges and universities become more diverse, fragmented, specialized, and connected with other social systems, institutional missions do not become clearer; rather, they multiply and become sources of stress and conflict rather than integration. The problem is that institutions cannot identify their goals but rather that they simultaneously embrace a large number of conflicting goals (Gross and Grambsch, 1974). There is no metric in higher education comparable to money in business, and no goal comparable to "profit." This is so in part because of disagreement on goals and in part because neither goal achievement nor the activities related to their performance can be satisfactorily quantified into an educational "balance sheet." Does a core curriculum produce more liberally educated students than a program built on the great books? Should a college measure its performance by the percentage of students who graduate, the percentage who get jobs, the percentage who are satisfied, or the percentage who participate in civic activities? The accountability techniques of the business corporation are of little benefit to the educational purposes of higher education.

Lack of clarity and agreement on institutional goals and mission has equally important effects on organization and management. The list of legitimate institutional missions is a lengthy one, but the problem can be seen in a consideration of only the
activities of people and groups in universities, as it is in other organizations. There are many ways of thinking about power. One influential typology has identified five kinds of power in social groups: coercive power, reward power, legitimate power, referent power, and expert power (French and Raven, 1959). Coercive power is the ability to punish if a person does not accept one's attempt at influence. Reward power is the ability of one person to offer or promise rewards to another or to remove or decrease negative influences. Legitimate power exists when both parties agree to a common code or standard that gives one party the right to influence the other in a specific range of activities or behaviors and obliges the other to comply. A major source of legitimate power in our society is the acceptance of a hierarchical authority structure in formal groups. Referent power results from the willingness to be influenced by another because of one's identification with the other. Expert power is exercised when one person accepts influence from another because of a belief that the other person has some special knowledge or competence in a specific area.

The exercise of power may cause alienation, and responses by faculty and others to various forms of power in institutions of higher education may pose problems for their organization and administration. Coercive power always alienates those subject to it. The use of reward power or legitimate power may or may not produce alienation, depending on the circumstances and the expectations of those subject to it. Neither referent power nor expert power results in alienation.

Different forms of power are typically used in different kinds of organizations, and they have different effects on the responses of organizational participants. One approach has identified coercive, utilitarian, and normative organizations as representing three major patterns (Etzioni, 1961). Coercive organizations, such as prisons, rely predominantly on the punishments and threats of coercive power, and they produce alienated involvement of participants. Utilitarian organizations, such as business firms, emphasize reward power and legitimate power to control participants. People calculate the costs and benefits of involvement in order to decide whether or not to participate.
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greater involvement by faculties in academic and personnel decisions, faculty collective bargaining, greater goal ambiguity, greater fractionation of the campus into interest groups, leading to a loss of consensus and community, greater involvement by trustees in campus operations, and increased bureaucracy and specialization among campus administrators. The dual system of authority, the expectation of participation as an element of shared authority, the linkages of faculty with groups external to the campus—these and related factors already noted severely limit the influence of administrators.

Institutions and Environments. Institutions must be responsive to the environment to survive, and the responses made by colleges and universities have had profound effects on their governance structures and processes. The number and pervasiveness of these environmental forces have increased almost exponentially in recent decades. Two examples showing the effects of external sources of support and power serve to illustrate the problem in different ways.

The confusion in governance that results when both faculty and administration lose the ability to understand and control the processes of their institutions was noted over a quarter of a century ago (Mooney, 1963). The loss of faculty control is related to increased institutional size and complexity and the division of faculty into different departments, committees, and other units. This fractionation prevents the development of a holistic faculty perspective. The loss of administrative control is related to the presence of external funding and control agencies that bypass and weaken institutional administration. As a consequence, neither faculty nor administration feels able to take control, since neither group fully understands the enterprise or has control of enough of its resources. As individuals and groups lose their ability to affect their institution through the implementation of positive and constructive programs, they increasingly tend to assert their influence and status by acting as veto blocs, thus increasing institutional conservatism. The result, says Clark Kerr (1982, p. 30), is more commitment "to the status quo—the status quo is the only solution that cannot be
same forces that limit the power of faculty groups and presidents as well, so that the power of administrative cases is determined by their right to block programs or classes. 

Major external force limiting institutional autonomy is of increased authority by the states. The growth of the sector of higher education during the past quarter century as support in some states of nonpublic institutions has increased state funding of—and therefore control over—programs and management of both public and private institutions. Coordinating or consolidating boards in almost all states exercise increasing influence over matters reserved in the past to the campus. Oftentimes, or legislative agencies become involved in program planning, administrative operations, budgeting, and planning. One often offered is the need for public accountability. The consequence is often chaos and confusion (Carnegie Council on the Advancement of Teaching, 1982). In this heterogeneous, multi-institutional system, single boards have authority for several campuses, not enough time or energy to become familiar with the locus of influence moves from the campus to a central governance body, public-sector presidents may find themselves behaving like middle managers than campus leaders. Faculty has been to increased centralization of control by centralizing participation through processes of collective bargaining, often ritualizing disruptive conflict. The loss of ability to influence leads to mutual scapegoating by faculty and administration, and then to state offices that further restrict the authority, and a diminished sense of both responsibility and accountability. The sense of power comes not just from the recognition of one's own limits but also from the realization that one is higher in the organization cannot exert much influence either.

Centralization. The centralization of authority at the campus level has influenced the distribution of influence at many institutions in two quite different ways. Institutions have become more administratively centralized because of requirements to rationalize budget formats, implement procedures that will pass judicial tests of equitable treatment, and speak with a single voice to powerful external agencies. At the same time, increased faculty specialization and decreased administrative authority have fostered decentralization of educational decision making at many institutions, which leads to further faculty specialization and continued reduction of administrative authority. As faculty become more specialized, they assert their expertise as a requirement for designing curriculum and assessing the qualifications of colleagues. Particularly in larger and more complex institutions, schools or departments become the locus of decision making, sometimes reinforced by an “every tub on its own bottom” management philosophy that makes these subunits responsible for their own enrollment and financial affairs as well. In such cases, the larger institution may become an academic holding company, presiding over a federation of quasi-autonomous subunits. Unable to influence the larger institution, faculty retreat into the small subunit for which they feel affinity and from which they can defend their influence and status.

Inflexibility of Resources. The ability of groups to significantly influence their campus through participation in governance is severely constrained by both the paucity of resources available and the short-term difficulties in internally reallocating those resources that do exist. Some important intangible campus resources, such as institutional prestige or attractiveness to students or to potential donors, are tied into networks of external relationships that are virtually impossible to change in the short run and difficult to alter even over long periods of time. Internally, the personnel complement on most campuses is largely fixed through tenure and contractual provisions, program change is constrained by faculty interests and structures as well as facilities limitations, and yearly planning begins with the largest share of the budget precommitted. In the public sector, institutions are subject to state personnel, purchasing, and con-
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...ulations, as well as budget management restrictions certain expenditures impossible even when resources. But resources are not always available, and when expenditures exceed this year’s projected income, variances are rare. Even on campuses that stress rationalized budgeting, opportunities for short-term effects are rare. For example, one relatively wealthy institution found its variance in the budget over ten years. An observer that “it may be hard to believe that any effort at the level is justifiable but added that “since the budget is virtually fixed, especially in the short run portion that is free to vary assumes tremendous (Chaffee, 1983, p. 402).

Division of Organisational Levels. Organizations can be as composed of three levels of responsibility and authority: technical, managerial, and institutional (Thompson, 1967). At colleges or universities, the technical level includes the teaching, and service responsibilities carried out by the faculty. The responsibility of the organization’s level, which in higher education is represented by the board of trustees and presidents, is to ensure that the organization’s resources are appropriately distributed and used to support the technical level and the organizational level. The managerial level is represented by the president, who is charged with mediating between these two levels and buffering the faculty and researchers who make the institutional core against disruption caused by problems in the university, fluctuations in student enrollments, and other challenges.

Organizations are presumed to be most effective when the top level specializes in coping with uncertainty and the middle level specializes in functioning effectively in conditions of certainty. This specialization is not uncommon in organizations in which senior officers are responsible for the environment (Katz and Kahn, 1978, p. 4). For education, distinctions among the three levels can be somewhat impossible to maintain, particularly in certain types of colleges and universities. For example, there are institutions in which faculty (technical level) are also members of the board of trustees (institutional level). At many institutions, faculty are expected by tradition as well as law (NLRB v. Yeshiva University, 444 U.S. 672 [1980]) to exercise responsibilities for personnel and for program that in other types of organizations would be considered managerial. Faculty in some types of institutions, through their professional associations, funded research, and consulting activities, often have direct access to major actors and resources in the environment and so bypass the managerial level. And major participants may sequentially (or simultaneously) be both administrators and faculty and therefore participate in both the managerial and technical levels, while the products of the technical level as alumni may become trustees at the institutional level. There are probably few organizations in our society in which someone who is a member of the union bargaining team one day can become the organizational president the next, but it has happened in higher education.

Distinctions among the institutional, managerial, and technical levels are clearer in some institutions than in others (church-related institutions or community colleges, for example). This should make the technical core more rational and management able to be more bureaucratized without creating problems. Other organizations, such as research universities, have technical cores that resist rationality and separation from the environment; faculty engaged in state-of-the-art research often cannot determine their research plans in advance, and they must keep in constant communication with colleagues and funding agencies. In such situations, arbitrary bureaucratic boundaries would be disruptive.

Cosmopolitans and Locals: Prestige and Rank. The growing professionalism and specialization of faculty have tended to create faculty orientations to their institutions and to their disciplines that can be considered across a continuum. The two polar types have been referred to as “cosmopolitans” and “locals” (Gouldner, 1957). Cosmopolitans are faculty whose peers are colleagues across the country—or the world—who share their
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...differences as well. If a “typical” business organization and “typical” university were compared, the university would exhibit less specialization of work activities (assistant professors and full professors do essentially the same things), a greater specialization by expertise (“unnecessary” history professors cannot be assigned to teach accounting when enrollments shift), a flatter hierarchy (fewer organizational levels between the faculty “workers” and the chief executive), lower interdependence of parts (what happens in one academic department is likely to have little effect on another), less control over “raw materials” (particularly in public institutions where student admission is nonselective), low accountability (because the administrative hierarchy and control system is less involved in directing goals activities), and less visible role performance (faculty usually carry out their professional teaching responsibilities unseen by either administrators or other professionals).

The differences between academic institutions and business firms are significant enough that systems of coordination and control effective in one of these types of organization might not have the same consequences in the other. In particular, it might be expected that colleges and businesses might require different approaches to leadership.

The Problem of Leadership

Our common notions of leadership arise from the perception that the success of business organizations depends on the directives of hard-driving, knowledgeable, and decisive executives. There are those who also see colleges and universities as the long shadows of great leaders or who assert that “our future rests on the bold, decisive leadership of college and university presidents nationwide” (Fisher, 1984, p. 11). On the other hand, it has been said that “the view of the university as the shadow of a strong president is unrealistic now, however, if indeed it was ever accurate” (Walker, 1979, p. 118) and even that “the presidency is an illusion” (Cohen and March, 1974, p. 2).

How important are administrative leaders to college and university performance? Do presidents make a difference? Be-
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what we think we see in business organizations, and
erts say about leaders in higher education, questions
ese may appear foolish. Lists identify the 100 most ef-
residents (“The 100 Most Effective . . .,” 1986), and
on panels argue that “strengthening presidential leader-
e of the most urgent concerns on the agenda of higher
” (Commission on Strengthening Presidential Leader-
4, p. 102). Leadership is treated as something identifiable, measurable, and efficacious. From the way we talk,
that we know what leadership is and how it should be
Fine tuning may be required, of course, but the prob-
higher education would presumably diminish if only
uld be willing to exercise leadership—or if we would
ourage to replace them with others who would.
ning for leadership is easy. But despite thousands of es-
arch studies, and other scholarly and practical works,
mains that little is actually known about the phenom-
er refer to as “leadership.” There is still no agreement on
ership can be defined, measured, assessed, or linked to
, and “no clear and unequivocal understanding exists
that distinguishes leaders from nonleaders, and perhaps
portant, what distinguishes effective leaders from in-
leaders” (Bennis and Nanus, 1985, p. 4).

Leadership Theories. Most studies of leadership have taken
business organizations, the military, and governmental
with little attention given to higher education. The
leadership is even more difficult in colleges and univer-
in other settings because of the dual control systems,
between professional and administrative authority, units,
and the other unique properties of professional,
organizations. In particular, the relationship between
ified as leaders and those whom they presume to
problematic. Some theoretical approaches assert that
be understood only in the context of “follower-
higher education, there is a strong resistance to
as it is generally understood in more traditional and
al organizations; in particular, in most institutions it
may be more appropriate to think of faculty as constituents
than as followers.

Five basic approaches to studying organizational leader-
ship are found in the literature (for summaries, see, for example,?
Yuki, 1981; Bass, 1981; Hollander, 1985). They include trait
theories, which identify specific characteristics that are be-
lieved to contribute to a person’s ability to assume and success-
fully function in a leadership position; power and influence
ories, which attempt to understand leadership in terms of the
source and amount of power available to leaders and the man-
nor in which leaders exercise influence over followers through
either unilateral or reciprocal interactions with them; behavioral
ories, which study leadership by examining activity patterns,
managerial roles, and behavioral categories of leaders—that is,
considering what it is that leaders actually do; contingency
ories, which emphasize the importance of situational factors
such as the nature of the task or the external environment in
understanding effective leadership; and symbolic and cultural
ories, which assume that leadership is a social attribution
that permits people to cognitively connect outcomes to causes
and thereby make sense of an equivocal, fluid, and complex
world.

Social Exchange Theory. One orientation to leadership
particularly suited to higher education is known as social ex-
change theory. The theory posits that there is a reciprocal rela-
tionship whereby leaders provide needed services to a group in
exchange for the group’s approval and compliance with the
leader’s demands. In essence, the group agrees to collectively reduce
its own autonomy and to accept the authority of the leader in
exchange for the rewards and benefits (social approval, finan-
cial benefits, competitive advantage) the leader can bring them.
Leaders are as dependent on followers as followers are on leaders.

Leaders accumulate power through their offices and their
own personalities to the extent that they produce the expected
rewards and fairly distribute them and lose power to the extent
that they do not. This suggests that effectiveness as a leader de-
deps on either fulfilling the expectations of followers by being
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...lead to a false view that leadership is a central feature of organizational events and activities. It amounts to what might be called a fallacy in the potential if not in the actual efficacy of people identified as leaders (Meindl, Ehrlich, and Dukerich, 1985). Cognitive biases allow us to see the "evidence" of the effects of leadership even when it does not exist. For example, work groups that are arbitrarily told that they have been successful at a task are more likely to perceive that they have had good leadership than groups that have been arbitrarily told that they have failed (Staw, 1975). Extreme (good or bad) performance of an organization is likely to lead to a preference to use leadership as an explanation even in the absence of any supporting data (Meindl, Ehrlich, and Dukerich, 1985). And it has been proposed that merely focusing someone's attention on a potential cause (and who is more likely to be visible and thought of than the president?) will affect the extent to which it is perceived as the cause (Nisbett and Ross, 1980). Findings such as these suggest that administrative leadership may be in part a product of social attributions. By creating roles that we declare will provide leadership to an organization, we construct the attribution that organizational effects are due to leadership behavior (Pfeffer, 1977). This allows us to simplify and make sense of complex organizational processes that would otherwise be impossible to comprehend (Meindl, Ehrlich, and Dukerich, 1985).

In many situations, presidential leadership may not be real but rather may be a social attribution. This can happen because of the tendency of campus constituents to assign to a president the responsibility for unusual institutional outcomes because the leader fills a role identified as that of leader, because presidents are very visible and prominent, because presidents spend a great deal of time doing leaderlike things (such as engaging in ceremonial and symbolic activities), and because we
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...ed to believe in the effectiveness of individual
...s, then, are people believed by followers to have
"Successful leaders," says Pfeffer (1977, p. 110),
can separate themselves from organizational fail-
te themselves with organizational successes."

Organizational Environments. Comparing traditional no-
te to those that come out of the symbolic or
which puts us in a rather difficult situation. Those
re are strengthening of presidential leadership recog-
quality of current presidents (Commission on
Presidential Leadership, 1984), and yet the best
be good enough. The primary factors affecting
be found not in the presidents themselves but
straints that exist in the environment within
ators function. Good times seem to call forth
The late nineteenth century is seen now as a time
ounded or expanded great institutions (although
been difficult in 1890 to predict exactly who
uld appear to have been in 1990). Similarly, the
ow an extraordinary number of campus leaders
al in directing new construction and burgeoning
it, as has been pointed out, administrators then
o, and "by traditional standards, administrative
as almost universal. Enrollments were increasing,
growing, innovations in the form of new and ex-
ams were common. ...Of course, the problem
standards of administrator effectiveness is that
those listed above are largely a product of envi-
es and beyond administrative control" (Whetten
85, p. 35).

Ultimately, leadership appears in short supply in bad
during eras of decline or of student unrest. In the
example, presidents faced with campus disrup-
tized for not calling in the police as frequently as
calling them, and for calling them either too soon
idents were castigated for ineffective leadership.
sest hoc suggestions proposing how one president

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...d have succeeded were precisely the explanations given on
another campus for why a president failed.

Presidential influence is constrained by many factors, and
many aspects of institutional functioning do not appear to de-
end on who the president happens to be (Birnbaum, forthcom-
ing e). But this does not mean that presidents are unimportant.
Complex social organizations cannot function effectively over
the long term without leaders to coordinate their activities, rep-
resent them to their various publics, and symbolize the embo-
diment of institutional purpose. Moreover, if these leaders are to
avoid conspicuous failure, they must have a high level of tech-
nical competence, an understanding of the nature of higher edu-
cation in general and the culture of the individual institution
in particular, and skills required to effectively interact with ex-
ternal constituencies. These are uncommon traits, but the pro-
cesses of presidential selection function in a manner that makes
it likely that successful candidates by and large will usually pos-
se them (Birnbaum, forthcoming b). There may be little rela-
tionship between institutional functioning and presidential ac-
tions, but this does not necessarily mean that presidents are too
weak; it could equally well be used to argue that presidents in
general are quite good but that they are generally homogeneous
in their effectiveness. This may in part be because the training
and socialization of a new president is likely to be similar to
those of the predecessor president, as well as to those of other
persons who could plausibly have been considered for that spe-
cific vacancy. In general, most presidents do the right things,
and do them right, most of the time; they properly fulfill the
requirements of their roles even if they are unlikely to leave a
distinctive mark on their institution.

The Nature of Academic Organization—A Summary

Because most institutions of higher education lack a clear
and unambiguous mission whose achievement can be assessed
through agreed upon quantifiable measures such as "profits,"
the processes, structures, and systems for accountability
commonly used in business firms are not always sensible for them.
to receive directives from superiors. But leaders in higher education are subject to internal and external constraints that limit their effectiveness and may make their roles highly symbolic rather than instrumental.

If traditional management theories are not applicable in higher education—at least in many institutions much of the time—people interested in exercising constructive influence on colleges and universities need other conceptual orientations to guide their interpretations and behaviors. A number of such orientations are presented in the models discussed in the second section of this book. These models will be easier to understand if first we can determine how colleges and universities operate as systems and how people come to act sensibly within them. In the next two chapters, we will look at these two questions using Huxley College, a fictitious institution, as a case in point.

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College and university managers do not exercise primary control over the curriculum, faculty recruitment or promotion, methods of teaching, major processes of production that firms would be fundamental managerial prerogatives of governance are clouded at least in part because the center of authority analogous to the owners of the firm to the cabinet member, governor or mayor” (Corby, p. 7). The authority of various constituencies to participate in decision making decisions is often unclear and frequently
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Chairperson Chippendale and department Professor Branch represent a subsystem of the urban ecology program area at Huxley, which is a subsystem of the sociology department, which in turn is a subsystem of the college, which is itself a subsystem of an informal statewide network of institutions. Each of these could be studied as a system in which the smaller units were the subsystems and the larger ones the supersystem.

The Nature of Systems

To clarify the system concept, I will describe two different systems, one relatively simple and one relatively complex, and compare their characteristics in terms of three elements common to all systems. In Figure 1, I have depicted the simple Pool System, representing a common recreational pastime, and the more complex School System, representing Huxley College.

The Pool System consists of a table surrounded by resilient borders within which are colored balls arranged in a triangle form. The School System can be depicted in a number of ways, but for this example I have shown it as consisting of two major components of Huxley College: a technical subsystem and an administrative subsystem. The Pool System and the School System are clearly quite different, and yet they share some common characteristics (Katz and Kahn, 1978).

Interacting Components. Both systems are composed of components that interact. In the Pool System, the movement of any of the balls from its initial position at the start of play affects every other ball on the table. In the School System, the components are not simple and clearly identifiable objects but rather are two complex subsystems. One of these, the technical subsystem, is composed of the elements of the system that turn inputs into outputs. For example, faculty, department chairs, academic freedom policy statements, and research laboratories at Huxley turn inputs such as students, money, prestige, societal expectations, chemicals, and books into outputs such as graduates, knowledge, service, and status. The administrative subsystem includes regulations, department chairs, the dean, budgets,
and similar elements that help to coordinate and direct the organization. Although these two subsystems are different, they have some common elements (both include the department chairs, for example), and so they are shown as overlapping. Both the diagram and our everyday organizational experience suggest that these two subsystems interact with and affect each other. A change in the instructional program (for example, the development of a new area of study) may lead to changes in administration (for example, the start of a new department). In turn, the creation of a new department may alter the instructional program.

**Boundaries.** Both systems have boundaries that delineate them from the larger supersystems of which they are parts. The Pool System boundaries are clearly defined by the pool table itself. The School System boundaries are not as clear-cut, but we are still able for the most part to identify what is part of Huxley College and what is not. In both cases, we can identify everything outside the system boundaries as being a part of that system’s environment.

**Inputs and Outputs.** Systems receive inputs from the environment, transform them in some way, and then return them to the environment. Environmental input into the Pool System is relatively simple. It comes as kinetic energy transferred from the cue stick to the cue ball and then to the other balls, causing them to move. By the time all the balls are again at rest, the kinetic energy from the environment that initiated the process has been transformed by the laws of thermodynamics into heat, which has been dissipated and returned to the environment.

While the Pool System has only one major environmental input, the School System has many. For the present example, consider the students. They enter Huxley College, interact with faculty and each other, and then as graduates or dropouts return to the environment. Both common sense and a considerable body of research (Bowen, 1977; Astin, 1977) indicate that students are likely to be changed in many ways during their involvement with Huxley, so that after the system “processes”
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tems are dynamic and nonlinear. The system parts are themselves systems; they constantly change as they interact with themselves and with the environment, and the system evolves over time.

Those who write about nonlinear systems use metaphors to suggest their dynamic nature: it is like being in a maze in which the walls change with every step you take; it is like consulting a clock that changes time as a result of being consulted: it is like playing a game in which every move you make changes the rules. Cause and effect in such systems often can be neither predicted nor adequately explained. Dynamic, nonlinear systems such as Huxley College at some times may appear to operate in an orderly manner, and at other times may fluctuate erratically. The complex outcomes that arise from such systems often lead us to infer complicated causes, but in fact the chaotic behavior of nonlinear systems such as Huxley may result from the continued processing and interaction of a small number of relatively simple rules.

Is an open system better than a closed system? No, just different. Each has its place. Consider the difficulty in playing pool if the table were part of an open system affected by many forces inside and outside its boundaries. Suppose, for example, that each ball “learned” from being struck and reacted slightly differently each time it was hit! Recognizing the differences between open and closed systems will turn out to be important in our later considerations of institutional governance and organization. Of course, since we are dealing in this book with social institutions, we will be concerned by definition with open systems. But even open systems can be more or less open, and the effectiveness of some institutions (or parts of institutions) may be enhanced by adjusting the extent to which they are relatively open or closed to influences from the environment.

Tight and Loose Coupling

In order to understand how the various subsystems and elements within a system interact with each other, we must consider how they are connected, or coupled. The coupling be-
elements in a system can range from tight to loose. We will use two simple systems to see how coupling works.

Boxes are black boxes with an input rotor protruding from one end and an output rotor from the other. If we turn the input rotor of the first box one full turn clockwise, the output rotor turns exactly the same way on a one-to-one basis. If we input a second box, the output rotor appears to move slowly. In order to understand why one box is so predictable and the other is so perverse, we open both boxes and examine the components shown in Figures 2 and 3.

Figure 2. Inside a Predictable Black Box.

Going inside the predictable box (Figure 2) makes the point of our observations clear. Each rotor is attached to a shaft on which the teeth match exactly. This precise correspondence between two elements is an example of tight coupling. Coupling is common in mechanical structures, but it rarely occurs in organizations. However, tight coupling is relative, and at Auxley College we can observe certain situations in which it is evident in one element (actions by the college curriculum committee or President Wagstaff's decisions on administrative salaries, for example) usually produce directly responsive actions in another (such as new sections in the college catalogue or paychecks).

Thus turn our attention now to the second black box, with an external appearance to the first. We confidently turn the input rotor one full turn clockwise and are startled to find that the output rotor turns only one-half turn and then tries it many times and finds that sometimes it turns all the way, sometimes it does not turn at all, and once in a while it turns a short way in the opposite direction! Sometimes it will run smoothly, and at other times it will go in fits and starts. There just does not seem to be a simple relationship between the two rotors, and when we open this perverse black box and examine the internal structure shown in Figure 3, we begin to understand why.

First, the input rotor is offset (a), so that sometimes it immediately hits the bar (b) when turned, and sometimes it does not. The bar is connected to a gear (c), but the connection appears itself to be moderated by another black box (d) that we cannot open, so that the motion of the large wheel (e) cannot always be predicted from the motion of the gear. The large wheel is connected to a smaller wheel (f) by a rubber band that sometimes slips, and the big wheel is connected to the output rotor by plastic tubing (g) that is semirigid and requires a certain increment of force before it moves. This is a loosely coupled system. The elements of the system are responsive to each other, but they also preserve their own identities and some logical
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Describing loose coupling by using this mechanical model simplifies the concept. In a social system, not only discontinuities in the way the parts are connected, but also the participants themselves have intentions, preconceptions, and beliefs that change over time. The faculty senate at a college is one “part” of a “perverse” black box. Its behavior is a function of its historical configuration. If the black box, like the Pool System, can be thought of as an elastic or inelastic one, we can accurately predict its future state if we know its present state and the forces that will act on it (Ashby, 1956). The second black box, like the School System, is more complex and less predictable. President Wagstaff can say what outcomes are possible, he resists a recommendation of the faculty because it is not a clear-cut decision and how frequently they will occur on average. He can never predict with certainty the outcome of any future tenure decision, nor can he project the state of the faculty in any specific situation.

Differences between the two black boxes are not only because we have been able to open them, but also because there is no way to open them. At the level of the boxes, the boxes do not open easily, if at all, and we cannot know what is going on if we try to open them. The boxes are not independent, and we cannot open them in a methodical way.

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relative terms. Conceptually they can be differentiated on two criteria: the extent to which subsystems have common variables between them and the extent to which the shared variables are important to the subsystems. If the subsystems have a great many components in common (like the gears on our predictable black box), and if those elements are among the most important in the subsystems, the subsystems are likely to be relatively tightly coupled, and changes in one should produce clear changes in the other.

On the other hand, the instructional and administrative subsystems of the simple School System of Huxley College shown in Figure 1 have only one element in common—the department chair. If the chair is tightly coupled to one subsystem, it is almost certainly loosely coupled to the other (that is, the chair can be completely responsive to either the dean's demands or the faculty's demands but not both). In addition, the department chair at Huxley is not among the most important elements in either subsystem. Because of this, changes in one subsystem might lead to changes in the other sometimes but not all the time, and the subsystems could be characterized as being loosely coupled. Although this model is highly simplified, it suggests at least one reason why attempts to develop administrative approaches to curriculum reform at Huxley are often unsuccessful. A major frustration of administrative life in loosely coupled systems is the difficulty of getting things to work the way the administrator wants them to.

Functions and Dysfunctions of Loosely Coupled Systems.

Loose coupling has often been attacked as merely a slick way to describe waste, inefficiency, or indecisive leadership and as a convenient rationale for the crawling pace of organizational change. It has been argued that if coupling were tighter, institutions would find it easier to communicate, achieve predictability, control their processes, and better achieve their goals (Lutz, 1982). Does loose coupling serve any constructive functions? Should administrators at Huxley try to change loose coupling and run a “tighter ship”?

To be sure, loosely coupled systems have significant
Coupling and Survival. Huxley College is a system composed of subsystems that interact both among themselves and with the environment outside the college's boundaries. Each subsystem is relatively loosely or tightly coupled with each other subsystem, depending on the extent to which common organizational elements are shared and are important to the subsystems. Each subsystem is at the same time relatively loosely or tightly coupled to environmental subsystems, again depending on the extent to which they share common elements. A major change in any subsystem, or in the environment, can be expected to have a marked effect on any other subsystem to which it is relatively tightly coupled and a weaker or less predictable effect if there is loose coupling. In an open system, everything cannot be tightly coupled to everything else, and loose coupling between and within subsystems is more prevalent than tight coupling.

Huxley College has a large number of environmental relationships and demands that are inconsistent with each other. For example, the college is under pressure from one part of the environment to increase the test scores of entering students and from another part to increase student access. Insisting on tight coupling among all the institution's subsystems and between those subsystems and the environment would cause Huxley to "freeze" internally. Either it would be unable to respond to any environmental stimuli at all or it would self-destruct in the impossible attempt to simultaneously respond to mutually inconsistent stimuli. Loose coupling makes it possible for Huxley to develop subsystems (for example, an honors program and an equal opportunity program) that respond separately to each of these demands. Loose coupling therefore can be considered not as evidence of organizational pathology or administrative failure to be identified and corrected but rather as an adaptive device essential to the survival of an open system (Weick, 1976). Effective administration may depend not on overcoming it but on accepting and understanding it.

The Contingency Approach

The School System model of Huxley College includes three major parts—the environment, the administrative subsys-
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their environment. But other environmental sectors, although less studied, are also important. For example, general societal values, political and legal constraints, changes in information and technical processes, and physical and geographical matters are all important elements of the environment with which organizations have to cope (Katz and Kahn, 1978).

Environments can be stable or turbulent, so that some institutions may exist in worlds that look much the same year to year, while others constantly confront new and unexpected problems as enrollments suddenly decline or external agencies demand new and costly programs or reports. Some live in a homogeneous world in which, for example, students have common backgrounds; others face a diverse world of students from different cultures and with different levels of preparation. Institutions may find that necessary resources such as money or students are either scattered randomly throughout the environment or clustered in identifiable areas, and while these resources may be scarce for some colleges, they may be abundant for others. Generalizations are difficult, but it probably can be said that, on average, institutions are becoming less autonomous and more connected into outside systems than in the past. The environment of organizations increasingly consists of other organizations. As environments become increasingly turbulent, they evolve faster than their constituent organizations. Changes in organizations are being caused more by their environments than by internal forces (Terreberry, 1968).

The level of stability, homogeneity, clustering, and munificence of the environment of Huxley College will affect its governance and management systems. Since the environments of other institutions are likely to be different from Huxley's, their governance and management procedures should also differ. Institutions must respond to environments that have different economic, social value, political, informational, and physical characteristics. This is true not only for institutions but for subunits within institutions as well. In order to be effective, the subunits of an organization should parallel the characteristics of the environment with which they must interact (Lawrence and Lorsch, 1967). That is, simple environments call for simple pro-
typical involves classroom instruction, student advising, final examinations, and communication with colleagues in the same institution; research may require laboratory investigation, library work, and communication with colleagues in other institutions; service programs utilize workshops, consulting, extension centers, policy analyses, and communications with community agencies.

- Institutions allocate their work effort differently. Some give primary attention to teaching and secondary attention to service; others focus on teaching with particular emphasis on general education and a distinctive model of scholarship (Ruscio, 1987); still others emphasize research, with teaching and service both given secondary emphasis.
- The raw materials to be worked on differ, and they affect the technologies employed. In undergraduate education, for instance, institutions that have an open-door admissions policy may give considerable attention to remedial education technologies that are not utilized at all at selective institutions.
- The people applying the technology at the various institutions differ in terms of their preparation and skills. In some institutions, almost all faculty have doctoral degrees and expertise in highly specialized areas; in others, most faculty have only master’s degrees.

Differences such as these create distinctive patterns of technologies (Clark, 1983) at different institutions and, thus, different ways in which people work together. Since the technical and managerial levels of the organization are interdependent, these differences in technologies can be best supported by different management structures and processes (Newman, 1971). When change is infrequent and the problems are preceded, a stable management system may be appropriate. Centralized decision making, coordination by rules and regulations, specific planning with short horizons and limited participation, close supervision, and emphasis on efficiency and dependability may all be effective.

When change is frequent and the problems are prece-
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The technology type calls for less centralization, coordination through specialized planning units, planning of interlocking with attention to intermediate goals, and emphasis on and when there is frequent need for change and there precedents, the technology must be adaptive. Manageresses supporting adaptive systems are likely to be dealt, to be coordinated through face-to-face interaction e unit, to emphasize general plans that are adjusted to feedback, and to give attention to learning basedience.

References in Institutional Governance and Management.

I have discussed colleges and universities as open and y system composed of parts of interacting elements and subsystems loosely or tightly coupled to each other and to their environments. What makes things "happen" in such systems, and how can we characterize the relationship between causes and effects? We often think about institutions in a linear fashion ("the faculty shapes the curriculum"). But the curriculum affects the faculty as much as the faculty influences the curriculum; a systems perspective requires us to replace linear thinking with an understanding of how elements and subsystems are connected to each other in nonlinear circles of reciprocald interaction and influence.

As an example, President Wagstaff thinks in circles (Weick, 1979) about the coupling between institutional prestige, student enrollment, and financial resources. The circle in Figure 4 shows

Figure 4. A Circular System That Reinforces and Amplifies Change.

Institutional Prestige

Financial Resources

Student Enrollment

+
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President currently believes the important couplings to
in these may change over time as the system itself
the circle suggests that increases in prestige (for exam-
examined as one of the top twenty-five colleges in the
will lead to increased enrollments, which in turn will
financial resources of Huxley and thus raise Huxley's
further. This kind of map suggests that a change in
elements will be reinforced and amplified as it moves
circle. In nonlinear systems such as Huxley, amplifi-
which as this make it possible for small changes in one
system to sometimes have very large effects.

Circles of interaction are not reinforcing and ampli-
ther are self-correcting and stabilizing. For example,
plays the relationship among institutional prestige,
ment, sense of community, and faculty morale at
college. When prestige increases, student enrollment in-
crease as well. Huxley has always prided itself on a sense of
community in which faculty and students knew each other well.
But if the number of students gets larger, the sense of com-
munity on campus decreases. In turn, this reduces faculty morale.
As faculty morale declines, so does institutional prestige. En-
rollment then also diminishes, so that the sense of community
is restored. This kind of circle of interaction corrects and con-
trols changes as they move through the system. Stabilizing
loops such as this in nonlinear systems mean that large changes
in one element become buffered and can sometimes end up
having little effect at all.

These amplifying and stabilizing loops obviously over-
simplify the complicated relationships that exist between ele-
ments in the circles of interaction. If Huxley consisted only of
amplifying loops, any change in prestige or resources would set
off a never-ending growth in enrollment. If Huxley consisted
only of stabilizing loops, enrollment would eventually return to
its previous level regardless of what happened to prestige, re-
sources, or faculty morale. In fact, Huxley contains both types
of loop, and the future of the college is dependent not so much
on either loop separately but on how these loops are connected.

In Figure 6, for example, the two loops have been com-
bined into what has been called a "cause map" (Weick, 1979)
that shows how they share elements that may become loosely
or tightly coupled. The complex cause map is still not com-
plete, but it gives a representation of the factors that tie to-
gether enrollment, prestige, community, morale, and financial
resources at Huxley that is more accurate than that shown by
either loop alone. Even if the model was complete and correct,
the fact that dynamic systems are always changing and never
look exactly the same would still make it impossible to accu-
rately predict the consequences of changing any single element
in the system. But by giving President Wagstaff a more compli-
cated sense of the dynamics of Huxley, it may prevent him from
making a bad decision on the basis of a simplistic view of how
the college works.

Maps such as these can aid understanding to the extent
that we can identify the relevant variables, the looseness or tight-
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Their couplings or interactions, and their relative importance even when the critical variables are simple and the relationships clear, predictions of organizational outcomes from interactive behaviors can never be certain. Thinking about these loops of interaction therefore is not so much an active tool as a way of developing a model of administrators. Such models help to suggest that things may be complex than they appear and prevent us from expecting solutions to be effective; they can reduce our expectations that the results of administrative actions will necessarily be direct or long lasting and teach us that problems may continually emerge and require attention; they can help us to understand why cause and effect are problematic at best; and they can help administrators think of factors that might influence a proposed action (even though they might not be obviously related to it) and to consider appropriate preventive measures.

Whether consciously or unconsciously, administrators often act on the basis of these kinds of maps. Thinking in circles rather than in straight lines provides a better understanding of organizational dynamics and can make administrators more effective. It often does this not by suggesting what we should do but rather by cautioning us about what not to do. Circular thinking can also lead to administrative indecision and impotence if it is misinterpreted to mean that nothing can be done and that nothing will make a difference. Administrators can make a difference, and consciously attempting to think of circles and other indirect connections will help in determining the potential effectiveness of various strategies and tactics.

Implications for Administrators

In this chapter I have introduced the basic idea of colleges and universities as open systems that are engaged in a number of continuing exchange processes with their environments. These institutions can be thought of as composed of subsystems that are related to each other through shared organizational elements. If these subsystems were tightly connected to each other, a change in one would directly affect them all. Since this often does not happen, it is useful to think of institutions of higher education as consisting of loosely coupled systems. While loose coupling can cause problems for administrators who wish to correct institutional problems or to promote change, it also serves important functions in both preserving institutions and making them adaptable and responsive.

Organizational elements are connected in ways that either intensify or stabilize system responses to environmental pres-
Changes in one part of the organization may affect other parts through a sequence of relationships, rather than directly. Reactions to an administrative action may occur long after the action has been taken. Small initial actions may have large consequences, and because the interaction is non-linear outcomes may not be predictable and are often quite different from those originally intended.

These basic concepts of systems, loose coupling, and feedback loops will be critical in later chapters to a more comprehensive understanding of college and university organization and management. Before exploring their significance in greater detail, however, other more obvious implications for administrators should be considered.

Cause and Effect. Because the elements and subsystems of an organization are coupled (either tightly or loosely) to one another and to the environment with which they are linked, cause-and-effect exchange, their relationships are interactive and circular. If cause A leads to effect B, then that effect becomes cause that then leads to effect C, which becomes a new cause, and so on. As administrators, we may tend to think in terms of cause-effect chains and to consider the direction of their relationships as linear. Viewing colleges and universities as systems should make us less certain about our assumptions and limit us to realize that the point at which we break the cause-and-effect loop and separate one from the other is arbitrary. Sometimes what we see as an effect is really a cause. For example, does increased centralization of decision making in public systems lead to faculty bargaining, or does faculty bargaining lead to increased centralization of decision making? Institutional research offices started because data needs increased, or do data needs increase because institutional research offices are created? Does dissatisfaction cause faculty to avoid participation in governance activities, or does lack of participation cause dissatisfaction? Our often-untested assumptions about cause and effect may lead us to act in a manner that unexacerbates rather than corrects our problems.

Time and Administrative Behavior. Recognition of cause and effect is constrained by the time it takes to see changes made in one part of a loosely coupled system have a measurable effect on another part. The greater the separation in time, the less obvious the cause-and-effect relationship will be. Administrators attempting to understand the impact of their behavior in a specific situation may often have to decide whether their action had no effect, whether their action will have a planned effect that has not yet been felt, whether their action has had an unplanned effect: that has not yet been recognized, or whether a planned outcome was actually due to the presumed cause. In each case, the data available to them are likely to be limited and ambiguous, and their conclusions may be based more on their preconceptions and hopes than on careful analysis.

Administrators who often move from one institution to another may be faced with a comparable dilemma. If some positive effects of their behaviors become evident immediately, but due to loose coupling the large-scale negative effects are not visible until after they have left the system, they may “learn” (incorrectly) that their actions have been successful. They may repeat these actions in their new setting, continuing the same cycle of ineffective behavior and uncorrected feedback. A president may develop an undeserved reputation for successfully “turning an institution around” through disruptive activities that lead to short-term accomplishments. Successors may be left to reap the long-term whirlwind. The same problems that may lead administrators to incorrectly assess their success may also lead them incorrectly to believe that they have failed; they may observe short-term negative consequences but leave before long-term benefits become evident.

Predictability. The relationships between the environment and organizational subsystems, and between the subsystems themselves, are exceptionally complex. We usually cannot specify with assurance precisely what the relevant elements are or how they interact. For that reason, administrative actions may sometimes have a very dramatic and expected effect, but at other
that we develop. Because of our experiences in one kind of organizational setting, we “learn” which organizational elements affect others, and we internalize cause maps on which we act. We usually do not think through these maps, and, because they are often not developed through self-conscious reflection, they tend to be simplistic and to contain many untested assumptions. When administrators move to new institutions, they may bring their old cause maps with them. Whetten and Cameron (1985, p. 41) suggest that administrators who move from one institution to another may be ineffective because of preconceptions “linked to previous personal successes at other universities.” Becoming aware of the elements and relationships that form our cause maps permits us in new institutions to recognize the need to unlearn previous maps.

The linear and nonlinear modes of thought discussed in this chapter are related to very different administrative world views. Administrators who see the world as linear believe that their institutions should function in a regular and steady manner. Fluctuations and exceptions are indications of problems that they should attend to and correct. Administrators who appreciate nonlinearity recognize that systems will often exhibit what may appear to be random behavior. They realize that erratic and even bizarre outcomes in the short term may not be an indication of long-term problems, but rather are expected in complex systems. Interventions may make them worse; if allowed to run their course, they will often disappear.

Administrators with linear perspectives are likely to emphasize making rational decisions; administrators with nonlinear perspectives are likely to be concerned with making sense. Linear administrators think they know how the system works and how to change it; nonlinear administrators are more modest in their assumptions and their expectations. The differences in the processes and assumptions of these alternative orientations are the subject of the next chapter.