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THE PARADOX IN INSTITUTIONAL RENEWAL

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The Paradox in Institutional Renewal

It is generally acknowledged that the environment in which colleges and universities will exist in the next decade will be unlike any faced by these organizations before. Labels such as the post-industrial society (Bell, 1973, Simon, 1973), the techtronic era (Brezezinski, 1970), the information society (Masuda, 1980), the telematic society (Martin, 1981), and the third wave (Toffler, 1980) all have been used to characterize a unique set of circumstances that will place special pressures on colleges and universities to adapt. Drucker (1980) observed, for example, that turbulence will be a hallmark of the future.

> The one certainty about the times ahead, the times in which managers will have to work and to perform, is that they will be turbulent times. And in turbulent times, the first task of management is to make sure of the institution's capacity for survival, to make sure of it structural strength and soundness, of its capacity to survive a blow, to adapt to sudden change, and to avail itself of new opportunities.

Several facts illustrate Drucker's concern with turbulence.

- In 1982 the total headcount in the approximately 3,250 American institutions of higher education was 12,000,000. Approximately 700 of those institutions had fewer than 450 FTE students. By 1990 it is estimated that the total headcount will be 11,150,000, a decrease of 850,000, or an average of 450 per institution. An equal distribution of the decrease would put at least 700 institutions out of business.

- The number of students enrolled in corporate education programs designed to compete directly with college and university courses is expanding dramatically and now exceeds the number enrolled at colleges and universities. The domain that was once exclusively the prerogative of institutions of higher education is no longer protected or benevolent.

- Studies pointing out that the correlation between success in college courses and subsequent adult achievement averages .18, and findings indicating that graduate professional degree holders (i.e., MBA, MEd) have no greater likelihood of achievement or promotion than non-degree holders is leading to a resurgence of the questioning of higher education's value. Particularly in preparing students for occupations, the private sector marketplace is becoming competitive with colleges and universities.

- Technological advances now make it possible to put the contents of a law library on a six inch disk that can be manufactured for $10.60. The immediate access to information that such technology implies, plus the

> teleconferencing and telenetwork systems that are mushrooming among individuals and organizations, make possible decision making based on far greater information than in the past, with less need to interact face-to-face or expend resources to acquire it. Decisions can be made more rapidly and more accurately than in the past. And because information feeds upon itself, more and more information will become immediately available, producing even more turbulence and complexity for decision makers.

These examples, and many others that could be identified, support Drucker's assertion that the future will be turbulent, and they point out that future institutions will not be able to follow the same patterns of adaptation as their predecessors. New patterns of adaptation will be required in order to maintain effectiveness. But as Cyert (1980) observed, adaptive strategies cannot be oriented toward mere survival.

> ...the major problems that will be facing the managers of universities in the 1980s can be put quite simply, "How can the attention of faculties and administrators be kept focused on maintaining excellence in the faces of forces pulling the attention to survival?"

In the remainder of this chapter, the discussion centers on how colleges and universities can not only survive, but excel in the turbulent environment of the next decade. Results of three years of research on institutional renewal and effectiveness are used as the basis for the recommendations and conclusions that drive this discussion. In brief, the major thesis of this chapter is that institutional renewal, and the maintenance of excellence in hyperturbulent environments, requires the perpetuation and management of paradoxes. Institutions of higher education must develop characteristics that are simultaneously contradictory, even antogonistic, in order to perform effectively in the environments of the future. The logic of this argument is presented below.

Psychological Paradoxes

The function of paradox in adaptation and renewal can best be understood by discussing it on two levels of generality--psychological and organiza-

tional. Psychologically, investigators have discovered the presence of paradox to be the common thread that runs through a wide variety of breakthroughs and major contributions in the sciences and arts. For example, Rothenburg [1979] introduced the concept of "Janusian thinking" while investigating the creative achievements of individuals such as Einstein, Mozart, Picasso, and O'Neill, as well as fifty-four highly creative artists and scientists in the United States and Great Britain. Janusian thinking is named after the Roman god Janus, who was pictured as having at least two faces looking in different directions at the same time. Janusian thinking occurs when two contradictory thoughts are held to be true simultaneously. The explanation or resolution of the apparent contradiction is what leads to major breakthroughs in insight.

> In Janusian thinking, two or more opposites or antitheses are conceived simultaneously, either as existing side by side, or as equally operative, valid, or true. In an apparent defiance of logic or of physical possibility, the creative person consciously formulates the simultaneous operation of antithetical elements and develops those into integrated entities and creations. It is a leap that transcends ordinarily logic. What emerges is no mere combination or blending of elements: the conception does not only contain different entities, it contains opposing and antagonistic elements, which are understood as coexistent. As a self-contradictory structure, the Janusian formulation is surprising when seriously posited in naked form. [1979, p. 55]

The surprising nature of Janusian formulations results from the preconception that two opposites cannot both be valid at the same time. However, holding such thoughts engenders the flexibility of thought that is a prerequisite for individual creativity.

The reason the Janusian thinking is not part of the cognitive processes of everyone is that most people have developed a particular "cognitive style" or way of organizing information that perpetuates linear thinking. For example, several researchers have identified underlying dimensions used by people to organize the information they encounter. Everyone is continually

presented with more information than can be considered at once. Consequently, each person attends to some aspects of the information and ignores other aspects. Which information is emphasized and which is ignored depends on what Jones (1961) called "axes of bias" or cognitive dimensions illustrated in Figure 1. One dimension ranges from an emphasis on novelty and unusual cues to an emphasis on predictable, stable cues. A second dimension ranges from an emphasis on internal, individual cues to an emphasis on external, wholistic cues. As most individuals encounter information, they tend to emphasize one end of each dimension more than the other, so a particular style of information processing emerges. For example, an individual may focus mainly on novel cues and on internal, particularistic cues. This would suggest a style in the upper left quadrant on the model in Figure 1. This is exactly opposite from a style in the lower right quadrant in Figure 1 in which the individual emphasizes stable, predictable cues and external, wholistic cues. Individuals in these opposite quadrants view their worlds in very dissimilar ways. They tend to interpret their experiences differently, and they tend to behave in dissimilar ways in response to their experiences. (See Mitroff, 1983; Quinn, 1984; and Whetten & Cameron, 1984; Rolb, 1974; McKenny & Keen, 1974, for reviews of an extensive literature support.) The more stylistic individuals become in their information processing patterns (i.e., the more they rely on and reinforce one way of thinking over any other), the more narrow and rigid becomes their viewpoint. More importantly, they become less able to understand, let alone adopt, an opposite style.

Janusian thinking, on the other hand, is thinking that emphasizes two opposite quadrants in Figure 1 at the same time. Individuals are sensitive both to the predictable and the unpredictable, to the particularistic and the wholistic. Both tolerance and flexibility of thought result from this ability

to focus on opposites, or paradoxes, simultaneously. And, as pointed out by Rothenburg, excellence and paradoxical thinking are closely linked.

Organizational Paradoxes

Similar dimensions have been identified by organizational researchers to frame differences among organizational forms and behaviors. That is, differences in cognitive styles lead to differences in individual behavioral styles (i.e., personality styles, leadership styles, decision making styles, etc.; see Jung, 1971; Quinn, 1984; and Driver & Rowe, 1979), which, in turn, lead to differences in the patterns of behaviors reinforced in institutions. These institutional differences might be best understood by differentiating among the four major types of organizational forms used in the organizational literature.

Up until the 1960's and early 1970's, organizations were generally categorized on the basis of the amount of bureaucratization present. That is, Weber's (1947) classic characterization of ideal organizations as bureaucracies led most analysts to focus on the formalization, specialization, and centralization of structures and control mechanisms in organization. An alternative to the bureaucratic continuum was proposed by Williamson (1975), however, when he suggested that another type of organization exists—the "market." His book, Markets and Hierarchies, set forth the characteristics of organizations that are oriented more toward competition in an external marketplace than toward internal coordination. They are more concerned with production and competitive advantage than with efficiency and formalization. He claimed that all organizations are of one of these two types, markets or hierarchies.

In the early 1980's, however, several authors introduced a third organizational form based on observations of Japanese management practices.

Ouchi (1980, 1981), for example, indicated that this new form of organization could be labeled a "clan" since it had similar characteristics to a traditional family unit. Loyalty and tradition along with a long-term commitment to members served as hallmarks of that type of organization. His article, "Markets, bureaucracies, and clans," (1980) served to elaborate the differences among these three types of organizational forms.

At about the same time, other authors who were analyzing organizations that had endured tumultuous environmental conditions, proposed still another alternative organizational form. This was labeled the "adhocracy" (Mintzberg, 1979) because of its emphasis on fluidity, temporariness, and dissolvable units. Adhocracies were described as highly dynamic and organic systems designed to maintain maximum creativity and innovation.

Figure 2 organizes these four main types of organizations on the same two dimensions as is used to frame cognitive styles and information processing. That is, hierarchies emphasize order and predictability (vertical dimension) along with internal structures and processes (horizontal dimension), so they appear in the lower left quadrant. The opposite form, adhocracies, emphasize flexibility and uniqueness (vertical dimension) along with an emphasis on external constituencies such as clients and resource providers (horizontal dimension), so adhocracies appear in the upper right quadrant. Clans are in the upper left quadrant because of their emphasis on internal processes (horizontal) and individual participation (vertical), whereas markets appear in the opposite quadrant (lower right) because of the emphasis on rational, systematic productivity (vertical) oriented toward competition in an external marketplace (horizontal).

The importance of these four organizational types being organized in the same matrix as psychological types is that certain patterns of thought and

behavior can be seen to be reinforced in different types of organizations. Figure 3 illustrates, for example, the leadership styles, information processing styles, and adaptive strategies that are reinforced by, and consistent with, each type of organization. Clans are normally led by parent-figures, sages, or mentors, for example. Strategies aimed at developing human resources and maintaining cohesion and commitment predominate, and information is processed using high degrees of participation and face-to-face meetings. Informality is a hallmark. Adhocracies are led by entrepreneurs and innovators with strategies oriented toward growth and development and the obtaining of new resources. The information processing style most reinforced is divergent, creative thinking and trial-and-error processing.

Markets are apt to be led by hard-driving production specialists who are driven by competition. Strategies are aimed at achieving a competitive advantage and accomplishing rational goals. Information is processed by means of rational, linear procedures with attention paid to eternal constituency demands. The hierarchy, on the other hand, is led by an organizer, administrator, or coordinator oriented strategically toward maintaining smooth, stable, efficient processes by means of formalized rules and procedures. Information is processed in formal communication channels with an emphasis on close monitoring and control.[1]

My own research of 335 four-year colleges and universities has found that each of these four types of institutions exists in American higher education. Some institutions are clans, some adhocracies, some hierarchies, and others markets. Moreover, institutions where leaders and information processing

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[1]Empirical research that describes in more detail these differences has been done by Cameron (1984), Quinn and his colleagues (1982, 1983, 1984), Mitroff and his colleagues (1981, 1974, 1983), and others.

styles are congruent with the organization form (e.g., clans are led by father or mother figures and strategies are centered on cohesion and human resource development) have been found to be highly effective in certain domains of activity. Clans, for example, tend to be very effective in domains of institutional effectiveness related to morale and satisfaction of students, faculty, and administrators. Adhocracies, with their emphasis on creativity and individual initiative, have the highest scores in domains of effectiveness related to student academic development and to the professional development and quality of the faculty. Market institutions excel at external adaptation and acquiring resources, whereas hierarchies are best at smooth internal functioning and coordination. The most important result of that research, however, was the discovery that the institutions that tended to improve their effectiveness scores over time (from the mid-1970s to the mid-1980s) possessed paradoxical characteristics. That is, they were apt to be both clans and markets. Or both hierarchies and adhocracies. That is, paradoxical characteristics appeared to be the most adaptive over time for institutions of higher education in that study. While institutions existing in a single quadrant did well in certain limited domains, paradoxical institutions tended to do well in many domains.

Of equal importance was the finding that when institutions faced hostile or turbulent environments (for example, uncontrolled decline in revenues or enrollments) successful adaptation almost always required the implementation of simultaneously opposite strategies. In a comparison between a group of institutions that recovered from decline and another matched group that didn't recover, for example, recovery was linked to the presence of paradoxical strategies. Organizational paradox facilitated a turnaround in revenues or enrollments, linearity did not.

Implications for Administrators in Higher Education

What has been argued up to here is that paradoxes on the psychological level lead to enhanced creativity and cognitive adaptability, and on the organizational level paradoxes lead to improvement in effectiveness and an expansion of the pockets of excellence. That is, the simultaneous presence and reinforcement of opposite characteristics in colleges and universities is functional for their adaptation. This is especially true when environments become unpredictable and complex.

On the other hand, no current psychological, managerial, or organizational models exist to guide the implementation of paradoxes in institutions. The introduction of opposition and contradiction on a haphazard basis will likely produce conflict and anarchy rather than improvement and adaptability. What can be said, then, about the practicalities of paradoxes? How can the principle be implemented? Results of some of my research on institutions under conditions of decline help provide some tentative guidelines (see Cameron, 1983, 1984, in press; Whetten & Cameron, in press).

1. When institutions of higher education face declining revenues and/or enrollments, the most effective responses have been aggressive, entrepreneurial, and externally oriented strategies aimed at enacting and manipulating the environment (on the one hand) while focusing on building and reinforcing strong institutional roots, saga, and internal stability (on the other hand). Effective institutions are innovative and flexible in their strategies but, at the same time, controlled and tradition-dependent in their internal operations.

2. Successful institutions have implemented both deviation amplifying and deviation reducing actions. That is, they have amplified the complexity of their environments by expanding and strengthening their student markets,

resource suppliers, linkages to previously ignored constituencies, and lobbying activities. On the other hand, they have reduced uncertainty and complexity by buffering the institution from outside encroachment with actions such as acquiring independence from state budgetary controls or legislation or creating slack financial and political resources. Simultaneously, the excellent institutions have expanded the amount of information they have to monitor and control while also reducing the amount of information that has critical influence on their functioning.

3. Institutions that successfully complete a turnaround from a condition of decline to a condition of growth (i.e., that successfully adapt to a downturn) make attempts to align the institution with the demands of the environment as well as make attempts to ignore or change the demands of the environment. They implement both adaptive strategies (i.e., make changes demanded by external constituencies or that will at least minimally satisfy them) as well as symbolic strategies (i.e., reinterpret events in the environment so that they are viewed as reinforcing current functioning, or that create a desired image or definition of the institution so that substantive organizational changes are not required). Constituency interests are both addressed and altered. (Also see Chaffee, 1983.)

4. Excellent institutions foster and support with adequate resources four different kinds of activities that have a parallel with the four organizational forms described above. Figure 4 illustrates them. Activities similar to the R&D functions in business organizations are fostered (adhocracies), while administrative efficiency and stability are emphasized (hierarchies). Collegiality and participation are reinforced (clans), while rigor and scholarly productivity are encouraged (markets). These institutions maintain the capacity to emphasize each of the four paradoxical activities simultaneously, as well as in sequence, by means of resource and personnel flexibility.

Conclusion

This chapter began by pointing out that the environment in which colleges and universities will function in the next decade will be unlike any in previous history. New kinds of adaptations will be required for institutions not only to survive but to remain excellent. That adaptation will require not only just a slight modification of current operating procedures and strategies, but it will require a rethinking of the ways institutions approach adaptation and renewal. Instead of relying on past linear models, evidence is beginning to show that paradoxical or contradictory models may be the most informative. Flexibility in administrative thinking and in institutional strategies in order to encourage paradox will be more and more a hallmark of institutional effectiveness in the coming decade.

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FIGURE 1 Styles of Information Processing

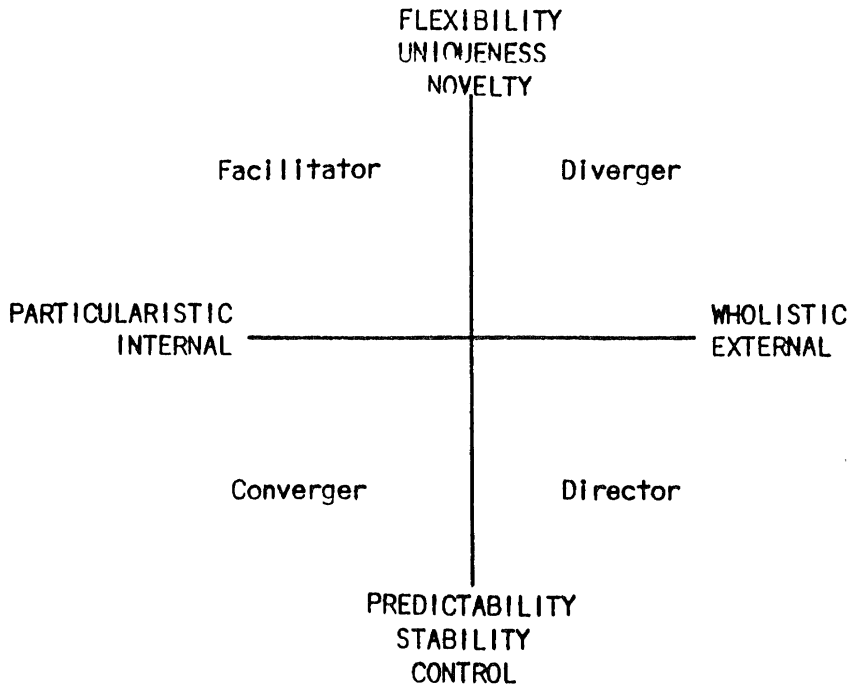

FIGURE 2 Four Types of Institutional Forms

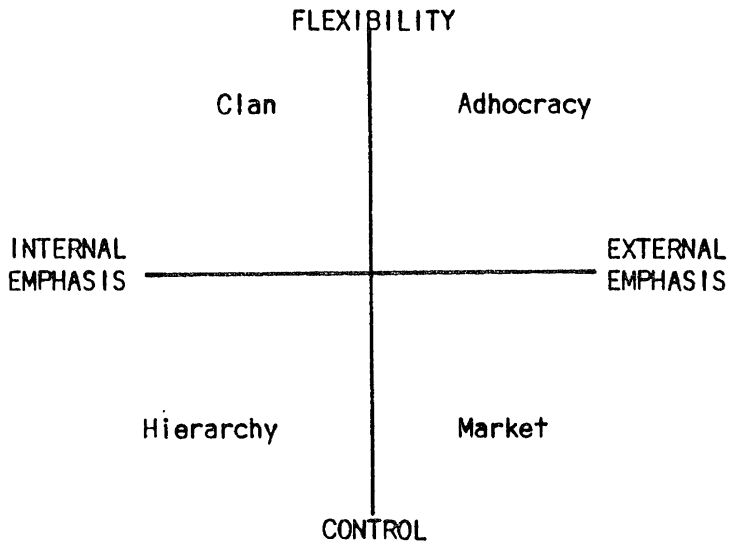

FIGURE 3 Institutional Types, Dominant Leadership, and Information Processing Strategies

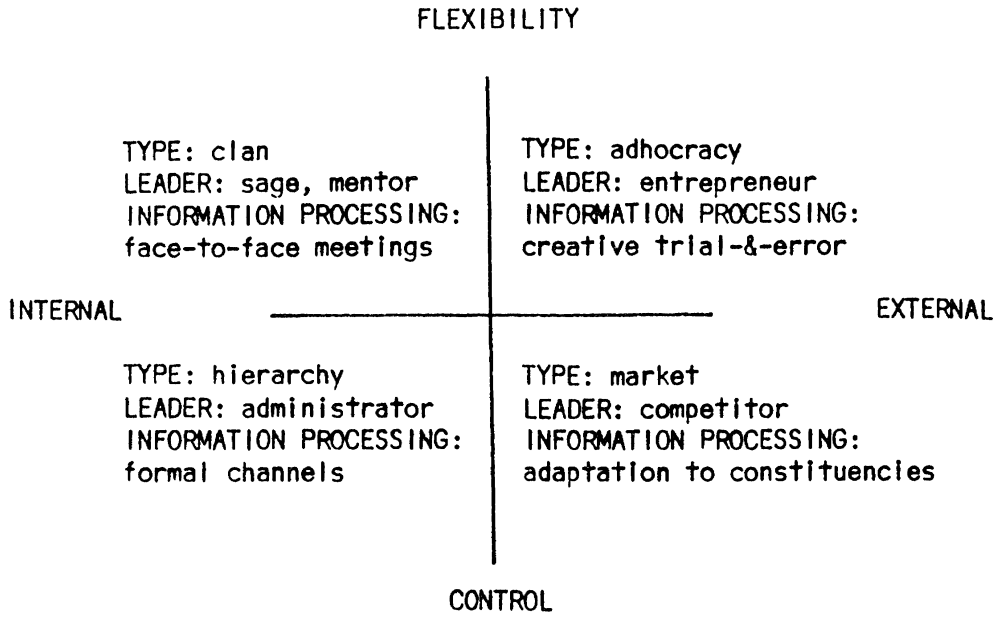

FIGURE 4 Four Paradoxical Activities in Colleges and Universities