Cultural awareness in higher education helps to achieve organizational goals, analyze organizations, explain differences among organizations, and unify personnel. Cultural awareness is also important because culture influences the making and implementation of decisions. Two major research views regarding organizations and organizational culture have developed. First, the functional view regards organizational values as absolute, culture as an ontological entity, and culture as a product of the organization. Here, researchers examine causal laws, observable behaviors, and organizational structures. By contrast, the interpretive approach regards organizations as cultures that subjectively create their own realities. Here, researchers assess how personnel interpret their organizations. Under the interpretive paradigm, three facets of culture furnish a framework for interpreting culture in organizations. The structural facet concerns the ways in which organizations perform their activities; the environmental facet concerns the context of people, events, demands, and constraints; and the value facet concerns the beliefs, norms, and priorities held by personnel. Administrators and researchers should analyze culture in their own organizations to reduce conflict and to promote the sharing of goals. Appended are 34 references. (RG)
DIMENSIONS OF CULTURE: ANALYZING EDUCATIONAL INSTITUTIONS

William G. Tierney
Assistant Professor & Research Associate
Center for the Study of Higher Education
Penn State University
133 Willard Building
University Park, PA 16802

February 1988
Abstract

This paper provides a framework to diagnose culture in educational institutions, with specific reference to postsecondary institutions. First, a rationale for why organizational culture is a useful concept for understanding colleges and universities is provided. Second, previous attempts to define culture in organizations and higher education are outlined. A distinction is made between functional and interpretive approaches to understanding culture. Third, three dimensions of culture—structure, environment, and values—are offered. The author concludes that a self-reflexive understanding of an organization's culture is critical for effective managerial action.
Asking for his advice on acting, Spencer Tracy once remarked, "Just know your lines and don't bump into the furniture." On the stage of organizational culture, such advice is wholly inadequate. Participants within collegiate cultures have few if any written scripts prepared by an author to go by. And as for the furniture, the most visible props--roles and governance arrangements--are not the ones we tend to bump into. Rather, we most often trip over perceptions and attitudes, the intangibles that escape our attention even as they make up the fabric of daily organizational life. As a result, effective management has to do not only with planning and adaptation but also with interpreting and communicating institutional values and understanding organizational processes.

This article outlines a provisional framework for interpreting culture in educational institutions, specifically postsecondary institutions. First, I provide a rationale for why organizational culture is a useful concept for understanding colleges and universities. Second, previous attempts to define culture in organizations and in higher education are provided. A distinction is made between functional and interpretive approaches to understanding culture. In short, a functional analysis of organizational culture assumes that culture exists as patterned symbolic rules for behavior, whereas an interpretive view assumes that organizations receive their structure from culture. Third, I offer three dimensions of collegiate culture, and pay special attention to institutional leadership and ideology. I conclude that a self-reflexive understanding of an organization's culture is critical for effective managerial action in an increasingly complex and abstruse world.
Understanding Culture in Higher Education

When I walk on collegiate campuses the institutions resonate with distinct identities. And I do not just mean the difference that exists between an urban Ivy League university and a small rural public state college. People talk about different topics. Individuals also discuss similar topics but use a different language and symbol system to communicate. The way people articulate their mission, what they stand for, differs dramatically. What people expect of their leaders and what leaders expect of their followers varies from institution to institution. Even when similarities exist organizational participants still experience their institution as unique.

What accounts for these differences? Why do similar leadership styles produce widely divergent results in two ostensibly similar institutions? Why do institutions with very similar missions and organizational identities perform quite differently? The assumption of this article is that an organization's culture plays a critical role in the answer to those questions.

Although colleges and universities are among the clearest examples of organizational cultures, underlying issues in management and performance transcend the college campus in both application and importance. Many key questions addressed when one investigates culture in postsecondary institutions are also asked as frequently in other educational organizations and in corporate board rooms:

- What role and how important is the role of culture in the life of the organization?
- Is it possible for administrators to contextualize decision-making strategies with the organization's culture?
What are the consequences of managerial failure to interpret and communicate the salient aspects of organizational culture to internal participants and external constituencies?

How can executives develop long range strategies that will incorporate environmental change and maintain organizational values that are central to the formal mission?

Is it possible for leaders to tighten the linkages between organizational culture and institutional identity to achieve their vision of the future, or do managers exist in "organized anarchies" (Cohen & March, 1974) where willful change is impossible?

Many managers intuitively understand the importance of organizational culture; their actions sometimes reflect an awareness of cultural codes and significations. But oftentimes we do not understand culture as it exists in our own organization because of our intense involvement in it. "The difficulty in studying culture," notes Andrew Masland, "arises because culture is implicit, we are all embedded in our own cultures" (1985, p.160).

On a day-to-day basis managers, not unlike the rest of us, are often unaware of the strength of an organization's culture. Insofar as individuals need to feel that they comprehend and exist in a rational world, we make sense of the organizational universe as if it were a lawful, objectively understandable set of facts; yet to understand one's own cultural stories and symbols is as difficult in an organization as it is in society. As with society, when administrators break cultural rules and norms is when an organization's culture surfaces and its strength becomes apparent. For example, organizations often have cultural norms that are expressed by way of traditions, ceremonies, or events that seemingly have little explicit value in the achievement of organizational
goals. However, leaders often find that when they do not pay attention to such norms their ability to manage may be hindered (Tierney, 1988b).

If administrators are to implement strategies that will achieve the organization's goals within their own cultures, then an appropriate perspective is needed, one that will help make explicit the essential dimensions of organizational culture. Traditional studies of organizations, oriented toward quantitative measurement of rationally conceived structures and patterns, do not adequately capture the dynamics of culture. Similarly, conventional variables such as size, control, and location, are little help in understanding what holds an institution together.

Our lack of grasping the dimensions of organizational culture inhibits our ability to address the problems that face higher education. As challenges increase the need to understand organizational culture only intensifies. In the last decade serious criticism has increased about higher education's quality, effectiveness and, most critically, its purpose (Mortimer, 1984; Boyer, 1987; Bloom, 1987). In many respects the questions raised about the purpose of postsecondary education may be viewed as challenges to the mission and identity of collegiate institutions.

The power of culture in postsecondary organizations is particularly important at times such as the past decade when colleges and universities have been under attack for ineffectiveness and deteriorating standards. Coupled with a decline in resources, the social fabric of the academic community is under great strain. Conflict, loss of morale and enthusiasm and participants' exit from academe are likely occurrences if managerial
attention has not focused on the organization's culture during periods of prosperity. "The nature of academic organizations and of administration," notes David Dill, "highlights the centrality of human behavior, beliefs, and values" (1984, p. 94). During periods of crisis an understanding of culture is particularly important insofar as cultural knowledge will aid managers in interpreting and making sense of the organization.

One assumption at work in this article is that more often than not more than one choice exists for the decision-maker. One simple answer most often does not occur. To be sure, wrong decisions exist, and at times, only one choice option can be made. In general, however, administrators choose from several viable alternatives. An organization's culture influences the decision. A leader's understanding and interpretation of culture enhance the implementation of that decision. Culture provides participants with a common program of action and standards for self-criticism and excellence. Culture helps participants understand the identity, beliefs and purpose of the institution.

Yet what is successful cultural management at one institution may fail elsewhere. Indeed, the rationale for understanding the dimensions of culture is to provide managers and researchers with a schema for interpreting their own organizations. Necessarily, a framework of culture will incorporate how cultural influences exist at many stages of the organization--within the department and the institution, as well as at the system-wide and state level.

Because organizational participants will have different perspectives about culture owing to their own unique backgrounds and the roles they
inhabit in the organization a central goal of understanding culture is to minimize the occurrence and consequences of cultural conflict and help foster the development of shared goals. By understanding the dimensions of culture at work in educational institutions administrators will be more able to understand the dynamic of organizational life, and hopefully, reduce adversarial relationships. Concurrently, an understanding of culture enables managers to understand how particular actions and shared goals are most likely to succeed. However, if we are to enable administrators and researchers to implement effective strategies within their own organizations, then we must first make explicit how we understand and interpret the dimensions of an organization's culture.

Previous Conceptions of Organizational Culture

Dill has commented, "While the best known research on academic organizations provides a rich understanding of the role of human behavior, culture, and meaning in the development of these institutions, it is currently the students of business organizations who argue most strongly for an emphasis on ... organizational culture" (1984, p. 94). In the last ten years rationally conceived management strategies have come under increasing criticism, and organizational culture has emerged as a central focus of inquiry. Books such as Peters and Waterman's *In Search of Excellence* (1982), Ouchi's *Theory Z* (1981), Deal and Kennedy's *Corporate Cultures*, and Schein's *Organizational Culture and Leadership* (1985) have become important investigations of managerial and organizational performance.

Although interest in organizational culture is now widespread, the lack of research on this topic in higher education has been noted by numerous writers (Chait, 1982; Dill, 1982; Masland, 1985; Tierney,
"The irony," observes Chait, "is the academy has moved toward the American business style of management." Research in higher education has moved toward defining managerial techniques based on strategic planning, marketing and management control.

Nevertheless, higher education researchers have made progress in studying campus cultures. Research in the early 1960s concerned primarily student culture (Becker, 1963; Bushnell, 1960; Pace, 1962). Since the early 1970s Burton Clark has undertaken a considerable body of research on distinctive colleges as cultures (1970), the role of belief and loyalty in college organizations (1971), and organizational sagas as instruments for institutional identity (1980). Recent work has included the study of academic cultures (Becher, 1981; Freedman, 1979; Gaff & Wilson, 1971), leadership (Chaffee, 1985, Chaffee & Tierney, 1988) and symbolism (Tierney, in press, a; 1987).

Dimensions of Culture: Interpreting the Organization

Prior to outlining the dimensions of culture it is helpful to first discuss the broad continuum of research perspectives about organizations that currently exists. Peterson (1985) notes that two competing theories about organizations have developed. The first theory is oriented toward a more traditionally conceived paradigm that considers organizational reality as an objective fact. A central concern for researchers in this paradigm is to uncover causal rules that have predictive value. Researchers focus on observable behaviors and organizational structures. The assumption of the rationalist is that an understanding of the influence variables have on one another will determine organizational outcomes. For example, the researcher tests how organizational size will
affect the ability of the leader to influence the followers. Prediction, validity, and reliability are key concerns.

Quantitative instruments that test different sets of variables and surveys that probe for attitudinal responses are the primary methodologies. Case studies and interview data also may be used as long as the researcher works from the assumption that the organization is composed of an objectively determined, understandable set of elements. Since all organizations are fundamentally similar in nature, context specific data is not so important as one variable's influence on another. For example, although small institutions may affect a leader's effectiveness in one manner, it is not assumed that similar types of institution's will vary among one another.

The second theory exists within a paradigm that emphasizes an organization's ability to socially construct its reality. This paradigm views an organization as a cultural construction where participants constantly interpret and re-create organizational reality. This view sees the organizational world as more than a conscious set of facts and figures. Further, the organization's understanding of itself is not the sum of its parts.

Rather than view the organizational universe as a finite set of knowable elements, the researcher studies how the participants interpret and make sense of their organization to themselves and to others. The history of the organization, individual perceptions, and present-day circumstances combine to produce organizational reality.

The assumption of this theory is that all organizations have a culture and to varying degrees, all organizational stakeholders affect
and are impacted by culture. That is, we assume that the positional power of the president of a college will generally provide greater ability to affect cultural change than that of an untenured assistant professor. Similarly, although culture affects all organizational participants the expectation is that a full-time faculty member will be more affected by an organization's culture than a part-time staff person.

Nevertheless, it is possible for all organizational participants to influence and be influenced by an organization's culture. Examples exist where a "cabal" of young faculty banded together and worked to change the organization's culture. The norms of the organization with regard to how it hires and treats part-time workers most assuredly affects workers who are hired and how they carry out work tasks.

The imperative for the researcher is to gain a dynamic view of the organization that successfully interprets the participants' understanding of their culture. Context-specific data is essential, and no assumption is made that what occurs in one organization will necessarily occur in another. Ethnography, case studies and qualitative methodologies are the primary tools for researchers in this paradigm. Instead of survey data or snapshots of an organization at a particular point in time the researcher studies the life of an organization over time and in depth to provide the reader with "thick description" (Geertz, 1973). Again, researchers may employ questionnaires and quantitative instruments but they will use those instruments in a different manner than rationalist researchers. Rather than enter a situation with a predetermined questionnaire, the cultural researcher is more likely to build surveys as an ongoing process.
It is important to note that different conceptions of organizational culture exist that differ in their epistemological assumptions. Much of the work mentioned in the previous section (Peters & Waterman, 1982; Schein, 1985) has investigated culture from a functional perspective. A functional analysis has more in common with the traditional paradigm than the interpretive paradigm. A functional view of culture assumes that culture is a "real" entity that can be broken down into knowable elements. Culture is the "adhesive" that makes the organization stick together. The purpose of understanding culture is to be able to understand the functional value of particular elements such as rituals, myths or symbols.

Functionalists assume that culture is manipulable and that causally determined rules can be discovered about how culture functions. There are three key functions of culture (Tierney, 1987). First, culture provides organizational members with a sense of meaning and identity. Second, culture shapes behavior; participants act in one way and not another because of the parameters of the culture. Third, culture increases organizational stability and effectiveness.

Alternatively, an interpretive view of culture tends to work from the assumption that an organization and the social interaction that occurs within the organization is derived from the organization's culture. Researchers from this perspective struggle to uncover the implicit meanings of organizational life and investigate not only the more overt symbols of the organization but also the more petty, mundane affairs that mark organizational existence. The assumption is that to understand symbols or rituals or ceremonies in organizations one needs to contextualize the experiences about which we speak.
Whereas a functionalist views culture as a product of the organization, the interpretive perspective sees the organization as a culture. In many respects the distinctions made here between functional and interpretive aspects of organizational culture is a reformulation of the differences between American sociologists and ethnologists. That is, essentially organizational theorists are asking if culture is a precipitate from society or instead does social organization receive its structure from culture?

For example, a functional analysis of a cultural artifact such as an open door or a presidential speech focuses on how the artifacts affect organizational effectiveness. An interpretive analysis provides a description of the artifacts that is rich in detail and thick in nuance. The content and meaning of an open door or a presidential speech is described, as well how such artifacts aid organizational participants in making sense of the organization.

Instead of "adhesive" that binds the organization together, culture from an interpretive perspective is a "root metaphor" (Smircich, 1983). In this light, organizations are subjective phenomena where participants create their reality. A function of an object may exist in one organization and not another. This approach begins with the assumption that the culture of an organization constitutes human existence to such an extent that either prediction or the ability to reduce organizational meaning to predefined elements is impossible. Intentionality depends upon the culture's prior significations within which individuals constitute themselves.

When I speak of dimensions of culture it is from the perspective of the interpretive paradigm. Anthropologists have struggled to define
culture in traditional society for over a century. It would be presum-
tuous, not to say foolhardy, to assume that the following dimensions are
a neatly defined framework of organizational culture. What follows is a
provisional framework for interpreting culture in organizations.

The three general dimensions of culture are structure, environment,
and values. They are highly interdependent and interpenetrating.
Speaking of them separately is convenient, but the reader should bear in
mind their interactive tendencies.

Structural. The structural dimension refers to the manifold ways in
which the organization accomplishes its activities, including program-
matic, fiscal and governance mechanisms. Structure is more than the
roles and relationships one sees on a formalized organizational chart,
encompassing also the processes by which activities are accomplished.
Structure involves both the formal and informal aspects of decision-
making, as well as the day-to-day operations of an organization and its
long-term planning. We investigate not only who reports to whom vis a
vis the organizational chart, but also who interacts with whom on infor-
mal levels. We study not only the formalized roles and tasks of each
worker, but also how the participants interact with one another and how
work activities are passed from one part of the organization to another.
Pertinent to the structural sphere are the roles of specific individuals
and the lines of communication and information that the array of these
roles creates.

Decision-making and the role of the leader assume special signifi-
cance within this dimension. The mechanisms for shared governance and
the roles of the president come under scrutiny when we investigate the
structure of higher education institutions. When one conducts research on collegiate campuses one may discover campuses where the structural role of the president is particularly constrained and other institutions where the president has assumed a powerful position. Similarly, one university may be found where collective bargaining has stymied communication and inhibits shared governance, and another institution where collective bargaining has helped clarify roles and responsibilities, making communication more effective.

The structural dimension has been of predominate importance for bureaucratic and rationally conceived studies of organizations. Weber's (1958) work delineated lines of authority and command that fostered a body of inquiry which still has many advocates. The essential difference between a bureaucratic and cultural investigation of an organization's structure is that a rationalist researcher studies formal roles and procedures and the interrelationships among formalized hierarchical entities such as divisions, departments, institutes and programs. A cultural researcher looks for implicit meanings that exist within the organization regardless of formalized charts and relationships. Informal procedures and interactions receive equal, if not more, investigative effort on the part of the researcher.

Although both the functionalist and interpretive researcher explore the normative and informal aspects of structure, the manner in which they approach the study differs. Given the assumption that causal rules exist in the organization, the functionalist is likely to uncover that informal approaches such as "management by walking around" (Peters & Waterman, 1982) are effective structural answers to organizational dilemmas. On
the other hand, the interpretivist contextualizes the specific situation in which signs such as a manager's informal walks occur. The interpretive researcher struggles to understand how the structural dimension interacts and reacts with the other cultural dimensions.

**Environment.** The environmental dimension of organizational culture includes, but is not limited to, the objective context of people, events, demands, and constraints in which an institution finds itself. Yet this dimension is more than a set of data. This dimension might be more aptly referred to as the "enacted environment" (Smircich & Stubbart, 1985; Tierney, in press, b). The enacted environment concerns the understanding organizational members develop about the nature of the boundaries of the organization. For example, it includes their definition of the organization's potential clientele (locale, ethnicity, ability, social class, age) and their understanding about the prospects for recruiting that clientele (demographics, competition, key factors that attract them). Other discussions of organizational environment often assume that it is a comprehensive, definable set of facts. The enacted environment includes those facts and pieces of information that come to the attention of the organization, but excludes those that do not. In short, the organization creates its environment through selective attention and interpretation.

An organization's perception of its environment provides useful information about the way the institution perceives itself. Do participants, for example, view the organization's relationship to its environment as one of friendship or hostility? The manner in which administrators respond to such a question helps explain why one organization
utilizes a different decision-making strategy than another. By noting that organizations not only respond to, but help define their environment through selective attention and interpretation, we observe once again that organizations are less a matter of objective fact and more an ongoing process of cultural definition.

Rationalist assumptions about the environment have focused on the decision-making strategies leaders use to deal with the environment. Linear strategy, devised in the 1970's, concerns the managerial development of organizational goals. The environment is viewed as divorced from the organization so that managers are free to develop goals without regard to environmental demands or constraints. Although it is true that the environment must be dealt with, linear managers are most apt to find solutions within the organization by the effective use of the organization's structure.

Alternatively, adaptive strategy takes into account market surveys and environmental forces. The adaptive manager necessarily must understand the environment and move the organization in the direction of environmental demands. Higher education has recently made extensive use of adaptive strategy. Liberal arts colleges have transformed themselves into business oriented institutions that offer majors in computer science to meet the demands of the marketplace.

The cultural manager believes that in large part the environment is constructed by organizational participants. Rather than linear or adaptive strategies, the manager uses interpretive strategy. "Strategy in the interpretive model," states Chaffee, "might be defined as orienting metaphors or frames of reference that allow the organization and
its environment to be understood by organizational stakeholders" (1985, p. 93). Whereas the functionalist will detail the functions of interpretive strategy, the interpretivist will highlight how the participants come to understand the organizational environment.

Values. Pertinent to the value dimension are the beliefs, norms and priorities held by members of the institution. Of special interest are values that pertain to the organization itself and to the extent to which values are congruent among individuals and subgroups.

These values are most apparent in the institution's mission and the quality and direction of its leadership. The mission expresses the college or university's core set of values and its underlying ideology. By ideology I mean, "the set of basic beliefs, or set of practices, which in some way helps to constitute or shape individual consciousness and which orients humans in the world and guides belief and action" (Siegel, 1987, p. 154). Ideology enables organizational participants to make sense of the organization they work in and guides the formation of organizational beliefs, intentions, attitudes and action. Geertz has noted how ideologies are essentially symbolic systems that make "otherwise incomprehensible social situations meaningful" (1973, p. 220).

Institutional mission embodies central values that provide a collective understanding of the institution and plays a key role in defining for members what the institution can and cannot do. It not only provides the rationale and criteria for developing institutional programs but also provides criteria for individual and group action. Useful suggestions pertain to how the institution defines and articulates organizational mission. Is the mission used as a basis for decisions?
How much agreement exists among the community about the institution's mission? And how has the mission changed over time?

The nature of an organization's leadership is, in many respects, the most tangible expression of its values. The nature of leadership in an organization extends beyond a transactional exchange between leaders and their subordinates. Of particular interest in this context is the extent to which transformational leadership exists within an institution, or leadership that seeks to satisfy higher needs of followers, engaging the person in the full life of the organization. It is by this kind of leadership that institutional values and constituent support are cultivated.

In general, the rationalist shows little interest in the study of organizational values. Weber conceded that organizations are apt to choose charismatic leaders with an intense sense of values and mission; however, Weber believed that for an organization to exist the values must become codified and routinized into a bureaucratic structure.

The cultural functionalist pays close attention to organizational values and believes that effective managers are those who highlight institutional values. Indeed, many functionalists believe that the central function of managers is to inculcate and socialize all participants about the values of the organization's culture. As noted, the nature of the organization, the roles of the participants, and the situational context will affect the extent to which different participants are socialized. "In strong culture companies," write Deal and Kennedy, "managers take the lead in supporting and shaping the culture. They spend a lot of time thinking about the values" (1982, p. 141). The interpretivist also studies the value and meaning system of
the organization but the researcher is more concerned with understanding how the values are communicated and changed rather than with its functional aspects.

Discussion

Each cultural dimension (structure, environment, and values) changes according to its own internal logic but not independently of the others. To be sure, the three dimensions are neither mutually exclusive nor do they comprise the totality of an organization’s culture. Cultural themes such as time, space, and communication also have a unique interplay with the three cultural dimensions. The dimensions may change in tempo with one another or each may turn at its own speed. A central task of managers is to comprehend each dimension and its relationships with the other dimension.

Complex organizations such as colleges and universities do not reach an optimum state. They can not even reach equilibrium, except perhaps for fleeting moments. The constant challenge is to seek equilibrium. Institutional life has no end point at which someone declares winners and losers. An organization may be perceptibly better or worse at the end of an administrator’s term in office than it was when the manager began, but in either case the new individual faces important challenges.

The framework outlined here provides a means of interpreting the points at which an institution’s progress toward dynamic equilibrium may be hampered by elements that are out of balance. I propose that institutions need structures, enacted environments, and values that are congruent. Institutions need to reinforce and develop those congruencies. When the dimensions are incongruent, one undermines the other instead of
reinforcing it. The institution cannot develop momentum toward equilibrium when it is headed in diverging directions.

Conclusion

This article has proposed a provisional framework for understanding and interpreting organizational culture in postsecondary institutions. The conceptualization has been away from functional aspects of culture and toward an interpretive analysis of organizations as cultures. Rather than assume that organizations produce culture I have considered organizations as cultures.

Instead of a model based on prediction and causally determined variables, the framework offered here outlines different interrelated dimensions within a culture that constantly evolves and changes. One assumption has been that administrators and leaders are not powerless with regard to organizational change but they also cannot create change simply by administrative prerogative.

I have viewed organizational management as involving something more than a collection of instrumental acts and functional roles. The interweaving of actions, events, and actors encourages us to take a holistic view of organizations. The analysis lends itself to a self-reflexive understanding of an organization to more adequately meet cultural requisites and to avoid misunderstandings and conflict.
I do not contend that managerial decisions solely demand cultural interpretation. To be sure, budgets need to be balanced and supplies need to be bought. Yet a cultural view of the organization looks at the consequences of a seemingly instrumental decision or action. Simply stated, managerial action does not operate in a cultural vacuum. An instrumentally correct decision today unavoidably alters a part of another dimension that will in turn demand attention tomorrow. This article calls for an internalized understanding and interpretation of the forces at work in an organization. Leaders may then utilize this understanding to weave and move within their own organizational culture.
References


