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**THE CONCEPTUAL FOUNDATION OF
ORGANIZATIONAL CULTURE**

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THE CONCEPTUAL FOUNDATIONS OF ORGANIZATIONAL CULTURE

Reviewing the development of theory and research in organizational studies reveals a continual tension between rational, empirical, explicit approaches and nonrational, qualitative, implicit approaches. At various times each of these paradigms has taken center stage in academic work, and each has led to important insights and contributions not available from the other. For example, the early rationalistic scientific management principles of Fredrick Taylor (1910) in the early part of the 1900s and the administrative principles of Gulick and Urwick (1937) gave way to an emphasis on informal, nonrational group norms (Whyte, 1943) and "the Hawthorne effect" in the 1940's and 50's (Rothlisberger and Dickson 1939; Homans, 1950). The 1960's brought back empirical multivariate analyses of organizational structure, technology, and size (Pugh, et al., 1969; Blau and Scott, 1962). But the late 1970's and 80's are being dominated by an emphasis on culture and symbol—a return to the nonrational aspects of organizations (Administrative Science Quarterly, 1983).

Methods of investigation also have shifted back and forth between empirical measurement studies and case studies or ethnographies as each intellectual paradigm has emerged as the predominant approach. Currently, ethnographic research and qualitative methods command a great deal of attention in the published literature, although the central place of the computer in quantitative analysis has guaranteed that empirical measurement will never be superceded entirely. Calls for "thick description" of organizational phenomena have been influential in changing the methods used by many researchers in their investigations, however.

At the center of this emphasis on ethnographic research lies the concept of culture. Whereas sociologists and anthropologists have studied societal and community culture for several decades, only recently has organizational culture emerged as a focus of attention. It has become integrally associated with qualitative methods and an emphasis on nonrational phenomena, not because these methods are required to investigate culture, but because organizational culture is usually equated with phenomena that are not easily observable or quantifiable.

The centrality of organizational culture in the literature is highlighted by two of its champions:

... the study of organizational culture has become one of the major domains of organizational research, and some might even argue that it has become the single most active arena, eclipsing studies of formal structure, or organization-environment research, and of bureaucracy (Ouchi and Wilkins, 1985: 458).

At least two concerns are associated with this dominance of the concept of culture in organizational and higher education literature. One concern is that organizational culture will become no more than a passing fad. This concern is pertinent because, typical of most new research areas, the culture literature is uneven in quality and, to a large extent, noncumulative. The development of a systematic body of knowledge on this subject is hindered not only by the confused status of the theoretical literature but also by the paucity of empirical research, especially comparative investigations. The importance of new research areas is often overstated and seldom justified, and this criticism seems characteristic of organizational culture.

A second concern is the lack of precise definition of the concept and its separation from other related concepts. Some confusion exists, for example,

between the concepts of organizational culture and organizational climate. Some authors use them synonymously, some independently. Without a precise definition, the development of a well-conceived nomological network that forms the basis for a theory of organizational culture is unlikely. So far, a consensual definition has not been forthcoming.

Our purpose in this chapter is to address these two concerns directly. We do so first by reviewing the literature associated with organizational culture. Our purpose is to identify the theoretical foundations of organizational culture, clarify the definition of the concept, and identify important dimensions of culture that may be most fruitful in future research. Additionally, we report our own empirical investigation of organizational culture and its association with organizational effectiveness in colleges and universities. This is done in order to illustrate some of the critical dimensions of culture and to introduce a theoretical model of culture that provides a conceptual grounding for this concept. Finally, we summarize the major findings gleaned from our literature survey in a form that produces testable hypotheses for future research on culture in higher education.

Organizational Culture

As mentioned previously, the conceptual boundaries of organizational culture are neither precise nor consensual. While this is similar to the status of many other concepts in the social sciences (e.g., effectiveness, adaptability, environment), it contributes to the faddishness of organizational culture studies, and to the lack of theoretical development. This imprecision and diversity, however, are not without justification. Substantial variation exists in the perspectives of writers on organizational culture. (See reviews and critiques of the culture literature by Burrell and Morgan (1979), Sanday (1979), Gregory (1983), Louis (1983), Morgan, et al., (1983), Smircich (1983),

Ouchi and Wilkins (1985), Roberts (1970), and Bhagat and McQuaid (1982).) Part of this diversity is due to the two separate disciplines from which the concept itself emerged--cultural anthropology and sociology. Within each of these two disciplines, moreover, two divergent perspectives have developed.

Intellectual Foundations

Most of the current, popular work on organizational culture has focused on business organizations, and it has relied upon the "functionalist" tradition in anthropology. This tradition (e.g., Radcliffe-Brown, 1952; Malinowski, 1961) focuses on the group, organization, or society as a whole and considers how the practices, beliefs, and values embedded in that unit function to maintain social control. The researcher is the central figure in interpreting phenomena that are observed in organizational functions, events, and activities. The researcher's job is to construct a meaning for the organizational phenomena and to identify and label certain patterns. For example, published descriptions of the aggressiveness of Pepsico's, AT&T's, and General Electric's corporate cultures, or the innovativeness of Hewlett Packard's and Digital Equipment Company's cultures (Deal and Kennedy, 1982), exemplify this functionalist foundation. Such descriptions are based on the activities and strategies implemented in these firms, and the interpretation of these firms' cultural patterns are generated by the researcher.

A second school of thought in anthropology, the "semiotic" tradition, has had a major impact on a substantial amount of the scholarly (non-popularized) literature of the last decade or so. This tradition is represented by Geertz (1973) and Goodenough (1971) in which obtaining the "native's point of view" and "thick description" predominate. Language, symbols, and rituals are the principle artifacts by which the native's point of view is discerned, and intuition and immersion by researchers in the phenomena of study is required.

The researcher's job in this tradition, in contrast, is to obtain interpretations from "locals." Complete immersion in the culture is required through participant observation so that the researcher him or herself can actually experience the native's point of view. Van Maanen's (1979) participant observation of police organizations and Barley's (1983) detailed look at the restorative domain of funeral work are examples of organizational culture analyses in the semiotic tradition.

These two traditions differ primarily in whose point of view is legitimate (researchers or natives) and in the level of analysis (organization versus individual cognitions). The functionalist tradition views culture as a component of the social system and assumes that it is manifested in organizational behaviors; the semiotic tradition views culture as residing in the minds of individuals. The former relies on researcher based data; the latter on the natives' data.

Authors influenced by the functionalist tradition include Ouchi (1981), Pascale and Athos (1981), Deal and Kennedy (1982), Paters and Waterman (1982), Schein (1983), and Kilmann, Saxton, and Serpa (1985). The semiotic tradition is represented by Pondy (1978), Smircich (1983), Gregory (1983), Barley (1983), Evered (1983), and Van Maanen (1979), and Frost and Morgan (1983). One of the best recent discussions of the historical and intellectual roots of the culture concept in anthropology is found in Allaire and Fursiruto (1984).

In sociology, Durkheim's (1893) early emphasis on ritual and myth along with Weber's (1947) and Toennies' (1957) distinctions between implicit and explicit features of social life gave rise to a focus on the nonrational aspects of organizations in this discipline. Whereas empiricism dominated sociology for several decades, the banner of cultural analysis was raised by influential publications such as Goffman's (1959) analysis of face-saving

devices, Berger and Luckman's (1966) focus on sense-making and interpretation systems, and the symbolic interactionist perspective (Blumer, 1971) which reinforced social construction of reality. These authors represent a tradition in sociology that views culture as comprised of the individual's cognitive framework--similar to the semiotic tradition in anthropology. These authors developed interpretations and frameworks of social life through the eyes of the participants in those phenomena, not through their own eyes.

On the other hand, another group of contributors had influence in developing an alternative cultural perspective in sociology including Selznick's (1949) analysis of the Tennessee Valley Authority, Whyte's (1949) analysis of gang behavior in Chicago slums, Stinchcombe's (1959) analysis of construction firms, Kanter's (1968) work on utopian communities, Spradley's (1970) skid row community analyses, and Clark's (1970) analysis of colleges. This second group of sociological researchers resemble the functionalist tradition in anthropology. Culture is analyzed as an integral part of social (not individual) activity and behavior, and the interpretive schema is generated by the researcher.

Despite similarities between the sociological and the anthropological perspectives on culture, an important difference exists as well. The sociological emphasis more often than not considers the concept to be an independent variable for explaining organizational structure, performance, or activity. The anthropological tradition was more likely to treat it as a dependent variable, i.e., the object of explanation. In sociology, in other words, culture is often used as a predictor of behavior or performance (cf. Clark, 1970; Kanter, 1968). In anthropology, culture is usually considered as the object of prediction or explanation (cf. Durkheim, 1893; Goffman, 1959). One of the best recent discussions of the sociological foundations of culture is Ouchi and Wilkins (1985).

A second distinction that emerged from an analysis of these two traditions is that anthropological literature tends to view culture as something an organization is; sociological literature tends to view culture as something an organization has. In the former tradition, culture is treated as a metaphor for organizations in the same way that open system, loosely-coupled system, or force field are metaphors used for describing organizations. The latter tradition treats culture as one attribute in a complex of attributes possessed by organizations that help explain effective organizational performance. The former treats culture as something, the latter treats culture for something. Figure 1 summarizes these two points of view.

Figure 1 about here

More will be said of these two perspectives later in connection with methods of studying cultures. For now, we turn to the different kinds of definitions of culture that have emerged from these different perspectives.

Definitions and Dimensions of Culture

The lack of precision and consensus regarding the definition of organizational culture has a long tradition. Ambiguity has existed (and continues to exist) in the fields of anthropology and sociology for several decades. A representative sample of the definitions of culture used by different authors in the recent published literature illustrates the variety in the approaches taken. For example, culture is variously defined to be:

... a shared appreciation system and a set of beliefs that help distinguish aspects of situations from one another (Sapienza, 1985).

... the amalgam of shared values, behavior patterns, mores, symbols, attitudes, and normative ways of conducting business that differentiate one organization from all others (Tunstall, 1985).

... the taken-for-granted and shared meanings that people assign to their social surroundings (Wilkins, 1983).

... distinct and locally shared social knowledge (Wilkins and Ouchi, 1983).

... the pattern of basic assumptions that a group has invented, discovered, or developed in learning to cope with its problems of external adaptation and internal integration (Schein, 1984).

... a set of commonly held attitudes, values, and beliefs that guide the behavior of an organization's members (Martin, 1985).

... informal values, understandings, and expectations indicated through symbolic structures, myths, heroes, and precedents (Leitko, 1984).

... the shared philosophies, ideologies, values, assumptions, beliefs, expectations, attitudes, and norms that knit a community together (Kilmann, et al., 1985).

... a system of property rights or economic and social relations that define the position of each individual with respect to others regarding the use of resources (Jones, 1983).

... an integrative framework for sensemaking, both a product and a process, the shaper of interaction and an outcome of it, continually being created and recreated through these interactions (Jelinek, et al., 1983).

... a common set of ideas shared by group members; a theory held by individuals of what their fellows know, believe, and mean (Jaeger, 1986; Keesing, 1974).

... the shared beliefs, ideologies, and norms that influence organizational action manifested through overriding ideologies and established patterns of behavior (Fiol and Lyles, 1985).

... a core set of assumptions, understandings, and implicit rules that govern day-to-day behavior in the workplace (Deal and Kennedy, 1982).

... a set of taken-for-granted assumptions, expectations, or rules for being in the world, often referred to as a paradigm, map, frame of reference interpretive schema, or shared understanding (Adler and Jelinek, 1986).

... collectively held and sanctioned definitions of the situation (Bate, 1984).

... a relatively enduring, interdependent symbolic system of values, beliefs, and assumptions evolving from interacting organization members that allow them to explain and evaluate behavior and ascribe common meanings to it (Schall, 1983).

... what is directly describable about members of a community (Ashforth, 1985; Sathe, 1983).

... the way we do things around here (Arnold and Capella, 1985; and others).

A close look at these definitions highlights the view that culture is something the organization has (not is), and the definitions are dominated by the anthropological functionalist paradigm. In general, they can be categorized as one of three types: (1) social interpretation definitions, (2) behavioral control definitions, and (3) organizational adaptation definitions. Social interpretation definitions focus on the interpretation schemas, meanings, or frames of references of individuals as indicators and components of culture (cf. Wilkins, 1983). Behavioral control definitions focus on patterns of interaction or activities that defined shared organization behavior (cf. Tunstall, 1985). Organizational adaptation

definitions emphasize habituated solutions to commonly encountered organizational problems (e.g., integration and adaptation problems) (cf. Jones, 1983; Schein, 1984).

It is also instructive to note that a majority of these definitions focus on attributes of culture that are enduring and are centered on values, beliefs, and assumptions. These attributes distinguish the concept of culture from the concept of climate which, although sometimes used synonymously in the literature, centers on individual attitudes and perceptions. This difference explains why organizational climate may change much more quickly than organizational culture.

In addition to variation in the definitions of culture, authors have identified (often implicitly) a variety of dimensions that help organize the core attributes of the concept. The importance of dimensions is that they serve as a groundwork upon which a theory of organizational culture may be built in the future. As yet, no such theory exists, but by specifying the core dimensions, researchers and theorists have begun identifying both the phenomena to measure and the relationships among the components of culture.

Several authors have attempted to develop frameworks of important dimensions of culture, but in most cases they are not based on a theoretical and empirical foundation but are merely common-sense propositions or long lists of itemized factors. A sample of these frameworks will help illuminate the diversity of approaches proposed.

Sathe (1983), Schall (1983), and Schein (1984) are among the many authors who argue that cultural strength and cultural congruence are the main dimensions of interest. Strength is usually defined as the power of the culture to enforce conformity, while congruence refers to the fit and similarity among the various cultural elements. The general argument is that strength and

congruence are associated with high organizational effectiveness. Albert and Whetten (1985) identified a holographic versus ideographic dimension of being critical in studying culture. Holographic culture exists when all organizational units share a common culture or identity in addition to their unique culture. Ideographic culture exists when each unit possesses only its own specialized culture. Holographic cultures are hypothesized to be better at executing strategies whereas ideographic culture are hypothesized to better at maintaining adaptability to diverse environmental conditions.

Arnold and Capella (1985) proposed a two-by-two matrix of cultures based on a strong-weak dimension and an internal-external focus dimension. The best cultures, they claimed, were strong-externally focused cultures. Deal and Kennedy (1983) proposed another two-by-two typology of cultures based on a speed of feedback dimension (high speed to low speed) and a degree of risk dimension (high to low). The four emerging types of cultures, each of which are argued to be appropriate under a different environmental condition, are (1) tough-guy/macho (high speed-high risk), (2) work hard/play hard (high speed-low risk), (3) bet your company (low speed-high risk), and (4) process (low speed-low risk). Ernest's (1985) two-by-two model used people orientation (participative-nonparticipative) and response to the environment (reactive-proactive) to develop four types of cultures: interactive (participative-reactive), integrated (participative-proactive), systematized (nonparticipative-reactive) and entrepreneurial (nonparticipative-proactive). He argued that no one culture type is best, but organizations in the same industry should have similar cultures. Riley (1983) proposed that culture is best analyzed by two main factors, structures and symbols. The most important structural dimensions, according to Riley, are (1) means of achieving significance, (2) means of acquiring legitimacy, and (3) means for achieving

dominance. The most important symbol dimensions are (1) verbal, (2) action, and (3) material. The intersection among each type of symbol and structure identifies a factor that helps diagnose corporate culture.

Bate (1984) analyzed language patterns, stories, and rituals in three organizations and proposed six dimensions of culture that helped organize patterns in his findings: unemotionality, depersonalization, subordination, conservatism, isolationism, and antipathy. Gordon (1985) assessed "management climate," which he later relabelled "corporate culture," based on a Hay Associates questionnaire administered over several years. The items clustered into 11 dimensions of culture: clarity and direction, organizational reach, integration, top management contact, encouragement of individual initiative, conflict resolution, performance clarity, performance emphasis, action orientation, compensation, and human resource development. Hofstede (1980) has a well-known set of dimensions for differentiating national or societal cultures, and several authors have made attempts to apply them to corporate cultures (e.g., (Jaeger, 1986). These dimensions are power distance, uncertainty avoidance, individualism, and masculinity.

Martin, Feldman, Hatch, and Sitkin (1983) identified seven common themes in the stories that people tell to reflect their culture. Most organizations project their cultural values through some sort of unique stories, yet those stories are characterized by certain common themes or questions: How will the organization deal with obstacles? How will the boss react to mistakes? Will the organization help me if I have to move? Will I get fired? Can the little person rise to the top? Is the big boss human? What happens when I break rules? Each story relates to conflicts between organizational needs and members values. Jones (1983) argued that culture is a product of institutional arrangements to regulate transactions and exchanges among individuals, and

that five characteristics describe those transactions. These characteristics define "property rights": vested in person or position, length of contract, degree of preciseness in specifying rights, degree of inclusiveness of facets of employment, configuration of rights in the organization. Strong property rights indicate strong culture: i.e., vested in persons, precise, inclusive, and enduring.

Kets de Vries and Miller (1986) focus on dysfunctional organizational cultures arising from pathological strategies and structures. They identify paranoid, avoidant, charismatic, bureaucratic, and politicized types of cultures. Trice and Beyer (1984) concentrate on rituals or rites as the main indicator of cultural forms. They suggest that these performances are the most appropriate way to capture the complexity of an organizations culture. The six rituals identified are: rites of passage, rites of degradation, rites of enhancement, rites of renewal, rites of conflict reduction, and rites of integration.

These dimensions of culture reviewed above differ from one another in that some emphasize underlying organizing factors for cultural phenomena, others emphasize typologies of cultures. The long lists of factors identified by authors such as Trice and Beyer, Bates, Gordon, and Kets de Vries and Miller tend to be enumerations of attributes of cultures. The 2 x 2 matrices, on the other hand, proposed by Deal and Kennedy, Arnold and Capella, and Ernest, tend to identify ways to organize these factors into typologies of cultures.

Our review of the empirical and the theoretical work on culture suggests to us that the following seem to be the most frequently cited, or at least the most potentially fruitful, conceptual dimensions used in culture research:

- (1) cultural strength (the power to control behavior),
- (2) cultural congruence

(the fit or homogeneity among cultural elements), (3) cultural type (the focus on certain dominant themes), (4) cultural continuity (the extent to which consistency in culture has been maintained over time), (5) cultural distinctiveness (the uniqueness of the culture) and (6) cultural clarity (the extent to which the culture is unambiguously defined, understood, and presented).

Of these, most authors have identified strength of culture and cultural congruence as the most critical dimensions. They are certainly the most frequently mentioned. A strong culture and a congruent culture (i.e., a culture that supports the structure and strategies of the organization) is more effective than a weak and an incongruent or disconnected culture, it is argued. For example, Peters and Waterman (1982), Deal and Kennedy (1981), O'Reilly and Moses (1983), and others asserted that a strong culture is associated with organizational excellence. "... a strong culture has almost always been the driving force behind continuing success in American business (Deal and Kennedy, 1982, p. 5)." Quinn (1980), Tichy (1982), Salmans (1983), Broms and Gahmberg (1983), Wilkins and Ouchi (1983), and others argued that a culture supportive of organizational strategies leads to high performance. "... to be successful, a company's culture needs to support the kind of business the organization is in and its strategy for handling that business (Tichy, 1982, p. 71)." This cultural "fit" or congruence theme is also espoused by Nadler and Tushman (1980), Quinn and Hall (1983), Kotter (1980), and others, who suggested that a variety of cultural attributes must be aligned to produce effectiveness. "Other things being equal, the greater the total degree of congruence or fit between the various components, the more effective will be organizational behavior at multiple levels" (Nadler and Tushman, 1980, p. 275). We will return to an examination of these important

dimensions of organizational culture in a later section as we describe an empirical investigation of three such dimensions. A discussion of alternative approaches to investigating culture, however, is necessary first.

Approaches to Investigating Culture

As mentioned before, culture is generally treated by authors in one of two ways: something the organization is, or something the organization has. The definitions and dimensions just discussed largely focus on the latter. It is necessary to discuss briefly the former perspective, however, in order to highlight the basis for the differences among three main methods used by investigators to assess organizational culture.

Treating culture as something an organization is presupposes that culture is a metaphor in the same way that "open system," "bureaucracy," "organized anarchy," or "machine" metaphors are used to describe the nature of organizations. The purpose of a metaphor for describing organizations is simply to highlight and uncover aspects of the organization that ordinarily are ignored by observers--in this case, the nonrational, taken-for-granted, underlying assumptions that drive organizational behavior and the shared interpretive schemas of organizational members. Treating culture as a metaphor goes beyond the instrumental view of those who treat culture as a variable in organizations. Instead it defines culture as the "shared knowledge," "shared meaning," and "the unconscious mental operation" of organizational members (Smircich, 1983; Goodenough, 1971; Agar, 1982; Hollowell, 1955; Geertz, 1973; Rossi and O'Higgins, 1980). This implies that culture cannot be observed directly, but it exists only in the heads of those associated with the organization. An outsider can never truly understand the culture, only those immersed in it. Approaches ranging from psychoanalytic procedures to story or linguistic analysis characterize the research in this tradition (e.g., Chomsky, 1972; Mitroff, 1983; Pfeffer, 1981; Pondy, 1983).

This use of culture as a root metaphor highlights the continuing controversy regarding how culture should best be assessed. Some authors argue that quantitative techniques have no place in empirical studies of culture; others assert that multiple methods—including quantitative and qualitative methods—are appropriate (see Van Maanen, 1979; Ouchi and Wilkins, 1985; Louis, 1984; for examples). Thus far, three main approaches have been taken in investigations of organizational culture, but little integration among them has occurred in the literature. The three are: (1) holistic studies through participant observation; (2) metaphorical or language studies; and (3) quantitative studies mainly relying on survey research or experimental manipulation (see Ouchi and Wilkins, 1985).

Holistic Studies. An emphasis on the whole organization and its culture (i.e., organizations as cultures) typify these studies. Important examples in this category include Rohlen's (1974) participation observation of a Japanese bank, Kreiger's portrait of a San Francisco rock music station, Van Maanen's (1973) description of the socialization of police recruits, Manning's (1979) study of the world of detectives, Dyer's (1982) description of a computer company, Wilkins' (1983) study of subcultures in an electronics company, Trice and Beyer's (1985) study of the routinization of organizational founders, and Barley's (1983) study of role evolution in the introduction of CAT scanning equipment in two hospitals. Most of these studies rely on field observation for 6 to 20 months, although a few use quantitative techniques such as content analysis of organizational documents or communications (e.g., Martin et al., 1984). Archival and historical documents have been substituted for direct observations by authors such as Clark (1970), Bojie (1983), Kanter (1968), and Martin and Siehl (1983), thus permitting a longitudinal perspective not possible with participant observation.

By and large, investigators are required to immerse themselves in a culture in order to study it--to become a native themselves. In fact, the argument is that true natives who have not experienced any other culture cannot articulate, and often are not even aware of, many cultural attributes and assumptions because they have no point of contrast. Only outside investigators who become insiders can really study culture in a holistic way.

Metaphorical studies. A focus on language and metaphor characterize these studies, as exemplified by Gregory's (1983) study of the language of Silicon Valley professionals in a rapidly changing environment, Barley's (1983) study of the language of funeral directors, Pondy's (1983) study of the role of metaphor in Communist China and an African tribe (the Nuer), Huff's (1983) study of the language of different subgroups within a graduate school of management, and Pondy and Huff's (1983) study of the language of public documents in public schools.

Investigators in these studies analyze the outward manifestations of cultural effects. Just as individuals possess unique finger prints, voice prints, and word prints in writing, it is assumed that unique organizational prints can also be detected by studying language patterns in organizations. This is done by analyzing official reports, documents, and written communications as well as informal rituals, stories, and conversations. The intent is to understand and describe the culture, not predict other behaviors or performances based on the cultural manifestations.

Quantitative studies. Like studies of organizational climate, quantitative studies of culture mainly rely on survey methodology and statistical data analysis. For example, Ouchi and Johnson (1978) used questionnaires to differentiate the cultures of two different firms. O'Reilly (1983) surveyed employees in high tech firms in Silicon Valley to test the

association between strong culture and employee identification with the firm. Bowditch, et al., (1983) compared climate and culture surveys in the merger activity of two banks. Beck and Moore (1983, 1984) report studies using projective measures to assess norms and culture in Canadian banks. Meyer (1982) used questionnaires and content analysis of interview data to examine shared values. And Martin and Powers (1983) compared information from stories with quantitative information in assessing their vividness and persuasive impact on employees.

Investigators in these studies have been criticized most for not really assessing culture, but rather climate. That is, attitudes and feelings--the basis for organizational climate--are rather easily assessed by means of questionnaires, but core values and assumptions--the basis for organizational culture--are difficult to assess via questionnaires. Some investigators have handled this problem by denying that any difference exists between the concepts of culture and climate (Dennison, 1985; Glick, 1985), and they have simply labeled their data cultural regardless of its source. Others have attempted to overcome this liability by asking directly for values and assumptions in their questions, hoping that they can obtain more than mere surface attitudes. In general, quantitative methods remain controversial in the study of culture. An alternative quantitative method designed to overcome some of the difficulties of standard survey methodology is explained in the next section.

These three different approaches to the study of culture are associated with the different perspectives discussed in previous sections. Holistic studies generally treat culture as an independent variable, manipulatable by managers. Various books and articles offering practical advice to managers in organizations have emerged from this view, namely, Paters and Waterman (1982),

Ouchi (1981), Deal and Kennedy (1983) and others. These and other works suggest manipulating the organization's mission (Clark, 1970), ideologies (Harrison, 1972), ceremonies (Trice and Beyer, 1985), myths (Boje et al., 1982), and stories (Mitroff and Kilmann, 1976) in order to manage culture and improve organizational effectiveness.

Metaphorical studies, on the other hand, are more likely to treat culture as a dependent variable. It is assumed that organizational culture emerges from an overall societal culture (Hofstede, 1980; Jaeger, 1986) and is a product of historical events and activities that are not manipulatable by management. The primary intent in this research is to discover and describe and organization's culture, not to determine how it can be modified to enhance effectiveness.

Quantitative approaches occupy the middle ground in that they are used in both independent variable and dependent variable studies. Some quantitative studies have attempted to identify and validate dimensions of culture or develop typologies and thus have treated it as a dependent variable (e.g., Albert and Whetten, 1985; Allaire and Firsiruto, 1984; Adler and Jelinek, 1986). Other studies have tried to find relationships between culture and other individuals or organizational outcomes, and thus have treated culture as an independent variable (e.g., Arnold and Capella, 1985; Bate, 1984; Bresser and Dunbar, 1986).

Investigating the Dimensions and Frameworks of Culture

Thus far in this chapter we have pointed out that a wide variety of perspectives, dimensions, definitions, and methods of assessment are associated with organizational culture. Simplifying this variety is one of the major challenges of organizational scholars since such variety and disagreement inhibits theoretical development and practical application of

this concept. In this section we review a study conducted by Cameron (1985) in which a comparison was made among the major dimensions of organizational culture to assess which was the most powerful in accounting for effectiveness in colleges and universities. We also introduce a theoretically-based model which identifies four types of organizational cultures. Our intent in summarizing this study is to address directly some of the continuing ambiguities associated with cultural dimensions and assessment techniques, especially in higher education institutions, and to introduce a framework that may be helpful in future culture investigations. Following the description of this study, we summarize the major findings of this and other studies as they relate to colleges and universities.

The study we summarize here was undertaken to investigate the relationships between the congruence and strength of organizations' cultures and the effectiveness of those organizations. The intent was to explore the linkages between culture and effectiveness in a variety of higher education institutions to determine the extent to which the assumptions of past authors, that the dimensions of strength and congruence are the most important dimensions in assessing culture, could be supported. In addition, the intent was to address directly the dearth of theoretical models in the culture literature.

The approach taken in this study was to make no a prior assumption about whether culture is something an organization has or is, but to investigate that proposition directly. Also, the study took the middle ground between the holistic and metaphorical approaches to assessment. That is, organizational culture was treated as both a dependent variable and as an independent variable.

The Psychological Understructure of Culture

The culture of an organization is grounded in the taken-for-granted, shared assumptions of individuals in the organization. These preconscious, shared assumptions have been the focus of investigations by a number of psychologists. These authors assert that "axes of bias" (Jones, 1961) or "psychological archetypes" (Jung, 1973) organize individuals' interpretations of reality into a limited number of categories. These categories help identify the different frames used by individuals to organize underlying assumptions, interpretations, and values. Consequently, these categories also can be used to identify types of cultures in organizations since cultures are based on the same assumptions and interpretations (see Mitroff, 1983; Newmann, 1955, 1970; Jaynes, 1976; Quinn, 1988).

One conclusion emerging from research on psychological archetypes is the commonality that is typical of the underlying axes of bias used to interpret and categorize information. That is, similar categorical schemas have been found to exist in the minds of individuals across a wide variety of circumstances.

"The more that one examines the great diversity of world cultures, the more one finds that at the symbolic level there is an astounding amount of agreement between various archtypal images. People may disagree and fight one another by day but at night they show the most profound similarity in their dreams and myths. The agreement is too profound to be produced by chance alone. It is therefore attributed to a similarity of the psyche at the deepest layers of the unconscious. These similar appearing symbolic images are termed archetypes" (Mitroff, 1983, p. 85).

Psychological archetypes serve to organize the underlying assumptions and understandings that emerge among individuals in organizations which become labeled cultures. They establish "patterns of vision in the consciousness, ordering the psychic material into symbolic images" (Neumann, 1955, p. 6).

A variety of frameworks have been proposed for conceptualizing these underlying archetypes of axes of bias, but one of the most well-known and widely researched was developed by Jung (1923). The appeal of the Jungian framework is that substantial amounts of research exist to support its validity, and the dimensions of the framework have been directly related to managerial and organizational styles (Myers, 1980; Keen, 1981; Mason and Mitroff, 1973; Wade, 1981). Even though the Jungian dimensions were originally posited to identify personality types, "the Jungian framework can be used to shed light on organizational and institutional differences" (Mitroff, 1983, p. 59).

The Jungian framework focuses primarily on the manner in which individuals gather and evaluate information. It has been used in psychological studies, such as the development and refinement of the Myers-Briggs Type Indicator (Myers, 1962), and, a substantial amount of research by the Educational Testing Service and other social science researchers on cognitive and behavioral differences among individuals and groups (for example, CAPT, 1980; McCaulley, 1977; Myers, 1980; Churchman, 1964, 1971; Mason and Mitroff, 1973; Henderson and Nutt, 1980). It also has been applied on the organizational level, such as in Quinn and Rohrbaugh (1981) and Carrier and Quinn (1985) who independently derived the same dimensions as those upon which the Jungian framework is based in analyses of organizational effectiveness criteria and on leadership styles. These dimensions accounted for approximately 90 percent of the variance in differences among the models of effectiveness in one study and

in leadership types in another. In addition, Driver (1979, 1983) found evidence for individual decision or information processing styles that match the Jungian framework and that help explain the differences in person-organization fit. Mitroff and Kilmann (1975, 1976, 1978) studied managerial behavior and found a fit between the Jungian framework and important management style differences. Mason and Mitroff (1973) found differences in the types of organizational stories told by managers to describe their organizational cultures. These story types were organized on the basis of the Jungian dimensions. MacKenney and Keen (1974) found different types of problem solving styles in three studies of MBA students at Harvard. The differences among the students were interpreted on the basis of the Jungian typology, and predictive validity was established. Slocum (1978) found clear differences in change agent strategies as a result of their cognitive styles. Cognitive style differences were based on the Jungian framework. Keen (1981) argued for the validity of the Jungian framework in a review of research based on the Myers-Briggs Type Indicator by pointing out supportive evidence for conceptual validity, construct validity, convergent validity, discriminate validity, predictive validity, and nomological validity.

In sum, the Jungian framework is a frequently used and highly reliable model for organizing the shared underlying assumptions and interpretations (i.e., psychological archetypes) used by individuals that subsequently become manifest as organizational cultures. Mason and Mitroff (1973) and Mitroff and Kilmann (1976) found, for example, that organizations attract individuals who emphasize different psychological archetypes (based on the Jungian dimensions), and that cultures in organizations are described in a manner consistent with the Jungian typology. Because cultural information in organizations is interpreted by individuals in context of their underlying archetypes, the

manner in which culture is experienced and transmitted also can be conceptualized on the basis of the Jungian dimensions. Four ideal types of culture emerging from these dimensions are described in Figure 2.

Figure 2 about here

This framework in Figure 2 is consistent with research by Quinn and Rohrbaugh (1981) in which a categorical schema for criteria of organizational effectiveness was derived. The model developed by those authors was called the "competing values model" since it identified characteristics of effectiveness that seemingly were opposite from one another. The Jungian dimensions were discovered to lie at the heart of that model. Subsequently, studies by Quinn and Cameron (1983), Quinn and Rohrbaugh (1983), Lewin and Minton (1986), and others helped develop and elaborate this framework. They pointed out that organizational culture can be meaningfully organized on the basis of this same Jungian-based model.

One problem with labeling the dimensions in the Jungian framework is that no single word or phrase captures their complexity. Those who interpret the Jungian framework often use multiple descriptors for each dimension and long explanations of the meaning of each quadrant (cf. Mitroff and Kilmann, 1975, 1976; Myers, 1980). To illustrate, the vertical dimensions in Figure 1 is grounded on one end by an emphasis on flexibility, individuality, and spontaneity, and on the other end by an emphasis on stability, control, and predictability. This dimension identifies the distinction in organizations between soft, human concerns and hard, control concerns. It also identifies a dynamism-stability distinction. The horizontal dimension is grounded on one end by an organizational emphasis on internal maintenance, short-term orientation, and smoothing activities (e.g., eliminating strain). The other end is

characterized by an organizational emphasis on external positioning, long-term time frames, and achievement oriented activities (e.g., competitive actions). The main emphasis in this dimension is separating an internal orientation from an external orientation.

The four types of cultures that emerge from this framework are labeled clan, hierarchy, adhocracy, and market. Mitroff and Kilmann (1975, 1976) used the Jungian symbols to label the culture quadrants and called them simply ST, NF, SF, and NT type cultures. The labels used in Cameron's study were selected because they are consistent not only with the Jungian dimensions, but also with the descriptions of Williamson (1975), Ouchi (1980), Weber (1937), Mintzberg (1979), Wilkins and Ouchi (1983), and others of the characteristics possessed by clan, hierarchy, market, and adhocracy type organizations.

Specifically, the lower left quadrant--the hierarchy culture--emphasizes order, rules and regulations, clear lines of authority, uniformity, and efficiency. Transactions are under the control of surveillance, evaluation, and direction (Ouchi, 1980). The lower right quadrant--the market culture--emphasizes competitiveness, goal accomplishment and production, environmental interaction, and customer orientation. Transactions are governed by equitable exchange and market mechanisms (Ouchi, 1980). The upper left quadrant is the clan culture which emphasizes shared values and goals, participativeness, individuality, and a sense of family. Transactions are controlled by congruence of beliefs and consensual objectives (Ouchi, 1980). The upper right quadrant is not identified by Ouchi as a major type of organization. However, Bennis (1973), Toffler (1980), Mintzberg (1979), Nystrom, Hedberg, and Starbuck (1976) use the term "adhocracy" to describe this type of culture. It emphasizes entrepreneurship, creativity, adaptability, and dynamism. Transactions are governed by flexibility and tolerance, development and growth, and a commitment to innovation (Mintzberg, 1979).

The relative placement of these four cultural types in the figure illustrates the relationship each holds to the others. Consistent with the competing values model of organizational effectiveness and the Jungian framework of cognitive types, each culture possesses opposite characteristics from the diagonal culture in the figure but shares some characteristics with the two cultures in adjacent quadrants. For example, hierarchies are opposite from adhocracies in characteristics but share some characteristics of internal orientation with clans and some characteristics of control and order with markets. Few organizations are likely to be characterized by only one culture since each culture in the model is an ideal or pure type. Most organizations will have attributes of more than one of the cultures, and paradoxical cultures often characterize organizations.

Cultural Congruence

Figure 2 identifies characteristics of each cultural type that have appeared in the literature. Specifically, the work of Wilkins and Ouchi (1983), Quinn (1984), Quinn and Cameron (1983), Quinn and McGrath (1984), Smirich (1983), Deal and Kennedy (1982), Lundberg (1984), Sathe (1983), Mason and Mitroff (1973), and Mitroff and Kilmann (1975) was used to identify particular attributes of each culture that represented congruency or fit. The dominant type of leadership, the bases for bonding or coupling, the strategic emphases present in the organization are among the important attributes that must be aligned with cultural type to produce cultural congruency, and they were selected for consideration in this study. More specifically, associated with each cultural type is a particular style of leadership that best enforces and shares its values. The research of Mitroff and Kilmann (1975, 1976) for example, found that certain types of managers are reinforced by and share the values of certain types of organizations. Quinn (1984) elaborated this fit

between leader style and cultural type in a review of the leadership literature. In brief, he found that the coordinator, organizer, and administrator roles are most consistent with the characteristics of the hierarchy culture. This cultural type reinforces the style of leadership Mitroff and Kilmann called the ST leader. The opposite style of leader, the entrepreneur, innovator, or risk taker (Mitroff and Kilmann's NF leader) is most consistent with the adhocracy or emergent system form since the culture emphasizes change and growth. A leader style emphasizing competitiveness, production, and achievement best fits with the market form (Mitroff and Kilmann's NT leader), whereas the clan reinforces a participative mentor, facilitator, or parent-figure style (Mitroff and Kilmann's SF leader). In each case, authors hypothesize that the appropriate leader style in each organizational type leads to a condition of minimum conflict and maximum efficiency. Congruent cultures are characterized by fit with leadership style. Incongruent cultures are characterized by lack of fit.

Other cultural characteristics enumerated in Figure 2 refer to the nature of bonding or coupling in each culture and the strategic emphases that characterize organizational action. Hierarchies rely on formal rules and policies for bonding; adhocracies on a commitment to risk, innovation, and development; markets on an emphasis on task accomplishment, customer satisfaction, and marketplace competitiveness; and clans on loyalty and tradition. Strategic emphases in hierarchies focus mainly on maintaining stability, predictability, and smooth operations; in adhocracies, mainly on prospecting, acquiring new resources, entrepreneurship; in markets, mainly on competitive actions and achievement; and in clans, mainly on human resource development and maintaining cohesion and morale (see Quinn and Cameron, 1983; Miles and Snow, 1978; Cameron and Whetten, 1983).

In sum, because so many authors have argued that congruency among these major elements of organizational culture is associated with effective performance, and that strength in these cultural types also has a positive relationship with effectiveness, this study was designed to investigate the relationship between congruence, strength, and types of culture with organizational effectiveness. The two research questions guiding the study were: Are organizations with congruent cultures or with "strong" cultures more effective than those with incongruent cultures or with 'weak cultures? What is the relationship between culture type and effectiveness?

The Study's Methodology

In a previous section we summarized some of the drawbacks of questionnaire methodology in assessing organizational culture. We did not review, however, any shortcomings of qualitative methods. An important drawback of qualitative methods is the number of organizations that can be included in an investigation. When indepth interviews and participant observation are the means of obtaining information on culture, cost and time constraints make multiple organizational observations prohibitive. That is why virtually all qualitative analyses of organizational culture focus on only one or a very few organizations. On the other hand, to investigate questions of cultural congruence and strength, comparisons must be made among multiple organizations. Congruence and strength, like effectiveness, are terms that have meaning only in relation to other referents. Therefore, indepth qualitative analyses in one organization must be traded-off against the need for multiple, comparative observations by means of questionnaire analyses.

One way to obtain the benefits of each type of method--questionnaire and qualitative--is to replace Likert-type attitude questions with written descriptions of cultural attributes, or scenarios. In qualitative methodologies,

respondents are stimulated to report underlying cultural assumptions and values by responding to probing interview questions or by telling stories. Another way to obtain the same result is to write scenarios describing certain types of organizational cultures and to have individuals rate the extent to which each scenario is similar to their own organization. In this way, cultural information can be obtained from multiple perspectives and on multiple organizations. The key is to stimulate individuals to make an interpretation of their organization's culture in more than a superficial way. This is done by constructing word pictures for respondents that they can use as reflections of cultural attributes. These word pictures help respondents not just convey the extent to which they are satisfied or dissatisfied with their organization (climate) but the core values and orientations that characterize it (culture). Table 1 provides the scenarios used to obtain the organizational culture data.

Table 1 about here

The Institutional Sample Used in the Study

The 334 colleges and universities in the United States selected for inclusion in this study were representative of the entire population of four-year higher education institutions in America. No known bias existed in the sample of institutions or respondents (see Cameron, 1985, for a sample description).

At each of the 334 schools, individuals were identified that could provide an overall institutional perspective, that is, who had a view of the overall institution's culture and not just a small subunit perspective. These respondents constituted the internal dominant coalition for each institution and consisted of presidents; chief academic, finance, student affairs,

external affairs, and institutional research officers; selected faculty department heads; and selected members of the board of trustees. Of the 3,406 individuals participating in the study (55 percent of the total receiving a questionnaire) 1,317 were administrators (39 percent of the sample), 11,162 were department heads (34 percent of the sample), and 927 were trustees (27 percent of the sample).

Assessing Organizational Culture in the Study

Brief scenarios were constructed that described the dominant characteristics of each of the four cultural types in Figure 2. The four types were all present as alternatives in each question. Respondents divided 100 points among the four alternatives in the question depending on how similar they thought their own organization was to the scenario. This gave them the opportunity to indicate both the type of culture(s) that characterized the organization as well as the strength of the culture (i.e., the more points given, the stronger, or more dominant, the cultural type). As mentioned before, the rationale for this type of question was that underlying assumptions about organizational culture were more likely to emerge from questions that asked respondents to react to already-constructed organizational descriptions than to ask respondents to generate the descriptions themselves. The questions were intended to serve essentially as mirrors, where respondents rated their familiarity with each different reflection. One question assessed the general cultural characteristics, a second assessed leader style, a third assessed institutional bonding or coupling, and a fourth assessed strategic emphases.

When respondents gave the highest number of points to cultural attributes representing the same quadrant of Figure 2, the institution was identified as having a congruent culture. For example, if a respondent gave the most points to the scenario indicating a clan type culture, identified the leader as a

facilitator or mentor, indicated that bonding occurred on the basis of loyalty, and that strategic emphases focus on human resource development--all upper left quadrant attributes--then the organization was labeled a congruent culture. On the other hand, it was also possible to identify incongruent cultures if the highest number of points represented a different quadrant for each of the four cultural attributes (e.g., a clan [upper left] was led by an entrepreneur [upper right], bonded together by formal rules [lower left], and strategically emphasized competitive actions [lower right]). Different amounts of congruence were represented by having two or three of the quadrants receive the highest number of points, so that a continuum of congruence could be derived from the instrument ranging from complete incongruence (a different quadrant was dominant in each question) to complete congruence of the culture (the same quadrant was dominant in each of the four questions).

In addition, it was possible to determine the strength of the culture based on the number of points given to the attributes. When respondents gave, say, 70 points to an attribute rather than, say, 40 points, that attribute was considered to be stronger, or more dominant, in the culture. Type of culture was also determined in the questions by examining organizations with congruent cultures and determining which of the four types of cultures was dominant. A clan culture was indicated by congruence among the four attributes in the upper left quadrant (i.e., a personal place, like a family; led by a mentor, facilitator or parent-figure; bonded together by loyalty and tradition; emphasizing human resources). An adhocracy was indicated by congruence among the four attributes in the upper right quadrant (i.e., a dynamic, entrepreneurial place; led by an entrepreneur or innovator; held together by a commitment to innovation and development; emphasizing growth and acquiring new resources).

A hierarchy was indicated by congruence in the lower left hand quadrant (i.e., a formalized, structured place; led by a coordinator or organizer; held together by formal rules and policies; emphasizing permanence and stability). A market was indicated by congruence in the lower right quadrant (i.e., a production oriented place; led by a hard driver or producer; held together by an emphasis on task and goal accomplishment; emphasizing competitive actions and achievement).

The points given by respondents to each attribute in each institution were averaged to produce an organization score for each attribute in each type of culture (e.g., a leader style score was produced for each of the four cultural types). These scores were used first to investigate the validity of the four culture types and to compare the organizational effectiveness of congruent and incongruent cultures, strong and weak cultures, and the different types of cultures on the basis of institutional mean scores.

Identification of Cultures in the Study

Table 2 presents a summary of the descriptive data analyses. No institution was characterized totally by only one culture (i.e., none received all 100 points on an attribute), but dominant cultures were clearly evident in some of the schools. For example, 47 institutions (14 percent) were classified as having congruent cultures, with 11 more added (3 percent) if tie scores were included. (That is, 11 organizations gave equal points to at least two different quadrants, one of which was the congruent quadrant.) Thirty-two organizations (10 percent) had completely incongruent cultures. The largest number of organizations had congruence in three of the quadrants (124 or 37 percent) with 55 more added (16 percent) if those with one tie were included. Sixty-six organizations (20 percent) were congruent in only two of the quadrants.

Table 2 About Here

Clans were the most numerous type of culture in the sample. Twenty-five of the organizations had congruent clan cultures (7 percent of the total sample), 9 were adhocracies (3 percent), 12 were hierarchies (4 percent), and only 1 was a market. Strong culture was defined by at least 50 points being given to a particular attribute. If an organization was a congruent clan, for example, and all the clan attributes received at least 50 points, it was classified as a strong culture. Twenty-eight of the congruent organizations (57 percent) had strong cultures--21 were clans, 4 were adhocracies, and 3 were hierarchies.

Investigating the Validity of Cultural Types in the Study

The first analysis was an investigation of the organizational characteristics associated with each culture type. For validity purposes, it was of interest to determine if each culture type was associated with traits consistent with the theoretical framework. That is, clan cultures should be associated with different kinds of organizational structures and processes than, say, markets if the proposed model is to be considered valid. Table 3 reports the results of discriminant analyses in which a large number of organizational attributes and strategies were used as discriminators. These variables all were based in the organizational literature as important descriptors of cultures and were assessed in each of the 334 institutions via the questionnaire. Strategy, structure, decision making style, leadership style, and organizational processes were among the types of variables assessed. (See Cameron, 1985, for explanations and justifications of these variables and for a detailed description of the statistical procedures used.)

Table 3 About Here

Three discriminant functions were produced with this analysis, resulting in 100 percent of the institutions being correctly classified in the appropriate culture after knowing their scores on the organizational attributes. This indicates that the discriminating variables were very powerful and that the cultures differ significantly from one another.

The results supported the validity of the theoretical framework. Institutions with clan cultures were characterized by variables such as high morale and collegial decision making. Institutions with adhocracy culture were characterized by variables such as innovative strategies and boundary spanning. Institutions with hierarchy cultures were characterized by variables such as mechanistic structures and an absence of slack resources. Institutions with market cultures were characterized by variables such as market initiative and proactivity. These results suggested that, in general, the four types of cultures are linked to organizational attributes that are consistent with their conceptual rationale and with the underlying the Jungian framework. Moreover, the results help support the view that culture may be used as either something the organization has or something the organization is. Organizations may be thought of as clans, hierarchies, adhocracies, or markets—something the organization is—since this framework helps organize cultural and organizational attributes (e.g., Ouchi, 1980; Williamson, 1975). Or they may be thought of as entities with cultural types that predict other attributes of organizations such as performance of effectiveness. Using the latter approach, the study investigated the relationship between major cultural dimensions and effectiveness.

Comparisons Among Cultures in the Study

In order to investigate the assumed congruence hypothesis (i.e., that congruent cultures are more effective than incongruent cultures), it was necessary to assess the organizational effectiveness of the institutions in the study. This was done using the nine dimensions of effectiveness developed by Cameron (1978, 1981, 1986) which were found to be both valid and reliable indicators of effectiveness of colleges and universities. Long-term viability of institutions, as well as current levels of high performance in colleges, are strongly associated with scores on those dimensions of effectiveness.

Those dimensions are:

1. Student Educational Satisfaction
2. Student Academic Development
3. Student Career Development
4. Student Personal Development
5. Faculty and Administrator Employment Satisfaction
6. Professional Development and Quality of the Faculty
7. System Openness and Community Interaction
8. Ability to Acquire Resources
9. Organizational Health.

Mean scores on each of the effectiveness dimensions were computed for each institution, and comparisons were made between congruent and incongruent cultures and between strong and weak cultures. Figures 3, 4, and 5 summarize the results. No significant differences were found between the means of organizations possessing a congruent culture and those possessing an incongruent culture on any dimension of effectiveness (Figure 3). Even when five different levels of congruence were used, no differences appeared (Figure 4). The same was true of the comparisons between strong and weak cultures (Figure 5).

Figures 3, 4, and 5 About Here

On the other hand, comparisons made among the four types of cultures--clan, adhocracy, hierarchy, market--along with the incongruent culture on the nine dimensions of effectiveness revealed significant differences among the groups' mean effectiveness scores on five of the nine dimensions (Figure 6). Clan cultures scored highest on four of the dimensions, adhocracy cultures scored highest on four of the nine dimensions, and the market culture scored highest on the remaining dimension. On no dimension did the incongruent group score lowest. At least one congruent culture group scored lowest on each of the effectiveness dimensions.

Figure 6 About Here

What these results pointed out is that cultural congruence and cultural strength do not predict effectiveness in colleges and universities. Rather, the type of culture present has a much stronger association with effectiveness on certain dimensions than the other two attributes of culture. In fact, an interesting finding was the discovery of the consistency between the dimensions of effectiveness on which the various cultures scored highest and their primary cultural attributes.

Past research has found that the nine dimensions of effectiveness used in this study are associated with three major domains of activity in colleges and universities (see Cameron, 1981, for an explanation of effectiveness domains in higher education). Table 4 gives the domains with which each effectiveness dimension is associated and matches each dimension and domain with the culture that scored highest.

Table 4 About Here

For example, clans scored highest on the four dimensions of effectiveness associated with the morale domain in colleges and universities. This is consistent with the attributes of the clan culture, with its emphasis on human resources, consensus, and cohesion. The adhocracy culture, with its emphasis on innovation, creativity, and entrepreneurship, scored highest on the two dimensions comprising the external adaptation domain, which is consistent with the conceptual rationale, and on two dimensions comprising the academic domain. This latter finding also appears to be consistent with the emphases present in an adhocracy--freedom and individual discretion, creativity, growth, and development--all of which form the core of the values of scholarship and academics. The market culture scored highest on the Ability to acquire resources, which is consistent with the orientation of market organizations. With an emphasis on competitive actions and achievements, and an orientation toward external (rather than internal) resources, it is not surprising that the market culture was most effective in acquiring resources from the environment. (Adhocracies scored next highest, also consistent with expectations.)

This study revealed, then, that the effectiveness of institutions is more closely associated with the type of culture present than with congruence or strength of that culture. The major attributes and emphases of a culture tend to be associated with high effectiveness in comparable domains. Probably a more important contribution of the study, however, is that it introduces and helps develop a theoretically-based framework of organizational culture. The evidence supporting the framework's validity in higher education institutions

is strong and should help provide a stimulus for others to investigate further the properties of that framework.

Summary of Propositions for Institutions of Higher Education

The summary of Cameron's (1985) study and the review of the culture literature at the beginning of the chapter have now prepared us to identify some propositions regarding the relationship between organizational culture and institutions of higher education. In so doing, our purpose is to use this summary to advance testable hypotheses for future investigators of organizational culture in higher education. We do not intend to suggest that these propositions summarize all we know about organizational culture. Instead our purpose is to identify some theoretically-based and commonly assumed relationships between culture and other higher education outcomes. Investigating these propositions and hypotheses may help researchers progress toward a more integrated and cumulative literature. Up to now, lack of theory and definitional ambiguity threaten to perpetuate a faddishness in organizational culture research. We hope this chapter provides a step in helping to overcome that tendency.

Because few studies of organizational culture have been conducted in multiple institution sites in higher education, many of these summary propositions are based on studies in other organizational sectors (e.g., business organizations). Whereas it is not uncommon for higher education researchers to borrow from business research, we should not assume that the applicability is direct in all cases. Therefore, whereas these 20 propositions all have supporting evidence available from some investigation, the extent to which they are indicative of colleges and universities is still somewhat questionable.

1. No single type of culture is best in all environmental conditions (Cameron, 1985; Ernest, 1985). A match must exist between culture and environment (Deal and Kennedy, 1983).
2. The changing demographic composition of institutions of higher education (e.g., nationality, age) may lead to a change in the culture of these organizations. (Adler and Jelinek, 1986). A shift from clans to markets is a likely change (Cameron and Ulrich, 1986).
3. Cultures shift as institutions develop over time, especially when growth or decline occurs. Different leaders and different criteria of success become valued at different times (Quinn and Cameron, 1983; Cameron, Kim, and Whetten, 1987).
4. All institutions have attributes of all four culture types, and a majority of institutions are not characterized by one dominant type. Most institutions do not have a congruent culture (Cameron, 1985).
5. The clan culture in institutions is usually inherently stronger (i.e., has more impact on individual's behavior) than the cultures of markets and hierarchies (Wilkins and Ouchi, 1983).
6. Strong cultures that also are externally oriented (i.e., adhocracies and markets) are more successful in turbulent, competitive environments (such as typify current conditions) than weak, internally oriented cultures (Arnold and Capella, 1985).
7. Certain types of cultures better foster organizational learning and, therefore, are better able to avoid stagnation and "groupthink," mainly markets and adhocracies (Fiol and Lyles, 1985; Bennis and Nature, 1985).
8. A certain amount of nonconformity must be permitted in the organization's culture in order to avoid stagnation (i.e., some emphasis must exist in the adhocracy quadrant) (Sathe, 1983).

9. Holographic cultures are less adaptive than ideographic cultures in organizations (Albert and Whetten, 1985). Diverse subcultures with a weak overall culture may be most adaptive in changing environments (Schein, 1984).
10. A changing culture requires that other major aspects of an organization change also, such as strategy, structure, relevant skills of personnel, the human resource system (i.e., rewards, selection, appraisal, and development systems), and so on (Waterman, Peters, and Philips, 1980; Kilmann, Saxton, and Serpa, 1980). Culture change assumes broad scale systems change.
11. Cultures lead to effectiveness when the organization's leader articulates a consistent vision that is clearly understood by organizational members (Gordon, 1985; Cameron and Ulrich, 1986; Tichy and Devanna, 1986).
12. Socialization practices for new employees that utilize the following characteristics lead to a strong culture and, presumably, to organizational effectiveness (Pascale, 1985; Stiehl and Martin, 1982; Louis, 1980; Trice, 1983;
 - a. Conscious use of rhetoric oriented toward establishing a sense of community.
 - b. Convincing new members that the organization has their best interests at heart.
 - c. Cultivating jokes, stories, and sagas, and communicating them frequently to new employees.
 - d. Utilizing off-site training experiences for new employees.
 - e. Designing rites of passage that are communicated and rewarded.
 - f. Carefully selecting entry level candidates.

- g. Inducing humility, or generating a desire to adopt the new culture in new employees.
 - h. Training new members "in the trenches" with meaningful, responsible jobs.
 - i. Reward and control systems reinforcing the desired behaviors that are consistent with the corporate culture.
 - j. Requiring personal sacrifices to enter the institution.
 - k. Developing mentoring relationships.
 - l. Leaders providing constant and consistent role models.
13. The greater the discrepancy between private organizational identity and public identity (i.e., incongruence), the lower the organizational effectiveness (Albert and Whetten, 1985).
 14. Strong cultures are more apt to lead to organizational effectiveness than weak cultures, especially in environments that challenge or threaten the survival of the institution (Lofland, 1966; Deal and Kennedy, 1982; Messinger, 1955; Ashforth, 1985).
 15. Participative cultures have more impact on effectiveness than strong and congruent cultures (Denison, 1984; Heller and Guastello, 1982).
 16. Clarity of culture leads to effectiveness and arises from clear communication from the leader (Albrecht and Zemke, 1985).
 17. Organizational size decreases the utility of culture for controlling behavior (Jones, 1983).
 18. A well-organized work environment (i.e., consistent culture) leads to organizational effectiveness (Denison, 1984).
 19. Employees are more committed to organizations where cultures are richer and stronger (i.e., have more stories told about them) (Wilkins, 1979).

20. Cultural change in organizations requires the conscious destruction of old processes and structures, and the institutionalization of new processes and structures. Symbolic or interpretation changes are at least as important as substantive or strategic changes (Miles and Cameron, 1982; Cameron and Ulrich, 1986; Chaffee, 1984).

Table 1 An Instrument for Assessing Organizational Culture

These questions relate to the type of organization that your institution is most like. Each of these items contains four descriptions of institutions of higher education. Please distribute 100 points among the four descriptions depending on how *similar* the description is to your school. None of the descriptions is any better than the others; they are just different. For each question, please use all 100 points.

FOR EXAMPLE:

In question 1, if institution A seems very similar to mine, B seems somewhat similar, and C and D do not seem similar at all, I might give 70 points to A and the remaining 30 points to B.

1. Institutional Characteristics (Please distribute 100 points) _____

_____ points for A Institution A is a very personal place. It is like an extended family. People seem to share a lot of themselves.

_____ points for B Institution B is a very dynamic and entrepreneurial place. People are willing to stick their necks out and take risks.

_____ points for C Institution C is a very formalized and structured place. Bureaucratic procedures generally govern what people do.

_____ points for D Institution D is very production oriented. A major concern is with getting the job done. People aren't very personally involved.

2. Institutional Leader (Please distribute 100 points) _____

_____ points for A The head of institution A is generally considered to be a mentor, a sage, or a father or mother figure.

_____ points for B The head of institution B is generally considered to be an entrepreneur, an innovator, or a risk taker.

_____ points for C The head of institution C is generally considered to be a coordinator, an organizer, or an administrator.

_____ points for D The head of institution D is generally considered to be a producer, a technician, or a hard-driver.

3. Institutional "Glue" (Please distribute 100 points) _____

_____ points for A The glue that holds institution A together is loyalty and tradition. Commitment to this school runs high.

_____ points for B The glue that holds institution B together is a commitment to innovation and development. There is an emphasis on being first.

_____ points for C The glue that holds institution C together is formal rules and policies. Maintaining a smooth-running institution is important here.

_____ points for D The glue that holds institution D together is the emphasis on tasks and goal accomplishment. A production orientation is commonly shared.

4. Institutional Emphases (Please distribute 100 points) _____

_____ points for A Institution A emphasizes human resources. High cohesion and morale in the school are important.

_____ points for B Institution B emphasizes growth and acquiring new resources. Readiness to meet new challenges is important.

_____ points for C Institution C emphasizes permanence and stability. Efficient, smooth operations are important.

_____ points for D Institution D emphasizes competitive actions and achievement. Measurable goals are important.

TABLE 2

Description of the cultures of 334 colleges and universities

Number of Congruent Quadrants	Number of Organizations		
4	47		
4 with ties	11		
3	124		
3 with ties	55		
2	66		
1	32		

Type of Culture	Congruent	Incongruent	Strong Culture
Clan	25		21
Adhocracy	9		4
Hierarchy	12		3
Market	1		0
TOTAL	47	32	27

TABLE 3 The Most Powerful Discriminators Among the Four Organizational Cultures

Function	Eigenvalue	Canonical		Wilks'		Chi		D.F.	Significance		
		Correlation	Lambda	Square	Square	A	B		A	B	
Variables		A	B	A	B	A	B	II	A	B	III
Distinctive purpose (Saga)	.754	.524***	.754	-.558	-.012	-.148	-.171				
Mission agreement (Saga)	.057	.449***	.057	.930	.337**	.274	-.124				
Increasing innovation	-.413	.438***	-.413	-.840	-.447**	-.686	.080				
Increasing morale	.101	.349***	.101	.289	-.037	.735	.204				
Absence of slack	-.386	-.437***	-.386	.205	.156	.316	.135				
High leader credibility	-.911	.210	-.911	-.592	-.193	-1.208	-.291*				
Increasing boundary spanning	.524	.586***	.524	.027	-.169	.305	.111				
Prospector strategy	.377	.370**	.377	-.304	-.619***	.942	.590***				
Increasing administrator quality	.716	.552***	.716	.187	-.074	-.306	.061				
Emphasizing revenue initiatives	.364	.414***	.364	-.455	-.459***	-.155	-.054				
Anarchy (Decision style)	1.533	.150	1.533	.178	.012	-.343	-.171				
Collegial (Decision style)	.374	.385***	.374	.548	.302**	-.136	.008				
Rational (Decision style)	1.474	.365**	1.474	.406	.064	.192	.063				
Student personal development	.222	.391***	.222	.388	.456***	.086	-.258*				
System openness	.667	.490***	.667	.022	-.031	.010	.031				

Group	Centroid 1	Centroid 2	Centroid 3	Percent Correctly Classified
Clan Culture	1.617	.949	-.435	
Adhocracy Culture	2.179	-2.565	1.004	100
Hierarchy Culture	-4.513	.499	.534	
Market Culture	-5.873	-6.636	-4.569	

A = discriminant coefficient B = Correlation with the discriminant score * p<.05 ** p<.01 *** p<.001

TABLE 4

A Summary of Which Culture Scored Highest on Which
Dimension of Organizational Effectiveness

Dimensions of Effectiveness	Domain (Cameron, 1981)	Culture Scoring Highest*
1. Student educational satisfaction	Morale	Clan
2. Student academic development	Academic	Adhocracy
3. Student career development	External Adaptation	Adhocracy
4. Student personal development	Morale	Clan
5. Faculty and administrator employment satisfaction	Morale	Clan
6. Professional development and quality of the faculty	Academic	Adhocracy
7. System openness and community interaction	External Adaptation	Adhocracy
8. Ability to acquire resources	Academic	Market
9. Organizational health	Morale	Clan

* The highest scoring culture was significantly higher ($p \leq .05$) than at least one other culture on each dimension of effectiveness.

FIGURE 1

Distinctions in the Traditional Approaches to Organizational Culture

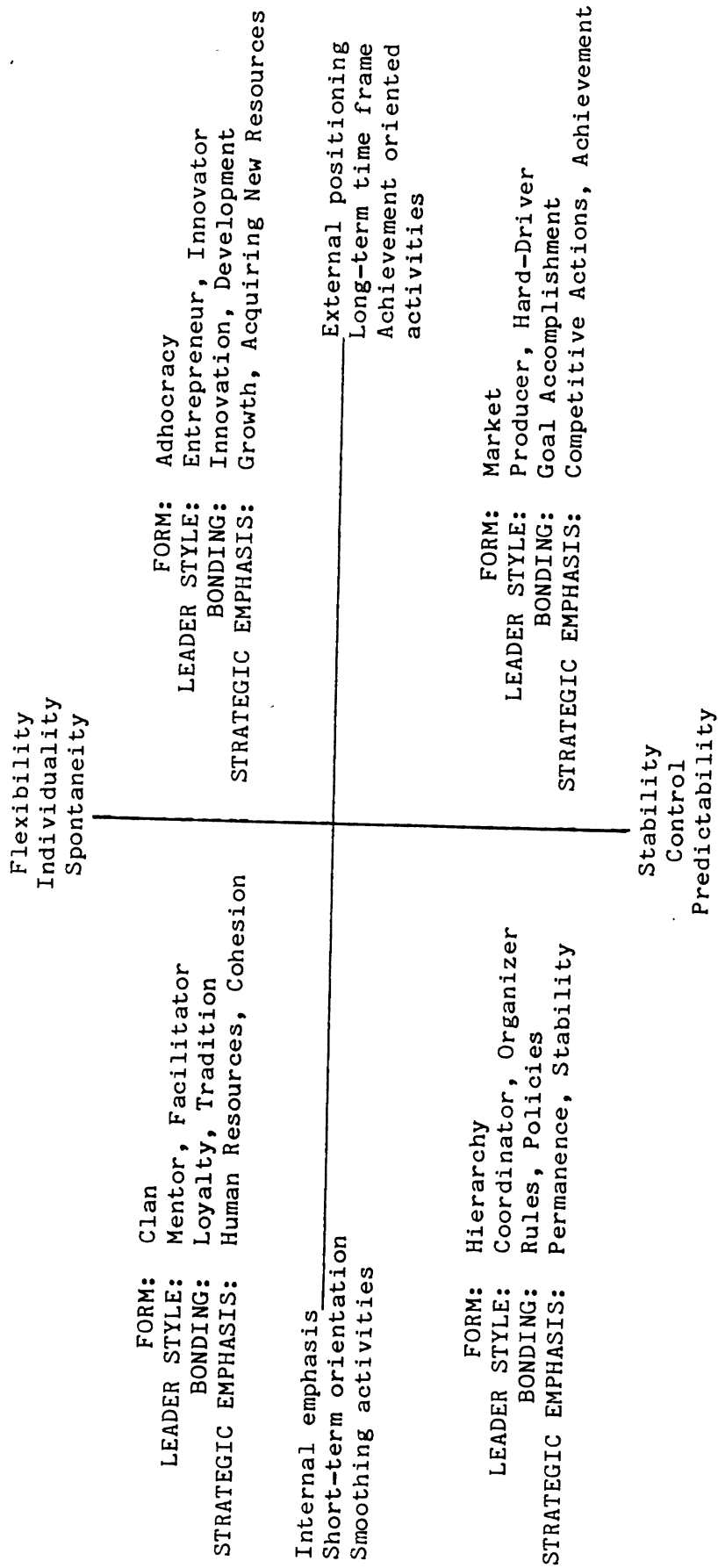
ANTHROPOLOGICAL

SOCIOLOGICAL

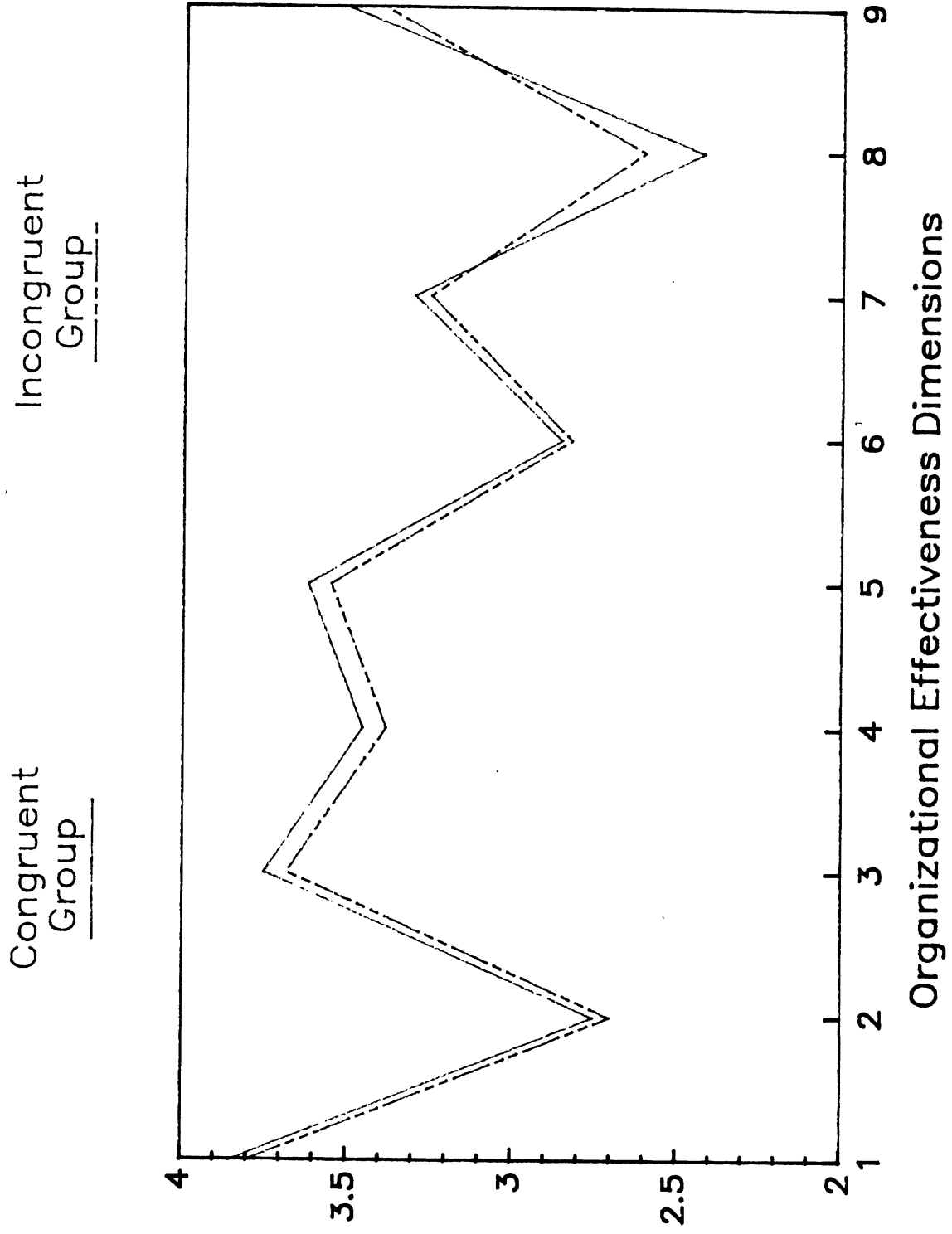
<ul style="list-style-type: none"> • focus on <u>behavior</u> • <u>researchers</u> interpret data • <u>outside observation</u> investigators • treated as a <u>dependent</u> variable • assumption: culture <u>is</u> something • organizations <u>are</u> cultures 	<ul style="list-style-type: none"> • focus on <u>behavior</u> • <u>researchers</u> interpret data • <u>outside observation</u> by investigators • treated as an <u>independent</u> variable • assumption: culture <u>for</u> something • organizations <u>have</u> cultures
<ul style="list-style-type: none"> • focus on <u>cognitions</u> • <u>natives</u> interpret data • <u>immersion</u> required of investigators • treated as a <u>dependent</u> variable • assumption: culture <u>is</u> something • organizations <u>are</u> cultures 	<ul style="list-style-type: none"> • focus on <u>cognitions</u> • <u>natives</u> interpret data • <u>immersion</u> required of investigators • treated as an <u>independent</u> variable • assumption: culture <u>for</u> something • organizations <u>have</u> cultures

FIGURE 2

A Model of Cultural Congruence for Organizations



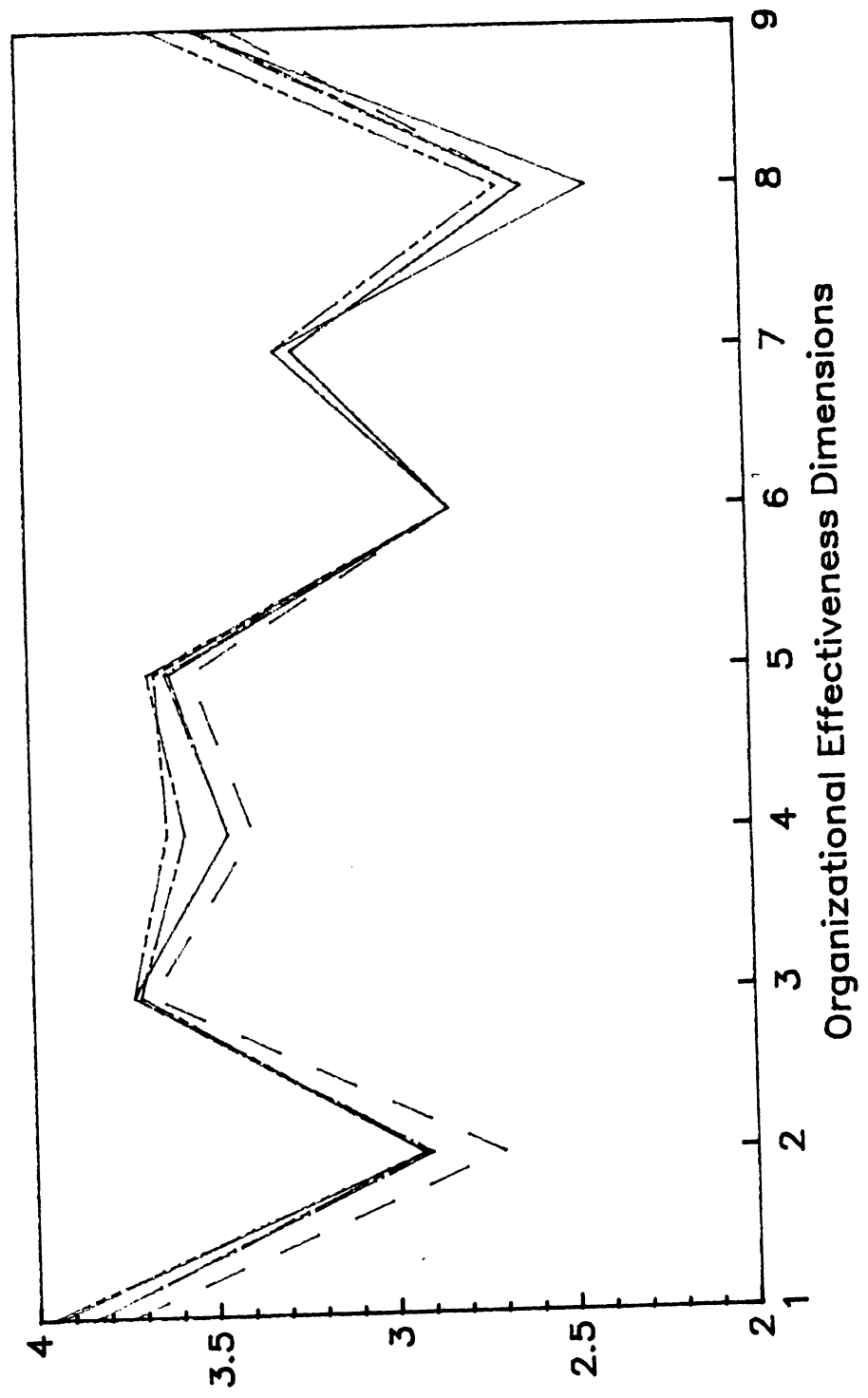
Analysis of "Culture" Data (Congruence)



Analysis of "Culture" Data (Congruence)

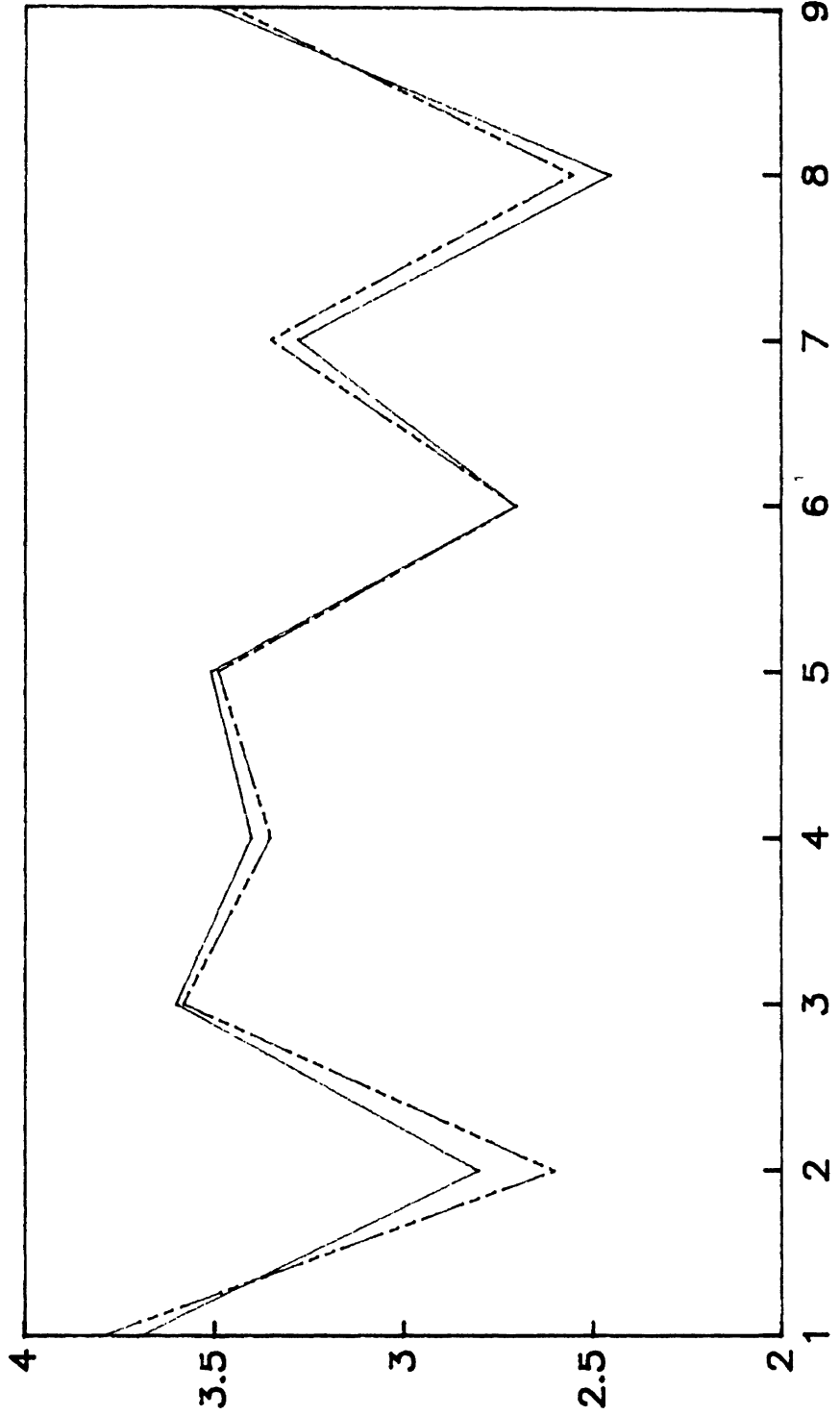
Five Levels of Congruence

High Mod. High Mod. Low Very Low



Weak

Strong



O.E. Dimensions

Four Cultures & Incongruent Group

In-Congruent Clan Adhocracy Hierarchy Market

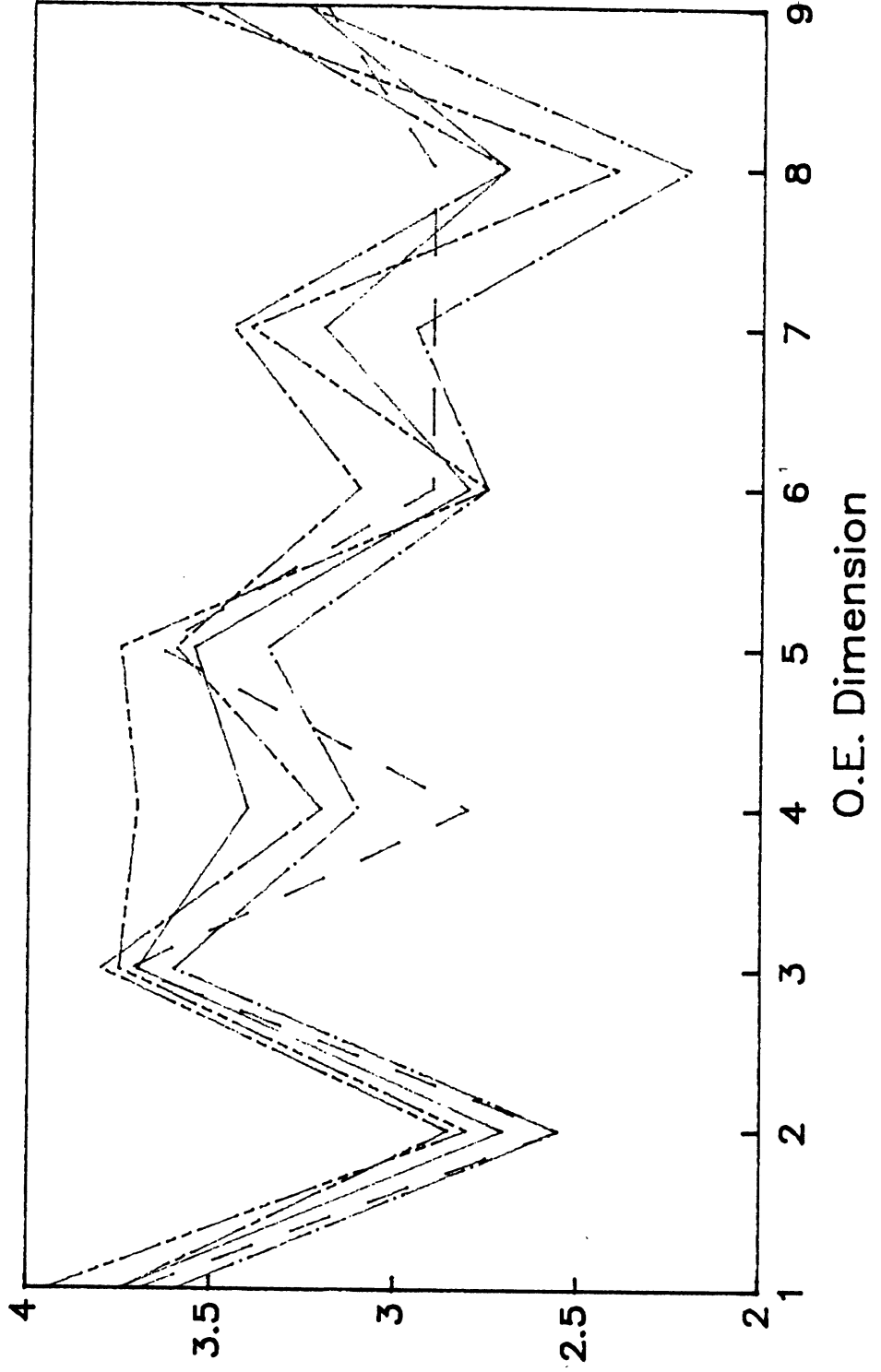


FIGURE 4 A comparison of five levels of cultural congruence

FIGURE 5 Comparisons between strong cultures and weak cultures

FIGURE 6 Comparisons among four types of cultures and incongruent culture

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