Cultural Perspectives of Academia: Toward a Model of Cultural Complexity

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Introduction

Throughout the past 20 years cultural analysis has flourished as a means of studying higher education organizations (Cameron & Ettington, 1988; Kuh & Whitt, 1988; Masland, 1985; Peterson, Cameron, Jones, Mets, & Ettington, 1986; Peterson, Cameron, Knapp, Spencer, & White, 1991; Peterson & Spencer, 1990, 1993; Silver, 2003; Smart, 2003; Smart & St. John, 1996; Smart, Kuh, & Tierney, 1997). Not only has it been of interest to organizational scholars but also to administrators for its potential to improve administrative action (Austin, 1990; Chaffee & Tierney, 1988; Dill, 1982; Tierney, 1988). Ultimately, cultural analysis is important because it can lead to insightful interpretations of organizations, management, and working life. A cultural perspective offers powerful ways to understand deep-level, partly non-conscious sets of meanings, ideas, and symbols.

Cultural analysis of higher education organizations began in the 1960s (Clark, 1963a; Clark & Trow, 1966), and in a novel insight at the time, Riesman and Jencks say, "to the extent that a college is a subculture, with its own idiosyncratic customs and concerns, an anthropologist can study it in much the same way that he studies a primitive tribe or modern community" (1962, p. 104). However, it was not until the late 1980s that a cultural perspective rapidly expanded (Allaire & Firsirotu, 1984; Barley, Meyer, & Gash, 1988; Denison, 1990; Weick, 1985). To some degree the interest in culture was a secondary wave from its prominence in the early 1980s in business organizations. Culture came to be seen by business managers as the key to Japan's economic success (Ouchi & Jaeger, 1978; Ouchi & Wilkens, 1985; Pettigrew, 2000). It was also seen by organizational scholars as a new perspective for those tired of sterile, scientific methods to understanding organizations (Alvesson, 1993; Ashkanasy, Wilderom, & Peterson, 2000; Jelinek, Smircich, & Hirsch, 1983; Schein, 1996; Smircich, 1983). The key books in the early 1980s that propelled the subject onto center stage were Ouchi's *Theory Z* (1981), where he

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describes the holistic concern for the physical and psychological well-being of the employee—an approach he saw among Japanese companies. Additionally, *In Search of Excellence* (1982) by Peters and Waterman and *Corporate Cultures* (1982) by Deal and Kennedy played prominent roles in the perspective's ascendancy.

In higher education organizations, culture is formed through many complex influences both in the organization and as the result of the environment. Within the organization, culture is the result of an organization's unique history (Clark, 1970, 1972), its leadership (Schein, 1983, 1984, 1985, 1990, 1992), and critical events (Pettigrew, 1979). Culture is also shaped by subcultures (Van Maanen & Barley, 1984, 1985), including at the broadest level the subcultures of faculty and administration. Within these groups, faculty have disciplinary identities (Becher, 1981, 1989, 1994; Lee, 2004; Välimaa, 1998), and administrators are subdivided into functional groupings. In sum, as complex organizations there are many forces that shape the culture of colleges and universities. As Gregory states:

> The small-homogenous-society metaphor is often inappropriate to those organizations that are large, internally differentiated, rapidly changing, and only command part-time commitment from members. Such organizations more nearly resemble the complex society of which they are a part... Societies, and many organizations, can more correctly be viewed in terms of multiple, cross-cutting cultural contexts changing through time, rather than as a stable, bounded, homogenous culture (1983, p. 365).

Understanding the "multiple, cross-cutting cultural contexts" in which people operate helps us better understand the complexity of higher education organizations and improve administrative action.

With an amalgam of research studies of colleges and universities, the recent development of a meta-theoretical perspective has helped classify the assumptions and frameworks from which scholars approach the study of organizations (Martin, 1992, 2002; Martin & Frost, 1996; Martin & Meyerson, 1988). The three perspectives developed by Martin and colleagues are integration, differentiation, and fragmentation. The integration perspective assumes consistency, organization-wide consensus, and clarity. Deviations from integration are considered regrettable shortfalls from an integrated ideal. Conversely, the differentiation perspective assumes that culture is manifested by differences among subunits, and that consensus only occurs in subcultures. This perspective can be clearly seen in Clark's book *Academic Life: Small Worlds, Different Worlds* (1987). The third perspective, fragmentation, assumes that culture can best be described by ambiguity in an organization. Consensus from a fragmentation perspective is transient and issue-specific. Research from this perspective notes the pervasiveness of unclear goals and the lack of clarity in determining whether outcomes have been reached.

With an extensive number of culture frameworks and studies, the main question guiding this chapter is: *What are the relative strengths and weaknesses of the various approaches to studying culture in colleges and universities?* Three perspectives will be used to classify the literature—integration, differentiation, and fragmentation— which offer heuristic value but should not overemphasize categorical thinking. Most studies have components of all three perspectives but usually stress one approach to

a lesser or greater degree, creating a continuum. In order to understand the culture literature about administrators and faculty in higher education, I first review the three perspectives that help classify the research. Then empirical findings and conceptual models of organizational culture from each perspective are reviewed.

Integration, Differentiation, and Fragmentation Perspectives of Culture

The three perspectives of integration, differentiation, and fragmentation have helped classify culture studies in an area that defies easy conceptualization (Mumby, 1994). The classification scheme has primarily been articulated by Martin (1992, 2002) who says the perspectives emerged inductively from the literature. The first perspective, integration, is the most widely-used perspective and flourished in the 1980s. Studies from this perspective tend to focus on homogeneity, harmony, and a unified culture with the unit-of-analysis being the organization (Martin & Frost, 1996). Some of the earlier exemplars of this perspective were managerially-oriented and written for a popular audience (Deal & Kennedy, 1982; Ouchi, 1981; Peters & Waterman, 1982). The integration perspective assumes that culture is what people share and that consensus can be found. It stresses actions which are consistent among employees, the shared meanings of stories and jargon, and the internally consistent ideology of an organization, such as the policies and practices that reinforce a company-wide concern for people in a Theory Z culture (Ouchi, 1981).

Integration studies tend to be criticized on both conceptual and methodological grounds (Siehl & Martin, 1990; Smircich & Calas, 1987; Wilderom, Glunk, & Masloswski, 2000). These include (1) overlooking conflict, (2) not including data which contradicts the shared conception of culture, (3) extrapolating from a relatively small sample of employees, (4) oversimplifying from a superficial, short-term interaction with the organization, and (5) overstating managerial influence in changing the culture. The strength of integration studies is the clarity of insight which can lead to focused action. These studies can alleviate "the anxieties associated with ignorance and confusion" (Martin, 1992, p. 59).

The differentiation perspective, on the other hand, seeks to penetrate what many researchers consider is a façade presented to outsiders. From a differentiation perspective, consensus and clarity occur only within a subculture; there is little organization-wide consensus; and less influence is attributed to the leader of the organization in comparison to integration studies. Researchers from this approach observe subcultural conflicts, power, and differences between stated attitudes and actual behaviors. With a pluralist sensitivity to differences "an organizational culture is not unitary; it is a *nexus* where environmental influences intersect, creating a nested, overlapping set of subcultures within a permeable organizational boundary" (Martin & Frost, 1996, p. 604). Most of the sources of cultural content come from non-leader sources such as occupational influences, demographics, or national contexts. With this emphasis, differentiation studies show how subcultures reflect

collectives in the larger society (Louis, 1983; Martin, Frost, & O'Neill, 2006). Clark (1983) best illustrates this nexus approach by describing how academics simultaneously belong to the culture of a discipline, enterprise, profession-at-large, and national system of higher education.

It is important to explain that the differentiation perspective, which emphasizes clarity within subcultures, is not simply the integration perspective, writ small. No study portrays each perspective in its ideal type, but each study stresses different phenomenon. Therefore, to categorize a research study, one must look at what phenomena are foreground and background. In differentiation studies, multiple subcultures are described and differences between them are stressed, while in integration studies, organization-wide consensus is stressed and subcultural differences are of secondary importance.

The third perspective of fragmentation highlights ambiguity and that objectives are often unclear, means to those objectives are not specified, and success is unknown—a perspective that mirrors the description of colleges and universities as "organized anarchies" (Cohen & March, 1974). From this perspective consensus is issue-specific and transient. There are short-term affinities among individuals that are quickly replaced by a different pattern of affinities as new issues arise (Martin & Frost, 1996). Subcultures are thus fleeting, issue-specific coalitions that fragment and re-form as time passes.

In a higher education context, ambiguity may rest with individuals who have competing logics as both a faculty member and administrator (Etzioni, 1964). Furthermore, faculty members live with the ongoing demands of teaching, research, and service (Boyer, 1990; Wright, 2005). Thus, culture in a higher education context may be more plausibly explained by a world of unclear goals and irresolvable time-conflicts and tensions, with no clearly-defined unitary culture.

In sum, the central focus of studies from the fragmentation perspective is ambiguity. Ambiguity includes "multiple, contradictory meanings that are simultaneously true and false, paradoxes, ironies, and irreconcilable tensions" (Martin, 2002, p. 110). This focus on ambiguity, however, challenges a central tenant of many organizational culture studies—that culture is *shared*. Researchers from an integration perspective would say ambiguity is not culture; it is the absence of culture. For example, Schein claims that "if things are ambiguous, then by definition, that group does not have a culture" (1991, p. 248). This debate portrays the different viewpoints researchers take to studying culture—if one is searching for a clearly-defined unitary logic (integration), or seeking to explain, to the best of one's abilities, the jungle we often find ourselves in (fragmentation).

Although studies seldom fit easily into a perspective, Martin (2002) approximates that 80% of cultural studies work tacitly from one of the three perspectives and another 10% combine two or three perspectives. Table 1 offers a synopsis of the three approaches.

Martin (1992, 2002) argues that researchers should take all three perspectives of culture—an integrated, differentiated, *and* fragmented view. The assumption is that there are some aspects of a cohesive culture that bind organizational actors, but at the same time there are factions, subcultures, and occupations that differentiate units

Table 1 Summary of the three perspective framework

	Integration	Differentiation	Fragmentation
Orientation to consensus	Organization-wide consensus	Subcultural consensus	Multiplicity of views
Treatment of ambiguity	Excludes ambiguity	Channels ambiguity outside subcultures	Acknowledges ambiguity
Primary focus of study	Harmony	Conflict/differences	Ambiguity, irony, paradox, and the multiple interpretations that do not coalesce into collective-wide consensus

Source: Adapted from Table 4.1 in Martin (2002), Table 1 in Martin and Meyerson (1988), and Table 1.1 in Martin (1992).

of an organization. Yet, there is also ambiguity and shifting alliances and unclear goals. Martin's intent in proposing a meta-theory is to surpass more narrow theories to move to higher levels of abstraction than a single approach. By being attentive to all three perspectives one can be aware of the interpretive framework that is imposed on the process of collecting and analyzing cultural data.

The Integration Perspective

With an understanding of the multiple approaches to culture research, the next section reviews higher education studies that are primarily from the integration perspective. The main question addressed in this section is: What major conceptual models and research findings have explained the culture of colleges and universities from an integration perspective? These descriptions and models focus on what makes an organization distinct from others and considers culture as the shared meanings and assumptions at the organization level-of-analysis.

Organizational Saga

One of the earliest and most-cited studies of higher education is Burton Clark's *The Distinctive College: Antioch, Reed & Swarthmore* (1970). In this study of three small, liberal arts colleges, Clark outlines the "organizational saga" of these colleges which he defines as a "unified set of publicly expressed beliefs about the formal group that (a) is rooted in history, (b) claims unique accomplishment, and (c) is held with sentiment by the group" (1972, p. 179). This story of special performance emerges not in a few months but over decades and creates allegiance among members to a unified sense of special purpose. Clark's concept of the organizational saga was a precursor to mainstream culture studies and played a role in the emergence of the study of organizational culture in the late 1970s and early 1980s (Clark, 2000).

The concept of organizational saga focuses our attention on the analytical importance of historical inquiry. Clark describes "the delights of studying historical records year by year, even week by week, especially to dig out what key actors did at crucial times" (Clark, 2000, p. 10). Clark's approach directs our attention to developmental historical analysis by examining the genesis of the character of a college.

Integration Perspective Case Studies

Further expanding our knowledge of culture in colleges and universities, Chaffee and Tierney (1988) conducted seven case studies with an aim to "foster [among readers] a more acute self-assessment of organizational culture" (1988, p. vii). In accordance with the managerial emphasis of the integration perspective, they consider culture analysis to be a tool to help administrators implement decisions by garnering the support of constituencies. With a goal of bringing the dimensions and dynamics of culture to the consciousness of leaders, Chaffee and Tierney (1988) provide a conceptual model for readers to compare and contrast the culture of their seven case studies of colleges and universities.

Depicted in Fig. 1, their model includes three dimensions—structure, enacted environment, and values—and three themes—time, space, and communication. *Structure* refers to the ways in which an organization accomplishes its activities. It includes governance mechanisms and the formalized roles of each worker. The
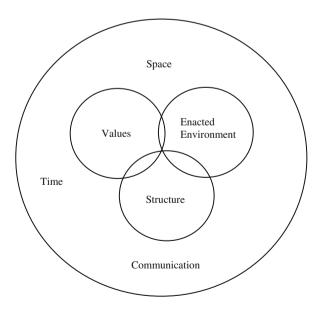

Fig. 1 Chaffee and Tierney's (1988) model of organizational culture
Source: Fig. 2.1 from Chaffee & Tierney (1988, p. 19)

enacted environment is the context of events, demands, and constraints in which an organization finds itself. They label the environment as "enacted" because they consider the portions of the environment that come to the attention of members of the organization, not the environment that may exist regardless of what is noticed. *Values* are beliefs, norms, and priorities. Coming from an integration perspective they are interested in the extent to which values are congruent among individuals and subgroups. They propose that it is the role of leaders to make structures, enacted environments, and values congruent. Among the three themes: *time* refers to the history and tradition of the organization; *space* is the physical layout of the college; and *communication* is the way members perceive and interpret their world.

Using one of the seven case studies, Tierney (1988) provides an additional framework to diagnose culture. With the goal of helping leaders implement decisions by having a full, nuanced understanding of the organization's culture, his perspective demonstrates the integration approach. He does not focus on conflict or irresolvable tensions and instead states that "a central goal of understanding organizational culture is to minimize conflict and help foster the development of shared goals" (p. 5). His framework outlines six dimensions of culture and diagnostic questions for each dimension. He stipulates that we should look at an organization as a traditional anthropologist would study a clan or village (Table 2).

The framework demonstrates the use of culture as an "umbrella concept" (Hirsch & Levin, 1999) where the six concepts of the framework are identified under the umbrella of culture. In this case, Tierney (1988) labels decision-making

Table 2 Tierney's (1988) framework of organizational culture

Environment	How does the organization define its environment?
	What is the attitude toward the environment? (Hostility? Friendship?)
Mission	How is it defined?
	How is it articulated?
	Is it used as a basis for decisions?
	How much agreement is there?
Socialization	How do new members become socialized?
	How is it articulated?
	What do we need to know to survive/excel in this organization?
Information	What constitutes information?
	Who has it?
	How is it disseminated?
Strategy	How are decisions arrived at?
	Which strategy is used?
	Who makes decisions?
	What is the penalty for bad decisions?
Leadership	What does the organization expect from its leaders?
	Who are the leaders?
	Are there formal and informal leaders?

Source: Table 1 from Tierney (1988, p. 8).

as part of strategy which is also a part of culture. Throughout the article, Tierney uses culture to describe nearly every aspect of organizational life, without linking the interpretations to deeper assumptions as found in Schein (1992).

In further demonstrating the integration approach, Sporn (1996) completed a case study of the federal university of economics and business administration in Austria, a university which enrolls 20,000 students. Although she approaches her research from an integration perspective, she finds differentiation and fragmentation. She begins by noting how colleges and universities are complex, have ambiguous goals, unclear techniques, and professionals with a strong desire for autonomy and freedom. She says the complexity and resulting fragmentation of universities is a "common problem" (p. 43). She argues that there are new demands that make culture strength and collective unity important for strategically adapting to the environment. She states that, "because many universities are a conglomerate of autonomous subunits with loose links and a high degree of specialization in the disciplines, overall integration at the broadest level is needed" (p. 43). She advises that universities involve a diverse and large number of members into a strategic planning effort to trigger a higher degree of identification for a more unified institution. "The challenge is to integrate all activities of the subcultures so that they can be used for diverse management purposes on a comprehensive level" (p. 48). This argument derives from the business literature on the managerial value of creating a "strong culture" (Saffold, 1988), with little heed for the scholarly value of a fragmented organization.

In her study, Sporn (1996) uses a mixed methods approach and her results show ambiguity and differentiation. She says:

> The values and beliefs concerning the mission and aims of the University activities are divergent; there are no general guidelines on how to manage teaching and research; the concept of the University as a whole barely exists and has no meaning for the University members; and depending on the hierarchical position within the University, professors, assistant professors, and administrators form subcultures. The values of these subcultures differ significantly (p. 51).

Along her two dimensions of strong vs. weak culture and internal vs. external orientation she finds the University culture is weak (i.e. not integrated) and *both* internally *and* externally oriented (i.e. ambiguously fragmented). Given her empirical findings, however, she argues for greater integration of the subcultures drawing heavily upon the arguments of Dill (1982).

Dill's (1982) conceptualization of culture emphasizes the managerial orientation of the integration perspective. His notion of culture could be described as work life that is infused with meaning. He describes the decline of culture in academia and how administrators should nurture culture and manage meaning. His view is that culture can be manipulated to improve organizational effectiveness and create a healthier organizational climate. This view either ignores divisiveness and conflict or labels them as indicators of ineffectiveness.

Dill's argument is that the survival of academic institutions depends on the adoption of the management tools developed in the business sector. He says these management tools were adopted by U.S. managers from Japan because of Japan's

superior economic performance in the late 1970s. His writing is an example of the integration perspective because he argues for academics to be more identified with their college or university rather than their discipline. He calls the identification with a discipline rather than an organization as a "loss of meaning." To overcome this loss of meaning he argues for a focus on symbolic management which nurtures the symbolic life of academic organizations such as myths and rituals (Pfeffer, 1981; Smircich & Morgan, 1982). This argument is further expressed by Sporn (1996) who argues that an integrated culture enables the university to deal with uncertainty and complexity in a more adequate fashion.
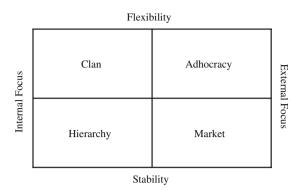
Bartell (2003) continues this argument by discussing the alignment of culture that is needed to effectively adapt to internationalization. He views universities as complex, with a high degree of differentiation, multiplicity of units and standards, and autonomy of professors. He argues that these characteristics hinder the change process. Instead, he says cultural strength would improve organizational functioning by facilitating a university's adaptation to internationalization. The author uses his experience as the founding director of an international exchange program, and his main argument is that "increased social integration of the variety of subcultures of the different units and a unified culture can then convey meaning and identification with the objectives and strategies of internationalization" (2003, p. 67).

Hartley (2003) also describes the harmony and unity that is a hallmark of an integration perspective. Using an ethnographic approach at several colleges, he discusses the process of renewal they underwent. He says that "over time, a majority of institutional members came to embrace the new vision. Relationships between estranged individuals were restored; and ultimately, efforts to realize the new mission led to a stronger organizational culture and more satisfying institutional life than had been in place before" (2003, p. 77). He says the political model is incomplete because it focuses on "enduring differences among coalition members in values, beliefs, information, interests, and perceptions of reality" (Bolman & Deal, 1997, p. 163). His data reveal a persistent theme of shared ideals and values.

The Competing Values Framework

One of the most widely-used conceptual models of culture in higher education is the competing values framework (Cameron & Quinn, 1999; Quinn & Rohrbaugh, 1983). The model posits that organizations can be one of four types—a clan, market, adhocracy, or hierarchy—and the research is linked with a functionalist concern for organizational effectiveness. Within the competing values model the *clan* culture emphasizes shared values and goals, participation, and a sense of family. A *market* culture emphasizes competition, environmental interaction, and customer orientation. An *adhocracy* emphasizes entrepreneurship, creativity, and adaptability, while a *hierarchy* has many rules and regulations, clear lines of authority, and is concerned with efficiency (Cameron & Ettington, 1988). Figure 2 outlines the major dimensions of the competing values framework.

Fig. 2 The basic typology of
the competing values
framework

Flexibility

Internal Focus

Clan	Adhocracy
Hierarchy	Market

External Focus

Stability

Survey respondents allocate points between descriptions of the four types to reveal a dominant culture. Distributing points highlights the relative strength of *competing* values among flexibility and stability and internal versus external orientation. This typology has been widely-used in higher education and is a clear example of the integration perspective. The authors are explicit about their assumptions as they say:

> The power of culture from our point of view lies in its ability to bring people together, to overcome fragmentation and ambiguity that characterize the external environment, and to lead organizations toward extraordinary success when their competitors struggle. That is, this book is biased toward the *integration* approach to culture because it is in the integration perspective that culture derives its power (Cameron & Quinn, 1999, p. 54).

Research using the competing values model on a sample of 334 colleges and universities has been widely published (Cameron & Ettington, 1988; Cameron & Freeman, 1991; Fjortoft & Smart, 1994; Smart & St. John, 1996; Zammuto & Krakower, 1991). The national survey of 334 colleges and universities was conducted from 1984 to 1985 at the National Center for Higher Education Management Systems. Among the 3,406 respondents of faculty, administrators, and trustees, Cameron and Ettington (1988) find that the type of culture has a strong association with effectiveness. Of the nine dimensions of effectiveness (Cameron, 1978), clan cultures score highest on four measures, adhocracies score highest on another four, while market cultures score highest on the remaining dimension.

In using the competing values framework, Smart and St. John (1996) come to the conclusion that "some culture types have a stronger positive relationship with traditional measures of the organizational effectiveness of colleges and universities than other culture types, but irrespective of the specific culture type, it is critically important that the culture be 'strong' in order to achieve maximum effectiveness" (p. 220). They define strong cultures as those in which there is congruence between espoused beliefs and actual practices, whereas weak cultures are characterized by incongruence between espoused beliefs and actual practices. This is one formulation of what a "strong" culture is and the authors recognized that the literature is replete with alternative definitions.

The competing values framework has also been used for studies focusing on community colleges (Smart & Hamm, 1993a, 1993b; Smart et al., 1997). Most recently Smart (2003) examined all full-time faculty and administrators in a statewide system of 14 community colleges. Completed surveys were obtained from 1,423 full-time faculty and administrative staff, and the research shows that as the level of cultural complexity increases, organizational effectiveness improves. Cultural complexity is defined as a campus that has several means above the entire sample mean in more than one of the four types. Organizational effectiveness is formulated by additional survey questions that assess Cameron's nine dimensions of higher education effectiveness (1978).

The strength of the competing values model is that it allows researchers to compare across organizations and generalize about culture with high sample sizes. The tradeoff, however, is that we lose the uniqueness and complexity of culture in each organization. The authors are explicit in their decision to "sacrifice analytic depth for comparative breadth" (Cameron & Freeman, 1991, p. 31). With its focus on organization-wide consensus, the differing views of faculty, admissions officers, financial affairs, and academic administrators are aggregated into one unified perception, and the unique texture of work-life is lost. The authors are explicit in their etic approach, which is counter to most studies of organizational culture. They assert that "underlying assumptions related to organizational culture are more likely to emerge from questions that ask respondents to react to already-constructed descriptions of organizations than from questions asking respondents to generate the descriptions themselves" (Cameron & Freeman, 1991, p. 32).

Another tradeoff of the competing values framework is that it may report clarity when none exists. Of the 334 colleges and universities reported in Cameron and Ettington (1988), the average number of responses per organization was around ten people. If nine of the people equally allocate 100 points among the four typologies (25 to each quadrant) and the tenth person is mixed and gives the adhocracy description slightly more points, the college is classified as an adhocracy. Nevertheless, in many circumstances, one of the descriptions of the four culture types may highly resonate with organization members and thus the survey gives researchers a useful diagnosis.

The research also takes an objective view of culture. As Martin states, the objective view treats culture "as a 'thing' 'out there' that can be objectively perceived and measured, the same way, by anyone who views it" (Martin, 2002, p. 34). Cameron and Quinn (1999) state the "most appropriate frameworks should be based on empirical evidence, should capture accurately the reality being described (i.e., be valid)" (p. 29). Yet, they say the value of the framework is in its ability to help participants socially construct their culture (Berger & Luckmann, 1967). In the words of Cameron and Quinn (1999), they say:

> The framework provides a way for organizations to discuss and interpret key elements of organizational culture that can foster change and improvement. A major problem in many organizations facing the need to change their cultures is that no language exists, no key elements or dimensions have been identified, and no common perspective is available to help the conversation even get started. Change doesn't occur because it is difficult to know what

to talk about and what to focus on. In our experience, this framework provides an intuitively appealing and easily interpretable way to foster the process of culture change (p. 17).

Therefore, while the research using the competing values framework gives us valuable comparative data it also helps organizational members construct the reality of their culture.

Finally, in a study of a small, private Midwestern university (SPMU), Adkinson (2005) uses the competing values framework and combines it with Martin's (1992, 2002) three-perspective theory. Her motivation was to "appropriately complicate the organizational culture assessment inventory to allow for greater insight and a more comprehensive interpretation of cultural phenomenon" (2005, p. 91). The survey was given to all 278 administrators, faculty, and staff with a response rate of 74% ($N = 207$). The overall culture of SPMU was high on clan and hierarchy, proving the integration approach. She used subgroups of gender and employment level (e.g. leadership, faculty, or staff) to test the differentiation perspective, and found many differences between the subgroups on the means of the four typologies. She also finds significant fragmentation based on the difference between a respondent's assessment of the current culture and the preferred culture of the future.
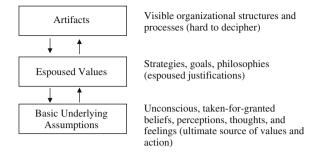
Thus, the author finds support for all three perspectives. Martin would argue this quantitative "test" of the three perspectives trivializes the theory (2002). In the end, however, Adkinson says "the integration bias of the competing values framework as originally conceived appears to oversimplify the complex construct of organizational culture" (2005, p. 89). Overall, the competing values framework has offered organizations a powerful vocabulary to discuss and change their culture, but the research lacks the depth of analysis which is characteristic of most culture studies—a tradeoff that researchers in this area consciously accept.

Schein's Three Levels of Culture

A framework that aids depth of analysis and is drawn from an integration perspective, is Schein's three levels of organizational culture (1985, 1992). It is widely-cited in the higher education literature (Kuh & Whitt, 1988; Peterson & Spencer, 1990), and forms the conceptual basis for many studies of culture, such as researching how faculty values effect their beliefs about post-tenure review (O'Meira, 2004). The three levels of culture Schein distinguishes are artifacts, espoused values, and basic underlying assumptions. He defines culture as:

> The pattern of basic assumptions that a given group has invented, discovered, or developed in learning to cope with its problems of external adaptation and internal integration, and that have worked well enough to be considered valid, and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems (1984, p. 3).

Fig. 3 Schein's three levels
of organizational culture
Source: Schein (1992, p. 17)

Artifacts

Visible organizational structures and
processes (hard to decipher)

Espoused Values

Strategies, goals, philosophies
(espoused justifications)

| Basic Underlying
Assumptions |
|---|

Unconscious, taken-for-granted
beliefs, perceptions, thoughts, and
feelings (ultimate source of values and
action)

Schein advocates working from direct experience with an organization and relies
heavily on inductive intuition in describing an organization's culture. He considers his research to be "clinical" because he learns about an organization's culture
as a consultant helping an organization deal with specific issues (Schein, 2000).
Figure 3 illustrates Schein's three levels of culture.

Of Schein's three levels, artifacts are what we can see, hear, and feel when we
encounter an organization. They are hard to decipher without understanding the
deeper levels of an organization's culture such as a group's underlying assumptions.
Examples of artifacts are architecture, language, manners of address, a published list
of values, myths and stories told about the organization (1992, p. 17).[1] At a deeper
level of analysis, an organization's culture is its espoused values which are hypotheses about how to integrate as a group or adapt to the environment. If an espoused
value proves to aid the group's functioning and survival it slowly transforms into
an underlying assumption. Likewise, if an espoused value aids the organization in
becoming a cohesive group by reducing the anxiety of unstable relationships, this
value becomes a basic assumption. It is no longer debated or questioned. It becomes
the only way to behave and "members will find behavior based on any other premise
inconceivable" (1992, p. 22). The third level of culture, basic assumptions, actually
guides behavior and tells group members how to perceive, think about, and feel
about problems and issues.

The strength of Schein's model is the depth of analysis it activates because its
focus on shared, taken-for-granted assumptions. These include an understanding of
a group's view of time, human nature, and relationship to its environment. However,
his model is criticized for trivializing symbols and artifacts (Trice & Beyer, 1993).
Generally speaking, Schein believes the causal arrows move from underlying
assumptions toward espoused values and artifacts. He gives less credence to symbols
and artifacts creating meaning through their interpretation (Denison, 2001; Hatch,
1993; Trice & Beyer, 1984).

Schein's framework is particularly useful if an organization has a strong culture.
Schein says, "The 'strength' or 'amount' of culture can be defined in terms of (1)
the homogeneity and stability of group membership and (2) the length and intensity
of shared experiences of the group. If a stable group has had a long, varied, intense
history (i.e. if it has had to cope with many difficult survival problems and has

succeeded), it will have a strong and highly differentiated culture" (1984, p. 7). Likewise, in a higher education context, Clark (1983) outlines several determinants of the strength of organization-level culture. These include:

> Organizational scale, with smaller units better able to forge unifying ideologies than larger ones; organizational integration, with interdependent parts more inclined than autonomous ones to share a self-definition; organizational age, with historical depth producing a larger storehouse of lore; organizational struggle, with dramatic events of birth or transformation producing more heroic symbols than an uneventful institutional life; and, especially, the competitiveness of the larger organizational setting, with competition for survival and status generating claims of uniqueness and a sense of common struggle (Clark, 1983, p. 81).

Thus, the degree to which a college or university meets these criteria for a "strong" culture is the extent to which the integration perspective is most useful. If a college or university has had an intense history, then underlying assumptions that are distinct to the organization will be most readily discernible, such as Clark's organizational saga (1970, 1972). Furthermore, smaller institutions with relatively interdependent components are more likely to have an organization-wide culture. These criteria are not often met among large research universities making a differentiation and fragmentation perspective more explanatory.

The Differentiation Perspective

After reviewing the studies primarily from an integration perspective, this section reviews the differentiation approach. The main question guiding this section is: What major conceptual models and research findings have explained the culture of colleges and universities from a differentiated perspective? This approach focuses on subgroups and the occupational subcultures that horizontally link organizations. This perspective views the members of colleges and universities as "professors" or "administrators" rather than "employees," as is primarily done in the organizational behavior literature from an integration perspective (Trice, 1993; Van Maanen & Barley, 1984). From this perspective there is more utility in viewing behavior through an occupational rather than organizational lens. Ouchi and Wilkens (1985) say, "Those who study occupational cultures argue passionately that any attempt to describe the culture of a firm without its many occupational subcultures is superficial, simpleminded, and cheap" (p. 479). The view of faculty as an occupational subculture is heavily supported by their common socialization experiences (Lortie, 1968; Tierney, 1997; Trice & Beyer, 1993; Van Maanen & Schein, 1979).

To understand occupational subgroups and a differentiation perspective, the concept of subcultures is first reviewed (Trice & Beyer, 1993; Van Maanen & Barley, 1985). Then, different studies of faculty subcultures and the dueling occupational subcultures of faculty and administration in a professional bureaucracy are examined (Etzioni, 1964; Mintzberg, 1979). Among differentiation studies, it has been proposed that there are two types (Alvesson, 2002)—those that simply describe subcultural differences based on functional or occupational assignments, and those that focus on power differentials between groups. The higher education literature has

mainly focused on the former, although power differentials as a result of administrative and professional authority have also been studied by sociologists (Clark, 1983, 1987; Etzioni, 1964; Freidson, 1973).

The Concept of Subcultures

Van Maanen and Barley (1985) outline four characteristics of subcultures. An organizational subculture is defined as:

> A subset of an organization's members who interact regularly with one another, identify themselves as a distinct group within the organization, share a set of problems commonly defined to be the problems of all, and routinely take action on the basis of collective understandings unique to the group (1985, p. 38).

From Van Maanen & Barley's (1985) reading of the literature, it is difficult to justify empirically that organizations bear unitary and unique cultures, and that the utility of culture as a means of analysis may be lost at the organization level-of-analysis.

Trice and Beyer (1993) also stress the concept of subcultures in their comprehensive book *The Cultures of Work Organizations.* They focus on occupational subcultures because they find them to be a prominent part of work life but absent from most cultural analyses. They also highlight the differences that give rise to a multitude of subcultures (Trice & Beyer, 1995). Similar to Van Maanen and Barley (1985) they see certain social conditions that are likely to give rise to subcultures. These include: differential interaction caused by the division of labor, shared experiences as people interact over time in a common context, and similar personality characteristics (Trice & Beyer, 1993). These conditions are likely to give rise to social cohesion, characterized by strong norms that govern behavior.

Disciplinary Subcultures and the Academic Profession

Clark (1963a) and Gouldner (1957, 1958) make some of the earliest contributions to understanding faculty as subcultures. Gouldner (1957) depicts faculty as cosmopolitans and locals. Cosmopolitans are marked by their commitment to their specialized role skills, outer reference group orientation, and low loyalty to their employing organization. Locals, on the other hand, are highly committed to their employing organization, likely to use an inner reference group for orientation, and not highly committed to obtaining specialized role skills. Using Gouldner's distinction, Clark (1963a) outlines three dimensions along which faculty diverge: cosmopolitan-local, pure-applied, and humanistic-scientific. Given these orientations, he describes four groups of faculty members: (1) "teachers" who have a high degree of identification with the institution and are committed to pure study; (2) "scholar-researchers" who have low institutional identification and high commitment to pure study; (3) "demonstrators" who identify with the institution and are committed to applied work; and (4) "consultants" who are interested in applied work and not identified

with the institution (Clark, 1963a). With his fourfold typology, Clark found little integration among professors. As early as 1963 he says:

> The concept of academic community is a myth of considerable value in most colleges and universities, but is not to be taken seriously as a description of the actual state of affairs in most places now and in the foreseeable future. In fact, the concept of federation seems more appropriate to many universities, composed as they are of a large number of quasi-autonomous professional schools, colleges and departments. Within the federation, held together by a loose bureaucratic structure, many nations and tribes live their own ways. Men of the sociological tribe rarely visit the land of the physicist and have little idea of what they do over there. If the sociologist were to step into the building occupied by the English department, they would encounter the cold stares if not the slingshots of the hostile natives (pp. 53–54).

Along with early studies of faculty culture, the effect of the epistemological character of a discipline was examined by Lodahl and Gordon's (1972) who compared the functioning of graduate departments based on whether the discipline had high paradigm development, such as physics and chemistry, or whether the discipline had low paradigm development, such as sociology and political science. In high paradigm fields there is more agreement about which problems need investigation, what methods are appropriate, and which findings are "proven." With a shared vocabulary and accumulated findings, high paradigm fields shape the culture of academic departments by leading to less conflict, facilitating collaboration between graduate students and professors, and improving professor's receptivity of research assistance from graduate students (Lodahl & Gordon, 1972).

After this early work describing faculty subcultures by Clark (1963a) and the influence of paradigm development on graduate departments by Lodahl and Gordon (1972), there was little advancement in using cultural analysis to examine disciplines until the work of Becher (1989, 1994) and Becher and Trowler (2001). His work was primarily a response to the over simplification he found in Snow's (1959) descriptions of two cultures in the scientific world (Becher, 1984). Snow (1959) observed the intellectual life of western society as split between two polar groups. At one pole were the humanists and the other the physical scientists. Snow states that humanists believe that basic truths lie in the great literature and that scientists are shallowly optimistic and unaware of man's condition. Scientists, on the other hand, seek truth that extends scientific knowledge through discovery and accuse literary intellectuals of creating a climate which discourages social hope. Becher, trained as a philosopher, seeks to "dispel the crude and damaging dichotomy of C. P. Snow's (1959) *Two Cultures*" (1981, p. 122).

Additionally, Becher studied disciplines as cultural phenomenon because he was inspired by anthropologist Clifford Geertz, who says:

> To see that to set out to deconstruct Yeat's imagery, absorb oneself in black holes, or measure the effect of schooling on economic achievement is not just to take up a technical task but to take on a cultural frame that defines a great part of one's life, that an ethnography of modern thought begins to seem an imperative project (1983, p. 155).

Becher originally chose to study six disciplines: physics, history, biology (only botany and zoology), sociology, mechanical engineering, and law. He conducted 126

interviews across these disciplines in 1980 and set out to produce an ethnographic account of each. He would later add mathematics, education, chemistry, language and literature, pharmacy, and geography. In searching for the causes of disciplinary cultures, he finds that they derive in part from the epistemological characteristics in which the discipline is engaged. For example, discovery is a central notion of physics while in engineering the central notion is invention. Another large difference he found among disciplines was variance in the "steady accretion of knowledge by building on previous work, as against the continuing reinterpretation of a more or less stable body of ideas" (1981, p. 112). For example, the discipline of physics was found to be more cumulative while history was more reiterative. He also found the role of ideology to be negligible in biology, physics, and engineering because "the ultimate test is evidential, depending on the way things are rather than on what is believed" (1981, p. 112).

In Becher's work, he sought to use disciplines as the unit-of-analysis, although his findings suggest there is little clarity within the culture of a discipline. He says:

> Nearly all those interviewed were at pains to emphasize that their disciplines, even if unified, were far from being homogenous entities. Some went out of their way to draw attention to the complexity and variety of the approaches adopted, and the lack of any simple rubric to describe the activity in which they were engaged (1981, p. 115).

Becher's observations suggest that individual disciplines are far from monolithic. In fact, despite his attempt to define and contrast disciplinary cultures, he found he was "drawn inexorably into a recognition of various subcultures within each discipline, and even into a separate classification of those subcultures which cut across disciplinary boundaries" (1984, p. 177). He eventually found himself forced to abandon the academic discipline as the unit-of-analysis (1990). He found, in the end, it was more meaningful to talk about identifiable and coherent properties of an area of inquiry within a discipline.

By changing his emphasis he found patterns of similarity and differences among subspecialties that cut across disciplinary boundaries. For example, he found academics who seek simplicity and others who embrace complexity. Most physicist would readily agree that simple laws govern the world, while historians "share the world-view that things are always more complex than they seem" (Becher, 1984, p. 187). Similarly, Becher found some academics who found their task to be one of finding "recurrent patterns and to explain their interconnection in terms of demonstrable laws. For others, the world of intellectual exploration is characterized by its diversity; its phenomena are not in their nature subject to direct and repetitive causal connections of any such kind" (1984, p. 187).

In Becher's later writings he proposes a classification scheme for the disciplines that draws upon Biglan's (1973) original nomenclature of hard vs. soft and pure vs. applied. Table 3 outlines Becher's explanatory framework for disciplinary cultures which highlights the influence of the nature of knowledge on disciplinary cultures.

Becher's classification scheme and study offer a rich portrait of the academic world. The limitation, however, is that it may engender the tendency to think in pure

Table 3 Becher's explanatory framework of differences among academics

Grouping	Example	Nature of knowledge	Disciplinary culture
Hard-pure	Physics	Knowledge is cumulative; problems can be subdivided into smaller segments and tackled piecemeal; the outcome of inquiry is discovery	Competitive; politically well-organized; high publication rate
Soft-pure	History	Work can traverse grounds already explored; concerned with particularities and comprehending complexity; the end product of scholarship is an understanding or re-interpretation	Individualistic, pluralistic, loosely structured; low publication rate
Hard-applied	Engineering	Work has some practical end in view; concerned with ways of mastering the physical world; the outcome is a product or technique	Dominated by professional values
Soft-applied	Education	Dependent on soft-pure knowledge for improving professional practice; aim is at understanding and mastering the human world	Outward looking; uncertain in status; dominated by intellectual fashions

Source: Adapted from Becher (1987, Table 6.2).

forms. His classifications of disciplines as pure-applied and hard-soft describe an ideal form that oversimplifies the mixed breed of orientations he also describes.

Becher ends with the irresolvable tension of whether it is better to view the academic profession in its diversity or in its unity. As a unitary entity he finds the academic profession is marked by autonomy, obsessive commitment to one's work, a high degree of job satisfaction, and a common dislike of grading students. As a metaphor for explaining the tension of viewing the diversity or unity of the profession he uses a satellite image of the earth. He says we can view the world at the level of (a) continents and oceans, (b) mountains, forests, and rivers, or (c) cars, roads and houses. He is quick to note that academic disciplines can be analyzed at any level-of-analysis. Specialization occurs in each of them; physics can be broken down into optics, mechanics, fluids, particle physics, and so on. Ultimately, one's view depends on the ontological priority placed on universals or particulars (Becher, 1987; Berlin, 1953). In sum, Becher's work derives from a differentiation perspective, but his conclusions lend support to a fragmented academic world, as he says that research groups "are not only impermanent and constantly changing, but also tend themselves to fragment into smaller and smaller units as the march of specialization proceeds" (1990, p. 343).

Along with Becher's work on disciplinary subcultures, Clark (1985, 1987, 1989) completed an extensive study of academic life. In 1984, the research team conducted

a total of 172 interviews at sixteen institutions—from top research universities to community colleges—in the disciplines of physics, biology, political science, English, medicine, and business. In Clark's (1987) published account of the study he says his motivation to research the "significant differences" in academia was a response to Talcott Parsons and Gerald Platt's *The American University* (1973) in which Clark says "too much of the flux, perversity, and sheer dirtiness of real life is left out" (1987, p. 287). His thesis is to look at the variety in academic life, and he finds much more differentiation than integration.

Clark finds widely varying beliefs, both across types of institutions and areas of study. For example, among the leading research universities, the discipline is front and center, while among liberal arts colleges and community colleges, professors show a greater emphasis on teaching. The two strongest determinants of culture were type of institution—research university, liberal arts college, or community college—and discipline. He finds little identification with institutions themselves. For example, it was less important to know that someone is a faculty member at the University of Michigan or Regis College (both in the sample) than it is to know that a faculty member is in the physics department in a research university. If a faculty member did identify with the institution, they were more likely to be professors at the top of the institutional hierarchy. Overall, subcultures proved to be a powerful phenomenon in everyday life. Clark's (1987) thesis emphasized differentiation and the empirical materials confirmed widely varying beliefs and little support for unique organizational cultures among academic institutions.

At the same time, however, Clark (1987, 1989) asks what integrates the profession. Faculty members in the study also gave formulations of what professors have in common. These include: generating knowledge, striving for understanding, disdain for the crime of plagiarism, academic freedom, and personal autonomy. But, he says, "we had to scrap to find values that might still be widely shared" (1989, p. 7). Those values that were shared had widely different meanings in different contexts. For example, academic freedom, while being a shared value, has widely different meanings in research universities than community colleges. Clark's conclusion is that integration occurs through the bit-by-bit overlap of narrow specialties. This mirrors Campbell's (1969) notion of the fish-scale model of omniscience, where the specialties in the social sciences overlap like fish scales to create collective competence and breadth.

Toma (1997) extends the faculty culture literature by studying paradigm cultures within the discipline of law. He defines paradigms as "belief systems about reality, truth, objectivity, and method that cut across disciplinary boundaries" (1997, p. 681). This notion of paradigm closely resembles Schein's notion of culture as shared, basic assumptions (1985). Toma uses a social science-based typology of paradigms to classify legal scholars as realist, critical, or interpretive (Guba & Lincoln, 1994). Interviewing twenty-two legal scholars at three institutions, he finds that a scholar's paradigm shapes several aspects of academic life, including: (1) the questions they decide to pursue; (2) audiences to which they write; (3) methods and models they employ; (4) standards that others apply to judge their work; (5) reward systems under which they operate; (6) access they have to influence decision

makers; and (7) pressures or personal rewards attendant to advancing causes (Toma, 1997, p. 690).

Toma's approach of adding paradigm inquiry as the fundamental unit-of-analysis is a great advancement to the faculty culture literature. It overcomes the setbacks that Becher (1989) found when using disciplines as the unit-of-analysis. Becher eventually began to recognize subcultures within each discipline and then altered his frameworks to cut across disciplinary boundaries. Toma's (1997) exploratory study builds upon this finding and describes the academic life of scholars within alternative paradigms. The approach also moves beyond objective criteria for determining cultural participation, such as having a job title, being employed by an organization, or being a citizen of a nation (Martin, 2002). The boundary drawing process is more complex with groupings being socially constructed. This corresponds with Van Maanen and Barley's appeal for "research strategies open to the discovery of socially meaningful work groups and methodologies that resonate to the inner cleavages of work worlds" (1984, p. 298).

Conflict between Administrative and Professional Subcultures

While the first type of differentiation study is based on functional or occupational groups, the second focuses on vertical differentiation which leads to analyses of power and conflict among subcultures (Alvesson, 2002). In the higher education literature, administrative subgroups have produced the least amount of research in comparison to students and faculty (Kuh & Whitt, 1988). These administrative subgroups include: librarians, admission officers, financial operations, human resources, information technology, student affairs staff, and so on. Some of these functional groups may have similar cultures with those found in non-academic organizations. For example, information technology professionals are likely to exhibit similar attitudes and values as those in business organizations (Gregory, 1983).

In describing the conflicting tendencies of administrative and professional staff, Etzioni (1964) outlines the conflict built into the structure of professional organizations. Etzioni's work predates the cultural perspective, but it is closely related with its descriptions of roles—or the behaviors expected from people in particular positions. Etzioni describes how administrative authority derives from hierarchy while professional authority derives from the expertise of knowledge.[2] What makes colleges and universities distinct is that professionals carry out the main activities in deciding what research to undertake and to some extent what to teach. Administrators, however, are in charge of secondary activities; "they administer *means* to the major activities carried out by professionals" (Etzioni, 1964, p. 81).[3] This leaves two sets of conflicting orientations in a professional organization: the administrator, who is oriented toward efficiency, the practical concerns of staffing, and allocating limited funds; and the professional, who is orientated toward developing, disseminating, and teaching a knowledge area. These role orientations could be described as subcultures within colleges and universities; their decoupling is further noted by Weick (1976) who states, "The typical coupling mechanisms of

authority of office and logic of the task do not operate in educational organizations" (p. 17).

Lunsford (1968) further elaborates the competing ideologies of faculty and administration, describing the prejudices of faculty regarding their counterparts' competence. He observes that many faculty think administrators should be "care-takers" by providing the conditions that academics need for their work and "that the only academics who turn to administration are those who were not fully 'competent' in their scholarly work or those who are motivated by desires for personal power and prestige" (1968, p. 6). Administrators, on the other hand, use several techniques in establishing a legitimate basis for their authority. These include: acting as if there is no separation between them and faculty, such as making appeals to teamwork; building myths of rational decision-making by implying the existence of "shared goals;" and claiming informal knowledge of the attitudes of constituents which allows administrators to predict the success of policy decisions (Lunsford, 1968).

Two case studies written from a differentiation perspective illuminate the conflicting orientations of administrators and faculty as subcultures (Feldman, 1987; Swenk, 1999). Feldman (1987) finds administrative authority succumbs to professional authority when a law school dean is forced to resign because of faculty dissatisfaction. Feldman says, "given the fact that the faculty members were primarily oriented toward autonomous activity and the dean was primarily oriented toward administrating an organization, a conflict existed which required resolution" (1987, p. 97). The clash of administrative and occupational interests shows the primacy of collegiality in a professional organization; when goodwill deteriorates between the dean and faculty it eventually leads to a change in the administrative hierarchy. Mintzberg describes this dynamic in his description of colleges and universities as professional bureaucracies (1979). He says, "The professional administrator keeps his power only as long as the professionals perceive him to be serving their interests effectively... that power can easily be overwhelmed by the *collective* power of the professionals [italics in original]" (p. 363).

In a similar case study of the cultural differences between faculty and administrators, Swenk (1999) outlines a case study of a failed strategic plan. She finds strategic planning often fails because of the inconsistencies between academic culture and the rational-based/business processes underlying it. In the university she studied, the campus administration did not "recognize the faculty's interest in the process of how a decision is arrived at as much as the content of the decision (i.e. emphasis on collegiality, thoroughness, carefulness, and expert-based review)" (1999, p. 11). She found that in faculty culture change tends to be slower and more deliberate. In this case, the faculty thought the administration did not adequately study and deliberate the opening of a new education school, delaying the implementation of the strategic plan for nearly a decade. Similar to Feldman (1987), the author finds severe limitations to administrative authority. While engaging in the business-based approach of strategic planning, administrators could not mandate activities or count on their positional authority to ensure participation in the process.

Both the conceptual descriptions and case studies clearly illustrate the competing subcultures of administration and faculty in colleges and universities. Thus, while organization-wide consensus among faculty and administration can occur, more

likely one will find competing subcultures between these groups. This makes these subgroups an important part of any cultural analysis of colleges and universities.

The Fragmentation Perspective

In comparison to integration and differentiation, the fragmentation perspective has been used relatively less among higher education scholars. Of the three perspectives it is the most difficult to articulate because it focuses on ambiguity which is, by definition, hard to conceptualize. Most prominent among the studies of higher education from a fragmentation perspective is Cohen and March's *Leadership and Ambiguity* (1974) in which they set forth the assumptions and limitations of eight metaphors of a college or university. In their research of college presidents, they found that perceptive presidents thought current metaphors of leadership fit poorly with reality. They conclude that none of the models "seem to capture fully the character of higher educational institutions and their governance" (p. 79). Therefore, Cohen and March argue for a view of organizations as:

> Sets of procedures through which organizational participants arrive at an interpretation of what they are doing and what they have done while doing it. From this point of view, an organization is a collection of choices looking for problems, issues and feelings looking for decision situations in which they might be aired, solutions looking for issues to which they might be the answer, and decision makers looking for work (p. 81).

This "organized anarchy" is characterized by uncertain goals, a familiar but unclear technology (teaching and learning), and inadequate knowledge about who is attending to what. Most issues have low salience for most people which leads to erratic participation in decision-making. The metaphor of colleges and universities as "organized anarchies" is interesting because it challenges assumptions (Davis, 1971, 1986; Thomas & Tymon, 1982), such as the prevalence of agreed-upon goals, a clear technology, and stable levels of participation among employees.

The metaphor (or theory) of "organized anarchy" has not been tested in the usual sense, but nevertheless it resonates with researchers and practitioners (Lindblom, 1987; Weick, 1989), perhaps because it represents a more plausible portrait of everyday lived experience. Also, the idea of "organized anarchies," along with the garbage can theory of decision-making (Cohen, March, & Olsen, 1974), contradicts widely-held assumptions about the integrated ideal of a collegial community and rational models of organizational choice.[4] This makes for a good theory, as Weick states:

> A good theory is a plausible theory, and a theory is judged to be more plausible and of higher quality if it is interesting rather than obvious, irrelevant or absurd, obvious in novel ways, a source of unexpected connections, high in narrative rationality, aesthetically pleasing, or correspondent with presumed realities (1989, p. 517).

The description of colleges and universities as "organized anarchies" meets these criteria, offering a portrait which describes an ambiguous world with shifting alliances. It is far from an integrated ideal and corresponds with the observation of Robert Maynard Hutchins, the president of the University of Chicago from 1929

to 1945, who said that "whatever their protestations to the contrary, [academic communities] really prefer anarchy to any form of government" (1956, p. 174).

Weick (1983) also gives a description of the culture of higher education from the fragmentation perspective—one marked by an irresolvable tension of cohesion versus accuracy. Weick says a differentiated structure emerges in colleges and universities because one of the dominant activities is research—an often isolated, individualized activity. This differentiated structure improves the effectiveness of producing valid knowledge. Weick says, "Differentiated structures are well designed to sense and represent a referent situation such as a problem, an experiment, a text, or a symptom" (1983, p. 257). Thus, high differentiation facilitates validity in research; the greater number of independent elements contributes less distortion. For example, "Such objects as a contour gage with more sensors (Weick, 1979), boundary people with less similarity, a palette with more colors, film of finer grain, all represent vehicles that improve the accuracy of representations" (1983, p. 258). The tradeoff of obtaining this accuracy is that the more differentiated a group becomes the greater danger of people not sharing or preserving knowledge.

The weakness of the functional utility of differentiation for knowledge production is the consideration that new knowledge can be generated among interdisciplinary research teams and collaboration among scholars. However, cohesive cultures can lead to similarity in thought that cannot accurately sense the complexity of the natural and social world. Therefore, the culture of higher education is one that should not be completely integrated (Kunda, 1992; Nemeth & Staw, 1989; O'Reilly & Chatman, 1996) or completely differentiated. Instead, it can best be described as a tension between the two.

In another study from the fragmentation perspective, Silver (2003) interviewed 221 people at five universities about their perceptions of innovations in teaching and learning. Culture was not the main focus of the research, but it emerged as an important area of analysis. His results, however, strongly support the fragmentation perspective and the salience of disciplinary cultures. He found "the great majority of interviewees found it difficult to respond to questions that were directed explicitly at a 'culture' of their university" (2003, p. 161). There was an absence of shared norms, assumptions and values that were clearly associated with the institution itself. When people did describe a culture it was one of change and constant flux, not indicating stable, underlying assumptions prevalent in most studies of culture. He reports, "If they could see a culture at all, it was change itself, often instability" (2003, p. 162).

In conclusion, Silver (2003) questions the usefulness of culture to examine colleges and universities. He says, "Applying the concept to universities is more difficult than applying it to more 'closed' or 'total institutions' whose population may be relatively homogenous" (p. 166). He argues that an integrated view of culture is not applicable to colleges and universities because members are primarily beholden to their disciplines and have no unified conception of the organization. These three studies (Cohen & March, 1974; Silver, 2003; Weick, 1983) represent the ambiguity, change, and irresolvable tensions which exhibit the fragmentation perspective. They offer a powerful contrast to the ideal of the integration

perspective, but perhaps less clarity for administrators looking to improve the functioning of colleges and universities.

In a study that equally stresses each perspective—integration, differentiation, and fragmentation—Harman (1989) describes the culture of the University of Melbourne. Inspiration for the study came from Clark's (1983) description of higher education as the culture of the enterprise, profession, discipline, and national system, as well as Becher (1989) and Geertz's (1983) ethnographic look at academic disciplines. With 104 interviews of the academic staff, the author describes the organization-wide culture through the unique history of the University of Melbourne. From a differentiation approach, the author describes the subculture of the academic profession with its unfettered quest for truth; the commitment to the transmission and creation of new knowledge; and the values of science. From a fragmentation perspective, the professional schools are described as exhibiting a precarious balance between academic and professional values which create a "culturally ambivalent bond" for many faculty members. The irresolvable tensions described depicts culture from the fragmentation perspective:

> Theoretical vied with practical interests in both teaching programmes and research interest, discipline-directedness ran counter to vocationally-geared orientations, intrinsic interests opposed professional relevance, specialisms vied with commitment to overall teaching programmes, liberal opposed social and vocational goals, and academic autonomy contested externally imposed control from outside professional groups (1989, p. 48).

This description illustrates Martin and Frost's (1996) articulation of the fragmentation perspective when they say, "Culture is no longer a clearing in a jungle of meaninglessness. Now, culture is the jungle itself" (p. 609). Harman says there is no homogenous academic culture at the University of Melbourne; members of the academic profession are involved with more than one level of culture, including their discipline, subspecialty, and organization. Harman says "If the University of Melbourne is any indicator, then the real university reflects not one, unifying culture but clusters of subcultures, some which harmonize with one another and some of which clearly do not" (1989, p. 51).

Harman's study demonstrates how several international scholars (Becher, 1989; Harman, 1989; Välimaa, 1998) were less influenced by the US-centered literature on high-performing, business organizations (Ouchi, 1981; Peters & Waterman, 1982). While the popular business press permeated the higher education literature in the US—with the notable exception of Clark (1983, 1987)—the work by several international scholars (Becher, 1989; Harman, 1989; Välimaa, 1998) resulted in more nuanced interpretations of colleges and universities as cultural entities.

Conceptualizations of Higher Education Organizations and the Perspectives

This section, along with the empirical findings reviewed in the previous sections, helps answer the overarching question of the strengths and weaknesses of the

various cultural perspectives. Each of the theoretical perspectives has generated an impressive body of empirical support. To some degree, however, studies from each perspective exhibit a methodological tautology; they define culture in a certain way and then find what they are looking for (Martin, Frost, & O'Neill, 2006). Nevertheless, given the metaphors and models of governance that most resonate with scholars and practitioners and the reported findings there are reasons to favor one perspective over another. The thesis of this chapter is that the differentiation and fragmentation perspectives have more explanatory power, in-line with the conceptualizations of colleges and universities as loosely-coupled systems (Weick, 1976), professional bureaucracies (Mintzberg, 1979), and multiversities (Kerr, 1963). To fully support this thesis, each of these conceptualizations is briefly reviewed.

Loosely-Coupled Systems

Loosely-coupled systems are defined as systems in which elements are responsive, yet retain evidence of separateness and identity (Weick, 1976). Loose coupling describes the contradictory concepts of connection and autonomy (Orton & Weick, 1990). In a university, this structure allows for novel solutions to local problems and meets professional needs for autonomy (Weick, 1982b). The first empirical grounding of loose coupling was among subunits in educational organizations (Weick, 1976), and several streams of research have used the term (Orton & Weick, 1990). Some argue for the tighter coupling of organizational units (Lutz, 1982), others that loose-coupling effects a university's adaptability (Rubin, 1979). At the level-of-analysis the term is often used, loose coupling is a differentiated structure at the organization-level resulting from the complexity of the environment (Clark, 1983, 1993; Lawrence & Lorsch, 1967; Orton & Weick, 1990).

The increasing complexity of the environment is noted by Clark (1993, 1995) who describes how the higher education system is becoming more diversified and diffused. He observes that higher education systems slide from elite to mass participation, opening to a greater diversity of clienteles from more segments of the population. In order to match the greater diversity of inputs from the environment, organizations increase their capabilities to match their environment (Lawrence & Lorsch, 1967). Loosely-coupled systems are able to sense deviations in environments more quickly and thus make corrective actions sooner (Weick, 1982b). Likewise, Clark (1993) notes that when knowledge environments become more complex, universities adapt to study this environment. For example, this never ending differentiation is promoted by such research as "the improvement of fisheries in Alaska, oil plant management in southern Norway, and computer services in the cities of northern Italy. The fascinations of specialized research, pure and applied, steadily deepen" (1993, p. 264). Comparatively, Clark (1996) argues that the long-term trend from simple to complex knowledge is a more important differentiation force than the trend from elite to mass participation in higher education.

Weick (1979) describes the need for differentiation because of complex environments as the need for requisite variety (Ashby, 1962), where organizational

effectiveness depends on the match between organizational and environmental complexity. Colleges and universities are dealing with complex environments, handling everything from chemistry to zoology. This mandates a complex, loosely-coupled system. As Buckley (1968) states, "The variety within a system must be at least as great as the environmental variety against which it is attempting to regulate itself" (p. 495). Thus, developing and disseminating knowledge covering the entire physical and social world *requires* differentiation and loose coupling. It is an effective response to a differentiated environment, and a primary reason there is greater explanatory power in the differentiated perspective.

Professional Bureaucracies

The second reason to view colleges and universities as culturally-differentiated is based on the characteristics of professional bureaucracies (Mintzberg, 1979). Ignoring the occupational culture and instead describing organization-level consensus overlooks a large component of the organization (Van Maanen & Barley, 1984). Occupational rather than organizational forces are prominent in professional bureaucracies, with professionals deriving valued identities from their occupational roles. These roles promote differentiation for two reasons. First, the socialization of professionals is rarely conducted by the employing organization, but instead through several years of graduate school (Lortie, 1968; Van Maanen & Schein, 1979). Thus, the organization-wide consensus of an integration approach is less explanatory of organizational behavior because of less socialization by the organization to create like-minded individuals (O'Reilly & Chatman, 1996). Socialization into independent functioning has already occurred (Weick, 1982a).

The second aspect of a professional bureaucracy that creates differentiation is the disciplinary control of work. As Clark states, "There is quite literally no way to stop the field of history from expanding its boundaries of coverage in time and space and from proliferating its arcane specialties—nor political science nor economics nor sociology nor anthropology. The basic disciplines are inherently imperialistic" (1993, p. 264). Over time this creates more subspecialties and differentiation (Clark, 1963b, 1993); the organizational structure accommodates to the multiplicity of goals by dividing into segments, creating a "federation of professionals" (Clark, 1963b). Thus, in professional bureaucracies occupational dominance causes differentiation by controlling the means of socialization and directing the focus of work activities.

The Multiversity

The third conceptualization of higher education organizations that presents reasons to favor the fragmentation perspective is Clark Kerr's idea of the multiversity (1963).[5] In his description—which falls far short of Newman's integrated ideal

(1875)—a university is comprised of a series of communities held together by a common name. Kerr says:

> The multiversity is an inconsistent institution. It is not one community but several—the community of the undergraduate and the graduate; the community of the humanist, the community of the social scientist, and the community of the scientist; the communities of the professional schools; the community of all the nonacademic personnel; the community of the administrators (1963, pp. 18–19).

Kerr describes how a university has many competing "publics" with many interests—legitimate and frivolous—similar to a city-state, with each of these competitors vying for fractionalized power. These include students, faculty, administration, and external constituents. Within a multiversity there is little sense of community, nor confinement, neither are there clear goals, "there are several ends and many groups to be served" (1963, p. 38). Kerr sees constant, fleeting interest groups, many unrelated to each other, where a president "must be content to hold its constituent elements loosely together" (1963, p. 40). In a notion prescient of loose coupling, he says, "Many parts can be added and subtracted with little effect on the whole or even little notice taken or blood spilled" (1963, p. 20). Given these observations, and their correspondent acceptance over time (Kerr, 2001), it seems implausible to describe the unitary ideal of an organization-wide culture.

Summary of Empirical Findings

With colleges and universities being conceptualized as loosely-coupled systems (Weick, 1976), professional bureaucracies (Mintzberg, 1979), and multiversities (Kerr, 1963), there are reasons to favor the differentiation and fragmentation perspectives. These models highlight the disconnectedness, unclear goals, professional federations, and environmental influences that impact colleges and universities—making them far from an integrated ideal (Newman, 1875). Additionally, the empirical findings of culture support the differentiation and fragmentation approach, as well as the utility of viewing culture through multiple perspectives (Eisenberg, Murphy, & Andrews, 1998; Harman, 1989).

In several studies the researcher began with an integration perspective but found it inadequate to describe culture. These include Sporn (1996) who concluded that "the concept of the university as a whole barely exists and has no meaning for the university members" (p. 51). Likewise, Adkinson (2005) finds little support for the integration perspective in concluding that "the integration bias of the competing values framework as originally conceived appears to oversimplify the complex construct of organizational culture" (p. 89). Silver (2003) also finds that "the great majority of interviewees found it difficult to respond to questions that were directed explicitly at a 'culture' of their university" (2003, p. 161). Clark (1970), on the other hand, found a unique, unified saga among three liberal arts colleges. Not surprisingly, this suggests that the integration perspective may be best employed in small, tightly-knit communities (Schein, 1984). In using an integration approach, Schein

(1985) stresses the need for stable membership, shared history, and influential founders—conditions not readily met in large universities.

Similar to Sporn (1996) who uses an integration approach but finds fragmentation, Becher (1989) sought to use a differentiation approach but finds fragmentation. In using disciplines as the unit-of-analysis, he says there is little clarity within the culture of a discipline. "Nearly all those interviewed were at pains to emphasize that their disciplines, even if unified, were far from being homogenous entities. Some went out of their way to draw attention to the complexity and variety of the approaches adopted" (1981, p. 115). He eventually found himself forced to abandon the academic discipline as the unit-of-analysis (1990). Becher's work derives from a differentiation perspective, but his conclusions lend support to a fragmented academic world. He says that research groups "are not only impermanent and constantly changing, but also tend themselves to fragment into smaller and smaller units as the march of specialization proceeds" (1990, p. 343).

In the research using the competing values framework there is support for the integration perspective (Fjortoft & Smart, 1994; Smart, 2003; Smart & St. John, 1996; Smart et al., 1997; Smart & Hamm, 1993a, 1993b; Zammuto & Krakower, 1991). The strength of the competing values model is that it allows researchers to compare across organizations and generalize about culture with high sample sizes. The tradeoff, however, is that we lose the uniqueness and complexity of culture in each organization. The authors are explicit in their decision to "sacrifice analytic depth for comparative breadth" (Cameron & Freeman, 1991, p. 31). With its focus on organization-wide consensus, the differing views of faculty, admissions officers, financial affairs, and academic administrators are aggregated into one unified perception. Thus, the unique texture of work-life is lost.

One of the most prominent figures in culture research, Burton Clark, unequivocally advocates a differentiation perspective. He says, "Wisdom begins with the will to disaggregate, seeking to give proper weight to settings that make a difference. As academic labor becomes finely tuned, we must play to a theme of differentiation" (1987, p. xxii). The lone exception to this statement is his work on the culture of three liberal arts colleges (1970). Nevertheless, the majority of his scholarship is firmly within the differentiation realm (Clark, 1963a, 1963b, 1968, 1984). He continually describes colleges and universities as highly differentiated "federations" and advocates understanding them in all their diversity (Clark, 1985, 1989, 2000).

The integration perspective, however, does have its advocates and utility (Bartell, 2003; Chaffee & Tierney, 1988; Dill, 1982; Hartley, 2003; Masland, 1985). Along with the competing values framework, Schein's three levels of organizational culture (1985, 1992) is widely-cited in the higher education literature (Kuh & Whitt, 1988; Peterson & Spencer, 1990), and forms the conceptual basis for many studies of culture. The framework, however, is focused on *shared* assumptions at the organization level-of-analysis, which places it within the integration approach.

Schein's framework is particularly useful if an organization has a strong culture. Schein says, "The 'strength' or 'amount' of culture can be defined in terms of (1) the homogeneity and stability of group membership and (2) the length and intensity of shared experiences of the group. If a stable group has had a long, varied, intense

Table 4 Studies of administrative and faculty culture in higher education

Integration	Differentiation	Fragmentation
Case studies	*Faculty differentiation*	Cohen and March
Bartell (2003)	Becher (1989)	(1974)
Chaffee and Tierney (1988)	Clark (1963a)	Silver (2003)
Clark (1970, 1972)	Clark (1987)	Weick (1983)
Dill (1982)	Goulder (1957)	
Hartley (2003)	Lodahl and Gordon	
Masland (1985)	(1972)	
Sporn (1996)	Snow (1959)	
Tierney (1988)	Toma (1997)	
Competing values research	*Administrative versus*	*Studies using multiple*
Adkinson (2005)	*faculty subcultures*	*perspectives*
Cameron and Ettington (1988)	Etzioni (1964)	Harman (1989)
Cameron and Freeman (1991)	Feldman (1987)	Eisenberg et al. (1998)
Fjortoft and Smart (1994)	Lunsford (1968)	
Smart (2003)	Swenk (1999)	
Smart and St. John (1996)		
Smart et al. (1997)		
Smart and Hamm (1993a, 1993b)		
Zammuto and Krakower (1991)		

history (i.e. if it has had to cope with many difficult survival problems and has succeeded), it will have strong and highly differentiated culture" (1984, p. 7). Thus, the degree to which a college or university meets these criteria for a "strong" culture is the extent to which the integration perspective is most useful. If a college or university has had an intense history, then underlying assumptions that are distinct to that organization will be discernible, such as Clark's descriptions of organizational sagas (1970, 1972).

Table 4 lists the studies reviewed in the previous sections of this chapter, indicating a heavier focus on the integration perspective. This implies greater attention should be given to scholarship from the differentiation and fragmentation perspectives.

A Framework for Analyzing Culture in Higher Education

As argued in this chapter, culture is formed through many complex influences both in an organization and as the result of its environment. Understanding the multiple contexts in which people operate helps us understand the complexity of higher education organizations and improve administrative action. Based on the literature review of this chapter and building upon a similar model proposed by Sackmann (1997, 2001), a framework specific to higher education is diagramed in Fig. 4. It displays not one, single culture, but several factors that influence the work context. It reminds us that individuals are simultaneously members of several groups, and describes many "frames" to "work" from in analyzing culture.
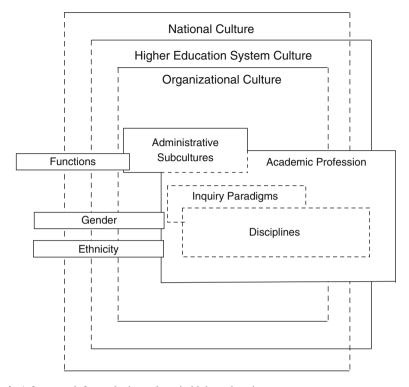
Fig. 4 A framework for analyzing culture in higher education

Culture is differentiated into academic and administrative subcultures—in line with descriptions of colleges and universities as professional bureaucracies (Mintzberg, 1979). Likewise, the relative size of the two subcultures is weighted toward greater dominance of the professional culture. The boundary between the two groups is permeable and overlaps because some members are part of both subgroups and move in-and-out of either context. The academic subculture is partitioned into the profession-at-large, the disciplines, and inquiry paradigms. The entire system is exists within an organizational culture, a national system of higher education (e.g. research universities, liberal arts colleges, and community colleges), and a national context.

The framework visually depicts the idea that "colleges and universities are organizational systems comprising many overlapping subsystems" (Bess, 2006, p. 504). It portrays socially meaningful groups in which "thick description" of behaviors, attitudes, and norms can occur (Geertz, 1973). The framework is static, however, not describing dynamic processes. Its strength is overcoming the perceptual simplicity of thinking about culture from only one unit-of-analysis. It suggests that culture is more pluralistic and diverse than most studies assume. To expand this framework, I will develop each of these frames, with the exception of national culture (see Hofstede, 1991, 2001), system culture, and gender/ethnicity which are not reviewed to keep a manageable scope.

Organizational Culture

Within the organization, culture is the result of an organization's unique history (Clark, 1970, 1972), its leadership (Schein, 1992), and critical events (Pettigrew, 1979). When culture at the organization-level is the dominant influence on behavior (as opposed to a profession, discipline, or functional unit) it is considered a "strong" culture, formed through an intense history (Clark, 1970). This describes Clark's notion of an "organizational saga" which is a "unified set of publicly expressed beliefs about the formal group that (a) is rooted in history, (b) claims unique accomplishment, and (c) is held with sentiment by the group" (1972, p. 179). The concept of organizational saga focuses our attention on the analytical importance of the historical context in which a college or university emerged. Overall, at the organizational level-of-analysis, not all colleges and universities have distinctive cultures (Pace, 1974). If they do, institutional size and an intense history are related to its development and salience (Clark, 1970; Kuh & Whitt, 1988; Peterson et al. 1986; Schein, 1992).

Academic and Administrative Subcultures

In the higher education literature, administrative subgroups have produced the least amount of research in comparison to students and faculty (Kuh & Whitt, 1988). These administrative subgroups include: librarians, admission officers, financial operations, human resources, information technology, student affairs staff, and so on. Some of these functional groups may have similar cultures with those found in non-academic organizations. For example, information technology professionals are likely to exhibit similar attitudes and values as those in business organizations (Gregory, 1983). As shown in Fig. 4, functional subcultures overlap with administrative ideologies (Lunsford, 1968), the organization's culture, the higher education system in which it is embedded, and the national culture.

Academic Profession-at-Large

The academic profession-at-large has been explored by various authors who describe the common values and norms of this subgroup (Clark, 1987; Kuh & Whitt, 1988). For example, Weick (1983) outlines many underlying assumptions of faculty at colleges and universities.[6] These include:

> Tradition is a source of error rather than truth; be suspicious of received wisdom. Stubborn, insubordinate, young geniuses are to be listened to even if their ideas go against the prevailing views of older, more established people. Competence rather than likeableness should be rewarded. Contribution to science is the only legitimate basis to bestow status. Punish dishonesty with ruthlessness and finality. And practice competitive replication (1983, pp. 261–262).

Also describing the culture of the profession-at-large, Gouldner (1957) depicts faculty as cosmopolitans and locals, and in Clark's (1987, 1989) study of academic life, he describes the academic profession as sharing a commitment to generating knowledge, striving for understanding, having disdain for the crime of plagiarism, and believing in academic freedom and personal autonomy. Similarly, Kuh and Whitt (1988) describe the culture of the academic profession as based on the concepts and symbols of: academic freedom, the community of scholars, scrutiny of accepted wisdom, truth seeking, collegial governance, individual autonomy, and service to society through the production of knowledge, the transmission of culture, and the education of the young (p. 76). The "academic profession" frame of Fig. 4 indicates that analysis of culture in colleges and universities should emphasize the occupational community of professors to comprehensively capture the culture of the organization (Van Maanen & Barley, 1984).

Disciplinary Subcultures

In addition to viewing faculty as an occupational community, disciplinary subcultures offer another frame to explain culture. These include a distinction between physical scientists and humanists (Snow, 1959); the level of paradigm development in a discipline, which describes the agreement about which problems need investigation, what methods are appropriate, and which findings are "proven" (Lodahl & Gordon, 1972); and whether a discipline is hard-soft and pure-applied (Biglan, 1973). In expanding our knowledge of disciplinary subcultures, Becher (1989) found a difference based on whether a discipline (1) seeks simplicity or embraces complexity (2) concerns itself with the "steady accretion of knowledge by building on previous work, as against the continuing reinterpretation of a more or less stable body of ideas" (1981, p. 112); (3) prioritizes discovery or invention, and (4) whether ideology has a visible role in scholarship.

Inquiry Paradigms

Toma's (1995, 1997) analysis of inquiry paradigms comprises an additional frame in our understanding of culture. It corresponds with Van Maanen and Barley's (1984) appeal for "research strategies open to the discovery of socially meaningful work groups and methodologies that resonate to the inner cleavages of work worlds" (p. 298). The term "inquiry paradigm" is not traditionally used in studies of culture, but the idea closely aligns with Schein's notion of culture as the implicit assumptions that guide behavior and have become "taken for granted" (1992). The idea of paradigms has mostly arisen through studies in the sociology of knowledge (Berger & Luckmann, 1967; Kuhn, 1969). Therefore, inquiry paradigms have less applicability to business organizations, where most culture research has been developed, and more utility in understanding knowledge organizations such as colleges and universities. Thus, the concept of inquiry paradigms is an important consideration in any cultural analysis of higher education organizations.

Toma's (1995, 1997) analysis describes how working from a postpositive, inter-pretive, or critical paradigm divides academics and deeply impacts scholarly lives and careers. A paradigm derives from our fundamental assumptions about ontol-ogy, epistemology, and methodology (see Guba & Lincoln, 1994; Lincoln & Guba, 2000). Similarly, Burrell and Morgan (1979) outline four paradigms from which social scientist operate: functionalist, interpretive, radical humanist, and radical structuralist. Burrell and Morgan (1979) define the four paradigms as "very basic meta-theoretical assumptions which underwrite the frame of reference, mode of theorizing and *modus operandi* of the social theorists who operate within them. It is a term which is intended to emphasize the commonality of perspective which binds the work of a group of theorists" (1979, p. 23). The functionalist paradigm seeks rational explanations of social affairs and applies the models and methods of the natural sciences to the study of human affairs. The interpretive paradigm seeks explanation within the frame of reference of the participant and views social reality as an ongoing, emergent process. The radical humanist paradigm has a sub-jective view of the social world with an orientation to radically changing constructed realities, while the radical structuralist paradigm seeks radical change of structural realities (Burrell & Morgan, 1979).

Inquiry paradigms are another important "frame" or vocabulary through which to understand the culture of a college or university. Along with organizational culture, the academic and administrative subcultures, and disciplinary subcultures, inquiry paradigms describe "taken for granted" assumptions that differentiate members of the academy. In Fig. 4, inquiry paradigms are shown to greatly overlap—as well as reciprocally influence—disciplinary subcultures, which is why the two "frames" overlap and have dashed boundaries. As another "frame," inquiry paradigms help us better understand the complexity of culture in higher education organizations.

Implications of the Framework of Cultural Complexity

With individuals simultaneously members of several subgroups, a research implica-tion of this cultural complexity is a movement toward social identity theory (Dahler-Larsen, 1997; Hernes, 1997; Hogg & Terry, 2000; Tajfel & Turner, 1985; Välimaa, 1998). With several overlapping subcultures, how do members of the organization compartmentalize or understand their multiple identities? Ashforth and Mael (1989) posit that, "Individuals have multiple, loosely-coupled identities, and inherent con-flicts between their demands are typically not resolved by cognitively integrating the identities, but by ordering, separating, or buffering them" (p. 35). A research implication of Fig. 4 is a need for a better understanding of how people switch "frames" from context to context as members of several subcultures (Hong, Morris, Chiu, & Benet, 2000). Likewise, a practical implication is that to be an effective administrator, one should see an individual as having multiple cultural identities.

Zerubavel (1997) also mentions different subcultural identities in his descrip-tion of cognitive sociology. He says, "Each of us is a member of more than just one thought community and therefore inhabits different social worlds. As a result,

we each have a rather wide 'cognitive repertoire' and often think somewhat differently in different social contexts" (p. 17). The model of cultural complexity outlined in Fig. 4 helps us visualize the various "thought communities" in which we, and others, are members. It also implies a movement away from the "organization" in "organizational culture" toward an understanding of occupational communities (Van Maanen & Barley, 1984) or "thought communities" (Zerubavel, 1997), which are meaningful subgroups in everyday work life.

Implications for Practice

The framework also has implications for the practice of administration in colleges and universities. For example, to be an engaged member of a community and to appreciate what change an organization may need to make, a rich understanding of culture is necessary (Louis, 1990; Pfeffer, 1981; Schein, 1992; Tierney, 1988). With culture being complex and difficult to understand and change, a simple map can help administrators take effective action (Roethlisberger, 1977; Weick, 1979, 1995). This is what I hope to offer with the framework in Fig. 4. As Roethlisberger states, "Instead of treating the world of facts (the territory) as simple and making the map complex, one should treat the territory as complex and keep the map simple. A simple map applied to a complex territory could do wonders" (1977, p. 139). The framework in this chapter is meant to be a simple map to a complex territory, thereby allowing us to wade-into complex territories with greater hope of successful navigation.

Another implication of this chapter is whether administrators at colleges and universities should pursue cultural integration, differentiation or fragmentation. To some degree each cultural perspective makes claims of improved organizational effectiveness. From an integration perspective, there are benefits to interdisciplinary research such as creative breakthroughs and the ability to study complex or practical problems that cannot be studied within narrow disciplinary bounds (Nissani, 1997). Better scholarship arises through interdepartmental linkages and collaboration, through sociologists working with psychologists, historians with anthropologists, and so on. From a differentiation perspective the specialization of tasks produces better scholarship (Weick, 1983). For the English department to be tightly connected with the physics department would hurt the inquiry of both fields. The law of requisite variety implies that differentiated scholars can better sense a complex knowledge environment. From a fragmentation perspective, ambiguity of purpose fosters the existence of multiple viewpoints, which promotes agreement on abstractions so that specific interpretations are not limited (Eisenberg, 1984). With a multiplicity of viewpoints and ambitions, ambiguity is hypothesized to improve innovation (Martin & Meyerson, 1988). For example, when there are unclear expectations and preferences, there is no apparent right or wrong outcome. Therefore, "because there is no risk of being 'wrong,' experimentation, and thus creativity, is encouraged. And if objectives are not clear a priori they can be permitted to emerge" (Martin & Meyerson, 1988, p. 119).

The question becomes: Is better knowledge a result of interdisciplinary scholarship, differentiated inquiry, or the pervasiveness of ambiguity and unclear goals? What do scholars think is the case from their experience? What does this imply for the management of colleges and universities? Should there be more interdisciplinary linkages, less collaboration among scholars, or more ambiguity and promotion of academic freedom which allows scholars to experiment and explore? Weick (1979, 1983) argues we should remain in disciplinary silos to produce more accurate knowledge. Contrary to this, the current president of Harvard, Drew Gilpin Faust, states:

> If we at Harvard are to accomplish all we intend, we need to find new ways of working together, of engaging the creativity of one of the most talented communities in the world. We need to break down barriers that inhibit collaboration among schools or among disciplines, barriers that divide the sciences and the humanities into what C.P. Snow once famously called two cultures, barriers that separate the practice of the arts from the interpretation of the arts, barriers that lead us to identify ourselves as from one or the other "side of the river." Collaboration means more energy, more ideas, more wisdom; it also means investing beyond one's own particular interest or bailiwick. It means learning to live and to think within the context of the whole university (2007).

Who has the best model of organizing to produce the best scholarship? The integrated world described by Faust (2007)? The differentiated, loosely-coupled system described by Weick (1983)? Or the ambiguity of an "organized anarchy," which may lead to more innovative thinking from professional autonomy (Bess, 2006; Cohen & March, 1974; Martin & Meyerson, 1988; Robertson & Swan, 2003)? This line of inquiry moves our thinking from "what colleges and universities are" to "what they should be" by examining the implications to the production of knowledge of each perspective.

In sum, studying colleges and universities "much the same way that [an anthropologist] studies a primitive tribe or modern community" (Riesman & Jencks, 1962, p. 104) has provided scholars and practitioners insights into organizations, management, and working life. Understanding the multiple identities of faculty and administrators—their differences, factions, and socially-meaningful work groups—all situated in complex environments, will continue to generate those meaningful insights to both improve the management of colleges and universities and our understanding of them. The framework in Fig. 4 helps us overcome many of the weaknesses and tradeoffs in studying culture to analyze multicultural contexts from several units-of-analysis.

Notes

1. Masland (1985) outlines Schein's surface-level artifacts in a higher education context, describing culture as saga, heroes, symbols, and rituals. However, his highly-cited article does not mention a link to more underlying assumptions, implicit values, beliefs, and ideologies.
2. This distinction is noted by a vast number of organizational theorist (Birnbaum, 1988; Blau, 1973; Clark, 1963b; Mintzberg, 1979; Trice & Beyer, 1993), who variously label it as the administrative and occupational principle (Friedson, 1973), hierarchical and collegial

authority (Becher & Kogan, 1980), bureaucratic and professional authority (Clark, 1968), or value-rational authority (Satow, 1975).
3. Mintzberg (1979) criticized Etzioni (1964) for portraying administrators as "the errand boys of the professionals" (p. 362).
4. For a critical analysis of the garbage can decision making model see Bender, Moe, and Shotts (2001).
5. Drawing upon Kerr's observations Clark (1968) similarly describes the university as an "educational city." These observations are mainly descriptions of the University of California-Berkeley, where both of the authors worked, which means the concept directly applies to large universities and is less true of small liberal arts colleges.
6. Weick adapted the ideas from Campbell (1979).

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