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A Process Model of Organizational Change in Cultural Context (OC³ Model)

The Impact of Organizational Culture on Leading Change

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Change resides at the heart of leadership. Organizational culture is one of many situational variables that have emerged as pivotal in determining the success of leaders' efforts to implement change initiatives. This article introduces a process model of organizational change in cultural context (OC³ Model) derived from ethnographic analysis. The model delineates the differential impact of organizational culture at every stage of change implementation. Eight stages of cultural influence are identified and illustrated. Research propositions are stated to encourage refinement of the model. Theoretical and practical implications for leadership are explored; applications for resolving organizational immunity to change are discussed.

Keywords: organizational culture; organizational change; leadership theory; sensemaking; process model; ethnography;

Purpose and Research Questions

The primary objective of this study was to model the interaction between organizational culture and change, delineating the ways in which a leader's knowledge of organizational culture affects the process of implementing change, and identifying the stages of the change process at which the interaction between organizational culture and change implementation holds functional significance. Many existing models of organizational change acknowledge the influence of tacit dimensions of organizational life at one or more stages of the change process (Bate, Khan, & Pye, 2000; Burke, 2008; Demers, 2007; Wilkins & Dyer, 1988). These models reflect differing levels of granularity with respect to the process of effecting organizational change, and each recognizes distinctive stages of change implementation (By, 2005). The Model of Organizational Change in Cultural Context (OC³ Model) introduced in this article was developed to reflect critical stages in the process of change implementation where organizational culture exerts differential influence.

The OC³ Model was derived from an ethnographic study undertaken to investigate how organizational culture shapes the development and mediates the implementation and impact of change initiatives

introduced by newly appointed leaders recruited from outside large, complex organizations. Research questions focused on (a) how knowledge of organizational culture is acquired by newly appointed leaders, (b) how cultural knowledge affects the process of change implementation, and (c) how tacit elements of organizational culture influence efforts to effect change. This article presents theoretical propositions of the OC³ Model, positioning it within the context of existing conceptual and process models of organizational change and establishing an agenda for future research. Implications for leadership and organizational studies are explored.

Models of Organizational Change

Leadership scholars have studied organizational change from both conceptual and process perspectives. Conceptual approaches focus on the antecedents and consequences of change (the "what"); process views address roles and strategies required for implementation (the "how") (Burke, 2008, p. 154, emphasis in original).

Conceptual Models

Conceptual models of change concentrate on the content and magnitude of strategic initiatives, with

particular emphasis on the cognitive mechanisms implicated in effecting intended outcomes. Golembiewski, Billingsley, and Yeager (1976) conceptualized three levels of change—alpha, beta and gamma—based on the degree to which individuals are required to modify their underlying cognitive mechanisms for assessing the behavioral outcomes of change initiatives. Other conceptual models of change emphasize the mental constructs that mediate sensemaking in organizations. These content theories of change invoke the notion of schemata (Bartunek & Moch, 1987) or theories-in-use (Argyris, 1976) as mental constructs functioning to focus attention, interpret experience, and assign meaning to events. In the context of organizational culture, these conceptual models of change draw attention to the importance of considering the extent to which a change agenda requires new strategies of sensemaking.

Bartunek and Moch's (1987) first, second, and third orders of change require increasing levels of examination with respect to tacit assumptions of meaning and decision making in organizational settings. The ability to surface and hold as object the underlying assumptions embedded in organizational culture is particularly important in third-order change, which requires the dynamic consideration of alternative systems of meaning, not just the substitution of a new perspective for an old one, as is sufficient for second-order change. Content models of change draw attention to the need for leaders to take into consideration the mental demands of affecting shifts in shared sensemaking embedded in organizational culture when charting a course for change because the ability to conceive and consider alternative perspectives is understood only at high levels of psychosocial development (Kegan, 1994).

Process Models

Process models of change designate the sequence of events necessary to effect organizational change, focusing more on the essential steps of implementation than on the conceptual tasks required. All process models bear homage to Lewin's (1947) classic threestage model of change, denoting the essential progression through phases of unfreeze, change, and refreeze. Subsequent process models outline sequences of events that elaborate to varying degrees upon these essential underlying stages of change (Bate et al., 2000; By, 2005; Kotter, 1996; Luecke, 2003; Mintzberg & Westley, 1992; Reardon, Reardon, & Rowe, 1998). In his recent reprisal, Burke (2008) emphasized the role of leadership at each stage, adding a prelaunch phase focused on preparing an organization for the disruptive effects of change.

Process models of change have been categorized with respect to the underlying philosophical perspectives and definitions they embody, major underlying assumptions, and types of sensemaking that characterize each approach (de Caluwé; & Vermaak, 2003; Kezar, 2001; Van de Ven & Poole, 1995). Although the number of categories and labels in each classification scheme varies, five distinct process models have been distinguished: evolutionary (inevitable), teleological (planned), life cycle (maturational), political (strategic), and social cognitive (conceptual). Organizational culture is afforded differing roles and functional significance in each of these process models of change. Kezar (2001) reserved a sixth category of cultural change for process models specifically aimed at altering organizational culture. Process models of cultural change are now recognized by organizational theorists despite the fact that "the concept of culture was originally developed to explain permanence, not change" (Demers, 2007, p. 80).

Organizational Culture in Models of Organizational Change

Organizational culture has consistently emerged as a pivotal variable in determining the success of efforts to implement institutional change (Bate et al., 2000; Curry, 1992; Hercleuous, 2001; Wilkins & Dyer, 1988). Both conceptual and process models of organizational change have been modified to reflect the role of cultural dynamics in moderating leaders' efforts to influence the attitudes, norms, and behavior of followers in organizational settings. The ways in which organizational culture has been integrated into these models of change provides a context for understanding the research questions addressed in this study.

Organizational Culture in Conceptual Models of Change

Conceptually, Gagliardi's (1986) fan model of cultural change accounts for the differential effects of apparent, incremental, and revolutionary change on existing cultural tenets in organizations. Change initiatives approached from each of these strategic perspectives serve respectively to reinforce, extend, or essentially undermine existing basic assumptions and values implicated by the change initiatives. Cultural

tenets lie at the heart of the strategies and modes of implementation adopted for introducing planned change, and they determine whether leaders can expect cultural assimilation, resistance, or modification as a result of their influence. Gagliardi's (1986) model draws attention to the importance of leaders' considering the deeper cultural implications of the strategies they adopt for introducing change initiatives into organizational settings.

Hatch's (2006) cultural dynamics model provides another conceptual framework for considering the cognitive impact of organizational culture on change implementation. Change is conceived within the cultural dynamics model as an ongoing cycle of interpretation by which individuals continually reinterpret events that enter the stream of cultural meaning from all levels within the organization: Four interpretive acts mediate the interactions among cultural elements, translating artifacts into symbols, symbols into basic assumptions, and basic assumptions into values that are in turn realized as artifacts. The interpretive acts that link these elements of culture are symbolization, implementation, manifestation, and realization, respectively (Hatch, 2000). Although the cultural dynamics model does not outline a sequential process of change implementation, it does offer an explanation for many of the underlying cognitive transformations at work within the sensemaking mechanisms implicated by efforts to implement organizational change.

Organizational Culture in Process Models of Change

With respect to process models of change, organizational culture has been incorporated by theorists who recognize the importance of accounting for tacit dimensions of sensemaking as moderating the impact of planned change. These models vary with respect to whether culture is identified as the target of the change initiative or merely serves as a context for affecting other strategic objectives.

The Burke-Litwin model illustrates an approach adopted by many process theorists for incorporating organizational culture into models of organizational change (Burke, 2008). Cultural factors function in this model as one of four dimensions influencing leadership, with systemic links to organizational performance, mission and strategy, and the external environment. Within this framework four phases are defined: prelaunch, launch, postlaunch, and sustaining the change. These phases encompass activities relating to leader self-examination, establishing and communicating need, clarifying vision, dealing with resistance, maintaining consistency and persistence, dealing with unanticipated consequences, sustaining momentum, and choosing successors. Organizational culture is conceptualized in this and other process models of change as one of many systemic factors affecting the context in which change is introduced.

The preceding review of content and process models of organizational change leaves open the question of whether cultural dynamics influence the process of effecting organizational change in a uniform manner or have a differential impact at each stage of implementation. This study was conducted to address this empirical question. Results suggest that organizational culture influences the process of effecting change differently at each stage of implementation. The OC³ Model was developed to aid leaders, human resource professionals, and other change agents in anticipating and accounting for the impact of organizational culture at every stage the change implementation process.

Method

The target institution in this qualitative study of organizational change was a public research university ranked among the top 25 members of the Association of American Universities. Ethnographic data were collected over a 4-month residency during which the researcher was granted unrestricted access to organizational leaders, administrators, faculty, and students. Observations, interviews, and reflexive hypothesis testing served as the primary means of data collection (Fetterman, 1998). One hundred interviews were conducted with 86 individuals at all levels in the university, representing current and previous administrators, academic middle managers, and faculty at every rank. Interviewees were systematically recruited from four upper administrative units, six colleges, and 15 academic departments, representing a cross section of disciplinary perspectives. Some interviewees served as key informants, providing opportunities for repeated interaction throughout the 4-month period. The overall response rate for interview requests was 93%; one interviewee declined permission to be audiotaped.

Interviews consisted of open-ended questions designed to elucidate interviewees' recollection and perspectives on critical incidents influencing the implementation of change, dimensions of organizational culture, personal reflections, and emotional reactions to campus events both historical and ongoing as well as subjective assessments of the progress of change implementation. Because the focus of analysis was on the implementation of change, one of the key informants was the university provost, who had been recruited 5 years prior to the study to implement a strategic plan. The provost, together with the university president, functioned as the primary agents of change in this academic community. Periodic meetings permitted ongoing inquiry regarding the provost's perspectives, thought processes, decision making, actions, and reactions to campus events during my residency. Strategic questioning permitted exploration of factors contributing to behavior and decision making, including the extent to which cultural knowledge influenced processes of sensemaking.

Trust was established with interviewees and key informants by pledging both personal and institutional confidentiality and by maintaining researcher independence throughout the 4-month residency. Bias was minimized by engaging in autonomous participation and observations of campus cultural dynamics, obtaining triangulated perspectives, protecting data integrity, and conducting implicit hypothesis testing. The timing of interviews, occurring toward the end of the 5-year implementation process, further minimized the potential for researcher influence on the target institution, study participants, or the outcomes of change process.

Analysis of Organizational Culture

Approaches to Cultural Analysis

Two approaches to cultural analysis have traditionally been embraced by scholars of organizational culture and change (Demers, 2007). The functionalist approach focuses on the role of cultural norms in regulating behavior and sustaining organizational survival. From a functionalist perspective, "the emergence and existence of organizational culture is explained in terms of the functions it performs to internal integration and external adaptation, rather than in terms of its meaning to the members of the organization" (Schultz, 1995, p. 23). A symbolic approach emphasizes the ways in which shared systems of meaning are employed by members of an organization to interpret events, make sense of reality, assign meaning to experience, and create common understandings of situations (Alvesson, 2002).

A symbolic approach to cultural analysis was employed in this study because the primary objective was to illuminate ways in which culturally embedded processes of sensemaking moderated the implementation of organizational change. Understanding organizational responses to change requires eliciting the underlying rules by which individuals use tacit knowledge in making sense of events by imposing meaning on shared experiences. As a negotiated reality, culture provides a worthy metaphor for understanding change (Alvesson, 2002). The symbolic approach reflects greater attention to the implicit processes of meaning making that shape decision making and the underlying processes of sensemaking that moderate the behavior of individuals in organizational settings. A functionalist approach to documenting cultural artifacts and behavioral norms would not have elucidated the ways in which members of the organization draw on underlying values and basic assumptions in ascribing meaning to events related to the change agenda (Schultz, 1995).

Profiling Organizational Culture

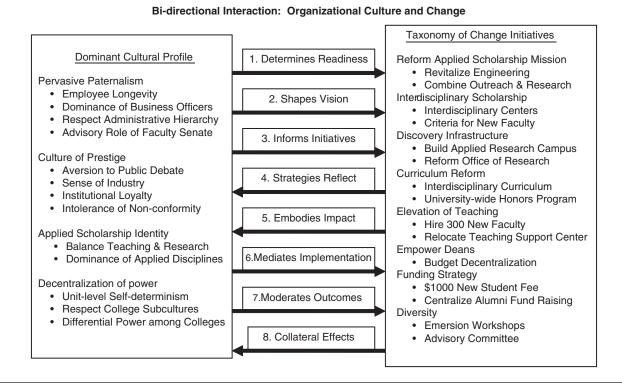
The first procedural product of analysis in this study was a comprehensive ethnographic profile of the target institution's systems of cultural meaning. Data analysis was informed by Martin's (2002) multiple perspectives model of cultural analysis, which advocates simultaneous consideration of evidence for cultural integration, differentiation, and fragmentation within the institution. The integrationist perspective promotes construction of an overarching profile of the organization's dominant cultural tenets, and the differentiation perspective leads to individual subprofiles of organizational units. The fragmentation perspective focuses on enduring sources of ambiguity embedded in the culture of the institution.

As employed in this study, the multiple perspectives analysis resulted in both a profile of the dominant organizational culture and a comparative analysis, across organizational units, of the degree to which each subculture reflects dominant cultural tenets of the organization (Figure 1).

Documenting Organizational Change

The second procedural product of this study was the creation of a taxonomy of change strategies adopted at the target institution (Figure 1). Although the initial focus of analysis was on planned change, the project expanded to encompass all types of change implemented at the target institution during the period of study. This methodological shift resulted in a more comprehensive treatment of the impact of cultural

Figure 1 **Interrelations Between Dominant Cultural Profile and Taxonomy** of Change Initiatives at Target Institution



dynamics on all types of change. Analysis revealed change initiatives conforming to all six types of process models identified by Kezar (2001). Together with the differentiated cultural profile, the taxonomy of change initiatives provided a context for modeling the interaction of cultural knowledge and organizational change, as presented in the remainder of this article. Latta (2006) provided a comprehensive ethnographic presentation of the interim products of analysis pertaining to cultural analysis and the taxonomy of change initiatives at the target institution.

Developing a Model

For purpose of modeling the interaction between organizational culture and change, a generic process model of organizational change was employed, delineating seven sequential stages: (a) assessing readiness for change, (b) creating a vision for change, (c) specifying intervention initiatives, (d) developing implementation strategies, (e) effecting change, (f)institutionalizing change, and (g) assessing the impact of change. The OC³ Model specifies both the mediating and moderating influence of organizational culture at each stage of this generic change process. The basic elements of the OC³ Model are presented graphically in Figure 2. The model functions as an overlay, informing existing process models of organizational change (de Caluwé; & Vermaak, 2003; Kezar, 2001; Van de Ven & Poole, 1995), delineating the interplay between organizational culture and the specific change initiatives targeted by a leadership agenda.

The dynamics of the OC³ Model specify the bidirectional influence of culture on planned organizational change and the ways in which planned change initiatives both alter and reinforce institutional culture (see Figure 1). The multiple interactions between institutional culture and the dynamic processes of effecting organizational change are detailed in the model at each stage of planning and implementation. The remaining sections of this article describe the components of the OC³ Model, delineating the interaction of organizational culture and change at each stage and illustrating the utility of cultural knowledge for informing the process of implementing organizational change. Theoretical propositions are stated to

CULTURAL Collateral ORGANIZATIONAL ANALYSIS KNOWLEDGE OF ORGANIZATIONAL Effects CHANGE ORGANIZATIONAL CULTURE CULTURE Determines Readiness 8 SUBCULTURAL VARIATION Shapes IMPACT Mediates Embodies Implementation ON Intent ORGANIZATION 6 VISION IMPLEMENTATION **Moderates Outcomes** STRATEGIES Informs Reflects Culture CHANGE AGENT CHANGE INITIATIVES Organizational Behavior Loop Change Management Loop Leadership Loop

Figure 2 Model of Organizational Change in Cultural Context (OC³ Model)

encourage future verification and refinement of the OC³ Model. Implications for leadership are explored.

OC³ Model

Organizational culture, the central phenomenon in this qualitative study, is situated at the core of the OC³ Model. This positioning reflects recognition of organizational culture as an embedded phenomenon that both exerts influence on and is influenced by other institutional processes. It further illustrates that the OC³ Model is grounded in a systemic view of organizational change embodying feedback loops linking cultural dynamics with the change process (Katz & Kahn, 1978). Eight stages of cultural influence are identified: cultural analysis of readiness, shaping vision, informing change initiatives, reflecting culture in implementation strategies, embodying cultural intent, cultural mediation of implementation, moderating outcomes of change, and documenting collateral effects (see Figure 2). The OC³ Model delineates the influence of organizational culture and a leader's cultural knowledge at each of these stages. The following discussion states the theoretical assumptions underlying the model and clarifies the nature and direction of cultural influence at each stage of organizational change identified.

Theoretical Assumptions

The OC³ Model embodies two theoretical assumptions regarding the interaction of organizational culture and change.

Theoretical Assumption 1: Different dimensions of organizational culture influence change implementation at each stage of the process.

This fundamental assumption reflects the multifaceted, pluralistic nature of organizational culture and takes into account the manifestation of cultural ambiguity (Martin, 2002). From a leadership perspective, it follows that developing a vision for change that brilliantly leverages dominant cultural values is insufficient. Effective leaders must consider additional aspects of culture that explicitly or implicitly influence change throughout the process of implementation.

The second theoretical assumption underlying the OC³ Model concerns a leader's awareness of organizational culture.

Theoretical Assumption 2: A leader's degree of cultural awareness will determine his or her effectiveness in facilitating organizational change.

The OC³ Model assumes that during each stage of change implementation increasing leaders' awareness of cultural dynamics will enhance the effectiveness of the change process. In the absence of an explicit cultural analysis, leaders are dependent on their tacit knowledge of organizational culture to guide decisions about aligning change initiatives with culturally embedded processes of sensemaking (Janson & McQueen, 2007). Leaders who lack awareness of cultural dynamics in their organizations are more likely to encounter difficulties implementing change (Hercleuous, 2001; Wilkins & Dyer, 1988). The OC³ Model provides a framework for viewing change through the lens of culturally embedded processes of sensemaking and provides a mechanism through which leaders' decisions about orchestrating change can accommodate the nuances of organizational culture at every stage of the change process.

Stage 1: Cultural Analysis—Readiness for **Change Is Culturally Embedded**

Establishing readiness for change is recognized as an essential first step in many process models of organizational change (Bernerth, 2004; Kotter, 1996; Walinga, 2008). Construing cultural analysis as an integral component of assessing readiness for change reinforces theoretical work by Wilkins and Dyer (1988), who posited two dimensions of culture as predisposing an organization toward change: the fluidity of its current cultural frames and the commitment of its members to existing cultural tenets. Creating readiness for change where it does not already exist involves showing discrepancies between what is and what should be (Wilkins & Dyer, 1988). This task can be made more difficult if the envisioned change is inconsistent with institutional culture (Kotter & Heskett, 1992). On the other hand, readiness for change can be enhanced if discrepancies are found between the institution's current status and its ideal cultural commitments (Harrison & Stokes, 1992). Cultural analysis is, thus, integral to assessing readiness for change.

Proposition 1: Including cultural analysis in assessing readiness for change facilitates an understanding of the dimensions of organizational culture that are likely to create resistance or be conducive to the introduction of change.

A high degree of readiness for change was documented at the target institution prior to the creation of a change agenda. Ethnographic analysis revealed the extent to which this readiness for change was culturally embedded. A pervasive culture of prestige characterized the institution, fueling an intense institutional loyalty and sense of industry, an aversion to public debate of issues, and an intolerance of nonconformity. Being highly motivated to protect institutional image, members of the organization were collectively focused on the university's decline in national rankings in the years prior to developing the strategic plan. Interpretation of the meaning of this slippage had cultural significance for organization members because of the academic community's commitment to an image of prestige. This created a sense of urgency to regain lost national status. At the same time, the institution's pervasive paternalism fueled a dependency that was threatened by the perceived faltering status of the institution. The heightened respect for administrative hierarchy and authority that sustained this paternalism created a propensity to defer to the directives of a strong, externally recruited leader who would "tell us how to get better."

Because of its unique cultural heritage, this institution was ripe for the influence of a charismatic, authoritarian leader, which it found in its new president. The coconstructed nature of organizational culture and the institution's readiness for change is underscored by the fact that this new president, who achieved award-winning success fostering change at the target institution, had failed to achieve similar strategic goals at his former institution. His leadership had been poorly received in a more traditional academic institution where shared governance was cherished over paternalism and where national rankings had not triggered the same culturally embedded sense of urgency for change. The OC³ Model captures this notion that the culture of an organization both determines its readiness for change and prescribes the types of leadership likely to be effective in orchestrating institutional reform.

Stage 2: Shapes Vision—Knowledge of Organizational Culture Helps Shape the **Vision for Change**

The OC³ Model incorporates the accepted view that knowledge of organizational culture, including awareness of subcultural variations within an organization, plays an integral role in shaping an effective vision for change (Bate et al., 2000; Sashkin, 1988). This is consistent with research suggesting that acceptance of a change initiative is related to its congruence with existing organizational identity and practice (Brooks & Bate, 1994; Wilkins & Dyer, 1988). Organizational identity theory reinforces this idea by specifying the behavioral, social, and environmental feedback mechanisms that underlie these processes (Whetten & Godfrey, 1998). Framing a vision for change that catalyzes cultural elements of the organization creates a powerful means of galvanizing support among followers by tapping these identity processes.

Change theorists who focus on reforming institutional culture, rather than finding ways to link a vision for change to existing cultural commitments, construe cultural reform as a prerequisite for effecting strategic change (Bate et al., 2000; Gayle, Tewarie & White, 2000). Others assert that cultural reform occurs only as a result of behavioral change in organizations (Hercleuous, 2001). The OC³ Model proposes a third perspective, conceiving of organizational culture as an essential context for informing leaders' decisions throughout the change process, whether or not cultural reform is required as an outcome. The OC³ Model can be applied equally to circumstances in which cultural reform is and is not required and whether such change occurs before or after behavioral change has been effected. Because change is rarely unidimensional, the OC³ Model suggests three propositions with respect to how cultural knowledge shapes vision.

Proposition 2a: Focusing on aspects of change consistent with existing culture during visioning permits leaders to engender support for broad ideological goals that may nevertheless necessitate modifying other aspects of culture during implementation.

Proposition 2b (with corollary): Leveraging cultural artifacts effectively during visioning enables leaders to foster commitment to a common ideal even before the specific nature of the changes required to achieve that vision have been articulated. Misreading or misappropriating cultural symbols during visioning fosters resistance to a change agenda from the outset.

Proposition 2c: Attention to subcultural variations among organizational units is integral to securing broad support for a vision that may differentially advantage certain programmatic aspects of the organization.

The vision crafted by leaders at the target institution in this study masterfully leveraged the power of cultural artifacts and institutional symbols. The university's original mascot was pulled out of mothballs and accorded new prominence and meaning, in service to the reform agenda. Rituals venerating this mascot were enacted, involving students and the general public. The mascot garnered attention, galvanized interest, and generated public support for the change agenda envisioned in the strategic plan both within and outside the institution even before specific initiatives for enacting the plan had been conceived. The cultural significance of this was underscored when a midlevel administrator testified regarding the power of the reinstated mascot: "We know engines, we study engines, we understand engines. So using an engine to symbolize our aspirations to become the economic engine of the state makes sense to us!"

Strategic leadership was required in resurrecting this cultural symbol. The mascot had been replaced several decades previous by a rogue icon derived from a public event unrelated to the institution's academic mission. The restoration effort was nearly thwarted, however, when a huge bronze statue of this rogue icon was donated to the university just as the new strategic plan was being launched. Although not rejected by the institution, the statue was placed strategically in a location away from the academic core where it was largely obscured by surrounding buildings. Doing so enabled leaders to maintain focus on resurrecting the original mascot, which more effectively tapped the power of culturally embedded values to reinforce goals embodied in the strategic plan related to restoring the prominence of the engineering disciplines as that university's unique embodiment of its applied scholarship mission.

Subcultural differentiation. The subcultural landscape of the institution was misread, or at least insufficiently accommodated, by the new president early in the visioning process. Initially, aspirational goals were framed solely in terms its applied scholarship mission. Whereas this commitment to applied scholarship reflected a core institutional value, it ignored the strength of disciplinary subcultures rooted in the sciences and the humanities. Faculty in those disciplines acknowledged the dominant culture but also asserted the value of their own contributions to the institutional mission. When they expressed dismay at being excluded from the vision for excellence, the strategic plan was amended to reflect aspirations of preeminence in applied sciences and excellence in all other academic disciplines. This adjustment was sufficient to unite members across subcultural units in support of the strategic plan.

Stage 3: Informs Initiatives—Cultural Knowledge Informs Development of Specific Change Initiatives

During the planning stages, institutional culture determines many elements of readiness for change in an organization and shapes leaders' vision of a preferred future. A vision does not constitute a blueprint for change, however, until it has been translated into specific change initiatives. Understanding organizational culture enables leaders to leverage existing values and behavioral norms in designing change interventions. Dimensions of institutional culture inconsistent with the vision may be targeted for modification.

Proposition 3a: Consideration of cultural dynamics promotes development of strategic initiatives more likely to be successful in accomplishing the goals of a change agenda.

Proposition 3b: Attention to culturally embedded systems of meaning ensure that planned change interventions are consistent with values and behavioral norms leaders determine should be preserved.

Proposition 3c: Discrepancies between an organization's vision and its existing values and behavioral norms point to areas ripe for effecting cultural change.

Planned change initiatives developed with consideration of existing elements of organizational culture can target aspects of institutional performance that are consistent with its overall heritage and identity, making the change initiatives themselves a expression of existing strengths rather than a demonstration of areas of weakness (Bate et al., 2000).

Translating a vision for change into specific interventions is the task of change agents in an organization (Burke, 2008; Kotter, 1996). At the target institution, the provost was responsible for crafting specific change initiatives to enact the strategic plan. Analysis of the taxonomy of change initiatives revealed how discrete elements of organizational culture became reflected in the interventions that emerged from the planning process. For each initiative, it was possible to trace the currents of cultural meaning that shaped the change agenda. These cultural elements were not necessarily the same aspects of culture leveraged in creating the sense of readiness or vision for change.

Testimony from the provost and others provided clues regarding how cultural knowledge may have influenced the development of these change initiatives, but because of the largely tacit way in which cultural sensemaking occurs, it was evident that cultural norms often influenced decision making without conscious consideration or at least in ways that were not readily articulated by the provost and other institutional leaders. Thus, whereas ethnographic analysis made it possible to trace the effects of organizational culture on the development of specific change initiatives at the target institution, at best it can be said that these strategies were influenced by organizational culture, not that explicit consideration of cultural dynamics always factored into their formulation. The OC³ Model predicts that more explicit consideration of cultural dynamics by leaders during planning would promote the development of change initiatives with greater potential to affect outcomes consistent with stated institutional goals.

Stage 4: Strategies Reflect Cultural Knowledge—Effective Implementation Strategies Reflect Differential Aspects of **Organizational Culture**

Once the objectives of a planned change initiative have been identified, institutional leaders must determine the most effective ways to implement desired changes. Cultural factors reflected in these implementation strategies may differ from those aspects of organizational culture that provided impetus for the initiatives. The OC3 Model calls on leaders and change agents to recognize that because culture is multidimensional other factors will come into play in implementing an initiative than just those dimensions identified as the target of change. This distinction is significant because it illustrates that implementation strategies are not dictated by change initiatives and can be designed to both reinforce and counter aspects of culture necessary to ensuring a desired outcome. Whether the goal of the change initiative is to alter a fundamental aspect of institutional culture or to effect a change that is essentially consistent with the culture of the organization, cultural knowledge can be a valuable tool for leaders in crafting strategies and tactics for implementing change.

Proposition 4a: Effective implementation strategies take into account different (or additional) aspects of organizational culture than were considered in formulating the change initiative.

Proposition 4b: Consideration of cultural norms can determine the success of change implementation independent of whether the change initiative itself is consistent with institutional culture.

Proposition 4c: Success of a change initiative is determined by the cultural implications of the initiative itself and its implementation strategy.

The importance of considering differential aspects of organizational culture in crafting change initiatives and implementation strategies is illustrated by an effort to create a university-wide honors program. This initiative reflected the espoused institutional value of balancing teaching and research, but the implementation strategy insufficiently took into account the culture of unit-level determinism that governs curricular decisions at this university. Consequently, the first attempt to implement the initiative was rejected by vote of the campus governing body because its implementation strategy called for central control of admissions to the program. After the implementation strategy was revised, the initiative was approved. This example illustrates how the success of a change initiative is jointly determined by the cultural implications of the initiative with the strategies employed to affect implementation. The OC³ Model draws attention to the importance of change agents' considering both during planning.

Stage 5: Embodies Intent—Change Initiatives and Their Implementation Strategies **Embody Intent to Modify or Reinforce Organizational Culture**

In some cases, this intent may be made explicit, as when leaders target specific values or rituals for modification or elimination. New rituals may be introduced or old symbols put into hibernation. The OC³ Model calls on leaders to identify those aspects of organizational culture targeted for modification as well as those dimensions intended to be preserved or strengthened. Consistent with Gagliardi's (1986) conceptual model, this process approach forestalls the perception that change requires an all-out overhaul of cherished values and familiar ways of operating while acknowledging those aspects of organizational behavior that will be expected to undergo transformation.

Proposition 5a: Change initiatives and their implementation strategies embody explicit or implicit intent to influence organizational culture.

Proposition 5b: Change initiatives may be designed to either modify or reinforce existing cultural tenets.

Proposition 5c: The cultural intent embodied in a change initiative or implementation strategy must be considered within the larger cultural fabric in which the targeted cultural tenets operate.

At the target institution, the overall intent of the strategic plan was not to fundamentally alter organizational culture. Nevertheless, some change initiatives were implemented in a way that, if successful, would modify elements of existing culture, whereas other incentives served to reinforce established norms. An initiative to introduce diversity workshops illustrates how the dynamics of the OC³ Model informs these leadership efforts. The initiative represented an explicit endeavor to change the cultural intolerance of nonconformity; however, altering this cultural tenet did not constitute an attempt to abolish the culture of prestige that was sustained by conformity at the institution. In fact, other change initiatives served to reinforce the culture of prestige at the same time that specific actions were introduced to create a more welcoming environment for diversity. Leaders were sometimes caught off guard by events that brought these two initiatives into conflict, such as when students staged a protest at a board meeting.

Student protests were a rare occurrence at the target institution and had historically been squelched by administration; the increase in these incidents was a natural reflection of a growing tolerance for nonconformity. Yet administrators' initial reaction reflected their continuing aversion to public debate, which was viewed as a threat to the culture of prestige. Initially, the protesting students were removed and barred from attending the public meeting, later being admitted after they agreed to not speak or otherwise disrupt proceedings. The intentional introduction of attitudes supporting greater tolerance of nonconformity had prompted a collateral impetus for more pubic debate, creating an unintended threat to the culture of prestige that leaders sought to preserve. In addition to illustrating how culturally relevant intent is embedded in change initiatives, this example demonstrates that the fabric of culture is a delicate weave, easily unraveled in the context of effecting change.

Stage 6: Cultural Mediation—Tacit Elements of Culture Mediate the Implementation of Change

Regardless of the strategies and tactics employed to implement particular change initiatives, the impact of these efforts will be mediated by elements of institutional culture not taken into consideration during planning. In some instances, cultural dynamics may serve to facilitate the assimilation of change; in others, they may foster resistance or result in unintended outcomes. Tacit elements of organizational culture are institutional dynamics not explicitly taken into account during planning that emerge unexpectedly as significant during the process of implementing change. These tacit cultural dynamics mediate the implementation process. The immediate effect of this mediation is facilitation or resistance to the change effort.

Like the intent embodied in change initiatives, the cultural mediation of change implementation has valence and serves to either accelerate or impede the process of change. Acceleration of change occurs when cultural tenets align with implementation strategies to facilitate the adoption of a change initiative; impedance results when elements of organizational culture create resistance to the implementation of change. In both instances, the effect is created by aspects of organizational culture not taken into account in planning the change initiatives and their associated implementation strategies. The resulting attenuation or acceleration of change implementation is a consequence of cultural mediation rather than overt opposition or accommodation of a particular change initiative.

Proposition 6a: Tacit elements of organizational culture not taken into account during planning mediate the implementation of change initiatives.

Proposition 6b: The mediating effect(s) of culture on change implementation has valence and will either accelerate or impede the process of change.

Cultural resistance additionally modifies the change initiatives and their implementation strategies. The effects of this mediation will vary across the institution, as the implementation strategies and tactics are interpreted by and interact differently with the various subcultures of the organization. The opportunities and threats members of these different subcultures perceive the change initiative to pose will determine how individuals and groups respond to the impetus for change (Hercleuous, 2001). The cultural mediation of change implementation may account for a significant portion of the variation observed in response to specific change initiatives.

Proposition 6c: Depending on valence, the cultural mediation of change implementation creates either facilitation or resistance that modifies the initiatives and/or their associated implementation strategies.

Proposition 6d: The effects of cultural mediation of change implementation will vary across institutional subcultures.

At the target institution, implementation strategies embodying specific change initiatives met with varying degrees of facilitation or resistance. Both cultural acceleration and impedance of change were documented as a result; tacit elements of culture not explicitly taken into account or insufficiently accounted for by the implementation strategies themselves served as the mediators of this effect. Acceptance of initiatives relating to the expansion of institutional engagement and outreach were facilitated by existing cultural norms. The intended change initiative (new engagement activities) was entirely consistent with existing cultural values of the institution (applied research), and thus implementation of the change was both facilitated by and in turn served to reinforce existing culture.

At the same time, other tacit elements of culture created resistance to these changes. This was dramatically witnessed when faculty refused to move into newly constructed state-of-the art research laboratories because the conditions under which they were permitted to retain use of those facilities violated basic tenets of the institution's pervasive paternalism. Faculty embraced the idea of new laboratories to promote an expanded engagement agenda but they voted with their feet when it came time to move into the new accommodations because of cultural shifts associated with the conditions governing extended occupancy.

This cultural mediation of implementation actually altered the nature of the change initiative. Revisions to the engagement agenda were required that attenuated the cultural impact of that particular change initiative. Overall at the target institution, the primary sources of cultural resistance stemmed from the persistence of paternalism, decentralized control, and unit-level determinism, which thwarted attempts to create more transparent processes, increase interdisciplinary collaboration, and foster accountability. The OC3 Model accounts for the role of these tacit dimensions of culture in mediating the implementation of specific change initiatives.

Stage 7: Moderates Outcomes—Culture Exerts a Moderating Influence on the **Outcomes of Organizational Change**

The mediating effects of organizational culture described above exert influence on the process of implementing change and the nature of the change initiatives themselves. In addition, cultural dynamics have a moderating influence on the outcomes of change implementation. The moderating influence of organizational dynamics determines the degree to which stated objectives of a change initiative are realized within the organization as a whole. The target of this moderation is not the change initiative itself or the process of implementation but the outcomes that result from efforts to effect organizational change relative to stated objectives and goals. This moderating effect is evident even when the objectives of the change initiative are not explicitly rejected by members of the organization but culturally motivated behaviors, nevertheless, thwart full realization of intended outcomes.

Proposition 7a: Organizational culture exerts a moderating effect on the outcomes of a change initiative, either augmenting or attenuating stated goals/objectives of the initiative.

Proposition 7b: The moderating effect of organizational culture on the outcomes of a change initiative is determined by the cumulative impact of attenuating and augmenting factors during implementation.

Proposition 7c: Cultural dynamics moderate the impact of organizational change irrespective of the degree to which the change initiative itself is embraced by members of the organization.

Events documented at the target institution relating to an initiative to increase interdisciplinary research illustrate these propositions relating to the moderating effects of organizational culture on the outcomes of change implementation. In response to a call for increasing interdisciplinary research at the institution, statisticians collaborated with engineers on a grant project. When the project reached an impasse, the statisticians offered to devise a solution. Later when their statistical problem solving was presented to the engineers, the applied scientists responded that they no longer needed that solution; they had simply devised a work-around. Statisticians viewed the problem as one of creating new knowledge; engineers considered the challenge one of applying existing techniques to avoid the problem altogether. As a result, the statisticians felt disrespected and the collaboration dissolved, thus failing to achieve the goal of increasing interdisciplinary scholarship.

Culturally driven attitudes about the fundamental nature of scholarship were deeply rooted in the disciplinary perspectives these would-be collaborators brought to their effort to embrace the change initiative calling for more interdisciplinary research. Even though the initiative was not rejected, its impact on the organization was moderated by culturally motivated behavior, rendering the outcome different than envisioned. Without addressing the moderating impact of these underlying cultural differences, the outcomes of this initiative were severely limited.

Stage 8: Collateral Impact—Organizational Change Has a Collateral Effect on the **Organizational Culture**

Regardless of how extensively the intended outcomes of change implementation are realized, the process of introducing change initiatives creates collateral effects on organizational culture. Whereas some change may be expressly aimed at altering elements of institutional culture, the cultural impact of change will in many instances be secondary to the goals of the change initiative. Whether the impact is primary or secondary, the introduction of change may serve to either alter or bolster collateral dimensions of organizational culture. In some cases, a single change initiative may simultaneously alter some cultural values, beliefs, or behaviors while bolstering other cultural tenets.

Proposition 8a: Organizational change has a collateral effect on cultural dynamics of an organization.

Proposition 8b: The collateral effects of introducing organizational change may simultaneously bolster some, while altering other dimensions of organizational culture.

At the target institution, the collateral impact of change on organizational culture was illustrated by the unintended effects of an initiative intended to create incentives to increase interdisciplinary scholarship. Funding was provided to administrators who allocated matching funds to hire new faculty with appointments split between two academic departments. In strategizing to secure these funds, however, some unit administrators stretched their fiscal resources to the point of being unable to cover existing faculty contracts. The unintended collateral impact of efforts to create a culture more conducive to interdisciplinary scholarship was, thus, the undermining the values of fiscal responsibility and employee retention, which were hallmarks of the institution's pervasive paternalism and points of institutional pride. The OC³ Model incorporates recognition that change initiatives precipitate these collateral cultural effects.

Systems Perspective: The Impact of Change Implementation Is Determined by Systemic Feedback Loops

The OC³ Model is grounded in open systems theory and embodies feedback loops that promote a state of organizational equilibrium throughout the change process (Birnbaum, 1988; Katz & Kahn, 1978). Three interconnected feedback loops operate within the OC³ Model: (a) a leadership loop, (b) a change management loop, and (c) an organizational behavior loop. The leadership loop is comprised of the first five stages of the OC³ Model, starting with cultural analysis, visioning, formulating change initiatives and implementation strategies and culminating with the intended impact of envisioned change on organizational culture. This feedback loop promotes incremental increases in leaders' cultural awareness, knowledge, and understanding, which inform the continual refinement of change initiatives and implementation strategies and the intended impacts on organizational culture they embody.

The change management feedback loop commences with the formulation of change initiatives and implementation strategies, cycling through the intended impacts and cultural mediation of these initiatives, back to the initiatives themselves. The dynamics of this feedback loop promote the continual refinement of change initiatives and implementation strategies and are consistent with Nutt and Backoff's (1993) distinction between strategic leadership and strategic management.

The organizational behavior feedback loop encompasses the cultural mediation of change implementation, moderation of organizational outcomes, and the collateral impact of change on the culture of the organization. This loop provides continual feedback to the change management loop, so that as organizational culture changes so does the mediation of change implementation.

The three feedback loops in the OC³ Model provide insight into Lewin's (1947) classic phases of organizational change and expand on the presence of culture in the Burke (2008) model by delineating the pervasive cultural dynamics that account for progressive organizational adaptation over time. Ongoing cultural analysis reveals knowledge of cultural shifts, which reshape leaders' vision for change, informing the development of revised change initiatives and implementation strategies that have both intended and corollary implications for organizational culture. The implementation of these new initiatives is mediated by the reformed culture of the organization, moderating the outcomes of change on the organization.

At each of these points, change agents have an opportunity to analyze the cumulative impact of cultural factors promoting and deterring change. Change initiatives consistent with existing cultural tenets will not fundamentally alter the culture of the organization; initiatives inconsistent with existing cultural tenets may require intervention to resolve culturally embedded sources of resistance. The OC³ Model can be used to resolve cultural immunity to change by providing a framework for revealing and examining discrepancies between the cultural intent embodied in change initiatives and their associated implementation strategies on one hand and the mediating and moderating cultural forces that emerge during the introduction of change (Kegan & Lahey, 2001).

Proposition 9a: The dynamics of organizational culture constitute the primary mechanism by which a state of equilibrium tends to be maintained in organizations.

Proposition 9b (with corollary): Cultural immunity to change results when change initiatives trigger inconsistencies in organizational sensemaking. Cultural facilitation of change results when change initiatives align with existing mechanisms of organizational sensemaking.

Proposition 9c: Overcoming cultural immunity to change requires resolving discrepancies in an organization's systems of meaning.

At the target institution, the opportunity to resolve cultural immunity to change was inherent at many points in the process of implementing the strategic plan. A prime example was the provost's increasingly acrimonious relations with the dean of the college of science. In discussing her leadership decisions, the provost confessed a growing frustration with the dean's "unreasonable" insistence on space needs and her disappointment that faculty in his college were not contributing more to the engagement agenda. This was, in her view, a failure of the dean's leadership.

The dean and faculty of the science college, meanwhile, expressed disappointment that their well-intentioned attempts to become involved in the engagement agenda had been repeatedly thwarted: Overtures toward collaboration with engineering had not worked out, applications for leadership positions in the engagement infrastructure had been passed over in favor of applied scientists, attempts to gain access to specialized equipment for conducting basic scientific research had been deflected by administrators promoting less theoretical applications, office space historically occupied by science faculty had been reallocated to applied scholars, and a new building slated for the college was reappropriated to house engineering programs.

What the provost failed to see was that her own cultural values and those of other university administrators not only drove these decisions but, more significantly, prevented her from viewing the situation from outside her own structure of knowing. Acknowledging the tension between the respective

subcultures of science and engineering within the academy would have allowed her and other academic leaders to view their own decisions more objectively. It is not necessarily that having this insight into the cultural dynamics of the organization would have dictated that the provost make different decisions.

The point is that not having her perspective informed by knowledge of organizational culture precluded consideration of some potentially viable alternative ways of handling the situation, even if she chose to make the same decisions. Realizing her own cultural embeddedness would have afforded perspective that could have empowered her to understand others' viewpoints as well as the source of her own emotional angst, empowering her to shift the conversation from the conflict of the moment to the underlying values and basis assumptions that were the root cause of ongoing organizational conflict (Kegan & Lahey, 2001). Even if she ultimately stuck to her decisions, she would have been able to do so in a way that explicitly acknowledged the root cause of dissention in differing cultural values. Not being able to see this is what contributed to the negative emotions that characterized her interactions with the dean and threatened his position within the institution. Shifting the conversation away from the specific events creating conflict to the underlying culturally embedded values and basic assumptions would have allowed these leaders to foster more productive conversations about how to reach overarching institutional goals.

This final set of propositions is further supported by observations of the status of change implementation at the conclusion of this study. Even though the focus was to assess the process of change implementation, not specifically its outcomes, evidence suggests that significant progress had been made toward identified goals of the change agenda and support still existed for these objectives. At the same time, some aspects of institutional culture had been pushed to a state of fragility by the pace and direction of change. New leadership was anticipated to attend to the emerging needs of this academic community resulting from its intensive change agenda.

Utility and Theoretical Implications of the OC³ Model

The OC³ Model provides a conceptual tool for understanding the various points, directional influences, and mechanisms of interaction between organizational culture (context) and change initiatives (content), and it holds promise as a tool for increasing leaders' effectiveness in implementing culturally sensitive planned change (Bate et al., 2000; Wilkins & Dyer, 1988). The model integrates insights from existing content and process models of organizational change and is compatible with extant process models, permitting leaders to account for the impact of organizational culture in implementing all types of change (de Caluwé; & Vermaak, 2003). The OC³ Model fills a gap between these existing content and process models of organizational change, explicating the mechanisms that often impede leaders' efforts to bring about higher order change (Bartunek & Moch, 1987).

The utility of the OC³ Model as a research paradigm for analyzing the moderating influence of organizational culture at each stage of a planned change process has been demonstrated in preliminary trials at three research universities beyond the target institution (Latta, 2006). Longitudinal studies are needed to affirm the utility of the model as a practical tool for guiding leaders' decision making throughout the stages of planning and implementing change. Whereas the utility of the model has been provisionally established, the theoretical precepts embodied in the OC³ Model are subject to subsequent verification. The following theoretical implications have yet to be empirically tested.

Cultural Influence Has Valence

Some organizational change efforts reinforce existing cultural norms and values; others have the effect of altering cultural tenets. The OC³ Model designates four points in the process of effecting change in which organizational culture may exert either positive or negative influence. Differential valence is recognized in (a) the intent embodied in change initiatives and their associated implementation strategies, (b) the mediating influence of culture on change implementation, (c) the moderating impact of culture on the outcomes of a change agenda, and (d) the collateral effects of change on organizational culture. The recognition of valence at each of these points in the OC³ Model is not to say that anything goes; rather, it serves to alert leaders and change agents to the importance of discerning and accounting for the pluralistic nature of culture in leading organizational change (Martin, 2002).

Dualistic Impact and Simultaneity

The OC³ Model embodies the notion that planned change simultaneously holds opposing implications for various dimensions of an organization's culture. A single change initiative may simultaneously bolster some aspects of culture and alter others. The cumulative impact of these opposing influences will determine the direction and degree to which organizational culture will change (Lord & Emrich, 2001). The OC³ Model facilitates examination of the differential influence of culture at every stage of implementation so that leaders can make informed decisions throughout the process, preserving treasured elements of institutional culture by modifying the change initiatives or seeking consensus about those aspects of institutional culture that must be altered to attain a preferred future for the organization. The OC3 Model provides a mechanism for achieving this reflexive awareness.

Subcultural Variation

The OC³ Model also affords leaders a mechanism for taking into account variations among subcultures, illuminating when alternative implementation strategies are needed to effect change in different parts of an organization. Profiling institutional subcultures provides a way to anticipate potential sources of resistance in different organizational units. Armed with knowledge of cultural differentiation (Martin, 2002), leaders are able to align change strategies with aspects of organizational culture that either reinforce or create resistance to a change initiative. The OC³ Model predicts that the success of change implementation can be traced to a leader's effectiveness navigating these sources of cultural variation.

Tacit Cultural Dynamics

Beyond accounting for those aspects of culture that may be explicitly accounted for during the process of implementing change, the OC³ Model draws attention to the tacit influences of organizational culture on change implementation. Tacit knowledge encompasses the implicit rules by which members of a culture-sharing group govern their decision making and interpersonal interactions (Astin & Astin, 2000). Tacit elements of culture not taken into account during implementation may either facilitate or create resistance to change. These forces of facilitation and resistance ultimately determine the impact of the change initiative on the organization and its culture. Theoretical, the OC³ Model predicts that the cumulative effect of these tacit elements of culture determines the extent to which change will be transactional (continuous) or transformative (discontinuous) (Burke, 2008).

Theoretical Predictions

The OC³ Model provides a process-based approach to considering the implications of cultural knowledge within the context of orchestrating organizational change. Theoretical propositions and implications derived from this model provide a basis for further research. An initial set of predictions based on the theoretical constructs outlined above provides a basis for further research with respect to each stage of change delineated by the model. Studies designed to test these predictions will promote leaders' effective use of the OC3 Model to effect organizational change.

Implications for Leadership and **Organizational Studies**

The OC³ Model delineates the ways in which cultural dynamics differentially influence the process of effecting organizational change at every stage of implementation. According to this model of change, knowledge of organizational culture is a prerequisite for effective leadership. The inductive means by which leaders ordinarily acquire cultural knowledge renders it largely implicit (Schein, 2004). Nevertheless, tacit knowledge influences leadership decisions, thought processes and behavior (Sternberg, 2000). Individual differences in sensitivity to tacit knowledge have been linked to leadership effectiveness (Hedlund et al., 2003; Taylor, 2005). Leaders can use the OC³ Model to raise awareness and increase sensitivity to the moderating influence of organizational culture at every stage of change implementation. Implications of the fundamental connections between cultural knowledge and organizational change embodied in the OC³ Model are explored below as a tool for (a) facilitation of organizational sensemaking, (b) resolving organizational immunity to change, and (c) fostering leadership development.

Organizational Sensemaking

Weick (2001) asserted that sensemaking is the primary function served by organizations in complex societies, enabling individuals to ascribe meaning to events in organizational settings. Sensemaking has since been localized by scholars within the mechanisms of organizational culture, acknowledging the primary function of culture in determining the meaning accorded shared experiences in institutional settings (Alvesson, 2002; Shultz, 1995; Tierney, 2008).

The mechanisms of meaning construction embodied in organizational culture provide the means by which individuals extract "common sense" out of shared experience (Drath & Palus, 1994). These sensemaking conventions are transmitted inductively among members of organizations and perpetuated through tacit processes (Schein, 2004). From a sensemaking perspective, the primary utility of cultural knowledge is to enhance leaders' understanding of how meaning is assigned to events in organizational life.

Implementing organizational change is a process that can be usefully informed by understanding how members of an organization ascribe meaning to shared experience, including perceptions of leaders' efforts to influence behavior through the introduction of change initiatives (Landau & Drori, 2008). The OC³ Model provides a tool for leaders to gain insight into the ways in which sensemaking functions within the context of organizational culture to influence the process of implementing change. The model reveals the influence of tacit processes of sensemaking embodied in cultural dynamics and delineates the ways in which they influence the process of implementing organizational change.

The OC³ Model embodies the fundamental assumption that these processes of sensemaking that undergird organizational culture are knowable to leaders through careful and ongoing analysis and interpretation of cultural artifacts. Institutional symbols, rituals, and behavioral norms exhibited by members of an organization may be probed continuously for clues to the underlying values, beliefs, and basic assumptions they evince (Demers, 2007). The potential and observed influence of change on these cultural tents may be examined by leaders, discussed openly, and considered dispassionately in relation to the objectives embodied in a vision for change, rendering change a process governed by increasing self-knowledge and deliberate, informed decision making rather than being implicitly controlled by tacit knowledge (Hansen, Ropo, & Sauer, 2007). By using the OC³ Model, leaders can help organizations become more conscious, self-aware, discerning, and deliberative in choosing how to function purposefully in complex, dynamic environments (Day & Lance, 2004).

Resolving Organizational Immunity to Change

The OC³ Model provides a framework for laying bare the underlying cultural dynamics preventing organizational change efforts from being successful. In the context of the OC³ Model, change initiatives serve as trigger events providing a lens through which to reveal elements of organizational culture that ordinarily remain tacit (Avolio, 2004). By raising awareness of the underlying cultural dynamics that result in resistance to change, the OC3 Model can serve as a trigger for surfacing and resolving the competing cultural commitments inhibiting the implementation of planned change (Kegan & Lahey, 2001). Within this framework, the emergence of resistance provides an opportunity for gaining insight into the cultural norms, values, and beliefs that serve to anchor portions of the organization in existing patterns of behavior, attitudes, and motivations.

Until they are objectified, tacit cultural commitments hold organizations subject to their influence. Overcoming this institutional immunity to change involves identifying and resolving conflicts between existing cultural commitments and those embedded in the change initiatives (Kegan & Lahey, 2001). Organizational leaders gain power to the extent they are able to make tacit elements of culture conscious and hold them as object in institutional decisionmaking processes (Kegan, 1994). Once rendered explicit, institutional decision makers can consider their influence and take actions that either reinforce or modify the cultural tenets implicated by the change initiatives.

The OC³ Model provides a tool for revealing the underlying cultural commitments that mire organizations in resistance to change, keeping them from moving forward. Leaders can then facilitate a process of resolving the competing cultural commitments influencing the success of planned change initiatives so that new levels of systemic integration can be achieved. This approach is consistent with the principles of double-loop learning in organizations (Argyris, 1976) and extends previous efforts to apply those principles to understanding organizational change (Curry, 1992).

Leadership Development

The OC³ Model holds potential as a tool for developing leadership capacity by providing a mechanism for navigating effectively tacit dimensions of organizational life. Indeed, the central utility of the OC³ Model lies in its potential to promote leadership development by opening a window onto the unconscious life of an organization and its leadership (Diamond, 1993). Developing as a leader requires a willingness to embrace self-revelation (Coutu, 2004; Day & Harrison, 2007; Kilburg, 2006). The power of the OC³ Model lies in its potential to reveal the extent to which leaders are culturally embedded so that they can make better informed and effective decisions. The OC³ Model provides a framework to help leaders increase effectiveness by gaining insight into the limitations of their own tacit knowledge of organizational culture. Using the OC³ Model, it is possible to discover ways in which a leader is limited by his or her own embeddedness in a structure of knowing that is culturally determined and potentially at odds with the values and basic assumptions underlying other subcultures within the institution. Leaders can use the OC³ Model to draw attention to aspects of organizational culture that formerly operated outside the realm of conscious awareness. Data from the target institution illustrate how the manifestation of resistance, emotionally charged exchanges between leaders and followers, or failed change initiatives point to tacit elements of culture or subcultural dynamics where greater understanding may be warranted (Latta, 2006).

Conclusions

Change resides at the heart of leadership. Indeed nearly two decades ago, Bass (1990) defined leaders as "agents of change - persons whose acts affect other people more than other people's acts affect them" (p. 19). Organizational culture is one of many situational moderators now considered essential in determining leadership effectiveness (Bass, 2008). Leaders are recognized as exerting a dominant influence on the emergence and direction of cultural norms, values, and basic assumptions in institutional settings (Schein, 2004). Yet culture is ultimately held and maintained collectively by all members of an organization, and it acts as a moderating variable with respect to the implementation of change (Bate et al., 2000; Burke, 2008). Change agendas can be thwarted by resistance rooted in existing cultural tenets, although cultural facilitation of change initiatives is similarly possible (Wilkins & Dyer, 1988).

Hatch (2006) asserted that the symbolic-interpretive approach to cultural theory "offers a way to carve out a middle ground" (p. 207) in this debate over whether organizational culture shapes or is shaped by its leaders. She argued that leaders have the potential to affect organizational culture, but members of the organization hold the power to determine the extent to which that potential is realized. Understanding how cultural dynamics both influence and are influenced by efforts to implement organizational change has thus become an essential leadership competency.

The OC³ Model advances theoretical perspectives on these bidirectional influences of organizational culture on change implementation and provides a road map charting the points in the process of implementing change where consideration of the impact of organizational culture contributes to effective leadership. The theoretical propositions underlying the OC³ Model invite further research on the culturally embedded processes of sensemaking that determine the success of efforts to lead organizational change. The model calls on leaders to identify those aspects of organizational culture targeted for modification as well as those dimensions intended to be preserved or strengthened. This approach forestalls the perception that change requires an all-out overhaul of cherished values and familiar ways of operating while acknowledging those aspects of organizational behavior that will be expected to undergo transformation. Because leaders often know what needs to change in their organizations but fall short of being able to bring about higher order change, those committed to acquiring and using cultural knowledge will find the OC3 Model a useful guide throughout the process of facilitating organizational change.

The OC³ Model also emphasizes the pervasive influence of tacit dimensions of culture on both the process and outcomes of change (Demers, 2007). This view of organizational change challenges leaders to be constantly mindful of the multidimensional nature of organizational culture and to continually adjust for its unanticipated influence. Using the OC³ Model can become an effective developmental tool for leaders, raising self-reflective awareness of unconscious dimensions of organizational life and providing an impetus for resolving culturally embedded immunity to change (Diamond, 1993, 2008). The OC3 Model can be used to foster a continuously expanding awareness of organizational life and an increasing consciousness of factors outside a leader's limited frame of reference that influence the course of change.

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