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TOWARD A THEORY OF PARADOX: A DYNAMIC EQUILIBRIUM MODEL OF ORGANIZING

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As organizational environments become more global, dynamic, and competitive, contradictory demands intensify. To understand and explain such tensions, academics and practitioners are increasingly adopting a paradox lens. We review the paradox literature, categorizing types and highlighting fundamental debates. We then present a dynamic equilibrium model of organizing, which depicts how cyclical responses to paradoxical tensions enable sustainability—peak performance in the present that enables success in the future. This review and the model provide the foundation of a theory of paradox.

Organizing raises multiple tensions, such as collaboration-control (Sundaramurthy & Lewis, 2003), individual-collective (Murnighan & Conlon, 1991), flexibility-efficiency (Adler, Goldoftas, & Levine, 1999), exploration-exploitation (Smith & Tushman, 2005), and profit-social responsibility (Margolis & Walsh, 2003). As environments become more global, fast paced, and competitive, and as internal organizational processes become more complex, such contradictory demands become increasingly salient and persistent (Lewis, 2000). Leaders' responses to these tensions may be a fundamental determinant of an organization's fate (Quinn, 1988).

Contingency theory offers one response to tensions. Assuming that organizational systems are most effective when they achieve alignment or fit among internal elements and with the external environment, this approach explores conditions for selecting among competing demands. Early contingency theory from the late 1960s (i.e., Lawrence & Lorsch, 1967; Woodward, 1965) inspired decades of research exploring how contexts influence the effectiveness of opposing alternatives. For example, contingency theory explores the conditions that drive choices between exploratory and exploitative (i.e., Tushman & Romanelli, 1985), cooperative and competitive (Deutsch, 1968), mechanistic and organic (Burns & Stalker, 1961), and centralized and decentralized (Siggelkow & Levinthal, 2003).

Paradox studies adopt an alternative approach to tensions, exploring how organizations can attend to competing demands simultaneously. Although choosing among competing tensions might aid short-term performance, a paradox perspective argues that long-term sustainability requires continuous efforts to meet multiple, divergent demands (Cameron, 1986; Lewis, 2000). Discussions of paradox from the late 1980s (Cameron & Quinn, 1988; Smith & Berg, 1987) motivated research in such domains as innovation (Andriopoulos & Lewis, 2009; Tushman & O'Reilly, 1996), change (Seo & Creed, 2002), communication and rhetoric (Jarzabkowski & Sillince, 2007; Putnam, 1986; Trethewey & Ashcraft, 2004), identity (Fiol, 2002), and leadership (Smith & Tushman, 2005).

As an alternative to contingency theory, the paradox literature has become increasingly crowded. Yet, even so, insights from a paradox perspective are limited by fundamental debates about the nature and management of paradoxical tensions. What is—and is not—a paradox?

We appreciate the provocative and engaging conversations with Jean Bartunek, Mike Beer, Kim Cameron, Jeffrey Ford, Paula Jarzabkowski, Joshua Margolis, Robert Quinn, Mike Tushman, and Andy Van de Ven that helped launch this article. We thank Amy Ingram for her research assistance and the participants of the 2010 European Group for Organization Studies (EGOS) Subtrack on Paradox for their feedback. Finally, we appreciate the valuable comments and advice from guest editor Quy Huy and three anonymous reviewers.

Are tensions that underlie paradox inherent in organizational systems, or are they socially constructed? Can leaders and organizations resolve tensions, or must they accept their persistence? And, most critical to leaders, how do varied management strategies for approaching paradox impact organizational outcomes?

Our goal is to sharpen the focus of a paradox lens, thereby enabling scholars to more effectively apply this perspective to organizational tensions. To do so, we focus on two main objectives. First, we review and synthesize a vast array of existing paradox literature. We define paradox as contradictory yet interrelated elements that exist simultaneously and persist over time. This definition highlights two components of paradox: (1) underlying tensions—that is, elements that seem logical individually but inconsistent and even absurd when juxtaposed—and (2) responses that embrace tensions simultaneously (Lewis, 2000).[1] Based on our review of the literature, we propose an organizing framework for categorizing paradoxical tensions while identifying points of divergence across varied studies. This first section of our paper contributes a synthesis of the paradox literature, highlighting its breadth and depth and surfacing fundamental debates.

Our second objective is to integrate existing literature and offer responses to these fundamental debates. We clarify the distinctions between our definition of paradox and similar constructs, such as dilemmas and dialectics. We propose a dynamic equilibrium model of organizing, which suggests that tensions are inherent and persistent and depicts how purposeful and cyclical responses to paradox over time enable sustainability—peak performance in the present that enables success in the future. This section of our article contributes an integrative model with explicit propositions that clarify underlying assumptions, provide a platform for ongoing research, and propose a means for long-term sustainability. Together, this review and the model provide the foundations of a paradox theory, which can offer clarity, provoke discussion, and fuel further studies of organizational paradox.

[1] Reflecting the dominant use of paradox, we focus on underlying tensions as dualities between two elements (Ford & Backoff, 1988). Later in our discussion we explore how these ideas might expand to relate to more complex trialectics (Ford & Ford, 1994) or pluralistic tensions (Jarzabkowski & Sillince, 2007).

ORGANIZATIONAL PARADOX: CATEGORIZATION AND DEBATES

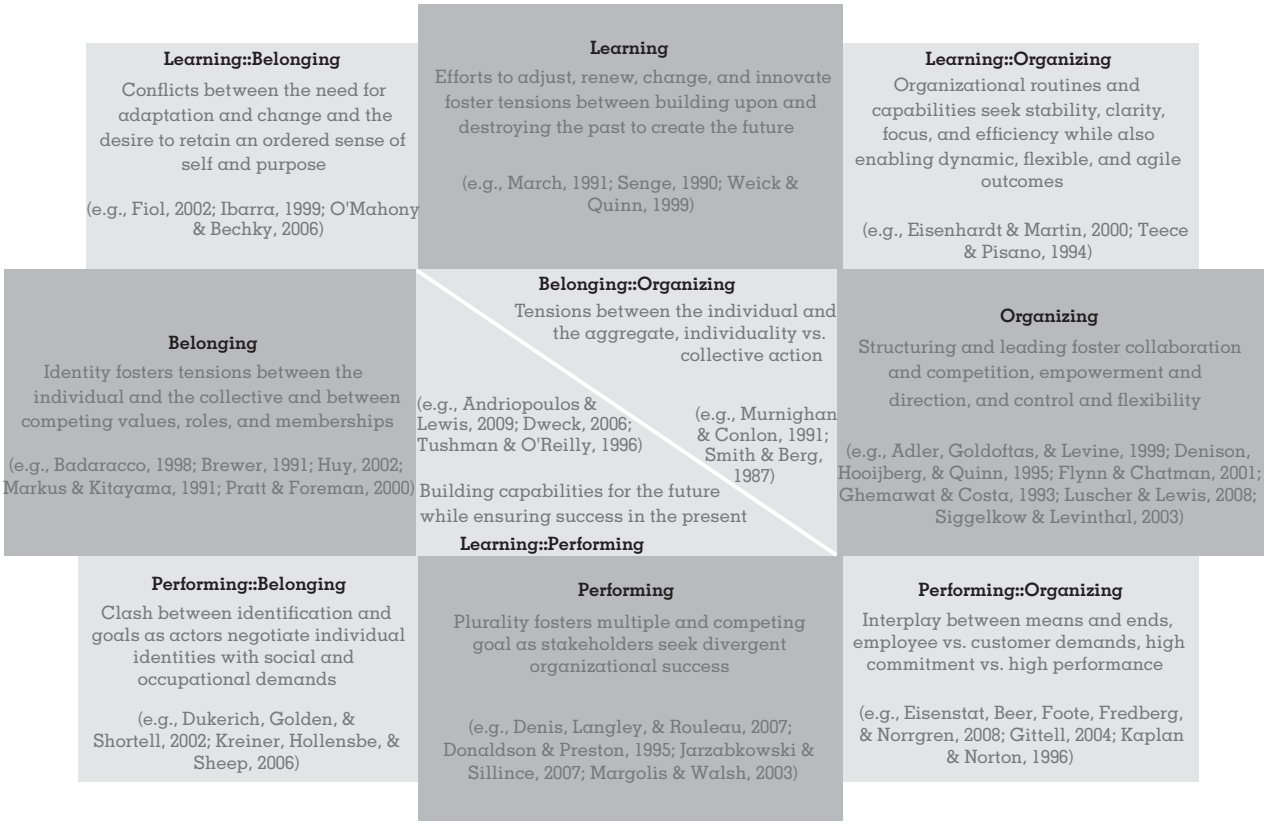
To examine the paradox perspective, we surveyed studies in the past twenty years across twelve management journals.[2] We found that scholars have increasingly adopted a paradox perspective, with accumulating studies spanning organizational phenomena and levels of analysis. Within our sample we found 360 articles focused on organizational paradox. The number of these articles grew at an average rate of 10 percent per year. In addition, several special issues in journals beyond our sample attended to organizational paradox (e.g., *Journal of Organizational Behavior,* volume 28, issue 5; *Journal of Organizational Change Management,* volume 19, issue 4). Even as research adopting a paradox perspective has expanded dramatically, this review highlights the lack of conceptual and theoretical coherence. We synthesize the literature through an organizing framework that categorizes paradoxes while highlighting key theoretical debates around definitions, assumptions, and management strategies.

Organizational Paradoxes: Categorizing Diverse Applications of a Paradox Perspective

We catalog paradoxes of belonging, learning, organizing, and performing. This framework builds from previous work—namely, Lewis's

[2] We focused on the years 1989–2008, which include the twenty years following publication of Cameron and Quinn's influential book, *Paradox and Transformation: Toward a Theory of Change in Organization and Management,* in 1988. We surveyed four journals illustrative of U.S. scholarship (*Academy of Management Journal, Academy of Management Review, Administrative Science Quarterly*, *Organization Science*), four indicative of European scholarship (*Human Relations*, *Journal of International Business Studies*, *Journal of Management Studies*, *Organization Studies*), and four providing a practitioner focus (*Academy of Management Executive*, *California Management Research*, *Harvard Business Review*, *Long Range Planning*). We identified all articles that used the words paradox, contradiction, tension, duality, polarity, and/or dialectic in their titles, abstracts, or keywords. We analyzed the abstracts, examining full articles when unsure, to confirm that paradoxical tensions and a both/and focus were central to the work.

FIGURE 1
Categorization of Organizational Tensions



(2000) review, which applied the first three categories, and Luscher and Lewis's (2008) inductive action research, which identified the latter three. Further, these categories mirror those identified in the early paradox research, reflecting Quinn's (1988) competing values (learning-adhocracy, belonging-clan, organizing-hierarchy, performance-market).[3] We identify exemplars that illustrate each category, as well as tensions at their intersections (see Figure 1).

The four categories of paradox represent core activities and elements of organizations: learning (knowledge), belonging (identity/interpersonal relationships), organizing (processes), and performing (goals). *Learning paradoxes* surface as dynamic systems change, renew, and innovate. These efforts involve building upon, as well as destroying, the past to create the future (O'Reilly & Tushman, 2008). Such tensions reflect the nature (Abernathy & Clark, 1985; Ghemawat & Costa, 1993) and pace (Weick & Quinn, 1999) of engaging new ideas, including tensions between radical and incremental innovation or episodic and continuous change.

Complexity and plurality drive *belonging paradoxes*, or tensions of identity. These tensions arise between the individual and the collective, as individuals (Brewer, 1991; Kreiner, Hollensbe, & Sheep, 2006) and groups (Smith & Berg, 1987) seek both homogeneity and distinction. At the firm level, opposing yet coexisting roles, memberships, and values highlight tensions of belonging (Badaracco, 1998; Huy, 2002; Markus & Kitayama, 1991; Pratt & Foreman, 2000). Golden-Biddle and Rao (1997), for instance, found that competing identities emerge among not-for-profit board members, creating conflict and ambiguity regarding strategic action.

Organizing paradoxes surface as complex systems create competing designs and pro-

[3] We thank an anonymous reviewer for highlighting the similarities of this categorization to Quinn's (1988) framework.

cesses to achieve a desired outcome. These include tensions between collaboration and competition (Murnighan & Conlon, 1991), empowerment and direction (Denison, Hooijberg, & Quinn, 1995), or routine and change (Flynn & Chatman, 2001; Gittell, 2004). For example, manufacturing depends on systems that can enable control and flexibility (Adler et al., 1999; Osono, Shimizu, & Takeuchi, 2008).

Performing paradoxes stem from the plurality of stakeholders and result in competing strategies and goals. Tensions surface between the differing, and often conflicting, demands of varied internal and external stakeholders (Donaldson & Preston, 1995). As an illustration, corporate social responsibility highlights a double bottom line, in which performance depends on financial and social goals (Margolis & Walsh, 2003).

Tensions operate between as well as within these categories. Learning and performing spur tensions between building capabilities for the future while ensuring success in the present (Andriopoulos & Lewis, 2009; Tushman & O'Reilly, 1996; Van Der Vegt & Bunderson, 2005). Related studies examine the inconsistent mindsets (Dweck, 2006) and norms (Ghoshal & Bartlett, 1994; Gibson & Birkinshaw, 2004) that support these contradictory efforts. Tensions between learning and belonging reflect conflicts between the need for change and the desire to retain a developed sense of self and purpose. Organizational identities often become enablers and obstacles to development and change (Dutton & Dukerich, 1991; Zilber, 2002). Individuals face this tension as they assume new roles (Ibarra, 1999; O'Mahony & Bechky, 2006), while firms embody such contradictions as they mature from entrepreneurial to more established stages (Fiol, 2002). Organizing and learning tensions surface in organizational capabilities that seek focus and efficiency while also enabling change and agility. The demand for dynamic capabilities creates tensions in seeking to continuously renew and alter stable routines (Teece & Pisano, 1994). For example, Eisenhardt and Martin (2000) argued that for capabilities to be truly dynamic, the routines themselves must be flexible and versatile.

Tensions between organizing and performing can be summarized by the interplay between means and ends or process and outcome, apparent in conflicts between meeting employee and customer demands (Gittell, 2004) and between seeking high commitment and high performance (Eisenstat, Beer, Foote, Fredberg, & Norrgren, 2008). Belonging and performing tensions emerge when identification and goals clash, often apparent in efforts to negotiate unique individual identities with social or occupational demands (e.g., Dukerich, Golden, & Shortell, 2002). Kreiner and colleagues (2006) noted this tension as priests grappled with maintaining their sense of self while fulfilling their professional roles. Finally, belonging and organizing efforts intersect via tensions between the individual and the aggregate. Organizing involves collective action and the subjugation of the individual for the benefit of the whole. Yet organizing is most successful when individuals identify with the whole and contribute their most distinctive personal strengths (Murnighan & Conlon, 1991; Smith & Berg, 1987).

These reviewed studies highlight the richness and scope of a paradox perspective. Conflicting yet interrelated elements have been identified across a range of organizational phenomena and across differing levels of analysis. Exemplars articulate tensions at the level of the individual (Markus & Kitayama, 1991), dyad (Argyris, 1988), group (Smith & Berg, 1987), project (van Marrewijk, Clegg, Pitsis, & Veenswijk, 2008), and organization (Cameron & Quinn, 1988). Moreover, the same tensions can exist across each of these levels. For example, tensions between learning and performance surface at the level of the individual (Dweck, 2006), group (Van Der Vegt & Bunderson, 2005), top management team (Bunderson & Sutcliffe, 2003), and firm (Ghoshal & Bartlett, 1994). Furthermore, paradoxical tensions may be nested, cascading across levels, as the experience at one level creates new challenges at another. For example, organizational efforts to explore and exploit create tensions that are experienced by individual leaders and senior teams (Smith & Tushman, 2005), middle managers (Huy, 2002), and individual employees (Gibson & Birkinshaw, 2004). In their comparative case studies, Andriopoulos and Lewis (2009) identified nested innovation tensions of strategic intent (profit-breakthroughs), of each project's customer orientation (tight-loose coupling), and of designers' own personal drivers (discipline-passion).

Remaining Gaps: Debates in Paradox Research

Our review highlights exemplars that can guide future research, but it also suggests gaps that thwart a more cohesive understanding of paradox and a more unified paradox community. To be more specific, debates swirl around the conceptualization of paradox, the ontological nature of paradoxical tensions, and strategies to respond to these tensions.

The lack of conceptual clarity in this field is evident in the varying language adopted to describe tensions, including "paradox," "dilemma," dichotomy," and "dialectic." Moreover, a number of organizational fields refer to simultaneously attending to contradictory tensions without using the term paradox. Ambidexterity scholars, for instance, explore underlying tensions associated with innovation (Andriopoulos & Lewis, 2009) and call for firms and their leaders to engage in exploration and exploitation simultaneously (Tushman & O'Reilly, 1996). Organizational identity scholars propose that hybrid identity organizations embed multiple, inconsistent identity types (Albert & Whetten, 1985), and they explore strategies for attending to competing identities simultaneously (Fiol, Pratt, & O'Connor, 2009; Pratt & Foreman, 2000). Institutional theorists recognize that organizations embed multiple institutional logics, and they explore responses to competing logics simultaneously (Kraatz & Block, 2008). At a more micro level, work-family researchers explore the integration and interaction of competing demands (Ilies, Wilson, & Wagner, 2009; Rothbard, 2001). Greater conceptual clarity could enable more fruitful and provocative discussion across paradox contexts.

A second challenge in the literature stems from an ontological debate that differentiates paradoxical tensions either as an inherent feature of a system or as social constructions that emerge from actors' cognition and rhetoric. Clegg (2002) described the divergence between views of paradoxes as material—inherent in the external world—or representations—social constructions of our lived experiences (Ashcraft, Kuhn, & Cooren, 2009). Material tensions are understood to be embedded in complex human systems, such as firms and their varied subgroups (Cameron & Quinn, 1988; Smith & Berg, 1987). These systems are inherently paradoxical since they are defined by boundaries between self and other, individuality and collaboration, and ingroup and outgroup. In contrast, a social construction view presumes that individuals situate tensions within a particular time or space (Poole & Van de Ven, 1989) or create them through cognitive frames or dialogical mixed messages (Argyris, 1988; Putnam, 1986). In their qualitative study, El-Sawad, Arnold, and Cohen (2004) examined how actors construct paradoxical tensions, such as one's opposing yet interconnected roles as a loyal manager and a grassroots employee, and then use rhetoric to reduce their awareness of doing so. They called such avoidance "doublethink." This ontological disparity fractures the literature and has implications for strategies to manage paradox through acceptance or resolution, another debate.

Advocated responses to paradox diverge between acceptance and resolution strategies. Poole and Van de Ven (1989) identified four strategic responses: (1) acceptance, keeping tensions separate and appreciating their differences; (2) spatial separation, allocating opposing forces across different organizational units; (3) temporal separation, choosing one pole of a tension at one point in time and then switching; and (4) synthesis, seeking a view that accommodates the opposing poles. In this frequently used typology, the first strategy focuses on acceptance, whereas the last three seek to resolve the underlying tensions.

Acceptance encourages actors to embrace or "live with" paradox (Clegg, Cuhna, & Cuhna, 2002; Lewis, 2000). Living with paradox implies that actors shift their expectations for rationality and linearity to accept paradoxes as persistent and unsolvable puzzles. Such strategies may be passive or proactive. Murnighan and Conlon (1991), for instance, found that high-performing string quarters "play through" rather than confront tensions, thereby avoiding potentially disastrous conflicts. Others, however, stress that acceptance is a powerful, proactive strategy, reducing defensiveness to unleash enhanced performance (Cameron, 1986). Emotions and cognition play key roles in such strategies, which call for actors to engage anxiety and thereby face challenges surfaced by tensions (Luscher & Lewis, 2008; Vince & Broussine, 1996). According to Beech, Burns, de Caestecker, MacIntosh, and MacLean (2004), acceptance entails opening ten-

sions to discussion to foster more creative considerations.

In contrast, other strategies seek resolution. In this case resolution does not imply eliminating a tension but, rather, finding a means of meeting competing demands or considering divergent ideas simultaneously. While Poole and Van de Ven (1989) suggest spatial separation, temporal separation, and synthesis, others explore cognitive shifts that reframe the relationship between polarized elements (Bartunek, 1988), clarifying mixed messages that invoke contradiction (Argyris, 1988), or metacommunicating about tensions to identify both/and possibilities (Seo, Putnam, & Bartunek, 2004). It is with these debates in mind that we propose an integrative model.

DYNAMIC EQUILIBRIUM: AN INTEGRATIVE MODEL

We respond to debates about the nature of and managerial responses to paradoxical tensions by building a model that (1) seeks conceptual clarity, (2) describes both the inherent and socially constructed features of organizational tensions, and (3) integrates management strategies of acceptance and resolution. While existing studies address a specific paradox or identify particular elements of paradox, we integrate shared understandings into a more holistic theoretical model. The metaphor of dynamic equilibrium highlights the model's key features—the persistence of conflicting forces and purposeful, cyclical responses over time that enable sustainability. Static equilibrium denotes a system at steady state, when all components are at rest. When episodic action creates an imbalance, the system responds to regain equilibrium. Dynamic equilibrium, in contrast, assumes constant motion across opposing forces. The system maintains equilibrium by adapting to a continuous pull in opposing directions. In biological terms, cells achieve a dynamic equilibrium state of homeostasis when molecules flow in and out of the cell at an equal rate. In thermodynamics a dynamic equilibrium involves simultaneous and vigorous forward and backward reactions. In a dynamic organizational system the role of leadership is to support opposing forces and harness the constant tension between them, enabling the system to not only survive but continuously improve (Nonaka & Toyama, 2002; Teece & Pisano, 1994; Weick & Quinn, 1999).

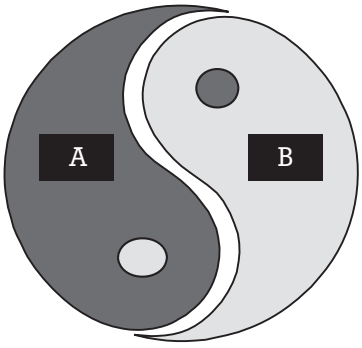
Conceptual Clarity: Distinguishing Among Organizational Tensions

Building the foundation of an integrative model requires conceptual clarity. To identify key elements of paradox, we describe similarities and differences between paradoxical tensions and those labeled as dilemmas or dialectics. Figure 2 illustrates these similarities and distinctions.

Leveraging existing literature, we define paradox as contradictory yet interrelated elements that exist simultaneously and persist over time. Such elements seem logical when considered in isolation but irrational, inconsistent, and even absurd when juxtaposed (see Lewis, 2000). The distinguishing characteristics of paradox are illustrated by the Taoist symbol of yin yang. First, paradox denotes elements, or dualities, that are oppositional to one another yet are also synergistic and interrelated within a larger system (Cameron & Quinn, 1988; Voorhees, 1986). These dualities are reflected as A and B in Figure 2. Boundaries separating these elements highlight their distinctions, reinforced by formal logic that encourages either/or thinking and accentuates differences. The external boundary integrates the overall system and highlights synergies. Yet this external boundary also binds and juxtaposes opposing elements and amplifies their paradoxical nature, creating a dynamic relationship between dualities and ensuring their persistence over time.

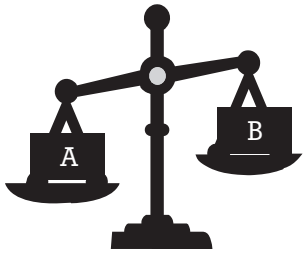
Distinguishing paradoxes from similar organizational tensions, such as dilemmas and dialectics, highlights the core characteristics of paradox. A dilemma denotes a tension such that each competing alternative poses clear advantages and disadvantages (McGrath, 1982). Resolving the dilemma involves weighing pros and cons. For example, a classic "make versus buy" decision may pose a dilemma when both options have upsides and downsides. In contrast, a dialectic denotes an ongoing process of resolving tensions through integration. In this case A and B are contradictory (thesis and antithesis) and resolvable through their merger into a combined element (synthesis). Yet a new tension eventually surfaces as the resulting synthesis becomes a new thesis, C, and eventually

FIGURE 2
Distinguishing Among Organizational Tensions



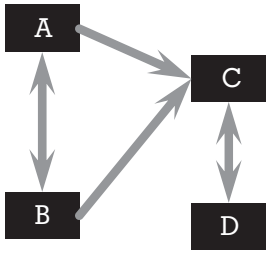
Paradox
Contradictory yet interrelated elements (dualities) that exist simultaneously and persist over time; such elements seem logical when considered in isolation, but irrational, inconsistent, and absurd when juxtaposed

Dualities (A and B) — Opposites that exist within a unified whole
- internal boundary creates distinction and highlights opposition
- external boundary encourages synergies by constructing the unified whole



Dilemma
Competing choices, each with advantages and disadvantages

Paradoxical when options are contradictory and interrelated such that any choice between them is temporary and tension will resurface



Dialectic
Contradictory elements (thesis and antithesis) resolved through integration (synthesis), which, over time, will confront new opposition

Paradoxical when elements are both contradictory and interrelated. Because synthesis stresses their similarities, neglecting valued differences, integration is temporary. Need for disparate qualities persists such that synthesis gradually favors one over the other (i.e., C and D retain core characteristics of A and B, respectively)

spurs an antithesis, D (Bledow, Frese, Anderson, Erez, & Farr, 2009; Nonaka & Toyama, 2002).

Conceptual confusion, however, emerges as dilemmas, dialectics, and paradoxes overlap. A dilemma may prove paradoxical, for instance, when a longer time horizon shows how any choice between A and B is temporary. Over time the contradictions resurface, suggesting their interrelatedness and persistence. As Cameron and Quinn (1988) warned, too often actors impose an either/or choice to treat tensions as dilemmas that could more fruitfully be approached from a both/and perspective. In their action research Luscher and Lewis (2008) found that pushing managers to explore dilemmas often surfaced their paradoxical nature. The more managers stressed the positive of one side, the more this accentuated the opposite. For example, in the tension between delegation and control, the more managers discussed the value of delegation to empower employees, the more this highlighted the need for control to ensure efficient execution.

Similarly, dialectics prove paradoxical when the contradictory and interrelated relationship between thesis and antithesis persists over time. Synthesis stresses the similarities between elements. But by neglecting valued differences, this integration is short-lived. The need for their disparate qualities remains such that any synthesis gradually favors one element over the other (i.e., C and D retain core features of A and B, respectively). Clegg proposed that paradoxes and dialectics become synonymous when "a thesis does not exist despite its antithesis, but because of it. Each pole of the dialectic needs the other to sustain its presence" (2002: 29). In their action research Beech et al. (2004) offered an example in the health care industry, a field pulled in opposing directions by demands

for medical and managerial skills. In their study a synthesis emerged through the educational merger of medical and business degrees. Yet the fundamental duality persisted. Such hybrid professionals gradually became focused on their medical peers and roles, eventually intensifying the need for greater business acumen.

The well-studied tension between exploration and exploitation illustrates the nature of paradox and its contrast with dilemmas and dialectics. As March (1991) first articulated, exploring and exploiting pose conflicting strategies between search and refinement, risk taking and efficiency, and variation and choice. These strategies are associated with inconsistent managerial cognitions (Gavetti & Levinthal, 2000; Gilbert, 2006), organizational contexts (Flynn & Chatman, 2001; Ghoshal & Bartlett, 1994; Gibson & Birkinshaw, 2004), managerial skills (Virany & Tushman, 1986), and rates of learning (Miller, Zhao, & Calantone, 2006; Taylor & Greve, 2006), and they compete for organizational resources (Gupta, Smith, & Shalley, 2006).

Initially, researchers and managers treated this challenge as a dilemma, seeking to identify contingencies that separate exploration and exploitation temporally or spatially. For example, in their punctuated equilibrium model Tushman and Romanelli (1985) assume that stability and flexibility occur during different time periods and that leadership should enable shifts over time. Alternative approaches suggest exploring and exploiting in different structures, where established firms continue to host exploitation activities and allocate exploration to internal corporate ventures (Burgelman, 2002) or spin-off entities (Rosenbloom & Christensen, 1994). Others treat exploration and exploitation as a dialectic, seeking to identify the synergies that emerge when new ideas, skills, and strategies are integrated along with the old (Bledow et al., 2009; Farjoun, 2010).

In contrast, recent ambidexterity research has adopted a paradox lens, stressing that overall organizational success depends on exploring and exploiting simultaneously (Gibson & Birkinshaw, 2004; O'Reilly & Tushman, 2008; Raisch & Birkinshaw, 2008). Even as these strategies compete for resources in the short term, they are mutually reinforcing to enable long-term success (He & Wong, 2004). Exploration and exploitation reinforce one another through their interwoven support of organizational learning (Andriopoulos & Lewis, 2009). Without exploration, there is no organizational knowledge to exploit. Likewise, without exploitation, firms lack the foundational knowledge that enables absorptive capacity and fuels experimentation. Ambidexterity creates demands for senior leadership to support these contradictory strategies simultaneously (Smith & Tushman, 2005).

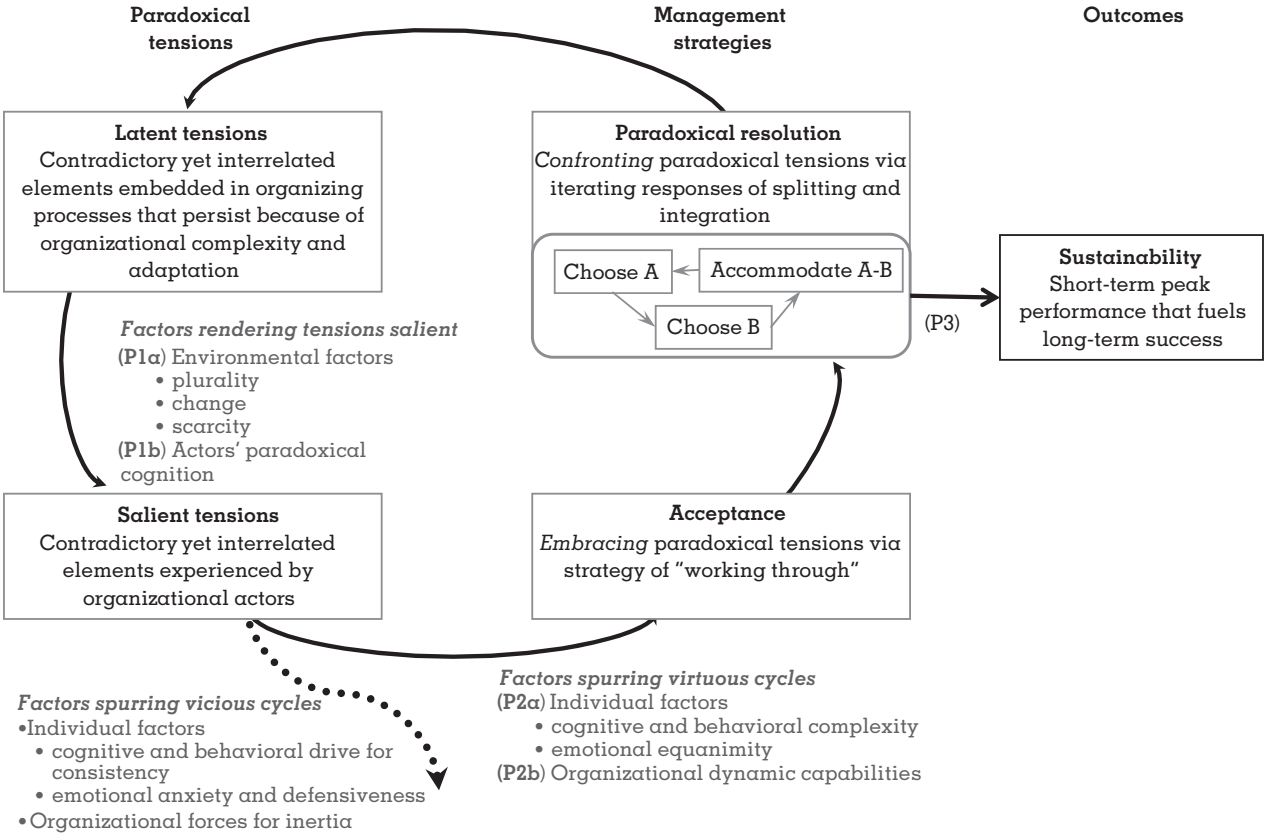
Paradoxical Tensions: Latent and Salient

Building from this conceptual base, we develop a dynamic equilibrium model, shown in Figure 3, that has three primary features: (1) paradoxical tensions that are both latent and salient, (2) responses to tensions that entail iterating among management strategies, and (3) the outcome or impact of management strategies on sustainability.

Researchers have explored paradoxical tensions as either inherent—existing within the system—or socially constructed—created by actors' cognition or rhetoric. We propose that they are both. That is, opposing yet interrelated dualities are embedded in the process of organizing *and* are brought into juxtaposition via environmental conditions. In this way we focus on forces that render latent tensions salient to organizational actors.

Organizations emerge as leaders respond to foundational questions, constructing boundaries that foster distinctions and dichotomies (Ford & Backoff, 1988). In creating organizations, leaders must decide what they are going to do, how they are going to do it, who is going to do it, and in what time horizon. By defining what they are trying to do, the leaders define what they are not trying to do, highlighting goals and strategies and creating *performing* tensions, such as global versus local and socially focused versus financially focused. By defining how they are going to operate, they define how they are not going to operate. Doing so creates *organizing* tensions, such as loosely coupled versus tightly coupled, centralized versus decentralized, and flexible versus controlling. Responding to questions about who is going to do what highlights conflicting identities, roles, and values, creating *belonging* tensions. Finally, as leaders consider the time horizon for their actions, they face *learning* tensions between today and tomorrow or between looking forward and looking backward. Tensions forged through the act of orga-

FIGURE 3
A Dynamic Equilibrium Model of Organizing



nizing are not merely distinct from one another but are also oppositional and relational (Seo et al., 2004). By defining A we create a broad category of not A. The result is a system of interrelated tensions. Clegg and colleagues explained this emergence, noting that "most management practices create their own nemesis" (2002: 491). While actors construct organizations, doing so inherently surfaces material paradoxical tensions.

Tensions emanating through acts of organizing persist because of the complex and adaptive nature of organizational systems. Systems are complex in that they consist of discrete, hierarchically arranged subsystems, spurring spatial tensions between subsystems or between subsystems and the overall system (Cyert & March, 1963). While each subsystem can operate independently, success of the overall system depends on their interdependence (Katz & Kahn, 1966; Simon, 1962; Thompson, 1967). Organizational subsystems, for example, can encompass varied functional domains, each involving distinct practices, cultures, identities, and demographics. R&D engineers might find themselves out of place if dressed in a suit and given sales targets, just as members of a sales force might feel as though they have walked into a science fiction movie if placed in a lab.

Finally, complex systems not only invoke varied goals from internal stakeholders but also must address diverse demands posed by external stakeholders (Donaldson & Preston, 1995; Freeman, 1984). Achieving success requires attention to the often conflicting needs of shareholders, customers, employees, communities, and suppliers. Moreover, the adaptive nature of systems spurs temporal tensions associated with paradoxes of learning and organizing as the demands of today differ from the needs for tomorrow. In response to external and internal stimuli, systems are constantly shifting, learning, and changing (Teece, Pisano, & Shuen, 1997; Tushman & Romanelli, 1985).

Even as tensions persist in organizational systems, they may remain *latent*—dormant, unperceived, or ignored—until environmental factors or cognitive efforts accentuate the oppositional and relational nature of dualities. Latent tensions then become salient—the contradictory and inconsistent nature of the tensions becomes experienced by organizational actors. We propose that environmental factors—namely, plurality, change, and scarcity—render latent tensions salient.

Plurality denotes a multiplicity of views in contexts of diffuse power (Denis, Langley, & Rouleau, 2007). Plurality expands uncertainty and surfaces competing goals and inconsistent processes (Cohen & March, 1974). Likewise, change spurs new opportunities for sensemaking as actors grapple with conflicting short- and long-term needs (Balogun & Johnson, 2004; Luscher & Lewis, 2008) and with competing yet coexisting roles and emotions (Huy, 2002). Last, scarcity involves resource limitations, whether temporal, financial, or human resources. As leaders make choices about how to allocate resources, this exacerbates tensions between opposing and interdependent alternatives (Smith & Tushman, 2005). Taken together, plurality, change, and scarcity challenge our bounded rationality and stress systems. As a result, individuals are more prone to break apart interwoven elements into either/or decisions, practices, and understanding, blurring their interrelatedness.

Studies of paradox frequently note the increasing intersection of these environmental forces. According to Clegg and colleagues (2002), today's business climate is defined by intricate dynamics that heighten awareness of tensions. Plurality, change, and scarcity converge in settings of rising globalization (Bradach, 1997), technological innovation (Iansiti, 1995), and hypercompetition (D'Aveni & MacMillan, 1990), demanding that leaders be more flexible (Teece et al., 1997) while also addressing an array of stakeholder pressures (Donaldson & Preston, 1995). Awareness of divergent organizational purposes is intensified when firms operate across national borders, elevating the importance of managing social as well as economic issues. Moreover, population explosion and urban expansion raise questions about the relationship between businesses and the natural environment (Hoffman & Woody, 2008). Thus, leaders must consider demands of stakeholders beyond their shareholders (Margolis & Walsh, 2003).

For example, Dutton and Dukerich (1991) depicted tensions between the Port Authority's organizational identity as a professional organization with high-quality transportation service and its identity as an altruistic organization with high commitment to the welfare of the region. These tensions became salient when the issue of homelessness created scarcity of resources, demanded attention to multiple stakeholders (customers, employees, community members, and the homeless), and involved organizational change. Exploration-exploitation tensions offer another example. Increased competitive pressures encourage firms to expand both their exploitative and exploratory efforts (Auh & Menguc, 2005). Change further accentuates demands for the flexibility, experimentation, and risk enabled by exploration, even while continuing to exploit for enhanced efficiency (Volberda & Lewin, 2003). These tensions are further pronounced in complex settings in which new technologies do not immediately displace existing ones (Gilbert, 2005). For instance, even as the personal computer eventually cannibalized the mainframe, mainframe revenue continued to grow for over twenty years. Such a setting demands exploiting existing technology, even as firms race to explore new possibilities.

> *Proposition 1a: Latent paradoxical tensions become salient to organizational actors under environmental conditions of plurality, change, and scarcity.*

In addition to external environmental forces, actors' cognition and subsequent rhetoric can also highlight boundaries that draw attention to underlying tensions (Ashcraft et al., 2009). Paradoxical cognition—frames and processes that recognize and juxtapose contradictory demands—make latent tensions more explicit (Smith & Tushman, 2005). These cognitive frames may be spurred by cultural and contextual variables. Keller and Loewenstein (2010), for example, found that Chinese students are more willing to simultaneously engage in both cooperating and competing processes than are American students.

Proposition 1b: Latent paradoxical tensions become salient as actors apply paradoxical cognition.

Managing Tensions: Enabling Vicious and Virtuous Cycles

Roots of vicious cycles. Once rendered salient, paradoxical tensions spur responses. According to paradox studies, responses fuel reinforcing cycles that can be negative or positive (Lewis, 2000). Negative, vicious cycles, depicted in Figure 3 with the dotted, downward arrow, stem from such factors as cognitive and behavioral forces for consistency, emotional anxiety and defensiveness, and organizational forces for inertia. Individuals demonstrate a strong preference for consistency in their attitudes and beliefs (Cialdini, Trost, & Newsom, 1995; Heider, 1958) and between their cognition and their actions (Festinger, 1957), as well as an emotional anxiety in the face of contradiction (Schneider, 1990). When facing contradiction, they often employ defense mechanisms, such as denial, repression (Vince & Broussine, 1996), and even humor (Hatch & Ehrlich, 1993), to avoid the inconsistencies. For example, actors may feel paralysis as tensions spur confusion and reinforce inaction (Smith & Berg, 1987).

Individuals may also react by choosing one agenda, altering their beliefs or actions to enable a consistent response (Cialdini et al., 1995) or maintaining an often mindless commitment to previous behaviors in order to enable consistency between the past and the future (Weick, 1993). Such commitments become reinforced by organizational dynamics that embed inertia in structures (Henderson & Clark, 1990), routines (Eisenhardt & Martin, 2000), processes (Gilbert, 2005), and capabilities (Leonard-Barton, 1992), where the future becomes beholden to the past. Together, these individual and organizational forces for consistency fuel a reinforcing cycle by becoming increasingly focused on a single choice.

Sundaramurthy and Lewis (2003) reviewed such dynamics, using collaboration-control tensions in governance for illustration. Boards that overemphasize collaboration fuel groupthink, as threat rigidity and escalating commitment foster even greater collaboration in a vicious spiral. Overemphasizing control signals distrust and drives defensiveness and turf wars that result in greater reliance on controls. While a single-focused and well-aligned goal can drive short-term success, it can also have unintended consequences, including missing alternative perspectives (Barron & Harackiewicz, 1999) and promoting unethical behaviors (Schweitzer, Lisa, & Douma, 2004). Firms such as Polaroid and Firestone maintained commitments to their existing strategies, which detrimentally prevented them from engaging in future options (Sull, 1999; Tripsas & Gavetti, 2000). Likewise, the Enron, WorldCom, and Tyco cases reflect a pathology of stressing profits without attending to process, ends without considering means, and performance without embracing ethics (Treviño & Brown, 2004).

Enabling virtuous cycles through acceptance and resolution strategies. The dynamic equilibrium model explicates a more positive response to paradoxical tensions. It depicts a virtuous cycle, with awareness of tensions triggering a management strategy of acceptance rather than defensiveness. Acceptance entails viewing tensions as an invitation for creativity and opportunity (Beech et al., 2004). Smith and Berg note that "by immersing oneself in the opposing forces, it becomes possible to discover the link between them, the framework that gives meaning to the apparent contradictions in the experience" (1987: 215) In their action research Luscher and Lewis (2008) show that helping managers accept tensions as paradoxical enabled their sensemaking. Initially managers experienced tensions as a dilemma. However, by recognizing that they could never choose between competing tensions, because either option intensified needs for its opposite, they began to adopt paradoxical thinking and opened discussions to consider both/and possibilities.

In contrast to factors that lead to defensiveness, we propose that attending to competing demands simultaneously requires cognitive and behavioral complexity, emotional equanimity, and dynamic organizational capabilities. At the individual level, cognitive complexity reflects an ability to recognize and accept the interrelated relationship of underlying tensions. It enables actors to host paradoxical cognitions—the cognitive frames that accept contradictions (Smith & Tushman, 2005). By seeking valued differences between competing forces (Langer, 1989), while also identifying potential synergies (Suedfeld, Tetlock, & Streufert, 1992), actors are

more likely to accept paradox. Similarly, Denison and colleagues (1995) proposed that behavioral complexity, a facility to adopt competing behaviors, enables acceptance of paradoxical tensions.

Emotional equanimity, an emotional calm and evenness, further fosters paradoxical responses by reducing anxiety and fear spurred by inconsistencies (Huy, 1999). Social psychologists have long investigated how emotions influence behavior, either by providing cognitive information to impact decision making (Forgas & George, 2001; Maitlis & Ozcelik, 2004) or by directly spurring behavior (Fredrickson, 2001). Tensions can elicit strong emotions. Competing demands highlight ambiguity, uncertainty, and equivocality that provoke anxiety (Lewis, 2000; Vince & Broussine, 1996). Freudian psychology suggests that contradictory and ambiguous information is ego threatening, provoking defensiveness (Schneider, 1990). Vince and Broussine (1996) and Smith and Berg (1987) cataloged defensive responses, including repression, denial, and splitting, often used to avoid an underlying tension. Emotional equanimity minimizes the intense emotional defensiveness and fear and, in doing so, fosters comfort and openness to contradictions that can minimize counterproductive defensiveness and vicious cycles (Sundaramurthy & Lewis, 2003).

> *Proposition 2a: Actors with cognitive and behavioral complexity and emotional equanimity are more likely to accept paradoxical tensions rather than respond defensively.*

While cognitive and behavioral complexity and emotional equanimity foster more openness to paradox at the individual level, dynamic capabilities can do so at the organizational level. Dynamic capabilities refer to the processes, routines, and skills that enable firm leaders to respond effectively to constantly shifting environments (Teece et al., 1997). As such, dynamic capabilities allow leaders to seek and integrate new information through distinct structures (Tushman & O'Reilly, 1996), cultures (Gibson & Birkinshaw, 2004), learning processes (Cohen & Levinthal, 1990; Zollo & Winter, 2002), and managerial capabilities (Adner & Helfat, 2002; Smith & Tushman, 2005). Dynamic capabilities provide collective tools to enable organizational leaders to respond to environmental shifts and, in doing so, enable members to be more open and accepting of the dynamic environment of paradoxical tensions.

> *Proposition 2b: Organizations with dynamic capabilities will foster greater acceptance of paradoxical tensions rather than encourage defensiveness.*

The dynamic equilibrium model proposes a managerial approach to paradox involving complementary and interwoven strategies of acceptance and resolution. Acceptance lays the vital groundwork for virtuous cycles. When actors assume that tensions can and should coexist (Peng & Nisbett, 1999; Rothenberg, 1979), they can mindfully explore the dynamic relationship between tensions (Langer, 1989). Specifically, viewing decisions as situated in the long term may reduce conflict over scarce resources because managers recognize that any choice is temporary, likely to change in the future because both dualities are vital to propagate long-run success. Acceptance can further involve viewing resources as abundant rather than scarce. Those with an abundance orientation assume that resources are adequate (Peach & Dugger, 2006) and that people attend to resources by seeking affirmative possibilities and endless potential (Cameron & Lavine, 2006).

Acceptance provides a comfort with tensions that enables more complex and challenging resolution strategies. Resolution involves seeking responses to paradoxical tensions, either through splitting and choosing between tensions or by finding synergies that accommodate opposing poles. Studies of tensions predominantly highlight one of these options, identifying cases of splitting (Tushman & Romanelli, 1985) or synergistic integration (i.e., Bledow et al., 2009; Jarzabkowski & Sillince, 2007). Yet Poole and Van de Ven (1989) presented these strategies as ideal types, which can be used together. A dynamic equilibrium model proposes such a combination; paradoxical resolution denotes purposeful iterations between alternatives in order to ensure simultaneous attention to them over time. Doing so involves consistent inconsistency as managers frequently and dynamically shift decisions. Actors therefore make choices in the short term while remaining acutely aware of accepting contradiction in the long term.

For example, as individuals consider allocating time between work and family, their choice may shift from attending to intense work commitments at one point to focusing on family demands to identifying means of linking work and family. These short-term allocations of time allow for long-term engagement with both opposing forces. Similarly, firms with strategic commitments to the financial bottom line and to a broader social mission may alternate between focusing subunits on different purposes and seeking synergistic opportunities that further both purposes.

A dynamic strategy may not only reflect inconsistent choices over time but inconsistencies within the same time period. For example, Smith, Binns, and Tushman (2010) found that more effectively attending to both exploration and exploitation simultaneously involved dynamic decision making in which senior leaders allocated additional resources to both the existing product and the innovation at the same time. Some paradox studies depict such purposeful iterations. Denis, Lamothe, and Langley (2001) noted that managing change surfaces leadership tensions between forceful action and approval seeking. They proposed that leaders more effectively manage change when they shift between these different poles and periodically seek an integrative means of restructuring the relationship among a group of leaders. Likewise, Fiol and colleagues (2009) described a model of responding to conflicting identities as an iterative dance among subgroup, individual, and blended identities, and Klein, Ziegert, Knight, and Xiao (2006) found that emergency room trauma teams dynamically shift leadership between the formal leader and informal leaders, thereby enabling both structure and flexibility.

A dynamic equilibrium creates a virtuous cycle. Following structuration theory, organizational systems are created and reproduced through both structure and agency (Giddens, 1984). Applying consistently inconsistent management strategies further embeds tensions within the system's strategies, structures, rules, processes, and identities. As such, paradoxes reflect both inherent features of organizations and the agency that created and continues to reproduce those systems. Yet even as virtuous cycles can reinforce underlying tensions, achieving benefits from those tensions is not easy. The threat of vicious cycles persists, requiring managers to remain vigilant as they iterate between acceptance and paradoxical resolution strategies.

Paradox studies have stressed these dynamics. Luscher and Lewis (2008) proposed that different types of paradoxical tensions are interwoven and reinforcing, just as strategies for their management interact in an ongoing cycle. Concluding their action research, they stressed that managing paradox is precarious since actors are likely to return to past practices. Dualities become taken-for-granted elements of organizational life, tempting actors to apply dichotomous either/or frames. Similarly, Clegg and colleagues (2002) described organizations in a state of permanent dialectics fueled by the interplay between paradoxical tensions and their management. The authors did not bemoan this state but, rather, depicted ongoing tensions as natural, encouraging managers to remain reflective and thereby manage paradoxes in ways that tap their positive potential.

The Outcome: Sustainability

What is the outcome of a virtuous cycle of managing tensions? Paradox research points to possibilities. Effectively attending to contradictory demands simultaneously has been associated with career success (O'Mahony & Bechky, 2006), exceptional leadership capabilities (Denison et al., 1995), high-performing groups (Murnighan & Conlon, 1991), and organizational performance (Cameron & Lavine, 2006; Tushman, Smith, Wood, Westerman, & O'Reilly, 2010). We expand on such studies, proposing that a dynamic equilibrium unleashes the power of paradox to foster sustainability. Individuals, groups, and firms achieve short-term excellence while ensuring that such performance fuels adaptation and growth enabling long-term success (Cameron & Lavine, 2006). More specifically, a dynamic equilibrium enables sustainability through three mechanisms: (1) enabling learning and creativity, (2) fostering flexibility and resilience, and (3) unleashing human potential.

By managing organizational paradox, a dynamic equilibrium fosters learning and creativity. In a study of fifty-four highly creative individuals, Rothenberg (1979) found that their genius stemmed from the capacity to juxtapose opposing ideas. Einstein's theory of relativity

emerged from thinking about the same object simultaneously in motion and at rest. Mozart's music is a function of engaging concordance with discordance, and Picasso's paintings reflect both calm and chaos. Similarly, Suedfeld et al. (1992) noted that world leaders attending to some of the most complex problems juxtapose contradictory elements to understand their differences and to explore points of intersection. At an organizational level, Eisenhardt and Westcott (1988) found that linking conflicting strategies can spur organizational learning. Juxtaposing opposing forces may create the context for leaders to engage in creative problem solving, allowing their organizations to continuously improve.

Managing paradoxical tensions also helps individuals, groups, and firms to be flexible and resilient, fostering more dynamic decision making. A well-aligned system that chooses between opposing elements may attain short-term success but can become static and inert (Tushman & O'Reilly, 1996). Complex interdependencies can trap resources (Miller, 1993), since core capabilities can become core rigidities (Leonard-Barton, 1992; Tripsas, 1997). Likewise, leaders can become cognitively committed to a singular focus (Tripsas & Gavetti, 2000). In contrast, attending to competing demands simultaneously involves a consistent and mindful shifting of cognition, restructuring of resources, altering of structures, and rethinking of goals (Weick, Sutcliffe, & Obstfeld, 1999). Such constant movement fosters adaptability (Farjoun, 2002; Weick & Quinn, 1999).

Finally, adopting a dynamic equilibrium approach to organizing can unleash human potential. Individuals can experience positive energy and success in response to the creativity and learning fueled from the juxtaposition of contradictory tensions. Positive energy creates the conditions for individuals to be more engaged in high-quality connections (Dutton & Heaphy, 2003), more persistent in the face of challenges (Seligman & Csikszentmihalyi, 2000), and more dedicated to reaching their goals (Kirschenbaum, 1984). In turn, this energy helps raise team effectiveness (Losada & Heaphy, 2004), as well as organizational performance (Cameron & Lavine, 2006). In sum, a dynamic equilibrium fosters and reinforces commitment to multiple, competing agendas. Attending to paradox and building supportive capabilities enable organizing to become a fluid, reflective, and sustainable process.

> *Proposition 3: Managing paradoxical tension via dynamic, purposeful, and ongoing strategies of acceptance and resolution (iterating between splitting and integration) fosters sustainability.*

DISCUSSION

Over the past twenty years, researchers have advocated paradox as a provocative and powerful lens for comprehending and managing organizational tensions (e.g., Cameron & Quinn, 1988; Lewis, 2000; Poole & Van de Ven, 1989). Yet as paradox has become more pervasive in our literature, its definitions, focus, and uses appear increasingly eclectic. Seeking to further unleash the power of a paradox perspective for theory and practice, we reviewed existing studies of paradox and integrated their insights within a dynamic equilibrium model of organizing. The review highlights varied empirical and theoretical exemplars that may guide future research while surfacing key debates.

The dynamic equilibrium model advances our understanding of paradox is several ways. First, this model responds to key debates about the nature and management of paradox. Second, the model attends to the dynamic and persistent nature of organizational paradoxes, depicting how paradoxical tensions and their management might interact in an ongoing, cyclical process. Finally, the dynamic equilibrium model proposes that this virtuous cycle enables sustainability by fostering creativity and learning, enabling flexibility and resilience, and unleashing human potential.

Alternative Perspectives on Organizational Tensions: Beyond Contingency Theory

We began this article by comparing a paradox perspective with contingency theory, suggesting that they both attend to underlying organizational tensions but with divergent assumptions and responses. We now return to this discussion, using this comparison to further highlight the benefit and boundary conditions of a paradox perspective.

Tensions are at the core of organizational research. Even before contingency theory, early

researchers responded to tensions by seeking the "one best way to organize." Scholars sought to articulate generalizable principles about why firms benefit from a more hierarchical versus flat structure (Fayol, 1990) or from more coercive versus self-directed HR practices (McGregor, 1960; Taylor, 1911). In reaction to this perspective, contingency theory emerged in the 1960s, calling for researchers to consider the conditions under which alternative elements of tensions were most effective (i.e., Galbraith, 1973; Lawrence & Lorsch, 1967; Woodward, 1965). According to this lens, success depends on alignment within the internal system and with the external environment. The role of management is to recognize and then resolve tensions. Contingency theory has been used to study organizational tensions across phenomena and levels of analysis (Luthans & Stewart, 1977; Tosi & Slocum, 1984).

A paradox perspective offers an alternative. As with contingency theory, a paradox perspective explores tensions across phenomena and levels. But in contrast to contingency theory, a paradox perspective assumes that tensions persist within complex and dynamic systems. These underlying tensions are not only normal but, if harnessed, can be beneficial and powerful. The juxtaposition of coexisting opposites intensifies experiences of tension, challenging actors' cognitive limits, demanding creative sensemaking, and seeking more fluid, reflexive, and sustainable management strategies.

Contrasting a paradox perspective with contingency theory and early organizational theories accentuates distinctions between their associated research questions, methodological designs, and practical implications (see Table 1). Early organizational theories asked, "Is A or B more effective?" Contingency theory asks, "Under what conditions is A or B more effective?" A paradox perspective, in contrast, asks, "How can organizations and their managers effectively engage A and B simultaneously?" Such differences further influence methodological choices. Early theories compared alternatives, whereas contingency theory suggests explanatory methods that address specific variables, seek mean tendencies, and emphasize cause and effect. This orientation contrasts with the contextualized and process-oriented methodologies often adopted to identify paradoxical tensions and their management. These include more discursive and systemic methods that stress context and process, ranging from Luscher and Lewis's (2008) action research to Huy's (2002) multiyear inductive field study.

Finally, the epistemological assumptions of these theories drive different practical implications. Early theories were based on the notion that there is one best way. Contingency theory assumes that alternative approaches depend on the situation and effective managers split tensions and choose the pole that best aligns strategy with structure (Chandler, 1962), internal organizational factors (Beer, 1980; Nadler &

TABLE 1
Alternative Approaches to Managing Organizational Tensions

Key Theory/ Perspective	Early Organizational Theories	Contingency	Paradox
Foundational research	Fayol (1911), Taylor (1911)	Woodward (1965), Lawrence & Lorsch (1967), Galbraith (1973)	Smith & Berg (1987), Cameron & Quinn (1988), Poole & Van de Ven (1989)
Approach to organizational tension	A or B?	Under what conditions A or B?	How to engage A and B simultaneously?
Research methods	Comparison of alternatives	Mean tendencies, limited variables	Systemic, discursive, contextual methods
Epistemological assumptions	One best way to be successful	Alignment and consistency with internal and external environment enable success	Contradiction is inherent and can be powerful to enable peak performance if harnessed

Tushman, 1992), and external environment (Lawrence & Lorsch, 1967). These theories further view time as linear and quantitative and change as a predominantly episodic experience. Such efforts require an orientation characterized by risk management and rational decision making. In contrast, a paradox perspective seeks managerial strategies that support contrasting elements simultaneously. Even as managerial responses might involve splitting in the short term—leveraging insights from contingency theory to guide choices that align the firm with its current context—they also move beyond to seek integration and iterative decision making and attend to temporality that is both episodic and quantitative, as well as continuous and qualitative (Huy, 2001; Weick & Quinn, 1999). Doing so requires management that can attend to complexity, engage ambiguity, and enable uncertainty.

While contingency theory remains a dominant model for organizational theorizing, a paradox perspective offers a timely alternative. Organizations increasingly face conditions of plurality, change, and scarcity. These factors not only increase the salience of persistent tensions but also limit the effectiveness of singular strategies. For example, firms once may have been able to shift between periods of exploitative innovation punctuated by more radical exploration (i.e., Tushman & Romanelli, 1985). Yet the pace of technological change today demands that firms simultaneously excel at both exploration and exploitation (Smith & Tushman, 2005), enabling stability and flexibility (Feldman & Pentland, 2003; Rindova & Kotha, 2001) and building contexts for learning and performance (Ghoshal & Bartlett, 1994).

Similarly, organizational boundaries appear increasingly blurred. Organizations could once justify bifurcating social and financial goals to either for-profit and not-for-profit entities (i.e., Friedman, 1970; Levitt, 1958). Yet as globalization, technology, and expansion increase social ills, human rights violations, pollution, climate change, and so forth, for-profit organizations are increasingly attending to social as well as financial outcomes (Margolis & Walsh, 2003). At the same time, population growth mixed with financial crises forces not-for-profits, including hospitals, universities, social service institutions, and so on, to make difficult decisions based on their bottom line (Golden-Biddle & Rao, 1997; Jarzabkowski & Sillince, 2007). In addition, rising numbers of "hybrid" organizations are emerging that explicitly seek to achieve both profit and social goals (Battilana & Dorado, 2010; Pache & Santos, 2010). These multiple bottom lines create paradoxical demands on organizations' strategy (Smith & Tushman, 2005). Likewise, at the individual level, gender roles are no longer clearly divided. The family structure dominant in the early twentieth century split responsibilities for work and family along gender lines. Yet a changing family structure, the economy, and the feminist movement challenge such stark divisions. As new options surface, the tensions between work and family become more salient (i.e., Rothbard, 2001).

We do not propose that a paradox perspective should replace contingency theory but, rather, that it provides a complementary alternative. In seeking to identify the conditions under which varied approaches are most appropriate, contingency research is restricted to a limited number of variables and holds constant broad contexts and long time horizons (Tosi & Slocum, 1984). Therefore, contingency theory is most valuable when solving problems with a narrower context in a shorter time horizon. Yet a contingency approach threatens to oversimplify contexts that are more complex and dynamic. As Weick notes:

> If a simple process is applied to complicated data, then only a small portion of that data will be registered, attended to, and made unequivocal. Most of the input will remain untouched and will remain a puzzle to people concerning what is up and why they are unable to manage it (1979: 189).

The dynamic equilibrium model reconceptualizes organizing, challenging management theory and organizational change practices to attend to this complexity. Rather than choose between dualities, paradox theory addresses tensions that are synergistic and persistent. As such, strategies of acceptance and resolution seek to engage tensions and thereby enable sustainability.

Toward a Theory of Paradox

Comparing paradox with contingency theory highlights the potential for creating a theory of paradox. Until now, we have referred to a paradox perspective, yet, like contingency theory,

this lens offers an approach to tensions that spans organizational phenomena, levels of analysis, and theoretical perspectives. Moreover, we presented the dynamic equilibrium model by integrating existing studies and proposing testable propositions. The model thus offers the basis for a theory of paradox, providing common definitions, assumptions, mechanisms, and outcomes for further study. At its core a paradox theory presumes that tensions are integral to complex systems and that sustainability depends on attending to contradictory yet interwoven demands simultaneously.

Why is a theory of paradox needed? First, such a theory can unify the extensive yet varied research in this area. The diverse literature of paradox has come to resemble Wenger and Snyder's (2000) paradox of communities of practice. Such communities evolve through shared interests. Devoid of controls, their efforts flourish in novel directions. Yet these novel directions create broad assumptions and prevent a growing community from effective interaction.

Minus an integrating theory, studies attending to simultaneous opposites coexist across theoretical and phenomenological domains without interacting with one another. Research on hybrid identities, multiple logics, ambidexterity, and work/family integration all draw from a similar assumption about the simultaneous coexistence of competing alternatives and yet could more effectively inform one another about the management of tensions. Fully leveraging their potential, however, requires efforts to identify commonalities and create integration through which paradox proponents may connect, interact, and build from each other's understandings.

Providing a unifying platform can spur continued theoretical debate and guide future empirical research. Such a theory not only offers a response to organizational tensions but encourages active searching for and surfacing of those tensions to enhance creativity and performance. Researchers can ask several primary questions in approaching organizational phenomena: (1) What tensions are embedded within organizations, and how and why are these tensions (not) experienced by organizational members? (2) How are these paradoxical tensions managed? (3) What are the implications of their (in)effective management?

As with contingency theory, a theory of paradox provides a metatheoretical perspective that can provide guidance on how other theories ask questions and explore insights. For example, organizational identity theorists can adopt a paradoxical perspective to understand the inherent tensions in hybrid identity organizations and identify strategies for the simultaneous management of these tensions (Albert & Whetten, 1985). Paradox theory offers a frame to help neoinstitutional theorists explore the tensions of multiple logics (Kraatz & Block, 2008). Similarly, paradox theory shifts the questions asked by motivational theorists from what the conditions are under which individuals are more driven by intrinsic or extrinsic motivators (Ryan & Deci, 2000) or self-interest or social interests (Crocker, 2008) to how individuals engage in these competing drives simultaneously.

To further the development and application of paradox theory, we encourage methodological strategies that can investigate tensions, enable contextual richness, and consider more cyclical dynamics. Paradox studies demonstrate the value of alternative tools, such as case studies (Andriopoulos & Lewis, 2009), action research (Beech et al., 2004), systems approaches (Sterman, 2000), and agent-based models (Axelrod, 1997), for enabling more nuanced insights. If we are to take paradoxes seriously, we need to develop these and other methods to explore paradoxical tensions, their management, and their impact.

Paradox theory also can challenge us to rethink our messages to practitioners. What would it mean to teach managers about paradoxes? Doing so could entail developing pedagogical material that includes conceptual and theoretical understandings of paradox. Further, it means helping students experience and learn to accept tensions and apply paradoxical strategies through varied structures, processes, and leadership approaches.

Finally, a paradox theory offers opportunities for enriching organizational theorizing. In 1989 Poole and Van de Ven responded to *AMR*'s special issue on new theory by suggesting that juxtaposing opposing theories can inspire novel insights. While our paper has focused on tools for exploring paradox in organizational phenomena, we reassert and strengthen their claim for using paradox as a tool for theorizing. How would our research and theorizing across the

Academy differ if we assumed that for every thesis there is an antithesis?[4] Such an assumption introduces the possibility of seeking opposing views of even our most well-established organizational theories. What is the opposing theory to emotional contagion? Threat rigidity? Upper echelon theory? What would theories look like that embed contradictory phenomena? Paradox theory not only proposes that contradictory theories exist but offers a process for academics to start enriching and renewing our stock of organizational theories.

Next Steps

The future of paradox theory is bright. The integrative model suggests several next steps, while the reviewed exemplars offer guides for such work. First, work could test our propositions. Both laboratory and field studies could investigate the short- and long-term implications of identifying tensions, cognitively and systemically accepting tensions, and dynamically resolving those tensions over time. Individuals face tensions daily, creating significant opportunity to observe or manipulate their mental models along with their behavioral responses to these tensions. Second, even as paradox studies have expanded rapidly, new research can apply a dynamic equilibrium model to varying organizational phenomena. Third, while we focused on dualities, paradox theory can be expanded to examine a multiplicity of competing demands, such as those noted by trialectics (e.g., Ford & Ford, 1994) and pluralism (e.g., Jarzabkowski & Sillince, 2007).

CONCLUSION

Paradox is an old concept. Its roots lie in ancient teachings across Eastern and Western thought, apparent in such works such as the Tao Te Ching and the Judeo-Christian Bible. More recent concepts of paradox draw upon the varied philosophies of Kierkegaard, Hegel, Hampden-Turner, and Weber and tap into the psychological insights of Freud, Rothenberg, and Watzalawick (e.g., see Lewis, 2000; Smith & Berg, 1987; Symonds & Pudsey, 2008). Indeed, Mary Parker Follet proposed ideas of circularity, dynamism, and simultaneity of opposing forces in her 1920s management writings (Graham, 1996).

Today, as globalization, innovation, hypercompetition, and social demands create more dynamic and intricate environments, paradox becomes a critical theoretical lens to understand and to lead contemporary organizations. Our goal in this paper therefore was not to redefine paradox, but to renew the concept—to propose and integrate research that draws from existing literature and thereby encourage academics and practitioners to apply a paradox theory. We hope that our work suggests ways to understand and manage through this more complex reality.

[4] We thank Jean Bartunek for raising this provocative question with us.

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