# University of Nebraska - Lincoln DigitalCommons@University of Nebraska - Lincoln

Management Department Faculty Publications

Management Department

2007

# Radical Change Accidentally: The Emergence and Amplification of Small Change

Donde Ashmos Plowman *University of Nebraska-Lincoln*, dplowman2@unl.edu

Lakami T. Baker Mississippi State University

Tammy E. Beck *University of Houston–Clear Lake*, tbeck8@unl.edu

Mukta Kulkarni Indian Institute of Management, Bangalore

Stephanie Thomas Solansky University of Houston–Victoria

See next page for additional authors

 $Follow\ this\ and\ additional\ works\ at:\ https://digital commons.unl.edu/management facpub$ 

Part of the <u>Business Administration</u>, <u>Management</u>, and <u>Operations Commons</u>, <u>Management Sciences and Quantitative Methods Commons</u>, and the <u>Strategic Management Policy Commons</u>

Plowman, Donde Ashmos; Baker, Lakami T.; Beck, Tammy E.; Kulkarni, Mukta; Solansky, Stephanie Thomas; and Travis, Deandra Villarreal, "Radical Change Accidentally: The Emergence and Amplification of Small Change" (2007). *Management Department Faculty Publications*. 208.

https://digitalcommons.unl.edu/managementfacpub/208

This Article is brought to you for free and open access by the Management Department at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Management Department Faculty Publications by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

Authors  Donde Ashmos Plowman, Lakami T. Baker, Tammy E. Beck, Mukta Kulkarni, Stephanie Thomas Solansky, and Deandra Villarreal Travis			

## RADICAL CHANGE ACCIDENTALLY: THE EMERGENCE AND AMPLIFICATION OF SMALL CHANGE

DONDE ASHMOS PLOWMAN
The University of Texas at San Antonio

LAKAMI T. BAKER Mississippi State University

TAMMY E. BECK University of Houston-Clear Lake

MUKTA KULKARNI Indian Institute of Management, Bangalore

STEPHANIE THOMAS SOLANSKY University of Houston-Victoria

DEANDRA VILLARREAL TRAVIS
The University of Texas at San Antonio

A decision to offer breakfast to homeless people led to radical change in a church and its environment. Existing theories of change do not fully explain observations from our qualitative study; however, complexity theory constructs suggest how and why such change emerged. We offer four key findings. First, the radical change was unintended, emergent, and slow. Second, destabilizing conditions helped small changes to emerge and become radical. Third, subsequent actions amplified an initial small change and, though not intended to do so, promoted radical change. Finally, the dynamic interaction of amplifying actions, contextual conditions, and small changes led to continuous radical change.

Mission Church is situated downtown in the middle of a large southwestern U.S. city, just a few blocks from a popular tourist spot and around the corner from many well-known restaurants, boutiques, and gift shops. The church faces scenic downtown Mission Park and is wedged between two historic hotels that regularly host elegant wed-

We are grateful to our colleagues who contributed to the early stages of this research: Tricia Cantu, Shane Lim, Scott Kruse, Eric McClung, and Peter Morales. We thank Dennis Duchon, Juanita Firestone, Tim Goles, Leticia Andrade, and Denise Sweeney for their comments on earlier versions of this paper. We are indebted to Bill McKelvey, whose extensive comments greatly enhanced the work, and to Benyamin Lichtenstein, for thoughtful comments that also strengthened our paper. Finally, we thank the three anonymous reviewers and associate editor, Chet Miller, not only for their valuable contributions, but also for their continuous encouragement throughout every stage of developing this article.

dings and expensive executive education seminars. Throughout the day, tour buses stop at the park, where eager tourists depart to see downtown sights. Decades ago, Mission Church was a "silk-stockings" church attended by the wealthiest in the city. However, for more than 50 years, the church was in decline, as people found suburban churches more attractive.

Over dinner one evening, several young people from the church were discussing Sunday morning alternatives for people like them who did not want to attend the traditional church school program. Someone suggested offering hot breakfast to the homeless people who walked by the church on Sunday mornings, and the idea took hold. The group served its first breakfast five weeks later and, within a short time, church volunteers were feeding over 200 homeless people on Sunday mornings. A few months after the first breakfast, a physician volunteer opted out of the food serving line and began seeing anyone who wanted to discuss a medical problem.

Within a short time, full-scale medical, dental,

<sup>&</sup>lt;sup>1</sup> "Mission Church" is a fictitious name used to ensure the anonymity of the informants.

and eye clinics emerged as part of the Sunday morning program and, within a few years, a 501(c)(3) spin-off (a tax-exempt organization) of the church was receiving city grants, providing a "day center" for several thousand homeless people and serving over 20,000 meals a year. Legal assistance, job training, laundry services, and shower facilities are a few of the programs, in addition to the clinics, that emerged from the initial idea of a hot breakfast. Homeless people began joining the church, singing in the choir, and ushering at the major worship service. The formality of dress and diversity of participants at the main worship service changed dramatically, as did the style of worship and music. Controversy inside the church swelled as these changes accumulated into a pattern of outreach that fundamentally altered the church's mission and brought hundreds of street people to the church each week. The church's mission began to shift, and the criticism from surrounding businesses, which did not like the changing landscape, gained media attention.

Mission Church and its immediate environment underwent radical change sparked, initially, by a group's simple act of generosity, partly generated out of boredom on Sunday mornings. Neither predicted nor intended, a cycle of continuous, radical change—for the church and its immediate environment—emerged. In this research, we attempt to understand how and why an initial small change, whose ultimate consequences were unintended, escalated and led to radical organizational change.

In recent years, researchers have depicted organizational change as either episodic or continuous (Weick & Quinn, 1999), and either convergent or radical (Greenwood & Hinings, 1996; Tushman & Romanelli, 1985). Radical organizational change is often referred to as "frame-bending" because the organizations experiencing such change break loose from existing orientations, and it is most often viewed as episodic—that is, as occurring suddenly and dramatically, after a long period of equilibrium (Nadler & Tushman, 1989; Romanelli & Tushman, 1994). At the same time, radical change can be the result of a pattern of small, microlevel changes that occur over time; this type of radical change, has, however, received little attention in the literature on organizational change. Scholars have limited empirical understanding of how and why some small changes become radical. Further, prior research on radical change (Greenwood & Hinings, 1996) has often implied intentionality, as reflected in the statement, "The development of movement away from an archetype depends on the existence of an articulated alternative organizational form" (Greenwood & Hinings, 1996: 1045).

A set of events we encountered at a local church brought the current state of theorizing about radical change into sharp relief. These events suggested radical change that was neither episodic nor planned, requiring us to develop alternative theoretical insights to understand what we had observed. We initially turned to ideas from complexity science for help (e.g., McKelvey, 2001), and this theory provided useful ways of thinking about radical change. Yet complexity science is a paradigm that is still developing, and empirical testing of its application to organizations is minimal (for exceptions, see Chiles, Meyer, & Hench, 2004; Lichtenstein, 2000; Lichtenstein, Carter, Dooley, & Gartner, 2007). However, four central ideas from complexity science provided rudimentary direction and enabled us to use the case study of Mission Church to generate a theoretical framework for understanding how, without intention on the part of actors, a small change can emerge and grow into something radical.

The case study approach we used allows a detailed look at the nonlinear dynamics at work in organizations undergoing continuous change, dynamics that are much more difficult to capture in traditional, linear analytical models (Meyer, Gaba, & Colwell, 2005). To orient our work, we provide a brief summary of four conceptualizations of organizational change varying in the scope or pace of change they describe (Greenwood & Hinings, 1996). We use complexity theory as a starting point in developing theory to explain the change that we observed: continuous radical change. We identify four characteristics of complex systems that are essential for emergent self-organization and are useful for explaining continuous radical change. We then present the story of radical change at Mission Church and argue that, absent intentionality among actors, the dynamic interaction<sup>2</sup> among contextual factors moved the church away from equilibrium and toward instability, making it more likely that a small, novel change could emerge. Further, we argue that specific actions led to other emergent changes and amplified the initial small change into something much greater than the originators of the change or the actors taking the amplifying actions intended. Our observations led us

<sup>&</sup>lt;sup>2</sup> We use the term "interaction" throughout the paper in the way that complexity theorists (e.g., Holland, 1998) have used it in arguing that to understand systems one needs to move beyond reductionist thinking and understand the patterns of interactions among parts of a system. Our use of "interaction" is thus not to be confused with its more common use in traditional statistics.

to conclude that radical change *can* become continuous through the dynamic interaction of amplifiers, contextual conditions, and small changes. Drawing on our observations and on key constructs from complexity science, we present six propositions for use in further research on continuous, radical change. Finally, we discuss the implications of this study.

#### THEORETICAL PERSPECTIVE

### **Continuous Radical Change**

Greenwood and Hinings (1996) proposed two dimensions of change, which we refer to as scope and pace. Change is either convergent or radical in its scope and either evolutionary or revolutionary in its pace. The Greenwood and Hinings (1996) notion of evolutionary pace is contained within Weick and Quinn's (1999) description of "continuous" change, and the earlier authors' notion of revolutionary change incorporates the notion of "episodic" change that Weick and Quinn (1999) described. Continuous change is often viewed as consisting of small adaptations that, having emerged from improvisation and learning, may or may not accumulate, and that occur because systems cannot maintain stability. Such small adaptations are often viewed as part of ongoing modifications in organizational processes and practices, but this does not mean that the small changes are necessarily trivial or that they always remain small (Weick & Quinn, 1999). In contrast, revolutionary or episodic change is often viewed as a response to growing inertia and most often takes the form of a planned replacement whereby a new structure, strategy, or program replaces an old one. The planned replacements of episodic change are distinct interruptions intended to negate and remove a previous condition (Ford & Ford, 1994).

The shift in focus from a silk-stocking church with a decidedly homogeneous racial makeup to a diverse congregation that gained media attention as a haven and advocate for the city's "marginalized" was frame-bending, meeting the Greenwood and Hinings (1996) definition of radical change. Not only was the scope of this change—its radical nature—of interest, but also the pace of the change. The stories we heard were not of a specific, episodic change triggered by the typical events that punctuate long periods of equilibrium, such as a crisis or change in leadership (Gersick, 1991; Romanelli & Tushman, 1994). No specific crisis thrust Mission Church toward outreach to the homeless. The formal leaders of the church, its pastors, had been there for four years before the breakfast idea emerged. The radical change that occurred, and is still occurring, at Mission Church fits the description of continuous change as "constant, evolving, cumulative...created simultaneously across units" (Weick & Quinn, 1999: 375). What we observed is important because it does not fit Romanelli and Tushman's (1994) popular view that radical change does not happen slowly and Gersick's (1991) assertion that fundamental change cannot be accomplished piecemeal or gradually.

The theoretical frameworks of Greenwood and Hinings (1996) and Weick and Quinn (1999), when combined, enabled us to identify the type of change we observed at Mission Church. Figure 1 presents four different ways of conceptualizing organizational change in terms of whether it is (1) continuous or episodic (Weick & Quinn, 1999) and (2) convergent or radical (Greenwood & Hinings, 1996). Quadrant IV, continuous, radical change, best characterizes theoretically and empirically the change that Mission Church underwent and that is the focus of this paper. The four types of change differ along the following dimensions: driver of the change, either inertia or instability; form of the change, either adaptation or replacement; nature of the change, either emergent or intended; and types of feedback and connections. In the last dimension, the feedback that enables a change and drives the system surrounding it is conceptualized as either negative (reducing deviations from the system's current trajectory), positive (encouraging deviations) (Maruyama, 1963; Weick, 1979), or both (Chiles et al., 2004; Stacey, 1995); and connections are either loose or tight.

Quadrant 1 illustrates change that is *continuous* and convergent—it is slow, evolutionary, and not (usually) the result of a specific episode or crisis. Rather, in this quadrant minor system instability leads to small adaptations that emerge from local improvisation and learning. These convergent changes take the form of continual updates to work processes and social practices (Weick & Quinn, 1999) and occur within an existing frame, or "existing archetypal template" (Greenwood & Hinings, 1996: 1026). Positive feedback encourages deviation, learning, and adaptation, and loose connections, which are common in systems with minor instability, help keep the small adaptations local and minimize the chance of the changes being amplified. In Quadrant 2, change is episodic and convergent, occurring quickly, as the result of a specific episode or minicrisis. In this quadrant, the need to overcome minor inertia drives incremental change that usually takes the form of infrequent, intentional replacements. That is, one process or procedure replaces another. Negative feedback in a

### FIGURE 1 Conceptualization of Four Types of Change

### Scope

	Convergent	Radical		
	Quadrant 1ª	Quadrant 4		
и п	Driver of change: <i>Minor</i> system instability	Driver of change: <i>Major</i> system instability		
	Form of change: Small adaptations that occur with existing frame	Form of change: <i>Pattern of adaptations</i> that is frame-bending		
Continuous	Nature of change: <i>Emergent and local</i> as members improvise and/or learn	Nature of change: <i>Emergent and</i> systemwide as adaptations accumulate into patterns		
	System uses <i>positive feedback</i> , which encourages deviations and adaptations	System uses <i>positive and negative</i> feedback, which pull system in two directions—toward bounded instability		
	Type of connections: <i>Loose coupling</i> which keeps local adaptations from amplifying	Type of connection: <i>Tight coupling,</i> which enables amplification of local adaptations into radical change		
Pace	Quadrant 2	Quadrant 3		
	Driver of change: <i>Minor</i> inertia	Driver of change: <i>Major</i> inertia		
	Form of change: A minor <i>replacement</i> that occurs within existing frame	Form of change: A <i>dramatic</i> replacement that is frame-bending		
Episodic	Nature of change: Intended and local	Nature of change: Intended and system wide		
	System uses <i>negative feedback</i> , which highlights need for minor replacement	System uses <i>negative feedback</i> , which highlights need for major replacement		
	Type of connection: Loose coupling requires local minor replacements	Type of connections: <i>Tight coupling</i> requires systemwide radical replacement		

<sup>&</sup>lt;sup>a</sup> We use the term "frame" to mean an "existing archetypal template" (Greenwood & Hinings, 1996: 1026) created in part by existing organizational ideas, beliefs, and values. We would consider continuous improvement programs to be in this quadrant. These programs are *planned* in the sense that the organization intends for improvement to take place continuously, yet each specific improvement is a function of emergent ideas that occur as learning takes place.

system simultaneously highlights the need for minor replacements and later acts as a force for restabilizing the system. Loose connections among parts of the system require that minor replacements occur locally. Quadrant 3 depicts change that is *epi*-

sodic and radical, or revolutionary, and that happens quickly as the result of a major specific episode or crisis. Negative feedback in the system simultaneously highlights the need for a major replacement and acts as a force for restabilizing the

system. In this quadrant, radical change is undertaken to overcome major inertia and takes the form of a dramatic, frame-bending replacement, such as a new strategy, structure, or top management (Romanelli & Tushman, 1994). Tightened connections, which are common when systems experience major stress, require larger interventions (Weick & Quinn, 1999)—that is, radical replacements.

Quadrant 4, the focus of this study, illustrates change that is continuous and radical and that generally occurs because small adaptations accumulate and a frame-bending pattern of organizing emerges. In this quadrant, emergent adaptations occur as individuals or subunits improvise and learn. These emergent adaptations can accumulate, gather momentum, and become transforming when they occur in the midst of major system instability. System instability often leads to tightened connections among parts of a system, which means that both positive and negative feedback play important roles in the way change occurs. Positive feedback reinforces the initial adaptation and, because of tightened connections, small adaptations can easily accumulate (Maruyama, 1963; Weick, 1979) and develop into a pattern that attracts attention (Ford & Ford, 1994). Negative feedback also plays a role in this quadrant, as a stabilizing mechanism that balances the dynamics of positive feedback (Chiles et al., 2004). Negative feedback can take the form of rules that actors in the system accept and apply to choices (Stacey, 1995). The emerging pattern of adaptations can become radical if it is attractive (Ford & Ford, 1994), becomes a new reference point for the organization (Masuch, 1985), and is reinforced by emergent rules.

Because our study revealed change that was continuous, radical, and unintended, earlier studies of change helped us clarify the distinctions between various conceptualizations of change, but none offered a rich theoretical explanation for the type of change we observed. Are there organizational conditions that encourage the accumulation of small adaptations into a pattern that becomes recognizable as a radical shift for an organization? What actions might explain how small changes "morph" into something larger? Complexity theory, with its central features of emergence (Chiles et al., 2004; Cilliers, 2000; McKelvey, 2001) and the self-organization of interconnected organization members operating "far from equilibrium" (Anderson, 1999; Kauffman, 1995; Lichtenstein, 2000; Mc-Kelvey, 1999), offers insight into how the continuous radical change depicted in Quadrant 4 can occur. It is important to note that the application of complexity theory to organizations is based largely on suggestive analogy between physical

and social science. We base our argument that complexity theory can inform understanding of radical organizational change on similarities between, not a deep structural equivalence of, physical and social phenomena.

### **Complexity Theory**

A complex system is comprised of numerous interacting agents,<sup>3</sup> each of which acts on the basis of local knowledge or rules. In the case of organizations, people or groups adapt to feedback about the behavior of others and act in parallel without explicit coordination or central communication (Anderson, 1999; Maguire & McKelvey, 1999). Complex systems are characterized by nonlinearity as their components interact with one another via feedback loops (Anderson, 1999) and by emergent self-organization (Anderson, 1999; Chiles et al., 2004; Cilliers, 2000; McKelvey, 2001). In complex adaptive systems, people or groups simultaneously adapt, and the collection of adaptations builds complexity from which "perpetual novelty" emerges. Four constructs from complexity theory are essential to understanding emergent behavior and provide a theoretical framework for better understanding continuous, radical change: (1) initiating conditions, (2) the far-from-equilibrium state, (3) deviation amplification, and (4) fractals and scalability.

Initiating conditions. With its roots in the physical and biological sciences, complexity theory emphasizes the sensitivity that complex systems have to initial conditions. Lorenz's (1963) famous story of the flap of a butterfly's wings in one part of the world creating a storm somewhere else made popular in the physical science community something that mathematicians already knew—that small fluctuations in some variables can have monumental and unpredictable consequences. The diversity and complexity of the universe make it impossible to predict the outcomes of most actions (Holland, 1995, 1998; Kauffman, 1993).

<sup>&</sup>lt;sup>3</sup> The term "agent" refers to a semiautonomous entity or part of a system, such as an atom, molecule, organ, process, person, unit, department, etc., as per Lichtenstein and McKelvey (2005). Complexity theorists (e.g., Anderson, 1999; Holland, 1995; McKelvey, 1999) frequently use this term when describing the unpredictability of systems as a consequence of the unpredictable outcomes of the interaction of agents. "Agent," construed as "semiautonomous entity," departs from the conventional use of the term in most management research to mean a manager rather than an owner/principal in an organization.

In applying complexity theory, organizational scientists describe organizations as systems of nonlinear interactions where small changes can have large effects (Anderson, 1999; Cilliers, 2000). Lichtenstein, for example, stated that "a single idea can provide the seed for self-organization—the beginnings of a new configuration" (2000: 132) when a system moves beyond certain limits or certain thresholds of capacity. The notion of sensitivity to initial conditions suggests that organizations are not predictable and that changes in them are often more emergent than intentional (Stacey, 1995). Anderson (1999) and others have argued that when complex adaptive systems coevolve to the edge of chaos, as Kauffman (1995) argued they all do, small changes can cascade, unleashing an avalanche of change.

Far-from-equilibrium state. From the study of chemical systems, Prigogine and colleagues (Nicolis & Prigogine, 1989; Prigogine & Stengers, 1984) established that nonlinear chemical systems change only when they are pushed to a state far from equilibrium. As adaptive tensions increase and push a system away from equilibrium, the system imports energy and information. At a certain critical point, the energy, rather than being dampened, is dissipated through the system, breaking up existing symmetries and creating disorder. In the midst of this chaos, irregular and unpredictable patterns called dissipative structures begin to form as the system transitions through chaos from one phase to another. These dissipative structures exist as long as energy is continually being imported, and usually the spontaneous self-organization leads to some new but unpredictable order (Kauffman, 1993). When organizations move away from equilibrium toward instability, they can display highly complex behavior; that is, they are orderly enough to be stable but also full of surprises (Kauffman, 1995), and contradictory forces operate simultaneously, pulling the organizations in different directions (Stacey, 1992). For example, in an organization where the forces of innovation and experimentation couple with the forces of planning and efficiency, the tug and pull of these counteracting forces may push the organization away from equilibrium into a more chaotic state. Maguire and McKelvey (1999) described this region of complexity as full of adaptive tension and tension gradients; it is in this state that emergent self-organization and creative destruction (Stacey, 1995) occur. An organization approaches a far-from-equilibrium state when members have enough freedom to experiment with new ways of doing things that their discoveries lead to disorder capable of moving through the entire organization.

**Deviation amplification.** The study of cybernetics has been referred to as a science of selfregulating and equilibrating systems (Maruyama, 1963), with primary attention given to the role of negative feedback in mutual causal processes, particularly focused on information that dampens the effect of a change and takes a system back to stability. However, what has come to be known as "second cybernetics" (Maruyama, 1963) focuses on positive feedback that amplifies deviations and moves systems away from a stable state. Simply put, positive feedback is information, such as rumors in organizations, that enhances rather than minimizes deviations from intended directions. Deviation amplification is what leads to Lorenz's (1963) butterfly effect, and it is what fuels the ongoing disturbance that exists at farfrom-equilibrium states of complex systems. Network theorists sometimes refer to the phenomenon from physics known as the Bose-Einstein condensate (Bianconi & Barabási, 2001) in explaining how molecules in systems, when pushed to the edge, become highly interconnected and a new form of matter altogether.

When small changes occur in an organization far from equilibrium, where a pattern of destabilizing forces is moving the organization toward heightened nonlinearity, the small changes are more likely to be amplified by other actions and result in unintended radical change (Thietart & Forgues, 1995). An action has an amplifying effect on an initial small change if it makes the initial small change larger or stronger or if it intensifies the small change or escalates its consequences (Maruyama, 1963; Weick, 1979). As systems reach critical adaptive states, elements that were independent become interdependent (McKelvey, 2001), or more tightly coupled. When social systems experience stress, people or groups that were independent become highly interdependent, often as the result of a crisis or turbulence of some sort. In highly interconnected systems, positive feedback reinforces an initial signal and can amplify small changes. Wheatley described the amplification of a minor disturbance as follows: "Once inside the network, this small disturbance circulates and feeds back on itself. As different parts of the system get hold of it, interpret it and change it, the disturbance grows" (1999: 87). The notion of positive feedback and its amplifying effects can lead to either "vicious" or "virtuous circles" in organizations (Masuch, 1985; Sastry, 1997; Weick, 1979).

*Fractal patterns and scalability.* Complexity pioneer Mandelbrot (1977) introduced the term "fractal" in geometry to describe patterns in nature that repeat themselves with differing levels of complex-

ity. Fractal patterns are "self-similar"; they are similar but not exactly the same. Ferns in a forest or the bark on a tree are examples. Fractal patterns exist across scales; that is, patterns and shapes repeat themselves in nature in finer and finer detail. Thus, complexity is organized; the patterns of complexity observable at nested levels of a system are also observable in the whole. Applied to organizations, the concepts of fractal patterns and scalability mean that, as in nature, similar patterns appear at various levels—the individual, group, and organizational. McKelvey and Lichtenstein (2005) proposed a scale-free theory of emergence, which suggests that emergence occurs in the same pattern across stages or levels in an organization.

These four notions from complexity theory—initiating conditions, the far-from-equilibrium state, deviation amplification, and fractal patterns and scalability—provided a theoretical departure point for our study. By considering complexity theory along with change theory, we were able, ultimately, to fill in what we saw as the inability of existing theories of radical change to account for the emergent, continuous nature of some radical change. Thus, we began our analysis with at least a rudimentary conceptual framework (Miles & Huberman, 1994) for developing further theory about how and why small change can emerge and be amplified into something radical.

#### **METHODS**

This study did not begin as a study about radical change. Rather, it grew out of an inquiry into the decision processes used at Mission Church regarding its homeless ministry, but what emerged was a story about radical change.4 Mission Church, with its recently identified ministry to the homeless, offered an excellent organizational setting for studying how continuous radical change could occur. The media attention given to this church, its homeless Day Center, and the business community's reaction to the migration of homeless to the area enabled us to observe the continuous radical change, meeting Eisenhardt's (1989) criteria of an extreme situation where the process of interest was "transparently observable." A case study approach seemed appropriate because we were interested in

exploring how and why a small change became radical, and Yin stated that "case studies are the preferred strategy when 'how' or 'why' questions are being posed" (2003: 1). Continuous radical change is a complex, novel, and understudied phenomenon, and we wanted to capture the finegrained detail that was likely part of the story of the organization's unplanned radical shift in focus. We were able to interview people both inside and outside the church for details about the process; because of extensive media coverage of the city's ongoing homeless issue (and Mission Church's role in it), a considerable amount of external data existed that served as a check on the informants' reports to us.

#### **Data Sources**

We collected data from three sources: (1) 16 interviews with church leaders, members, employees, and volunteers, (2) 6 interviews with representatives of the downtown community, and (3) secondary sources such as newspaper articles, church documents, grant applications, Web sites, and informal observations. The interviews were semistructured and open-ended. Initially, when the focus of the study was on decision making, we interviewed 12 church leaders, members, employees, and volunteers. When the focus of our research shifted to emergent, radical change, we conducted four additional interviews, including people who had been present at the dinner where the idea for Sunday morning breakfasts was first proposed. We interviewed the physician who started seeing breakfast guests for medical problems. The originators of the breakfast idea made available to us their notes and files from those early days of the breakfasts. We also reinterviewed the copastors for points of clarification and for help in establishing the timeline.

Informants. The first set of interviews occurred at the church site and involved leaders, members, employees, and volunteers of the church and its Day Center, which offered homeless people various services such as lockers, showers, clean clothes, recovery programs, and a place to spend time during the day. Respondents included two senior copastors—the formal leaders—of the church, two people who started the breakfasts, the doctor, the church business manager, the church building manager, the Day Center manager, the director of food services, a nurse, a maintenance engineer, a mental health director, two church volunteers, and two volunteers at the Day Center. The pastors suggested the initial informants, on the basis of knowl-

<sup>&</sup>lt;sup>4</sup> The lead author was asked by the church pastors to observe the decision-making processes used in the homeless day center, which had become controversial. In the course of the interviews conducted for that purpose, the story emerged about the radical change that had occurred at Mission Church.

edge of the Day Center and church decision-making processes. After our focus shifted to change, we sought interviews with those involved in the early small change. To discover the perceived impact of the church's homeless ministry on neighboring businesses, we conducted a second set of interviews with representatives of the downtown community surrounding the church. The names of these immediate neighbors came from newspaper articles about the church or from church staff who identified business neighbors with concerns about the church's homeless ministry. Respondents included a hotel manager, a leader of the downtown business alliance, a city council member, a bank executive, a property manager, and a police lieutenant.

We taped and transcribed the interviews, which lasted approximately 60 minutes each. Two researchers were at each interview, one conducting the interview and the other taking notes. Immediately after the interview, the researchers crosschecked facts and impressions. We followed Eisenhardt's (1989) rules in that we (1) developed detailed interview notes within 24 hours, (2) included all data from the interview, and (3) concluded each set of interview notes with the researchers' overall impressions.

In designing the study, we were mindful that the presence of researchers within the field setting can "create social behavior in others that would not have occurred ordinarily" (Miles & Huberman, 1994: 265) and bias observations and inferences. We were careful to avoid potential biases. The initial small change that is the focus of this study had occurred at Mission Church five years prior to our research involvement. To minimize our effects on the setting and the informants, we followed the guidelines of Miles and Huberman (1994) by clearly identifying our study intentions and our data collection processes to the interviewees. We also used unobtrusive measures where possible and, while visiting the site, tried to keep as low a profile as possible. To minimize the effects of the setting on us, we avoided "elite bias" by interviewing all staff involved with the church and Day Center operations, including dissidents. We triangulated our findings over multiple sources and asked colleagues to review our findings and conclusions as the study progressed.

Our data collection effort relied heavily on retrospective reports, an approach that is not without limitations. Following the suggestions of Miller, Cardinal, and Glick (1997) and the approach taken by Cardinal, Sitkin, and Long (2004), we took several actions that enhanced the accuracy of the re-

ports. First, we used free reports<sup>5</sup> rather than forced reports, allowing informants to not answer a question if they did not remember clearly. Second, we verified individual reports by asking the same questions to multiple participants. Finally, we supplemented interviews with secondary data, as described below.

*Interview questions.* The interview guide for internal interviews had four sections: respondent's background, his/her role and relationship to the church and/or Day Center; the purpose, mission, and uniqueness of the church and Day Center; church and Day Center decision processes; and finally, challenges and opportunities facing both the church and the Day Center. The interview guide for external community members had five sections: respondent's background and responsibilities; impact of Mission Church's homeless ministry on the respondent's organization; the nature of the relationships among downtown organizations; the proposed ordinance regarding homeless people; and finally, respondent's feedback to the church regarding its homeless ministry. At the end of each interview, we asked informants to share any other information they felt was relevant.

Secondary sources and other data. We reviewed 34 newspaper articles about the church and the city's homeless issue. We also reviewed internal church documents, church reports, the church's Web site, the Web sites of other local providers of services for the homeless, grant applications, and other materials as available. During site visits, we took notes of our informal observations while waiting for interviews and eating in the restaurant located in the church. The restaurant, which employed homeless people, offered the opportunity to observe interactions of homeless people, staff, and church volunteers. Finally, we attended two monthly board of directors meetings for the church's nonprofit spin-off and took extensive notes that we referred to later.

### **Data Analysis**

Our analysis was guided by Eisenhardt's notion that "it is the connection with empirical reality that permits the development of a testable, relevant, and

<sup>&</sup>lt;sup>5</sup> Free reports allow informants to provide retrospective data freely; that is, they are encouraged to say they do not recall if that is true. Miller et al. (1997) documented improved accuracy of retrospective reports when informants offer free reports rather than forced reports, which are those that require answering specific questions without the option of skipping the question.

valid theory" (1989: 532) and by Van Maanen's contention that this type of research "should be empirical enough to be credible and analytical enough to be interesting" (1988: 29). Thus, we sought to tell a story based on the analysis of themes (Dutton & Dukerich, 1991), a story about how a small change led to unintended, radical organizational change. The theme analysis followed steps described by Miles and Huberman (1994) and used by Dutton and Dukerich (1991).

Step 1: Using a contact summary sheet. We used a contact summary sheet (Miles & Huberman, 1994) to record the main themes and issues from each interview. One researcher completed the contact summary sheet, and another researcher crosschecked it with the transcripts to confirm the identification of all the major themes. A theme was defined as a recurring topic of discussion that captured an interview's central ideas (Dutton & Dukerich, 1991).

Step 2: Creating a complete theme list. The process used to complete the contact summary sheets resulted in a list of unique themes for each of the 22 interviews. We required uniqueness of the themes identified within each interview by the original theme coder and the cross-checker but allowed for commonly identified themes over the 22 interviews. We coded each identified theme for analysis and tracking purposes. We then consolidated the list of themes over all 22 interviews. Examples of themes are "radical change," "randomness," "trust," "organic," "power," "connections," "transformation," and "charity."

To collapse this consolidated list further, each author sorted the themes into ten or fewer major categories, with each major category representing conceptually coherent constructs. Following O'Reilly, Chatman, and Caldwell's (1991) Q-sort process, we required the categories to be nonredundant, readable, general, and discriminant. This process resulted in ten broad classifications of themes, including organizational change, structure, goals/ mission/vision, identity, interpretation, challenges, social/emotional conditions, performance, external partnerships, and communication. We calculated agreement on the major theme classification as the proportion of authors identifying a given theme. Each of the ten major themes was listed by 83.3 percent of the authors. We decided to limit our research efforts to the major theme "organizational change" because this category contained many subthemes, and the interviews with people from both inside and outside the church contained this major theme.

Step 3: Construction of timeline. We constructed a timeline based on informants' recollec-

tions of important events, newspaper articles, and church documents. We consulted the pastors for corrections to the timeline, which Table 1 presents.

Step 4: Narrative analysis. Five of the authors created independent narrative accounts<sup>6</sup> of the organizational change that occurred at Mission Church. Narrative analysis is useful for organizing longitudinal data, especially data based on a single case of abundant information (Langley, 1999). We each recorded our "story" of what transpired at Mission Church using detailed analytic text to weave together, or make sense of, the interviews, observations, and theme analysis outlined above (Miles & Huberman, 1994). Moving back and forth among the timeline, the data, theory on organizational change and complexity, our narrative analyses, and conversations with each other, we were able to display the data (Miles & Huberman, 1994) and to observe a pattern within the data that related to organizational context (specifically, organizational decline, leadership, struggles with identity, and conflict). We also found patterns relating to organizational actions taken (specifically, acquiring resources, using language, and symbolic actions of commitment) and the outcome of radical change. Table 2 provides additional details about the data sources used to identify the patterns.

Step 5: Coding interview and newspaper data. We reviewed each interview transcript sentence by sentence and extracted all quotations associated with the theme of organizational change and/or the four contextual elements and three organizational actions outlined above. We coded quotations into the context and action categories using category definitions derived from previous research. Two authors were responsible for coding a single interview transcript, serving respectively as first and second coders. We employed this dual-coder

<sup>&</sup>lt;sup>6</sup> Through five narrative accounts, we identified several contextual conditions and amplifying actions as potentially instrumental to the change we observed at Mission Church. We only retained those contextual conditions and amplifying actions mentioned in at least three of the narrative accounts for further analysis. Specifically, we identified four contextual conditions (imminence of decline, changed leadership, struggling identity, ongoing conflict) within the narrative accounts. In addition, we identified four amplifying actions (acquiring/ rearranging resources, use of language, symbolic actions of commitment, and search for a model), but eventually dropped the last (search for a model) because only two authors identified this action as important. All six authors reached consensus on the four contextual conditions and three amplifying actions to include in the remainder of our analysis.

### TABLE 1 Timeline of Organizational Change

Period	Event/Action
Pre-1995 1974 1977 1983 1985 1993	Declining attendance, contributions, and changing leadership Leadership change. Leadership change. Leadership change. Leadership change. Leadership change. Subgroup of congregation lobby denominational administrator to save the church by appointing energetic clergy to
1994 1994 1995	church.  Minorities represent less than 2 percent of membership.  Current leaders appointed.  Pastors convince church to unlock the church doors, dismantle security system, and move church offices near the entrance.
1995–99 1997 1999	Struggle, conflict, identity issues, continuing decline Copastors welcome homosexuals to church. Young people meet for dinner and discuss Sunday morning ideas; Idea for small change (breakfast) emerges from conversation
1999	Small change occurs: first breakfast served on Sunday morning by 19 volunteers to 75 homeless people
1999	Increase in membership, small change amplified.  Effects of small change grow; 30 volunteers are serving up to 200 homeless people.  1st amplification; doctor offers services to homeless.  Membership increases by 46 percent from previous year.
2000	Change in membership, small change amplified, change in worship  Minorities represent 4 percent of membership.  Effects of small change continue to grow; medical, dental, optometry exam rooms are added on Sunday mornings.  Leaders began framing worship thematically around biblical stories of the marginalized.  Mission statement of church changes; more emphasis on "marginalized"  Church council votes to remove the chapel nameplate honoring former KKK grand dragon and church leader.  Feeding breakfast to 200–300 homeless each Sunday morning.
2001	Funding increases change in diversity of membership  The denominational board of the city increases funding.  Minorities represent 5 percent of membership.
2002	Symbolic changes, continuing focus on marginalized  Chapel nameplate is melted into a chalice and given to all-Black sister church. Members from both congregations marched from Mission Church through downtown streets to their sister church. The event concluded with singing, prayers, and sermons on healing.  Billboards go up around city: "Hell and Judgment Not Included."  Leader leaves early traditional worship service and starts regular worship with the homeless on Sunday mornings.
2003	Expansion of ministry to the marginalized, funding increases, symbolic actions, birth of a new organization Worship music changes, more homeless begin to attend worship services. Church enters into a \$100K year-long contract with city to provide hot meals to homeless. Church decides to spend \$500,000 of \$3M in undesignated foundation funds to expand its ministry and visibility in the community. Church starts a service for the severely mentally ill. Church leader and homeless people crash breakfast meeting with downtown business leaders regarding homeless issues. Church applies and receives city grant. Church forms new organization; spin-off 501(c)(3).
2004	Symbolic actions demonstrating commitment to the marginalized, conflict continues  Opening of Day Center for homeless.  Arrest of copastor for interfering with the arrest of a homeless man.  Crime rate increases in one-block radius of church, while crime rate in rest of downtown declines slightly.  City ordinance proposed to outlaw vagrancy and panhandling.  Minorities represent 10 percent of membership.
2005	Symbolic actions demonstrating commitment to the marginalized Pastor marries homeless couple. Church is declared a "safe zone" for homeless to sleep on church grounds. Church sponsors community event march around downtown to show solidarity with the homeless.

TABLE 2
Details on Data Sources

	Details on Data Sources				
Topic	Quotes from Interviews	News- paper Articles	Observations	Archival Data	
Context Decline	28	1	Board meeting discussion	Church history book Internal progress report Church member letter	
Conflict	84	16	Homeless in fight with leader and other homeless Police in Mission Park Posted rules at Day Center Board meeting discussion	Church history book Internal progress report Church conference report Church member letter	
Leadership	74	3	Interactions with marginalized Participation in T.V. interviews Church pamphlets	Church history book Internal progress report Letter from leaders to congregation Church conference report Church member letter	
Identity struggle	112	16	Board meeting discussion Meeting with leaders	Church history book Internal progress report Letter from leaders to congregation Church conference report Church member letter	
Amplifying actions Use of language	32	8	Business cards Billboards Signs on church property Meeting with leaders Church pamphlets	Annual report to denomination officials Letter from leaders to congregation Church conference report Church member letter	
Acquiring resources	105	6	Overheard conversations of business manager and staff Board meeting discussion Expansion of programs	Annual report to denomination officials Internal progress report Letter from leaders to congregation Church conference report Church member letter	
Symbols/signals	30	16	Leader daily interactions with homeless Leader as homeless spokesperson Former homeless man on church board Map of citywide services posted Inclusiveness awards from denomination's city district	Annual report to denomination officials Letter from leaders to congregation Church member letter	

method for each of the 22 interview transcripts. Each coder separately categorized interview quotations from assigned transcripts. The two coders then compared the quotations each had identified for inclusion. Review and discussion between the first and second coders continued until they agreed

on the quotations to include in each category. We removed all quotations not agreed on by the two coders from further analysis. This coding process, which resulted in the inclusion of 539 quotations, also allowed us to assess the degree of support for the organizational change theme (and accompany-

ing context and action categories) by the number of related quotations mentioned both within and across the interviews. Using exactly the same coding procedure as for the interview data, we identified a net total of 92 quotations from the newspaper stories that related to the theoretical categories in this research.

Step 6: Visual mapping. We used a graphic approach to represent the coded interview data. Specifically, we used a visual map to display a network of causal relationships among the organizational change, four contextual elements, and three organizational actions that provided the basis for our coding scheme. This method helped us improve the organization of our data and develop our analysis of the radical change at Mission Church within the context of complexity theory.

Step 7: Validity checks. We relied on triangulation of data wherever possible to check the validity of our study. We triangulated data obtained from interviews, observations, documents, and secondary sources. Our reporting includes only data substantiated over multiple information sources. We also triangulated data using multiple methods, such as narrative analysis and visual mapping. For a final check on the accuracy of our findings, we presented our final story to the pastors and two originators of the breakfast idea for confirmation of what we had found as well as additional insights and details. This presentation led to revisions of the timeline and corrections in some of the details about how the breakfasts started and who was involved.

### THE EMERGENCE OF RADICAL CHANGE

### Small Change—The Initiating Conditions

In the course of the interviews, we heard the story that a small change individuals initiated without the intention of radically changing the church appeared to have sparked the radical pattern of changes that followed. We labeled the change "small" because it (1) did not require a significant outlay of the church's resources, (2) did not require a reorganizing of other programs or activities, (3) was initiated informally as an "experiment" by church members-not by church authorities-and (4) had no intended goal or timeline associated with it. The *small change* was an informal group of young adults offering free hot breakfasts to the homeless on Sunday mornings. According to the pastors, this was a novel gesture, given the church's history with the homeless.

In the past, [the homeless] were invisible to us on Sunday mornings, intruding occasionally by asking for a handout. Our greeters were instructed to keep them away from our front doors because we knew they made people uncomfortable, especially visitors.

The idea for the breakfast grew out of conversations among a group of young people, not all members of the church, one night over dinner. A young man who was a new church member suggested the breakfast idea, and it seemed interesting to others present at the dinner. From that point, a handful of people became an informal group that spent the next five weeks planning their unorthodox Sunday morning concept. They got the pastors' "OK" and named their idea "Café Corazón" in an effort to differentiate it from traditional soup kitchens, where, they believed, homeless people often were not treated with dignity. One of them told us, "We had originally intended it to be a dignified breakfast and not a cafeteria. . . . We wanted to even wait on the people, with round tables. But the demand was so high that we just couldn't do that." The group handed out flyers one weekend on the streets, and over 75 homeless people showed up for the first breakfast. Attendance quickly grew to over 200 and, for over a year, the originators of the idea and their friends funded the breakfasts informally. No official group or organizing body oversaw the breakfasts, and a handful of organizers solicited volunteers through announcements at the major worship services. Interest began to grow, and other groups in the church volunteered to help staff the breakfasts. One Sunday about six months after the breakfasts began, a physician who was volunteering brought a stethoscope, medical bag, and medicine samples and began to see people regarding health problems. Describing his actions, he said, "I basically just started doing it. Of course I probably informed the pastor about it and in his classic way he said 'Well, sure, if you want to, go do it."

The Sunday morning "doc and a table" was the first of many *amplifications* of the Sunday morning breakfast into something that went beyond its originators' initial idea. The Sunday morning medical service quickly grew to include several physicians recruited by the original doctor. At the time of this writing, the Sunday morning medical clinic was treating over a thousand patients a year. A vision clinic and dental hygiene clinic operated on Sunday mornings as well.

Almost three years after the serving of the first breakfast, an attorney member of the church wrote a grant application seeking funding for the expanded ministry with the homeless. He wrote, "What began as 5–6 persons seeing the needs of the homeless has grown into a ministry in which over

one hundred church members are now involved." Five years after the breakfasts began, the church was providing thousands of meals a year, offering the Day Center for the homeless, and achieving recognition as an advocate for the homeless population of the city.

The informants described to us the change that has occurred in the church as "radical," "drastic," "transforming," yet also "slow to evolve" and "very organic." Informants also described a mass exodus of church members as the radical change unfolded. A review of the attendance numbers showed that at the time of this study, a steady 50-year decline in attendance had leveled off, and the church was experiencing increases in the diversity of worship participants. The year before the breakfasts were started, membership had dipped downward sharply, but a sharp increase (46%) by the end of 1999, the year the breakfasts began, confirmed what many informants told us: that the ministry to the homeless drew new members. Thus, we went back to our interview notes and transcriptions to see what might account for how this small change with unintended outcomes became transforming and ultimately revitalizing for the church.

### A Far-from-Equilibrium State Gives Way to Emergent Self-Organization

We could not discern from our interviews a specific point at which the leadership of Mission Church chose a new "deep structure" because of a specific trigger (Gersick, 1991). Mission Church had been in decline for decades, pastoral leaders had come and gone, and organization members had been aware of a need to change for many years but had either been unable to figure out how to change, or uninterested in doing so. As one church member and staff person said, "[Mission Church] seemed to be the church where the white-headed 60-year-old male about to retire was appointed [as a pastor] . . . kind of a plum appointment. . . . [Mission Church] was a congregation that was slowly dying."

The story our data tell is that the dynamic context in which the initial change occurred provided a fertile setting in which emergent behavior was more likely and in which small changes could occur, be amplified by other actions, and result in unintended radical change. We did not observe a linear progression from one small change to another. We did, however, observe four contextual factors, or "tension gradients" (McKelvey, 1999), that seemed to move the church toward instability: (1) imminence of organizational decline, (2) change

in leadership, (3) struggles with identity, and (4) ongoing major organizational conflict. Our story reveals how each of these factors destabilized Mission Church, pushing it away from equilibrium and making it more possible for a pattern of unintended radical change to emerge.

Imminence of decline. Organizations enter a state of organizational decline when they "fail to anticipate, recognize, avoid, neutralize, or adapt to external or internal pressures that threaten [their] long-term survival" (Weitzel & Jonsson, 1989: 94). With a large endowment, Mission Church was asset rich, but it was cash poor because attendance and membership were in steady decline, and many leaders had exited. A constant reminder of its more vibrant past was an unused wing, closed off to save on utilities. The local newspaper noted that the church had been losing members because of the expanding suburbs, and one person characterized the church as "on the verge of becoming a museum."

The husband and wife who were copastors at the church when the Sunday breakfasts began described their unsuccessful search for a turnaround strategy during their first four years at Mission Church: "After years of trying everything we were exhausted mentally and spiritually, and the church was still stuck in its plateau/decline spiral." They had followed the advice of church growth experts and attended seminars on urban ministry, but nothing seemed to work. Frustrations with the new pastors and their lack of success at reversing the decline grew, while the departure of long-time financial supporters continued. As one church member and supporter of the changes at Mission Church told us, "The only people coming in [to the church] were those that were cost-centered, not revenue-centered." This four-year period of somewhat frenetic efforts to stop the decline helped move the church into a state of disequilibrium, a state in which a small change can have an unintended and important impact (Thietart & Forgues,

Changed leadership. When denominational leaders had appointed the two copastors to Mission in 1995, the church had gone through two different pastors in the previous three years. This turnover in leadership also contributed to system instability. Further, the appointment of a husband-wife copastor team is highly unusual in this denomination and may have been another destabilizing shock to the conservative congregation. A complexity view of organizations suggests that leaders can push organizations to the edge of chaos (Regine & Lewin, 2000) or create regions of complexity (Maguire & McKelvey, 1999) by disrupting existing patterns

and ways of doing things. We heard stories of many disruptions caused by the new leaders that further stressed the system.

When they arrived at Mission Church, the pastors said, it had locked doors during the week and a security system intended to keep street people from wandering into the church. The symbolism of these features offended the new pastors and, after intense debate, they convinced church officials to open the doors. This was but one of many disruptions in existing patterns that the leaders initiated. One informant told us, "When the [pastors] came, you know, they turned this world upside down, in a good way." These "disruptions" added turmoil to the setting in which the breakfast idea was planted.

Struggles with identity. Organizational identity refers to how members of any organization perceive and understand who they are and what they stand for (Hatch & Schultz, 2000). Although the traditional view of organizational identity emphasizes an organization's "distinctive and enduring aspects" (Albert & Whetten, 1985), some researchers have argued that an organization's identity is relatively fluid and unstable (Gioia, Schultz, & Corley, 2000).

Augmenting the imminence of decline and the changed leadership, the church's struggle with its identity added destabilizing pressures to the system. The move of the church away from its silkstocking image was unsettling for many members. Prior to the Sunday morning breakfasts for the homeless, the pastoral leadership had tried to engage the congregation in a conversation about its identity, a conversation that became polarizing. Part of that conversation included the notion of being more inclusive and, as one informant told us, "The decision to be an inclusive church . . . specifically to gays and lesbians, upset a lot of members, so a lot of those members left." In trying to define the church's identity, several informants used words like "chaos," "flux," "fundamental change," and "evolution." One member told us, "I remember there were several 'visions' that were run up the flagpole and a couple of them didn't work so well." The ongoing struggle over conflicting views of church identity (cf. Corley & Gioia, 2004) further destabilized the system.

Ongoing conflict. A final contextual factor that moved Mission Church toward instability was the presence of ongoing conflict. Because organizations are made up of people with different goals, needs, and interests, organization members struggle for the values they hold dear (Perrow, 1986), which results in conflict. The presence of organizational actors with contradictory objectives who "intervene at different phases of the evaluation-choice-

action process" (Thietart & Forgues, 1995: 22) contributes to system instability.

Mission Church had never been immune to conflict. Several informants told of the 1964 showdown between Mission Church and the denomination to which it belonged over the latter's ruling that no church could exclude members on the basis of race. Church leaders, including a former "grand dragon" of the Ku Klux Klan, protested, but the church eventually complied with the denomination. The following year the former KKK leader died, and the church named its chapel after him. Memories of that painful period lingered at Mission Church, and in the midst of its recent struggle with a new identity, conflict arose about having a chapel named after a KKK leader.

With the advent of the wife-husband pastoral team, Mission Church battled the effects of internal conflict following organizational changes the copastors initiated. For example, informants recounted conflict around "the whole change in how church is presented and jazz music being used in a contemporary format." We heard that a conflict would arise, be dealt with, and then be succeeded by another, so that organizational energy was continually required to address conflicts. One informant summarized the resulting tension: "It was a very painful process but what's happened [is] it's been a kind of purging, I guess, of the people that were not in line with the vision of the Church." Our findings suggest the organization's history of conflict was well known and part of the backdrop against which the initial small change occurred. The church's ongoing experience with conflict added tension to the system, moving it toward greater instability.

Complexity theory, with its emphasis on far-from-equilibrium conditions and adaptive tensions (Anderson, 1999; Chiles et al., 2004; McKelvey, 1999; Weick & Quinn, 1999), directed us to the identification of four shifting contextual conditions that help explain how a small change can emerge and lead to a radical pattern of changes. Table 3 summarizes our evidence of these contextual conditions. Instabilities from the imminence of decline, changed leadership, struggles with identity, and ongoing conflict created tension for the church and pushed it toward instability.

Our analysis revealed, however, that the emergence of continuous radical change was not just a function of shifting contextual conditions, but also a consequence of church member and leader actions that amplified the initial change into change that went beyond the intentions of both the initiators and those taking the amplifying actions.

TABLE 3
Evidence for the Contextual Conditions

Contextual Condition	Source	Function	<b>Exemplary Quotation</b>
Decline: A threat to the organization's viability; decrease in organization's resource base (50 percent of internal informants talked about decline)	Internal	Church employee	We went to the district superintendent and said, if you don't appoint somebody young and vibrant and with a vision for [Mission] Church, we're going to die. I can promise you we're going to die. And we will die the richest old lady in town because we have \$4 million dollars in our foundation, but there was nobody here we were dying, dying.
	Internal	Program director	This Church was a dying downtown Church like a lot of downtown Churches are. This was what they considered the silk stocking Church; it was where very wealthy people came to Church it's a very ornate sanctuary. And what happened with people moving out to the suburbs, was the congregation dwindled and dwindled and dwindled.
	Internal	Day Center volunteer	This church has radically changed in the last decade and that's why there's this mass exodus of a bunch of congregates.
Leadership: The process of guiding, shaping, directing, and influencing the organization (88 percent of internal informants talked about leadership)	Internal	Church employee	They [the new leaders] changed the way we worship, they brought in new styles of music, [the new leaders] definitely felt the need to open the doors to the people on the streets and not turn a blind eye to our neighbors that are right outside the door.
Ŷ	Internal	Church member	That organ was a \$750,000 organ that a single individual gave back in 1981 and [the co-pastors] weren't kissing up They let powerful people go.
	Internal	Church leader	It's so difficult to get people engaged in acts of justice. It's because change is slow, success is vague, and no one gets
	External	Business leader	to really take credit for it.  I think that the mistake the leadership made and maybe they're trying to rectify but they took on a project that was going to impact an entire neighborhood.
	External	Banker	I think their [leaders'] heart is in the right place.
Identity: Distinctive and enduring aspects of an organization; sense of self (94 percent of internal informants talked about identity)	Internal	Day center staff	We went from a Church that considered itself mission oriented but the missions were almost always at the cuff; kind of far away. There were not a lot of hands on kinds of things where we could actually see something happening.
	Internal	Church member	Now along that time [in reference to when the breakfast started] there were similar processes going on there was a rapid grotesque attrition of the money there was white flight to the periphery and the struggle to find a vision.
	Internal	Church leader	We had to make a conscious decision of do we go after numbers, which basically meant more in terms of warehousing, or did we want to go after an intentionality of transforming human lives?
	External	Banker	I think that they've changed the direction of their ministry from where they were six months to a year ago and I know that from talking with some of the people that they are more now in the business of wanting to transform lives rather than warehouse lives.
Conflict: Difference in perceptions, beliefs, goals, and ideas; controversy; debate (50 percent of internal informants talked about conflict)	Internal	Church leader	We have difficulty in terms of community relations and it could be that civic leaders decide that we need to shut down. I felt that the minimum amount of rules was the best witness we could get to human transformation and respect and dignity for all people. So there was an ongoing collision about that and I lost.

TABLE 3 (Continued)

Contextual Condition	Source	Function	Exemplary Quotation
Conflict: Difference in perceptions, beliefs, goals, and ideas; controversy; debate (50 percent of internal informants talked about conflict)	Internal	Board member	I think one would be the stance that the church took and our music director took in the controversy over the gay man going to be a sponsor on the youth ministry trip. The first year it came about after the sponsor caused such an uproar, the kids weren't going, so the guy backed out. The second year they went ahead and invited him anyway and a lot of people left (the Church).
	External	Police	I've had almost every business owner around here come to my office at some point this year saying what can we do about this Day Center, its hurting our business our customers don't want to walk by it they don't want to walk through the park, they don't want to sit in the park anymore.
	Internal	Church staff	We have lost a lot of members who did not share this vision, and that's fine it isn't for everybody. We don't expect everybody to jump on the same boat together.
	Internal	Board member	We lost a lot of people over it (Sunday morning breakfast), but it wasn't just over the homeless issue and what we were doing. I mean it was over the gay issue, the racism issue, changes that were made.

### **Actions Amplify Small Change**

In a complex adaptive system, individuals and groups form a nonlinear network. Every time two people interact, the actions of one have consequences for the other, whose response feeds back information to the first person, who then responds; the result is a continuous circular loop, or what Weick (1979) called a "double interact." However, the first two actors' actions and responses become amplifying when they affect the actions of others in the system. Negative feedback is an attempt to counteract deviations, and positive feedback amplifies them. As Weick pointed out, a system will move in the direction of the most important or most prevalent feedback loop—that is, it will move in either a deviation-amplifying or a deviation-counteracting direction.

Informants from Mission Church described the period following the initial small change with statements such as, "Church members began the [breakfasts] five years ago and everything just grew and blossomed from there." As we reviewed the data on events, we developed three categories of amplifying actions that followed the initial small change: (1) acquiring new and rearranging existing resources that enabled and prompted more changes, (2) using language that reinforced the emerging pattern of change, and (3) using symbols and signals that reinforced the church's commitment to its emerging new direction. These amplifying actions reinforced the idea behind the Sunday morning breakfasts and helped transform the

church. Table 4 presents evidence of actions that amplified the initial small change.

Acquiring new and rearranging existing re**sources.** The first amplification occurred when the physician unexpectedly began seeing people with medical problems at the breakfasts. This new set of resources—the physician's expertise and the medicine he brought—pushed the Sunday morning event in a new and unplanned direction. About a year after the breakfasts started, the originators of the idea took it to the official church council for placement in the church's budget. This marked the first move toward formalizing what had now become a Sunday morning ministry with the homeless.<sup>7</sup> The approval of the council made formal the church's commitment to the breakfasts and led to other changes as well, such as a more organized plan for staffing the meals and expanding the medical offerings on Sunday morning. Seeking a way to help pay for the renovations needed to expand the medical clinic and the Sunday breakfasts, the church applied for and received some grants from the city.

The church's budget and the city's grant money represented new resources that made it possible to not only continue, but also grow the Sunday morning program in ways unanticipated before the

<sup>&</sup>lt;sup>7</sup> As is explained more fully under "Interaction of resources, language, and symbols," Mission Church members referred to the church's ministry "with" rather than "to" the homeless.

### TABLE 4 Evidence for the Amplifying Actions

Action and Exemplary Quotation	Source
Acquiring resources: Acquiring, expanding, transforming assets, capabilities, competencies, etc. (88 percent of internal informants talked about new or rearranged resources)  There just needs to be more money to be able to do all the things that have to be done, but right now we have a little bathroom, a little set of showers, a little washing machine and dryer and we're trying to do what we can, but without funding to expand all that, I	Employee
think we're just doing the best we can do.  We wanted to expand the Sunday feeding, we wanted somebody to pay for the food we wanted to get the city to do that. Then there was the Day Center thing came up and we said, "Well, we'll put in for that," and there was the mobile canteen, which we really didn't want, so we put in this bid some exorbitant amount of money just to make sure that we didn't get it, you know; and I don't think anybody else put in for it and so we got it.	Employee
We see that there will always be a need for the Day Center and I think this Day Center is going to grow. And we're going to need more help. And more funds. There is so much more to do. We have a whole floor not being used.	Employee
Use of language: Tool for describing, reporting, creating reality; expressing a point of view (88 percent of internal informants used language consistent with the church's new identity)	Internal source
What that means is justice for all people, whether they're homeless, whether they're	Program director
straight or gay, it doesn't matter who they are, they're treated with unconditional love.  What we mean as not being transformed is if you want to continue to stay on the street and do nothing but loiter and do whatever you do then we love you all the same but you're not transforming your life, you're not trying to help yourself and we're all about	Employee
you helping yourself and us helping you. [About a year after the start of the breakfasts] we began framing worship thematically around the Biblical stories of the marginalized. We preached their stories in the context of today until their stories became the identity of the congregation itself.	Leader
Symbols/signals: When an action or behavior takes on a larger meaning (38 percent of internal informants referred to symbols or symbolic acts)	
This is the church that isn't just talking the talk, they are walking the walk.  If you come to our church on Sunday you'll see homeless people in the pew next to doctors and lawyers. So we're very intentional about including the homeless in our community.	Employee Program director
So here we have a "silk stocking" attorney putting on sandals and going down and	Member
washing feet.  Back in the fifties when segregation was big, the balcony was made for the African  American people. When we redid the church [and reduced the sanctuary seating], we had a bunch of pews left over so we took one and gave it to St. Paul's [Mission's sister  African American church].	Member

money was received. For example, a vesting room was turned into an eye clinic, and another dressing room became showers. An organist's room became a doctor's office, and part of a classroom became a clothes closet.

Ultimately, the Sunday morning breakfasts led to the unintended establishment of the Day Center that provided daytime shelter and services for homeless people throughout the week. A surprising challenge had developed when some of the homeless people who regularly attended breakfasts and worship services on Sunday mornings began to drop in to talk to church staff during the week and make requests of them. One person said, "We

couldn't turn them away and...we [Mission Church staff] couldn't get any work done." One informant said,

Our decision to open up the Day Center was made before we knew 100% that we'd have funding for it, but we had to, you know . . . we either had to stop doing it and start stopping those people at the door saying we know you come to Church here on Sunday, but, you know, you look like you're from the streets and we can't let you in; or we had to open up the Day Center.

Mission Church sought to solve the problem of homeless people interrupting the work of the staff during the week by relying on two major resources: space and dollars. The church renovated some of its unused space, away from the church offices, for weekday homeless services. The number of people who began coming to this area, the Day Center, was greater than the number funded in the grant and, as an informant told us, "The city was interested in finding ways to work with us to increase that even further." As the church received multiple grants, it appeared that the city increasingly depended on it to provide services to the homeless. Mission Church started to receive other external funding that further extended the commitment to the homeless. In sum, as Mission Church was able to acquire additional resources for the Sunday breakfasts and the Day Center, the church's commitment increased; as one of the pastors told us, "The Day Center and feeding program . . . are now our primary symbols." The acquisition and rearrangement of resources helped fund and expand the Sunday morning breakfasts and the medical clinic. The resources gave rise to new ideas that became connected to other ideas, further amplifying the initial idea of Café Corazón. The Sunday morning program increased access of the homeless to the church building, which in turn created demand for use of the building during the week. The resources acquired to help solve the weekday problem of staff being interrupted led to establishment of a center for providing homeless services during the week, and the amplifying cycle continued. The resources amplified the original deviation and led to other activities that began to form the pattern of changes leading to radical organizational change.

*Use of language.* Language forms and expresses the underlying mind-set of an organization (Culbert, 1996). As a mind-set changes, language can either block or promote alternatives to the status quo and help crystallize a future vision (Butcher & Atkinson, 2001). Language gives importance to change because "change is created, sustained and managed in and by communications" (Ford & Ford, 1995: 560). In the course of our interviews, we found the recurrence of some words and phrases striking. We looked carefully at our transcripts and considered the use of language as a way of labeling and amplifying the pattern that was forming around the emergent changes at Mission Church. The language most used by informants to describe change they perceived as positive centered on the term "transformation." This language, which was used by the pastors but not formally imposed by them, spread throughout the church staff and church members.

We heard informants use metaphors that Marshak (1993) has associated with transformational

change, such as "purging," "becoming holistic," "dying and being reborn," "recovering," and "removing blinders." For example, one pastor explained, "We are all in recovery for something . . . you may have an alcohol problem, I may be an overeater, I may be an overachiever, there are all kinds of things we are all in recovery on." The Day Center manager, who had been homeless, reflected the new language the church was using when he told us, "We're in the business of transforming people's lives, specifically those that are living in the margins . . . that are poor . . . that are homeless . . . that don't have access to services that we are providing." When the language at Mission Church changed to a language of transformation, recovery, dignity, and respect, it was associated with an emergent inclusiveness among church members that played a role in creating, sustaining, and maintaining the church's unfolding new vision and values. One of the initiators of the Sunday breakfasts told us what "transformation" had come to mean to her:

The best experience I've had at that breakfast was... you know, I'm trying to help, I'm pouring syrup. I'm an emotional wreck because my mom just died and tears are coming down and this [homeless] man walks over and he says "What's wrong" and I said "It's okay. My mom just died." And tears are coming down. He puts his hand on my shoulder and he says "I'm sorry." And I've written [transformation several times and okay, that was the moment I got it. You know that was an awkward moment, and I realized at that moment . . . I thought "your pain is the same as I have . . . I'm not feeling any worse than you are, you know, and maybe you have been through this. We're on an equal playing field." And from that, when people say "transformation," it's like, okay, but have you really had a hard moment

We traced the consistent use of certain words throughout Mission Church to the copastors' linguistic choices. For example, early on in the church's transformation, the pastors and others began to use "marginalized" instead of "homeless," because they considered the former both more respectful and more inclusive. When the Day Center opened, the church staff referred to the homeless clients as "consumers" because they believed it to be more dignified than "the homeless." The church also placed billboards around the city bearing the church's name and address and the message, "Hell and Judgment Not Included." The initial small change that pushed Mission Church toward a ministry with the homeless was amplified by resources and by language that gave meaning to the changes underway and thus helped people discern and label a pattern in the changes. This scenario reflects Bartunek's (1984) idea that leaders influence the expression of alternative interpretative schemes in the midst of change.

Use of symbols. Symbolic processes are responsible for a great deal of human cognition (Axley, 1984). Symbols can be critical for organization members making sense out of a changing reality (Gioia, Thomas, Clark, & Chittipeddi, 1994). Barthes suggested that the action of a symbol, the "heightening and making clear aspects of reality that were otherwise ambiguous or removed from experience" (1972: 255) can be crucial in bringing about change.

Several stories emerged from our interviews involving symbolic actions that signaled significant change at Mission Church. A few years after the breakfasts started, one of the copastors received an invitation to a meeting of downtown business and community leaders to discuss the "homeless problem." The invitation itself legitimized the church's role in the city's homeless problem. The pastor arrived at the meeting with 12 freshly showered "marginalized people" to participate in the conversation, and the local newspaper reported the action with the headline, "Homeless Crash Breakfast, Leave Elites a Reality Check." This action, now part of the church's folklore, was a symbol for both the congregation and the wider community of Mission Church's deepening commitment to its ministry with the marginalized. A second story involved the pastor's arrest the following year for interfering with a police officer who was questioning a homeless person, a consumer at the Day Center. The pastor's action and his congregation's supportive response (charges were eventually dropped) were covered on the local news stations and became another symbol of Mission Church's commitment to working on behalf of the homeless. A local newspaper reporter wrote, "If one moment can be said to crystallize a conflict, it happened one day in a standoff between the pastor and police that ended with [the Pastor] being arrested for interfering with an arrest" (Hamilton, 2004). A third story involved the church's decision to remove the nameplate dedicating the chapel to the church member who had been a KKK leader. During the emerging radical shift in identity at Mission Church, discussions revealed the racist background of the chapel's namesake. Church members' response was swift, and as the local newspaper reported, "They wanted to reconcile [the church's] racist past with its current vision one centered on tolerance and inclusion, on diversity and acceptance" (Stoeltje, 2002). The

church had the nameplate melted down and turned into a communion chalice, which they gave to a "sister" church with mainly African American congregants.<sup>8</sup> One member of Mission Church said, "[The chalice] seemed a symbol or a parable about how even the worst hurt and ugliness-given the right heart-can transform into a thing of beauty and love." Through this symbolic action, the church's commitment to serving the marginalized seemed to deepen, further amplifying changes that had already happened. Although we heard many stories, the downtown meeting, the arrest, and the chalice were the major symbolic actions consistently described to us. Each symbolized the radical change in identity that was emerging at Mission Church.

Interaction of resources, language, and symbols. Our observations suggested that each of the three amplifying actions not only escalated the initial small change, but also that each impacted the others, interaction that in turn further amplified the initial change. Requesting grant money from the city required the church to articulate its purpose for acquiring the money. This articulation represented a dynamic interaction between acquiring resources and use of language. In the first grant application, the following introductory sentences appear, echoing the goals of the original group who had thought up the breakfast idea five years earlier:

At Corazón Ministries in Mission Church we believe we are all alike, rich or poor, there is no distinction. We will treat homeless persons who come to us, as you would treat a guest in your home. We have served homeless men, women and children for nearly 5 years and many are friends and members of the Mission Church family.

The sentiment in the grant application reflects the language the church had adopted and begun using on its Web site and in its brochures, which described their program as a ministry with the homeless, not to the homeless. Subsequently, this language helped shape further requests for resources made both within and outside the church. Several members described the symbolic action of removing the nameplate from the chapel using the same language of acceptance and inclusiveness that was being used in the pulpit, on

<sup>&</sup>lt;sup>8</sup> This church, the oldest African American church in the city, was established by former slaves in 1866. Many of them had originally attended Mission Church, where they were forced to sit in the balcony. Years later Mission Church members referred to this as Mission's "sister church."

billboards, and in grant applications, thus demonstrating the interaction among symbols, language, and resources. Each amplifying action helped grow the first small change, but each also seemed to affect the others and to "amplify the effects of one variable on another" (Weick, 1979: 7), thus accelerating and furthering the system's movement toward radical change.

### The Dynamic Interaction of Amplifying Actions and Context

Effects of amplifying actions on contextual conditions. The three amplifying actions we observed—acquiring resources, use of language, and use of symbols—amplified the original small change, affected each other, and also seemed to feed back information that contributed to altering the original contextual conditions: the imminence of decline, changed leadership, struggles with identity, and ongoing conflict. Thus, we observed ongoing dynamic interaction among the amplifiers and contextual factors that helps explain the continuous nature of the radical change experienced at Mission Church.

The amplifying actions affected the nature and level of the organization's decline. Many of the "deep pockets" continued leaving the church because of the growing ministry with the homeless; however, the city grant money made up for some of the loss. Although some people left because of the emerging new vision, the 50-year decline began to tail off as new people were attracted to the church's new focus, reflected on the church Web site, on "unconditional love and justice in action." The billboards, the language of inclusiveness used in church services, and the media image of the church were all controversial, yet they attracted new people to worship at Mission. Although attendance and membership began to grow again for the first time in many years, the church's coffers did not fully recover, since the new members brought with them fewer resources than departed members had possessed. The effect of the 50-year decline was far-reaching, even as the church began to grow again.

We observed two ways in which amplifying actions affected church leadership. Accepting city resources thrust the church into a more public light than before and led to one of the copastors switching much of his focus to Corazón Ministries, the newly formed 501(c)(3) umbrella organization managing the Sunday morning programs and Day Center, and public advocacy for the homeless. While he concentrated on advocacy, his wife took on more responsibility for the traditional day-to-

day church business. The increased use of language and symbolic actions that reinforced the church's commitment to serving the homeless also contributed to a public view of the male copastor as a spokesman for the marginalized:

[The pastor] has emerged as a spokesman for the city's 23,000 plus homeless people, calling for more public restrooms and water fountains downtown and criticizing proposed ordinances to ban sleeping in public areas and "aggressive panhandling." He has held news conferences with homeless advocates such as a city council member. (Jaffee, 2004)

The second way in which leadership changed as a result of the amplifying actions was the establishment of a nonprofit organization—Corazón Ministries—to accept city grant money. The nonprofit's board, made up of church members, professional staff, and representatives for the homeless, eventually oversaw the entire Corazón Ministries operation. The pastor's hands-on management role in the early years of the ministry with the homeless evolved into more of an executive role of working with the board and in external relationships based on the issue of homelessness. The pastors at Mission Church were the first to say that the unfolding radical change deeply altered their roles. It is interesting to note that some of the changes in their roles were partly a result of actions they or others took to amplify the initial small change, without the intention of ultimately affecting the pastors' roles.

Receiving funds from the city reinforced the church's emerging *identity* as a church in ministry with the marginalized, as did the language used in the billboards and the media coverage of some of the symbolic actions, such as the pastor's arrest and bringing the homeless guests to the downtown business breakfast. The identity continued to shift beyond that of a church in ministry with the poor to that of a community advocate for the homeless. The organization's sense of what it was, what it stood for, and what its distinctive qualities were, continued to emerge as new resources, new language, and different symbols became available.

The amplifying actions also affected the nature and level of *conflict* inside and outside the church. The new resources enabled programs that sharply increased the number of homeless people coming to the church, antagonizing several downtown business neighbors. The increased visibility of the church as it began advertising "Hell and Judgment Not Included" and referring to the homeless as their "guests" or "consumers" increased the tension between the church and the downtown business community. Once the Day Center had opened, bringing many homeless people to the church

daily, discontent and complaints replaced the previously cordial relationship between the church and its neighbors. The hotels adjacent to the church reported having to refund money to guests who were unhappy with the traffic of homeless people created by the church's Day Center. A downtown business executive told us, "I believe [Mission Church] is somewhat insensitive. They don't fully understand the impact on businesses . . . people hang out at [Mission Park] [and] create discomfort for office workers, residents, and hotel guests." Initially conflict was part of what destabilized the organization and led to the emergence of a new idea. As actions amplified that original idea, they also affected the nature of conflict, whose presence kept the system from returning to its previous state of equilibrium. As the church addressed and resolved each new conflict that surfaced, the resolutions became part of the pattern of changes that ultimately represented a radical change.

Effect of contextual conditions on amplifying actions. As we linked together the stories and examined the timeline, our explanation of how radical change can occur came to include system-level amplification. Our analysis revealed not only that the amplifiers seemed to alter the organizational context, but also that the altered context seemed to affect the amplifiers, creating an ongoing dynamic interaction that enabled continuous radical change. For example, we observed how the unfolding new organizational identity altered the church's resources. Four years into the emerging radical new direction for Mission Church, the church administrative council voted to do something new, financially underwriting the emerging homeless ministry with \$500,000 withdrawn from its \$3 million endowment. This action was not without controversy, as some long-time members felt it violated the conditions of the initial endowment gift. The early amplifying action of searching for resources contributed to alteration in the church's identity that in turn led to a vote to restructure the organization's assets to fund the emerging radical change. Thus, the search for resources reached an entirely new and more complex level, because of the altered identity of the church.

A second example of the dynamic interaction was the effect that the contextual conditions had on the use of language. The conflict over developing a homeless ministry was dying out as members who opposed it either left or were quieted by the growing enthusiasm among younger, new members for the emerging focus of "ministry with the marginalized." The leaders were no longer searching for a vision, because one had emerged. Early in the course of change, the pastors used language to re-

inforce the initial small change by focusing sermons on biblical stories of the "marginalized" and developing mission statements, billboards, and logos that reflected the church's emerging vision. As change continued, the use of language, as an amplifier, became increasingly sophisticated and complex. For example, the pastors moved from creatively using language in the pulpit and in promotional materials to an aggressive use of the media for bringing attention to the church's mission. In the two-year period 2003-05, 34 articles and editorials appeared in the local newspaper about the church's outreach efforts. The pastor began appearing in news conferences, and the media increasingly described him as the city's "advocate for the homeless." The unfolding change at the church and the associated external conflicts captured the attention of the local media, and the church began to use the media to heighten awareness of the plight of the homeless.

We also observed the effect of changing contextual conditions on the use of symbols. Some of the most visible early symbolic actions we noted were largely actions by one pastor, such as bringing homeless people to the downtown business breakfast and being arrested on the steps of the church. Increasingly symbolic actions of church members supplemented the pastor's symbolic actions. The church held a candlelit wedding for a homeless couple, and church members donated money for a honeymoon. A wealthy lawyer gave up his practice, went to seminary, and later became the pastor for Corazón Ministries. A formerly homeless man was appointed to the board of directors of Corazón Ministries. Most recently, in response to a new city ordinance outlawing vagrancy, the church organized a demonstration in which church members camped out overnight under a bridge to show solidarity with the homeless.

The church's new identity, its reversal from decline, the altered nature of conflict at the church, and changes in its leadership's roles all affected the use of symbols. The ongoing dynamic interaction among amplifiers, small changes, and contextual conditions gave rise to continuous radical organizational change.

The radical change we observed at Mission Church seemed to emerge at increasing levels of complexity, lending some preliminary support to McKelvey and Lichtenstein's (forthcoming) scale-free theory of emergence. For example, the earliest amplifying action was acquiring resources through informal donations from a handful of church members. Systematic collection of donations from all church attendees on Sunday mornings followed, then grant applications, and then asset restructur-

ing. We observed the same fractal-like pattern in the use of language, which evolved from the sermons about the marginalized to sophisticated use of the media. The symbolic actions in recent years, such as the churchwide demonstration under the bridge, communicated the earliest message of dignity and respect but in a more complex fashion than the earlier symbolic actions had. Although we do not have definitive evidence, the ongoing use of amplifying actions appears to have a fractal quality. Each subsequent action—be it acquiring resources, using language, or using symbols—was similar in purpose to the earlier action but more complex than its predecessor.

### The Role of Negative Feedback in Emergent Change

We have emphasized the role of positive feedback in our story of radical change because of the amplifying effect of specific actions participants took, mostly without the intention of radically changing the church's identity. However, negative feedback also played a role in what happened at Mission Church. It is beyond the scope of this article to include a complete analysis of feedback loops of the sort suggested by Weick's (1979) treatment of causal loops or Masuch's (1985) treatment of action loops, but some attention to this issue is warranted. Positive, or amplifying, feedback is often viewed as dangerous or counterproductive because it can lead to vicious circles (e.g., Masuch, 1985) by moving a system away from an established reference point and toward instability. However, the notion of virtuous circles (Weick, 1979) suggests that deviationamplifying loops are not always destructive.

As the radical change unfolded at Mission Church, negative feedback countered some of the positive feedback and kept the church from spinning out of control. As the initial breakfasts drew homeless people to the church throughout the week as well as on Sunday morning, some church members complained about wear and tear on the building (negative feedback), a concern partly satisfied by the opening of the Day Center, which redirected traffic to a different side of the building and a separate entrance. Yet after the church established the Day Center, neighboring businesses complained that the line of homeless people waiting to get in on weekday mornings created barriers for employees coming to work (negative feedback). The Day Center staff responded by adjusting the hours so that the center opened earlier, before the employees had started their workdays. An angry church member frequently sent hostile letters and made aggressive presentations at church council

meetings about the changes (negative feedback), but most of his supporters left the church or were silenced by the increasing interest in the homeless ministry, and he eventually became silent. At the time of this writing, he still belonged to the church and was still opposed to its new identity, but he had given up active complaining.

Although the negative feedback helped stabilize the system at each new level of emergence, both positive and negative feedback continued. The paucity of services for the homeless during the daytime in the downtown area made the Mission Church Day Center popular among the homeless population. Word quickly spread (positive feedback), and the homeless population in the area of the church increased dramatically, causing surrounding businesses to support a city ordinance outlawing vagrancy (negative feedback). The church responded to the new ordinance by making church property a "safe zone" where people could sleep without the risk of arrest, causing the homeless population to increase even more (positive feedback). Thus, at an environmental level, the field continued to be in flux (Meyer et al., 2005). Inside the church, the field also remained in flux. One result of the church's new identity with the homeless had been that some people now participated in the Sunday morning program but not in the larger church (positive feedback). In an effort to keep the breakfast program from spinning off in a separate direction, the church instituted a rule that Sunday morning service providers needed to also participate in regular worship services (negative feedback). Feedback in the church's system oscillated between positive and negative, as is characteristic in the system state that the complexity theorist Stacey termed "bounded instability far from equilibrium":

The key discovery about the operation of nonlinear feedback loops is that stable equilibrium and explosively unstable equilibrium are not the only endpoints of behavior open to such systems. Nonlinear systems have a third choice: a state of bounded or limited instability far from equilibrium, in which behavior has a pattern, but it is irregular. (Stacey, 1992: 53–54)

In bounded instability far from equilibrium, organizations are driven alternatively by positive and negative feedback. This is what we saw at Mission Church. The amplifying actions and their dynamic interplay with contextual conditions escalated the accumulation of small changes into a pattern that ultimately became radical, but the resistance created by negative feedback along the way limited how far and how fast the system changed.

### DISCUSSION AND IMPLICATIONS

This paper explores the nature of change that is both radical and continuous and offers a new theoretical explanation of how small individual adaptations can become radical, transforming an organization in unintended yet dramatic ways. The existing theory of radical change does not explain what we observed at Mission Church. Although Greenwood and Hinings (1996) identified radical evolutionary change as a type of change (see Table 1), there is very little understanding about how this type of change occurs. According to the punctuated equilibrium theory (Gersick, 1991; Romanelli & Tushman, 1994), small changes do not accumulate into big ones, yet that is exactly what we observed.

The story of Mission Church and its unintended radical transformation suggest that organizational context matters when one seeks to explain emergent radical change. According to complexity theory, when a small change occurs in a context of destabilizing organizational shifts, other small changes are likely to emerge. Specifically, in regions of bounded instability (Stacey, 1992), where adaptive tensions (Maguire & McKelvey, 1999) or fluctuations (Chiles et al., 2004) are interacting with one another, emergence and self-organization occur. For Mission Church, this meant that the tension the organization was experiencing as a result of decline, new leaders, an unclear identity, and ongoing conflict made it all the more likely that a small change could emerge and be amplified into something much larger. Further, when an organization experiences a high degree of tension, connections among parts of the system tighten, as do their counterparts in the physical systems. When connections, whether among molecules or among people, tighten, amplifying small changes becomes easy. It is in this region—away from equilibrium that emergent self-organization is likely to occur, making unintended radical change a possibility. In the case of Mission Church, the originators of the initial small change were loosely connected to the organization. Some of the originators were not members of the church, and their group functioned ad hoc and unofficially. The originators might have considered their idea a contained Quadrant 1 (see Figure 1) type of change. Destabilizing pressures and tightened connections elsewhere in the system, however, made their idea a Quadrant 4 type of change, one that was easily amplified by subsequent actions. The small change in this study was a novel adaptation, somewhat divergent from the church's trajectory at the time the young people initiated it. The factors that amplified it into something radical, however, could easily have also amplified a small change less novel than the one we observed.

The important role of amplifying actions in the radical change that Mission Church underwent emphasizes the critical impact of positive feedback in organizations. Positive feedback amplifies small adaptations and explains, in part, how a single small adaptation can lead to a radical new order. A system's move toward instability implies the dampening mechanism of negative feedback has failed to return the system to equilibrium. Positive feedback will move the system toward instability until new negative feedback balances it at a new point of equilibrium. The further an organization moves from equilibrium, the more likely it will be that small changes or adaptations will interact with other adaptations and that an accumulation of small changes, whose pattern may end up being radical, will result. Certain organizational actions, such as acquiring resources to fund a new idea and using language and symbols to give it coherence, can amplify the new idea into something much greater than either its originators or those taking amplifying actions intended. Radical change can then become continuous, because the dynamic interaction of amplifiers, contextual conditions, and small changes is continuous. This conclusion supports the finding of Amis, Slack, and Hinings (2004) that radical change does not have to be fast paced.

Mission Church's experience of decline and renewal supports the notion that change can be viewed as continuous/evolutionary (Greenwood & Hinings, 1996; Weick & Quinn, 1999) but also provides empirical evidence that continuous change, whose pace is much slower than that of episodic change, can become radical. Ideas from complexity theory (Anderson, 1999; McKelvey, 1999; Prigogine & Stengers, 1984) helped us develop a theoretical framework that explains the emergence and amplification of small change into continuous radical change, complementing established thinking on organizational change. The significance of contextual conditions and amplifying actions that we observed led us to the development of a set of propositions regarding radical change that can be tested in future research. Table 5 summarizes these propositions.

The findings from our study of emergent radical change raise questions about the role of leadership in bringing about such change. We observed an organization that had experienced frequent turnover in leadership and the advent of a new leadership style and a new set of interests with each turnover. The copastors who were part of the radical change had been actively, and unsuccessfully,

TABLE 5
Summary Table of Propositions

Propositions	Contribution to Theory of Change	<b>Complexity Theory Explanations</b>
Organizational tension, created by the number and intensity of contextual conditions, encourages the emergence of small change and amplification into radical change.	Unintended radical change is likely when contextual conditions create stress for the organization.	Sensitivity to initial conditions in systems far from equilibrium results in emergent self-organization. Small changes can cascade bringing unpredictable and monumental outcomes.
2. Resource availability accelerates a small change into radical change, given a high level of organizational tension.	Resources enable local adaptations to accumulate and amplify.	Positive feedback more prevalent in disequilibrium; dampening mechanisms fail to return system to stability; positive feedback reinforces signals and amplify fluctuations. When agents in a system are pushed to the edge, they become highly interconnected; new matter forms.
3. The use of <i>language</i> accelerates a small change into radical change, given a high level of organizational tension.	Language enables local adaptations to accumulate and amplify.	
4. The use of <i>symbols</i> accelerates a small change into radical change, given a high level of organizational tension.	Symbols enable local adaptations to accumulate and amplify.	
5. The interaction of amplifying actions accelerates a small change into radical change, given a high level of organizational tension.	The <i>interaction of amplifiers</i> enables local adaptations to accumulate into a pattern.	Nonlinear dynamic systems respond to multiple forces, multiple actors, and instabilities. Fractal images and scalability suggest that there will be similar patterns to emergence across levels of the organization.
6. The interaction of amplifying actions and contextual conditions accelerates small change into radical change, given a high level of organizational tension.	The ongoing interactions of amplifiers, organizational conditions, and small changes enable local adaptations to accumulate into a pattern that is radical and continuous.	

searching for solutions to the decline problem for four years prior to the beginning of the breakfasts. Many of their efforts were unpopular with the congregation, creating yet more controversy and further destabilizing the organization. Thus, in our theoretical framework we placed "changed leadership" as part of the context that pushed the system away from equilibrium and contributed to the emergence of small change. Yet clearly leadership also helped amplify the small changes as well. This observation raises the question of the role of leadership in emergent change.

Unlike previous radical change theorists, who have emphasized leaders' role in *creating* and triggering change (Gersick, 1991; Marion & Uhl-Bien,

2001; Romanelli & Tushman, 1994), we observed that in emergent radical change, leaders' interpreting adaptations as they begin to accumulate was important. What we saw at Mission Church was leadership skill in detecting and labeling the pattern that was forming around the small emergent adaptations. In this way, the leaders served as "sensegivers," giving meaning to the changes that were unfolding rather than creating and directing the changes. For example, the young people started a breakfast for the homeless, and the leaders began talking about reaching out to the "marginalized." The doctor started seeing patients, and eventually the church motto included "justice in action." The leaders' use of language was skillful because it gave

meaning to emergent changes and helped draw attention to the pattern that was forming. The meaning that was given to the changes (ministry with the marginalized) was larger than any specific change (e.g., Sunday morning breakfast for the homeless), thus attracting more attention and drawing wider participation. Ford and Ford (1994) argued that any change involves attractives, things that draw or pull others to them, and actives, people who are looking for or open to what is being offered. In emergent change, ideas attract people, but only people who are actively looking for and listening to what is emerging. In this way, the leaders at Mission Church were the "actives" who were open to an emerging pattern of adaptations and then capable of labeling and interpreting the pattern in ways that made it more attractive, thereby drawing in others. Once the changes were underway, we still observed the leaders encouraging self-organizing behaviors.

Had the radical change at Mission Church been attributable solely to leadership, the church would have begun its turnaround as soon as the new leaders arrived. This was not the case, as four years had passed before a handful of young people planted the small seed of the idea that led to radical change. A contribution of this research is the notion that the momentum for radical change that we observed seemed to lie at the intersection of an emergent idea that bubbled up from below, destabilizing conditions that encouraged emergent self-organization, and leaders who were skillful at recognizing and giving meaning to emerging patterns.

Some compelling research issues surface when we think about organizational change as radical, emergent, and continuous. First, there is a need for further exploration of the role of leadership in emergent radical change. Complexity theory, for example, offers a theoretical framework for rethinking leadership in the context of emergence and self-organization. For example, in another work (Plowman, Thomas, Beck, Baker, Kulkarni, & Travis, in press) we build on the work of Marion and Uhl-Bien (2001) to draw two contrasts: leadership behaviors versus leadership roles, and enabling behaviors (needed for emergent self-organization) versus controlling behaviors (traditional leadership). Second, further research should examine whether some particular contextual configurations are more likely to be destabilizing, and thereby sources of emergence, than others. We identified four dimensions of context that were destabilizing for Mission Church. It remains to be seen whether imminence of decline, ongoing conflict, changed leadership, and struggles with identity represent a configuration of contextual factors that have to be in play for

any organization to move toward disequilibrium. Our findings do not allow us to make that claim. A configuration is defined as "any multidimensional constellation of conceptually distinct characteristics that commonly occurs together" (Meyer, Tsui, & Hinings, 1993: 1175). Although previous research has examined the configurations of organizational attributes that lead to performance (Ashmos, Duchon, & McDaniel, 2000; Ferguson & Ketchen, 1999; Miller, 1996; Ostroff & Schmitt, 1993), more understanding of the configurations that contribute to system instability is needed. However, as Fiss (in press) pointed out, existing empirical approaches to configurational research are limited by their reliance on linear relationships that imply singular causation, when the configurational approach stresses nonlinear relationships and complex causality. Thus, understanding the configurations of contextual characteristics that enable small changes to become radical is important but will need to build on methodologies, such as set theory (Fiss, in press; Ragin, 2000), that enable researchers to determine which combinations of organizational characteristics combine to result in particular outcomes.

We have made the case that the interactions among amplifiers can play an important role in escalating unfolding change; however, several questions remain. Is acquiring resources alone enough of an amplifier to lead to radical change? Can small change become radical without consistent use of language that reinforces a change and provides coherence among small adaptations? Is there a configuration of amplifiers that leads to the most radical change? Future research should pursue these questions in case studies and in crossorganizational research.

In addition, our findings provide limited support for McKelvey & Lichtenstein's (forthcoming) idea that complexity emerges in stages. Certainly, the change at Mission Church continues to emerge in ever more complex ways. Further research should examine the idea of fractal-like patterns in the emergence of complexity and should establish empirical support for the application of this idea from complexity theory to the study of organizations.

Finally, our analysis of organizational emergence parallels findings from Chiles and his colleagues' (2004) study of regional emergence. We used four characteristics of complex adaptive systems to help explain emergent radical change, and they used similar characteristics to explain the emergence of a regional collective of organizations. That these two distinct cases of emergent change are so resonant in their findings provides support for an

emerging theory of complexity in management, an area that warrants further attention.

The managerial implications from this study of continuous, radical change challenge traditional views about how to manage change. The emergence and amplification of small change is not orderly. Managers should learn to expect surprise and see it as an opportunity rather than as an indication of poor control. McDaniel, Jordan, and Fleeman (2003) argued that a traditional view of surprise is that it is created by a lack of information or by "bounded rationality," whereas a complex adaptive systems view is that surprise occurs because the world is basically unknowable. If one believes surprise occurs because of missing information or bounded rationality, one's response is usually collecting more information, being more vigilant, and looking for scapegoats. But, as McDaniel and his colleagues pointed out, if one's view is that surprise is inevitable, "We open the door for creative, innovative approaches without the mark of blame and failure" (2003: 270). Looking back at our data, we see organizational leaders who were frustrated with the failure of "known" prescriptions for dying organizations such as theirs, who were fairly accepting of the unknowable nature of the world, and who welcomed surprise (the Sunday breakfast experiment) rather than avoided it. A manager's mental framework appears to determine whether surprise is an opportunity for creativity or a stimulus for finger pointing or blaming.

A second implication for managers is that the tools for effective leadership in organizations needing or undergoing major transformation do not necessarily have to include the traditional tools of goals, plans, budgets, and strategies. In our study, we saw the important role that leaders played as "sensemakers" (Weick & Quinn, 1999), using the tools of language and symbols to give meaning to the changes that were happening in a way that provided coherence to the organization. Carefully chosen words and their consistent use can provide coherence to an unfolding pattern of change, thereby reducing uncertainty and ambiguity for organization members. At Mission Church, the pastors consistently used a few words and phrases: "marginalized," "transformation," "dignity and respect," and "justice in action." Thus, when surprising interactions occurred and the unexpected continued to happen, the consistent language reduced uncertainty for church members and made it easier for them to generate ideas about what to do next. Symbols are another tool at a leader's disposal. As small changes accumulate into a radical pattern, symbols help clarify an organization's identity and provide rallying points for members.

Our study is not without limitations. We firmly believe that a fine-grained research approach to studying radical change—such as studying a single organization—is important for developing new theory, yet we recognize the limitations of such an approach. We relied on interviews, but multiple newspaper articles, internal organizational documents, and direct observations greatly assisted in corroborating the evidence from our interviews. Although we guarded against bias, as in any qualitative research, that concern lingers.

The story of Mission Church's struggle with decline, change, and ministry with the homeless is a story of organizational decline, revitalization, and emergent radical change. This story provides fertile ground for exploring further considerations relating to the emergent view of change and adaptation in organizations. The idea that both context and amplification contribute to change that is emergent, radical, and continuous may be a simple one, but it is an idea worthy of more exploration.

#### REFERENCES

- Albert, S., & Whetten, D. A. 1985. Organizational identity. In L. L. Cummings & B. M. Staw (Eds.), *Research in organizational behavior*, vol. 7: 263–295. Greenwich, CT: JAI Press.
- Amis, J., Slack, T., & Hinings, C. R. 2004. The pace, sequence, and linearity of radical change. *Academy of Management Journal*, 47: 15–40.
- Anderson, R. 1999. Complexity theory and organization science. *Organization Science*, 10: 216–232.
- Ashmos, D. P., Duchon, D., & McDaniel, R. R. 2000. Organizational responses to complexity: The effect on organizational performance. *Journal of Organizational Change Management*, 13: 577–594.
- Axley, S. R. 1984. Managerial and organizational communication in terms of the conduit metaphor. *Academy of Management Review*, 9: 428–437.
- Barthes, R. 1972. Mythologies. London: Cape.
- Bartunek, J. M. 1984. Changing interpretive schemes and organizational restructuring: The example of a religious order. *Administrative Science Quarterly*, 29: 355–372.
- Bianconi, G., & Barabási, A. 2001. Bose-Einstein condensation in complex networks. *Physical Review Letters*, 86: 5632–5635.
- Butcher, D., & Atkinson, S. 2001. Stealth, secrecy and subversion: The language of change. *Journal of Organizational Change Management*, 14: 554–569.
- Cardinal, L. B., Sitkin, S. B., & Long, C. P. 2004. Balancing and rebalancing in the creation and evolution or organizational control. *Organization Science*, 15: 411–431.

- Chiles, T., Meyer, A., & Hench, T. 2004. Organizational emergence: The origin and transformation of Branson, Missouri's musical theaters. *Organization Science*, 15: 499–519.
- Cilliers, P. 2000. Rules and complex systems. *Emergence*, 2(3): 40-50.
- Corley, K., & Gioia, D. 2004. Identity ambiguity and change in the wake of a corporate spin-off. *Administrative Science Quarterly*, 49: 173–208.
- Culbert, S. 1996. Mind-set management: The heart of leadership. New York: Oxford University Press.
- Dutton, J. E., & Dukerich, J. M. 1991. Keeping an eye on the mirror: Image and identity in organizational adaptation. Academy of Management Journal, 34: 517–554.
- Eisenhardt, K. M. 1989. Building theories from case study research. *Academy of Management Review*, 14: 532–550.
- Ferguson, T. D., & Ketchen, D. J. 1999. Organizational configurations and performance: The role of statistical power in extant research. *Strategic Management Journal*, 20: 385–395.
- Fiss, P. C. In press. A set-theoretic approach to organizational configurations. *Academy of Management Review*.
- Ford, J. D., & Ford, L. W. 1994. Logics of identity, contradiction, and attraction in change. *Academy of Management Review*, 19: 756–785.
- Ford, J. D., & Ford, L. W. 1995. The role of conversations in producing intentional change in organizations. *Academy of Management Review*, 20: 541–570.
- Gersick, C. J. 1991. Revolutionary change theories: A multilevel exploration of the punctuated equilibrium paradigm. *Academy of Management Review*, 16: 10–36.
- Gioia, D., Schultz, M., & Corley, K. 2000. Organizational identity, image and adaptive instability. *Academy of Management Review*, 25: 63–81.
- Gioia, D., Thomas, J., Clark, S., & Chittipeddi, K. 1994. Symbolism and strategic change in academia: The dynamics of sensemaking and influence. *Organization Science*, 5: 363–383.
- Greenwood, R., & Hinings, C. R. 1996. Understanding radical organizational change: Bringing together the old and the new institutionalism. *Academy of Management Review*, 21: 1022–1054.
- Hamilton, T. I. 2004. Church's day center is under fire— With police calls in this area downtown way up, both sides seek a solution. San Antonio Express News, September 5: 1b.
- Hatch, M. J., & Schultz, M. 2000. Scaling the tower of Babel: Relational differences between identity, image, and culture in organizations. In M. Schultz, M. J. Hatch, & M. L. Larson (Eds.), The expressive organization: Linking identity, reputation, and the cor-

- porate brand: 11–35. New York: Oxford University Press.
- Holland, J. H. 1995. *Hidden order*. Reading, MA: Addison-Wesley.
- Holland, J. H. 1998. *Emergence*. New York: Basic Books.
- Jaffee, M. K. 2004 Heeding the call—In wake of personal tragedy, pastor shakes up downtown church, transforms lives. *San Antonio Express News*, July 11: 1k.
- Kauffman, S. A. 1993. *The origins of order.* New York: Oxford University Press.
- Kauffman, S. A. 1995. At home in the universe: The search for the laws of self-organization and complexity. New York: Oxford University Press.
- Langley, A. 1999. Strategies for theorizing from process data. *Academy of Management Review*, 24: 691–710.
- Lichtenstein, B. B. 2000. Self-organized transitions: A pattern amid the chaos of transformative change. *Academy of Management Executive*, 14(X): 128–141.
- Lichtenstein, B. B., Carter, N. M., Dooley, K. J., & Gartner, W. B. 2007. Complexity dynamics of nascent entrepreneurship. *Journal of Business Venturing*, 22: 236–261.
- Lorenz, E. N. 1963. The mechanics of vacillation. *Journal* of the Atmospheric Sciences, 20: 448–464.
- Maguire, S., & McKelvey, B. 1999. Complexity and management: Moving from fad to firm foundations. *Emergence*, 1(2): 19-61.
- Mandelbrot, B. 1977. *The fractal geometry of nature*. New York: W. H. Freeman.
- Marion, R., & Uhl-Bien, M. 2001. Leadership in complex organizations. *Leadership Quarterly*, 12: 389–418.
- Marshak, R. 1993. Managing the metaphors of change. *Organizational Dynamics*, 22(1): 44–57.
- Maruyama, M. 1963. The second cybernetics: Deviation amplifying mutual causal processes. *American Science*, 51: 164–179.
- Masuch, M. 1985. Vicious circles in organizations. *Administrative Science Quarterly*, 30: 14–33.
- McDaniel, R. R., Jordan, M., & Fleeman, B. 2003. Surprise, surprise, surprise! A complexity science view of the unexpected. *Health Care Management Review*, 28: 266–278.
- McKelvey, B. 1999. Avoiding complexity catastrophe in coevolutionary pockets: Strategies for rugged land-scapes. *Organization Science*, 10: 294–321.
- McKelvey, B. 2001. What is complexity science? It is really order-creation science. *Emergence*, 3(1): 137–157.
- McKelvey, B., & Lichtenstein, B. Forthcoming. Toward a theory of emergence by stages: Complexity and enabling leadership. In J. Hazy, J. Goldstein, & B. Lich-

- tenstein (Eds.), *Complex systems leadership theory*. Boston: ISCE Publishing.
- Meyer, A. D., Gaba, V., & Colwell, K. A. 2005. Organizing far from equilibrium: Nonlinear change in organizational fields. *Organization Science*, 16: 456–473.
- Meyer, A. D., Tsui, A. S., & Hinings, C. R. 1993. Configurational approaches to organizational analysis. *Academy of Management Journal*, 36: 1175–1195.
- Miles, M. B., & Huberman, A. M. 1994. *Qualitative data analysis.* Thousand Oaks, CA: Sage.
- Miller, C. C., Cardinal, L. B., & Glick, W. H. 1997. Retrospective reports in organizational research: A reexamination of recent evidence. Academy of Management Journal, 40: 189.
- Miller, D. 1996. Configurations revisited. *Strategic Management Journal*, 17: 505–512.
- Nadler, D. A., & Tushman, M. L. 1989. Organizational frame bending: Principles for managing reorientation. *Academy of Management Executive*, 3(3): 194–204.
- Nicolis, G., & Prigogine, I. 1989. *Exploring complexity: An introduction.* New York: Freeman.
- O'Reilly, C. A., Chatman, J., & Caldwell, D. F. 1991. People and organizational culture: A profile comparison approach to assessing person-organization fit. *Academy of Management Journal*, 34: 487–516.
- Ostroff, C., & Schmitt, N. 1993. Configurations of organizational effectiveness and efficiency. *Academy of Management Journal*, 36: 1345–1361.
- Perrow, C. 1986. *Complex organizations: A critical essay*. New York: McGraw-Hill.
- Plowman, D. A., Thomas, S., Beck, T., Baker, L., Kulkarni, M., & Travis, D. In press. The role of leadership in emergent self-organization. *Leadership Quarterly*.
- Prigogine, I., & Stengers, I. 1984. *Order out of chaos: Man's new dialogue with nature.* Boulder, CO: New Science Library.
- Ragin, C. C. 2000. *Fuzzy set social science*. Chicago: University of Chicago Press.
- Regine, B., & Lewin, R. 2000. Leading at the edge: How leaders influence complex systems. *Emergence* 2(2): 5–23.
- Romanelli, E., & Tushman, M. L. 1994. Organizational transformation as punctuated equilibrium: An empirical test. *Academy of Management Journal*, 37: 1141–1166.
- Sastry, M. A. 1997. Problems and paradoxes in a model of

- punctuated organizational change. *Administrative Science Quarterly*, 42: 237–275.
- Stacey, R. 1992. *Managing the unknowable*. San Francisco: Jossey-Bass.
- Stacey, R. 1995. The science of complexity: An alternative perspective for strategic change processes. *Strategic Management Journal*, 16: 477–495.
- Stoeltje, M. F. 2002. Churches prove there are ways to get past the racist past. *San Antonio Express News*, November 12: 1d.
- Thietart, R. A., & Forgues, B. 1995. Chaos theory and organizations. *Organization Science*, 6: 19–31.
- Tushman, M. L., & Romanelli, E. 1985. Organizational evolution: A metamorphosis model of convergence and reorientation. In L. L. Cummings & B. M. Staw (Eds.), *Research in organizational behavior*, vol. 7: 171–222. Greenwich, CT: JAI Press.
- Van Maanen, J. 1988. *Tales of the field*. Chicago: University of Chicago Press.
- Weick, K. 1979. *The social psychology of organizing*. New York: Random House.
- Weick, K., & Quinn, R. 1999. Organizational change and development. *American Review of Psychology*, 50: 361–386.
- Weitzel, W., & Jonsson, E. 1989. Decline in organizations: A literature integration and extensions. *Administrative Science Quarterly*, 34: 91–109.
- Wheatley, M. 1999. *Leadership and the new science*. San Francisco: Berrett-Koehler.
- Yin, R. K. 2003. *Case study research* (3rd ed.). Thousand Oaks, CA: Sage.



**Donde Ashmos Plowman** (donde.plowman@utsa.edu) is a professor of management at The University of Texas at San Antonio. She received her Ph.D. from The University of Texas at Austin. Her current research interests include organizational change, leadership, decision making, interpretation, and participation in complex adaptive systems.

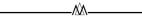
**LaKami T. Baker** is an assistant professor of management at Mississippi State University. She received her Ph.D. from The University of Texas at San Antonio. Her research interests include decision making, technology and innovation management, entrepreneurship, and family business management.

**Tammy E. Beck** is an assistant professor of management at the University of Houston–Clear Lake. She received her Ph.D. from The University of Texas at San Antonio. Her research interests include cooperative relationships among organizations, organizational resilience, and organizational interpretation.

Mukta Kulkarni is an assistant professor of management at the Indian Institute of Management, Bangalore. She received her Ph.D. from The University of Texas at San Antonio. Her research interests include organizational structure, symbols, reputation, and image creation.

Stephanie Thomas Solansky is an assistant professor of management at the University of Houston–Victoria. She received her Ph.D. from The University of Texas at San Antonio. Her research interests include team cognition, leadership, inter- and intraorganizational collaboration, and decision making.

**Deandra Villarreal Travis** is a Ph.D. candidate in the Department of Management at The University of Texas at San Antonio. Her current research interests include organizational discourse and emotion in organizations, especially as they relate to organizational change and performance.



Copyright of Academy of Management Journal is the property of Academy of Management and its content may not be copied or emailed to multiple sites or posted to a listsery without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.