Organizational Emergence: The Origin and Transformation of Branson, Missouri's Musical Theaters

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We draw on complexity theory to explain the emergence of a new organizational collective, and we provide a much-needed empirical test of the theory at the collective level of analysis. Taking a case study approach, we use four dynamics of emergence posited by complexity theory's dissipative structures model—fluctuation, positive feedback, stabilization, and recombination—to explain how a collective of live musical performance theaters in Branson, Missouri, came into being and periodically transformed itself over a 100-year period. Our findings suggest a strong match between the theoretical perspective employed and the empirical processes uncovered, empirically validating the model at the collective level. The study demonstrates the value of conceptualizing evolution in terms of emergence, highlighting distinctions between the nascent complexity approach to evolution and the neo-Darwinian evolutionary approach that has dominated the theoretical conversation in organization science for the past generation. Our findings complement the insights of the dominant theoretical perspectives in organization theory, providing a more comprehensive understanding of organizational evolution by directly addressing the heretofore intractable phenomenon of emergence.

Key words: self-organization; emergence; creation; transformation; industry clusters; complexity theory

Imagine yourself a century ago in a remote area of the Ozarks near the Missouri-Arkansas border, looking for ways to breathe life into a community that had little more to commend it than natural beauty, simple living, and "the wildest river in the Midwest" (1).[1] Who would have said, "Let's turn the place into a multibillion-dollar tourist attraction and entertainment venue?" Yet Branson, Missouri, in the 1880s "a small hamlet with one store and a post office" (2) nestled in an unknown corner of the Ozarks, grew into exactly that: a thriving tourist destination featuring a cluster of live musical performance theaters and teeming with more than six million visitors annually—two million more than visit the Grand Canyon. How could this happen?

Mainstream organizational scientists would invoke one of several theoretical frames to answer this question: Organizational ecologists (Baum 1996) would say a novel organizational form has filled an ecological niche; neoinstitutional theorists (Scott 2001) would cite the construction of a new organizational field; organizational adaptation theorists (Romanelli and Tushman 1994) would deem Branson an example of punctuated equilibrium; regional economists (Krugman 1995) would turn to agglomeration models of industry clusters. All these orthodox perspectives, along with the empirical work they have inspired, help us understand the Branson phenomenon, but none addresses the fundamental issue of *emergence*: how such a community could come about in the first place and periodically transform itself over time.

Many scholars have noted the dearth of organizational theory and research addressing the emergence of organizational collectives such as forms, populations, and communities (Astley 1985, Hannan and Freeman 1989, Aldrich 1999). This critical gap in organization science—a field constructed almost entirely on what Sarasvathy (2001, p. 243) describes as "the *assumed existence* of the central artifacts...of business" with almost no attention to their "*creation*"—obscures "the connection between the ongoing creative ferment in human societies and the particular realizations of it in organizations" (Aldrich 1999, p. 1), and ignores how the creation of new organizational collectives generates "jobs, innovation, and economic wealth" and catalyzes "economic and social transformation of whole societies" (Schoonhoven and Romanelli 2001, pp. 2, 7).

To address this gap in the literature, we propose a self-organizing logic drawn from complexity theory and use it to analyze field study data to explain how an

organizational collective featuring musical theaters in Branson, Missouri, emerged over a century. To date, those organizational scholars who have employed complexity theory have rarely tested its applicability in organizational settings (Lichtenstein 2000), and they have directed almost no attention to the collective level of analysis (Sorenson 2002). Further, they have paid insufficient empirical attention to the basic causal processes underlying organizational emergence (McKelvey 2001). This study represents a first step in addressing these issues by empirically tackling the fundamental question: How do organizational collectives emerge?

Emergence comprises not only the creation (i.e., origin), but also the continuous re-creation over time (i.e., transformation) of new organizational populations and forms. Emergence and transformation are intimately bound up: Emergence is a transformative process, and transformation is an emergent process (Leifer 1989). While some organizational scholars have suggested that evolution involves a series of transformative punctuations, their work has focused mainly at the group (Katz 1993) or firm (Siggelkow 2002) level. Notable exceptions at the collective level include Jones (2001), Feldman (2001), and Haveman et al. (2001); however, each study illustrates only a single transformation separating two epochs. We study Branson's evolution as an extended series of "punctuated emergences," each of which ushered in a new epoch. Because of its unique ability to explain such a series and its distinctive emphasis on the self-organizing dynamics of emergence, we use the dissipative structures approach to complexity theory as our primary framework.

Specifically, we seek to contribute to organization theory by empirically testing the extent to which the emergence of a new organizational collective can be explained in terms of four mechanisms of emergent self-organization posited by the dissipative structures model, developed by Nobel Laureate Ilya Prigogine and refined by organizational scholars: (1) spontaneous fluctuations that initiate a new order, (2) positive feedback loops that amplify and reinforce these fluctuations, (3) coordinating mechanisms that stabilize the emerging order, and (4) recombinations of existing resources that help construct the new order. Despite the growing importance of this model in organization science (e.g., Gemmill and Smith 1985, Leifer 1989, MacIntosh and MacLean 1999, Lichtenstein 2000), no research has demonstrated its empirical validity at the collective level. Our study seeks to do so, not only to extend the model's empirical range, as complexity scholars have recommended (Cohen 1999), but also to shed much-needed light on how new organizational collectives emerge.

We now turn to review a number of academic perspectives and address their theoretical and empirical limitations regarding the emergence of organizational collectives. On this foundation, we then argue that complexity theory offers the promise of overcoming the limitations of orthodox perspectives.

Orthodox Perspectives on the Emergence of Organizational Collectives

Organizational Ecology. Hannan and Freeman's (1977) seminal paper assumed the existence of populations of organizations and called for the study of their vital rates. In their subsequent work on the rise of the semiconductor industry, Brittain and Freeman (1980) acknowledged that in conceptualizing niches as vacant ecological spaces, they had not come to grips with the population's origins. "The next step," as Hannan and Freeman (1989, p. 341) observed, was "to analyze the origins of populations," but despite this exhortation, a subsequent review of the organizational ecology literature concluded that no empirical progress had been made on this crucial question (Baum 1996).

More recent ecological studies have grappled with the issue of emergence of organizational collectives (Russo 2001, McKendrick et al. 2003). While providing much-needed insight into the early years of new populations, these two studies remain firmly rooted in the existing ecological paradigm. Both test a series of bivariate linear relationships and make specific predictions about the effect of institutional factors (Russo 2001) and density measures (McKendrick et al. 2003) on vital rates in existing populations. As a result, they neither move beyond the standard focus on generic founding and failure events in existing populations nor shed much light on the nonlinear, bottom-up, autogenetic processes of emergence (Drazin and Sandelands 1992, Aldrich 1999). To come to grips with such complex processes, Hayek (1967) stressed the need for a different approach that, instead of statistically testing specific theorized relationships between two variables, matches and predicts unfolding empirical patterns of events with existing theories of complex phenomena.

Neoinstitutional Theory. Scott (2001, p. 121) remarks that "students of organization have paid more attention to how institutional forces affect organizational forms and processes than to how institutions themselves arise, persist, and diffuse." Recently, neoinstitutional researchers have directed new attention to institutional change (DiMaggio 1991, Haveman and Rao 1997, Thornton and Ocasio 1999). Collectively, these studies elucidate exogenous mechanisms driving institutional change: professional activism (DiMaggio 1991), market forces (Thornton and Ocasio 1999), and demographic changes coupled with the rise of Progressivism (Haveman and Rao 1997). However, these and similar studies provide scant accounts of the origins of organizational fields.[2] Because they see causes as flowing down from contexts rather than up from actors, such studies offer the theorist trying to understand emergence only an infinite regress of higher level contexts.

Adaptation Theory. Convinced that ecological and institutional approaches say little about the emergence of organizational collectives, adaptation theorists have turned to the punctuated equilibrium model from paleontology (Astley 1985). This model, now a prominent fixture in the organizational sciences, has received little empirical attention at the collective level (Haveman et al. 2001), although it has been used to examine processes at the group (Gersick 1988) and organizational (Romanelli and Tushman 1994) levels. Punctuated equilibrium goes a step beyond ecological and institutional models in addressing rapid organizational transformation (Sammut-Bonnici and Wensley 2002), arguing that major events are required to break strong inertial forces and trigger system transformation from one equilibrium period to the next (Romanelli and Tushman 1994). This model has, however, received substantial criticism. Paleontologists (Ridley 1985) as well as complexity and organization theorists (Kauffman 1993, Lichtenstein 1995) question its fundamental principles, notably the role of genetic and incremental change in emergent processes. Given that punctuated equilibrium is considered "a minor theory or flatly incorrect in its own field" and is judged ill-equipped to capture the subtleties of emergent processes (Lichtenstein 1995, p. 292), some scholars conclude that this model should not be used to study organizational emergence (Sammut-Bonnici and Wensley 2002).

Regional Economics. Since Marshall's analyses of "industrial districts" in the 1890s, economists have been intrigued by the clustering of industries in specific locations. Most studies motivated by Marshall's insights, like those of the previously mentioned perspectives, have sidestepped the dynamics of emergence to pursue equilibrium explanations of established clusters (Das 1998, Feldman 2001). More recently, Porter (1990) examined local factors affecting competitiveness in industry clusters but, once again, glossed over the emergent processes that bring about such clusters. Except for a handful of heterodox studies discussed below, regional economists have increasingly ignored the actions of individuals as agents of economic change, and collectively failed to explain how emergent processes originate and transform regional economies (Feldman 2001).

In sum, mainstream organization and economic theories offer models that at most explain equilibrium-seeking processes and change in existing populations (Drazin and Sandelands 1992). Their ontological assumptions are rooted in stability, routine, equilibrium, homogeneity, and incrementalism (Gemmill and Smith 1985). Nevertheless, scholars in these traditions are increasingly acknowledging that the emergence of organizational collectives is among the most fundamental, difficult, and under-addressed issues in the field (Hannan and Freeman 1989, Meyer et al. 1990, Aldrich 1999, Schoonhoven and Romanelli 2001).

Heterodox Perspectives on the Emergence of Organizational Collectives

Heterodox economists have foresworn mainstream theories to come to grips with emergence, but their approaches have important limitations. Austrian economists (Vaughn 1994) have taken on emergence as their primary theoretical objective, providing keen theoretical insight into emergent order as an unintended consequence of human action and interaction, without central planning, and through disequilibrium market processes and stabilizing social institutions. They have been criticized, however, for producing virtually no empirical evidence to support their theories (Vaughn 1994). Increasing returns economists (Arthur 1994) have tackled emergence by demonstrating that incipient events can trigger positive feedback processes that lock industries into localized regions. They emphasize unpredictable, nonoptimal, path-dependent outcomes sensitive to small differences in initial conditions. Their work, however, has been limited to stylized mathematical models. Recent regional economic studies have begun to explore the emergence of industry clusters, emphasizing entrepreneurial action and interaction, institutions, and the importance of early events (Feldman 2001). However, this work is primarily descriptive and relatively underdeveloped in theoretical terms.

The Promise of Complexity Theory for the Emergence of Organizational Collectives

After flourishing in the natural sciences for over 35 years, complexity theory has recently drawn the attention of organizational scholars, leading some to suggest it will become vital to twenty-first-century organizational research (Eisenhardt 2002). Complexity theory is ideally suited to our purpose because it spotlights *emergence* as its central phenomenon, helping explain how system-level order spontaneously arises from the action and repeated interaction of lower level system components without intervention by a central controller. In a sharp break from orthodox perspectives, complexity theory adopts ontological assumptions rooted in fundamental indeterminacy, emergent novelty, perpetual disequilibrium, increasing heterogeneity, and radical transformation (Leifer 1989). Its proponents argue that by departing from traditional worldview assumptions, complexity theory overcomes the inadequacies of past paradigms to offer a fuller, more accurate, and more nuanced explanation of emergent organizational phenomena (Lichtenstein 1995). Complexity theory does not render past paradigms obsolete. Instead, it goes a step beyond these paradigms while remaining complementary to them (Sorenson 2002).

Complexity Theory

Complexity theory is a science of "becoming rather than being" (Gleick 1987, p. 5) with emergence as its

anchor point phenomenon. Because emergence is a self-organizing process (McKelvey 1999), the term *emergent self-organization* provides a more accurate description. Emergent self-organization is the emergence of system-level order as an unintended consequence of the action and repeated interaction of lower level system components, without intervention by a central controller. Because order in self-organizing systems relies not on the imposition of an overall plan by a central authority, but on the action of interdependent agents purposefully pursuing individual plans based on local knowledge and continuously adapting to feedback about the actions of others, it is said to emerge spontaneously (Hayek 1988). Thus, *the system itself* spontaneously generates macro-order through microprocesses involving action, interaction, and causal feedback (Drazin and Sandelands 1992).

Complexity theory's emphasis on "process rather than state" (Gleick 1987, p. 5) makes it particularly well suited to the study of complex phenomena. Unlike traditional variance theory, which uses variation in a small set of well-defined independent variables to explain variance in a dependent variable and to predict specific outcomes of simple phenomena, process theory calls for a high level of abstraction, predicts how general patterns of change will unfold, and develops post hoc explanations of a sequence of events over time by telling a story about how or why a phenomenon evolved from the temporal ordering and interaction of myriad events (Hayek 1967, Langley 1999).

Complexity theory is not a monolithic bloc, but incorporates a variety of conceptual approaches (McKelvey 1999). As our primary approach, we draw on the dissipative structures model of emergent self-organization that predicts and explains a pattern of change in which the evolution of organizational systems proceeds from one "punctuated emergence" to the next in an ongoing process of whole-system transformation (Leifer 1989). More specifically, a dissipative structure is an orderly state that emerges spontaneously when a system is maintained far from equilibrium because energy is continually injected into and dissipated from it (Anderson 1999). Such structures are "not concrete things," but "structures of process" (Juarrero 1999, p. 124) that undergo periodic transformations to qualitatively new ways of operating that allow the dissipative structure to renew itself constantly to remain resilient, handle greater energy flow, and cope with increasing complexity (Leifer 1989, Smith and Gemmill 1991). The model features four primary dynamics of emergence: fluctuation, positive feedback, stabilization, and recombination.

Fluctuation Dynamics. Ever-increasing injections of energy eventually drive disequilibrium systems to a threshold of stability, where even a small fluctuation or series of fluctuations in energy can be large enough to overcome the damping forces of the existing regime of order, and create the opportunity for movement into a new regime of order (Leifer 1989). In social systems, fluctuations in energy are represented by new activities, events, or resources that punctuate the existing order and catalyze the emergence of a new order (Lichtenstein 2000). This idea of "order through fluctuation" is central to the dissipative structures model (Prigogine and Stengers 1984).

Positive Feedback Dynamics. Once the threshold of stability is crossed, positive (or self-reinforcing) feedback loops facilitate movement into a new order or system configuration (Gemmill and Smith 1985). Positive feedback processes amplify the initial fluctuations, helping the new order "take hold and gain momentum" (Smith and Gemmill 1991, p. 711). Despite the absence of a central controller, the system's components (e.g., A, B, C) can "communicate" because they are partially connected in a web of interlinked positive feedback loops through which the flow of energy is repeatedly channeled (i.e., A → B, B → C, C → A) (Prigogine and Stengers 1984).

Stabilization Dynamics. Stabilizing mechanisms also play an important role in moving the system into a new order or configuration. The stabilization these mechanisms provide is not stabilization qua equilibrium, but rather a kind of natural regulation process that balances the dynamics of positive feedback. Dissipative self-organizing processes rely on deep structure to serve as a self-referencing framework that shapes novelties and guides choices in a way consistent with the system's accumulated history and learning, preserving the system's identity and core behavioral patterns (Smith 1986). Deep structure is a "quasi-permanent, invisible substructure" that, unlike many observable structures, remains intact during major transformations, takes the form of basic social rules that comprise fundamental "organizing principles and business logic" (MacIntosh and MacLean 1999, p. 303), and provides a "superordinate order" (Smith 1986). The newly emerging order is self-referenced when it is based on "principles, values, and elements that are intrinsic...rather than...imposed without reference to the history and learning in the [system]" (Lichtenstein 2000, p. 133). Self-referencing of the deep structure thus provides an element of continuity and stability, reflecting common "reference points" in the system such as participants' widely held, deep-seated values and beliefs, or other elements that facilitate collective mind (Smith 1986).

Recombination Dynamics. The emergence of dissipative structures implies that some of the existing elements of the system must be reconstituted to generate new ones (Gemmill and Smith 1985, Smith 1986). To generate these new elements, the system's existing elements must be reused, rearranged, reconstructed, re-leveraged, and

re-created through a key dynamic known as *recombination*. Recombination represents one important way of understanding how self-organizing systems evolve (Anderson 1999) and how novelty and variety are generated (Hodgson 1997).

The dissipative structures model provides a meta-theoretical framework within which other theoretically consistent approaches can be integrated (Smith 1986). In this paper, we integrate ideas from Austrian economics (Lachmann 1971, Kirzner 1973, Hayek 1988, Menger 1991, Vaughn 1999), increasing returns (Arthur 1994, Krugman 1995), autocatalytic networks (Kauffman 1993), organizational ecology (Hannan and Freeman 1977, Hannan and Carroll 1992), and institutional theory (DiMaggio and Powell 1991, Thornton and Ocasio 1999). Each of the four primary dynamics of emergence finds parallels in one or more of these complementary theories. (For a detailed explanation of how these theories complement our primary approach, see http://www.informs.org/Pubs/Supplements/ORSC.)

Methods: A Longitudinal Case Study

Research Setting
At the end of the nineteenth century, Branson was a small Missouri town in the White River wilderness of the Ozarks. Beginning in 1896, a series of events—"a lake, a book, and a train" (3)—transformed this isolated region into a destination for outdoors vacationers and sparked the "Branson phenomenon," culminating in its live musical performance theater population. During the course of a century, Branson evolved from a remote hamlet eking out a subsistence existence into the Number 1 motorcoach and Number 2 automobile vacation destination in the United States. From the inception of the theater population in 1955 until the end of our study in 1995, 135 theaters were founded and 77 failed. In 1995, Branson's 58 theaters seated 79,400 patrons, nearly twice the capacity of Broadway. In contrast to the modest lakeside pavilions, converted skating rinks, and crude metal buildings that had started it all 40 years before, theaters erected in the 1990s were sophisticated venues seating up to 4,000 and costing over $20 million. The theater population now forms the core of a thriving community of restaurants, shops, motels, and theme parks situated among rolling hills and picturesque lakes.

Case Selection
Branson afforded an excellent setting for studying the emergence of an organizational collective. First, this case allowed a clear look at the phenomenon, yielding a high "signal-to-noise ratio" unencumbered by confounding factors. The town's geographic isolation and small size, its specialization in tourism, and the dominance of its theater population in the organizational community allowed us to control extraneous variation,

thus bounding our phenomenon of interest in a tractable manner (cf. Stern and Barley 1996). Second, Branson's history provided more than 100 years of records dating to its origin, including over 40 years focusing on the theater population from the advent of its first theater through a series of transformations. We used a longitudinal case study design to capture the organizational collective's emergence in fine-grained detail that could be supplied only by early participants. All of the more influential theater founders were available for interviews. Because Branson has received extensive coverage by historians, journalists, and other writers, a large amount of data existed, including accounts by key players that provided insight into their thinking at the time and served as a check on informants' retrospective sensemaking and recall biases (Miles and Huberman 1994).

Data Collection and Sources

Informants, Interviews, and Questionnaires. Key informants were initially identified through the Branson Chamber of Commerce, the local entertainment guild, and a regional economic development center. Using a snowball approach, we asked these informants to recommend additional informants, continuing until we were no longer uncovering new information. In this fashion, we recruited 38 informants from various groups: theater and tourist attraction founders, managers, and performers: 15; local government, economic development, and transportation officials: 8; officers of various collective associations: 4; travel and real estate professionals: 3; long-time Branson residents: 3; the newspaper's entertainment editor: 1; and a local historian: 1.

Semistructured one- to four-hour interviews were conducted face to face with 32 informants. Telephone interviews with six other informants lasted approximately 30 minutes each. Informants' comments were recorded in handwritten notes, which were reviewed, edited, and transcribed immediately. Follow-up telephone calls were made to clarify ambiguous points. We asked all informants to (1) describe the nature and timing of key events before and during the emergence of Branson's theaters, (2) identify local attributes contributing to the emergence of the theater population and tourism niche, and (3) provide their personal explanations for the "Branson phenomenon." Other questions were tailored to informants' specific roles. From theater founders, for example, we elicited stories of the origins, processes, and outcomes of their entrepreneurial efforts. We asked government officials to relate sources and consequences of Branson's political, regulatory, and legislative milieu; we asked transportation experts to complete questionnaires (see http://www.informs.org/Pubs/Supplements/ORSC) rating the extent to which 19 transportation infrastructure developments over Branson's 100-year history had

affected accessibility to tourists. Probes were used selectively to elicit informants' views on impacts of governmental policy, local culture, mass media, collective action, social networks, and organizational genealogy. Finally, informants were encouraged to describe any additional factors they perceived to have influenced niche and theater emergence.

Observation. On-site fieldwork afforded us direct exposure to Branson's local culture, infrastructure, and natural setting. We attended performances at five theaters and visited two flagship attractions. We studied artifacts, pictures, writings, and videotapes at the local history museum and recorded our observations in field notes.

Documents. Extensive data were collected from documentary sources, including books, newspapers, magazines, television and video transcripts, press kits, information packets, websites, theater programs, maps, photographs, reports, theses, and archived correspondence. Many documents came from four area libraries with specialized collections in local history. We cite documents parenthetically, using numbers that correspond to a list at http://www.informs.org/Pubs/Supplements/ORSC.

Secondary Data. We gained access to an extensive database maintained by the Ozark Marketing Council (OMC) covering 1982–1995 and containing theater names, dates of founding and failure, and seating capacities. We verified and augmented these data with (1) Yellow Pages directories from Associated Directory Services and the Missouri Historical Society, (2) Chamber of Commerce archives and publications, (3) field interviews and correspondence with key informants, and (4) books (4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17). These sources allowed us to cover an additional 27 years dating back to 1955. Other secondary data consisted of annual traffic counts along Branson's theater "strip" between 1957 and 1995, obtained from the Missouri Highway Department and extrapolated to estimate pre-1957 data, and annual counts beginning in 1963 of the number of country music radio stations in the United States obtained from *Broadcasting Yearbook* that were extrapolated to estimate pre-1963 data.

This wide-ranging array of interviews, questionnaires, observations, documents, and secondary data provided rich contextual detail relating to the emergence of Branson and its theaters. These data uncovered key events, their sequencing, their interactions, and their nonlinear and cumulative effects.

Data Analysis
We analyzed our data using an approach that, in its broad outlines, resembled the sequence of sense-making strategies Langley (1999) would later call *grounding*, *organizing*, and *replicating*. As the analysis progressed, our overarching logical frame shifted from exploring data through induction to verifying theory through deduction. Within each stage, however, we iterated between data and theory and cycled between induction and deduction.
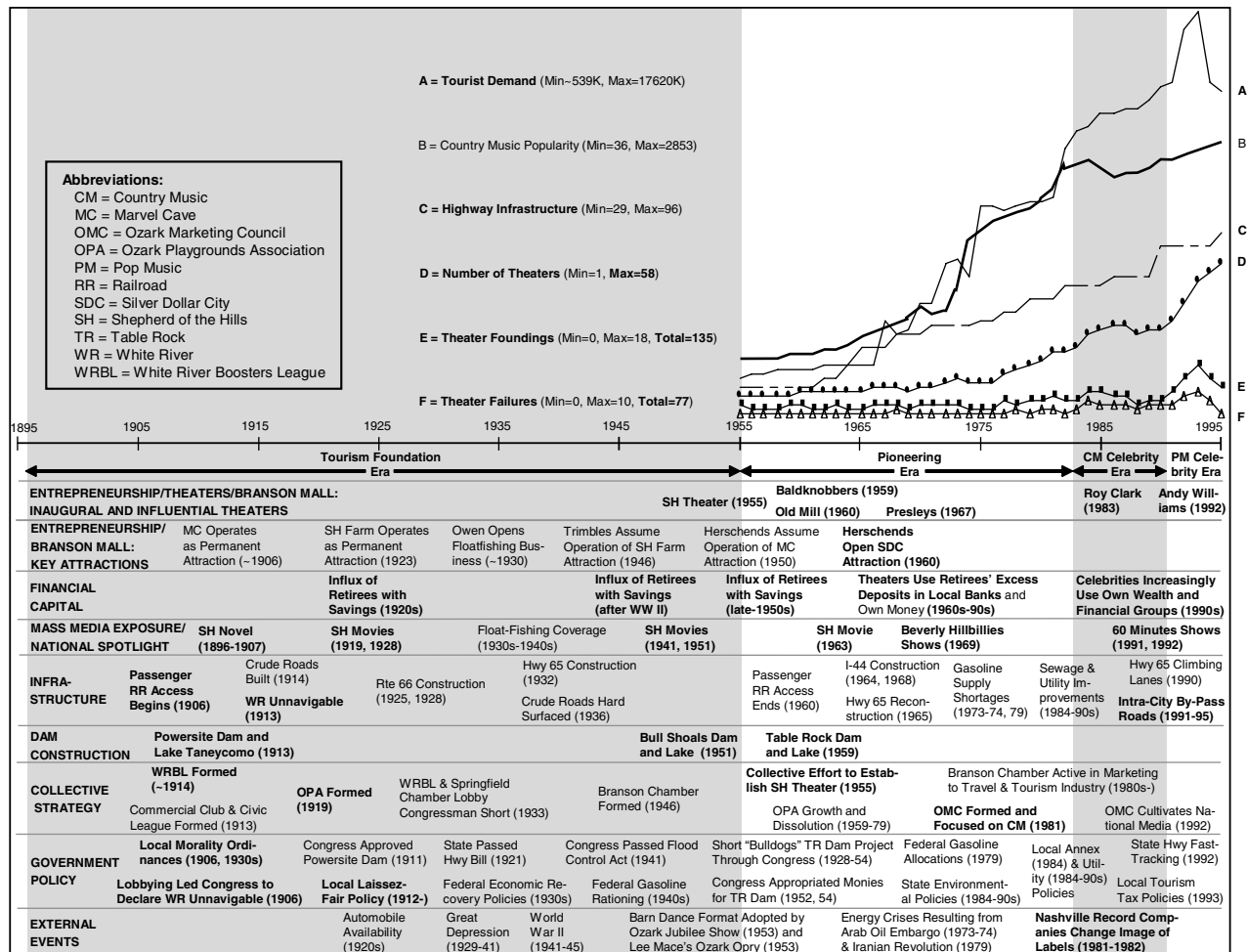
Grounding strategies are techniques for educing relevant concepts from both field data and academic theory (Langley 1999). Initially, we adopted *grounded theory* as our methodology (Glaser and Strauss 1967) because we intended to induce new theoretical insights from our data. Throughout data collection, the first two authors applied the constant comparative method to extract and refine coding categories from field notes and documents. Following Miles and Huberman (1994), data were coded with "descriptive codes" at two levels. First, "master codes" were attached to denote broad conceptual categories (e.g., mass media exposure). Second, "subcodes" were used to denote subsets of the category (e.g., *60 Minutes* shows featuring Branson). In addition, "pattern codes" were used to denote relationships between the "descriptive codes" (e.g., *60 Minutes* led to an increase in theater foundings). As categories, subcategories, and relationships emerged, we began comparing this data-driven conceptual framework with a broad spectrum of academic literature in the organization and natural sciences. We found that our empirical framework fit the complexity theory literature far better than any other. At that point, we shifted from grounded theory to *pattern matching* (Yin 1994), a deductive technique in which patterns observed in data are matched with patterns derived from extant theory. We came to see how closely our data fit such complexity theory concepts as dissipative structures, autocatalytic processes, and order through fluctuation. Thus, this first stage of analysis yielded a set of concepts grounded both in theory and in data.

Organizing strategies provide us with ways to descriptively represent process data in a systematic fashion (Langley 1999). *Visual mapping*, a graphical approach to depicting theoretical ideas, helped us to reduce and organize the data. The first author analyzed over 1,200 pages of coded textual data to generate an elaborate causal network display (see http://www.informs.org/Pubs/Supplements/ORSC). This graphic depicts 76 causal relationships among 10 key conceptual categories and 48 subcategories developed in our grounded theory analysis of the Branson emergence process.

We then constructed a chronological display (Figure 1) to chart the temporal sequence of important events before and during the theater population's emergence. The quantitative data graphed above the horizontal time line in Figure 1 track changes in tourist demand, country music popularity, highway infrastructure, theater foundings, theater density, and theater failure. The event categories and specific events arrayed in the rows below the time line were derived from our grounded theory analysis. (In the interest of brevity, only the events shown in boldface type are discussed in this paper.) In addition,

Figure 1   Chronological Display

A = Tourist Demand (Min~539K, Max=17620K)

B = Country Music Popularity (Min=36, Max=2853)

C = Highway Infrastructure (Min=29, Max=96)

D = Number of Theaters (Min=1, **Max=58**)

E = Theater Foundings (Min=0, Max=18, **Total=135**)

F = Theater Failures (Min=0, Max=10, **Total=77**)

Abbreviations:
CM = Country Music
MC = Marvel Cave
OMC = Ozark Marketing Council
OPA = Ozark Playgrounds Association
PM = Pop Music
RR = Railroad
SDC = Silver Dollar City
SH = Shepherd of the Hills
TR = Table Rock
WR = White River
WRBL = White River Boosters League

Timeline: 1895 1905 1915 1925 1935 1945 1955 1965 1975 1985 1995

Eras: **Tourism Foundation Era** — **Pioneering Era** — **CM Celebrity Era** — **PM Celebrity Era**

ENTREPRENEURSHIP/THEATERS/BRANSON MALL: INAUGURAL AND INFLUENTIAL THEATERS
SH Theater (1955) · Baldknobbers (1959) · Old Mill (1960) · Presleys (1967) · Roy Clark (1983) · Andy Williams (1992)

ENTREPRENEURSHIP/BRANSON MALL: KEY ATTRACTIONS
MC Operates as Permanent Attraction (~1906) · SH Farm Operates as Permanent Attraction (1923) · Owen Opens Floatfishing Business (~1930) · Trimbles Assume Operation of SH Farm Attraction (1946) · Herschends Assume Operation of MC Attraction (1950) · Herschends Open SDC Attraction (1960)

FINANCIAL CAPITAL
Influx of Retirees with Savings (1920s) · Influx of Retirees with Savings (after WW II) · Influx of Retirees with Savings (late-1950s) · Theaters Use Retirees' Excess Deposits in Local Banks and Own Money (1960s-90s) · Celebrities Increasingly Use Own Wealth and Financial Groups (1990s)

MASS MEDIA EXPOSURE/ NATIONAL SPOTLIGHT
SH Novel (1896-1907) · SH Movies (1919, 1928) · Float-Fishing Coverage (1930s-1940s) · SH Movies (1941, 1951) · SH Movie (1963) · Beverly Hillbillies Shows (1969) · 60 Minutes Shows (1991, 1992)

INFRA-STRUCTURE
Passenger RR Access Begins (1906) · Crude Roads Built (1914) · WR Unnavigable (1913) · Rte 66 Construction (1925, 1928) · Hwy 65 Construction (1932) · Crude Roads Hard Surfaced (1936) · Passenger RR Access Ends (1960) · I-44 Construction (1964, 1968) · Hwy 65 Reconstruction (1965) · Gasoline Supply Shortages (1973-74, 79) · Sewage & Utility Improvements (1984-90s) · Hwy 65 Climbing Lanes (1990) · Intra-City By-Pass Roads (1991-95)

DAM CONSTRUCTION
Powersite Dam and Lake Taneycomo (1913) · Bull Shoals Dam and Lake (1951) · Table Rock Dam and Lake (1959)

COLLECTIVE STRATEGY
WRBL Formed (~1914) · Commercial Club & Civic League Formed (1913) · OPA Formed (1919) · WRBL & Springfield Chamber Lobby Congressman Short (1933) · Branson Chamber Formed (1946) · Collective Effort to Establish SH Theater (1955) · OPA Growth and Dissolution (1959-79) · Branson Chamber Active in Marketing to Travel & Tourism Industry (1980s-) · OMC Formed and Focused on CM (1981) · OMC Cultivates National Media (1992)

GOVERNMENT POLICY
Local Morality Ordinances (1906, 1930s) · Lobbying Led Congress to Declare WR Unnavigable (1906) · Congress Approved Powersite Dam (1911) · Local Laissez-Fair Policy (1912-) · State Passed Hwy Bill (1921) · Federal Economic Recovery Policies (1930s) · Congress Passed Flood Control Act (1941) · Federal Gasoline Rationing (1940s) · Short "Bulldogs" TR Dam Project Through Congress (1928-54) · Congress Appropriated Monies for TR Dam (1952, 54) · Federal Gasoline Allocations (1979) · State Environmental Policies (1984-90s) · Local Annex (1984) & Utility (1984-90s) Policies · State Hwy Fast-Tracking (1992) · Local Tourism Tax Policies (1993)

EXTERNAL EVENTS
Automobile Availability (1920s) · Great Depression (1929-41) · World War II (1941-45) · Barn Dance Format Adopted by Ozark Jubilee Show (1953) and Lee Mace's Ozark Opry (1953) · Energy Crises Resulting from Arab Oil Embargo (1973-74) & Iranian Revolution (1979) · Nashville Record Companies Change Image of Labels (1981-1982)

Note. Events in bold text were referred to in this paper.

Figure 1 partitions Branson's 100-year history into four eras, which we discuss below.

Narrative techniques were then invoked to construct verbal accounts of Branson's emergence. This is a particularly effective strategy for organizing data when time plays an important role, and where a single case provides rich and varied incidents (Langley 1999). Following Miles and Huberman (1994), we wrote detailed "analytic text" to elaborate the visual maps described above, making sense of their features by weaving together a coherent narrative that drew on the qualitative accounts of Branson's pioneers, commentators, historians, and analysts. This narrative text, portions of which we incorporate in the interpretation section of this paper, represents a form of analysis through which we demonstrate linkages between data and theory and make sense of critical features of visual displays. As Miles and Huberman (1994, p. 101) note, the "writing" of such narratives "*is* analysis."

Replicating strategies are techniques for "decomposing the data for the replication of theoretical propositions by phase, by event, and by case" (Langley 1999,

p. 707). *Temporal bracketing* decomposes processes into successive eras separated by discontinuities, a strategy particularly well suited to analyzing nonlinear organizing processes (Langley 1999). This technique is valuable in longitudinal case studies because it allows researchers to determine whether theorized processes are replicated across eras. Through this technique, a "shapeless mass of process data is transformed into a series of more discrete but connected blocks" (Langley 1999, p. 703). As shown in Figure 1, we decomposed Branson's history into the following four eras, each inaugurated by a discontinuity.

(1) The Tourism Foundation Era, in which Branson became a destination for outdoors vacationers, was launched in the first decades of the twentieth century by the combined effects of improved rail service, a best-selling novel set in Branson, and the creation of Lake Taneycomo.

(2) The Pioneering Era, inaugurated by the founding of the town's first theater in 1955 in concert with a flurry of new business venturing by local entrepreneurs and

the impounding of Table Rock Lake, soon transformed Branson into "a small, second-class tourist town with a hillbilly theme" (18), featuring theaters headlined by local musicians.

(3) The Country Music Celebrity Era, sparked in the early 1980s by the arrival of country music star Roy Clark who established Branson's first celebrity theater, was fueled by a change in strategy among Nashville-based record companies aimed at attracting younger listeners. Aging stars deserted Nashville, settled in Branson, founded celebrity theaters, and created a live country music hub.

(4) The Popular Music Celebrity Era began in the early 1990s with the arrival of pop music icon Andy Williams and the airing of two *60 Minutes* shows that ushered Branson into the American mainstream. Theaters headlining pop music stars proliferated.

Quantification provides an additional technique for replicating theorized processes, one that is "much more convincing if it is used in combination with other approaches that allow contextualization of the abstract data" (Langley 1999, p. 698). In our complexity theory interpretation of Branson's evolution, the qualitative analytical strategies described above will carry most of the explanatory burden, with quantitative analyses of secondary data playing a supporting role, helping us verify relationships and processes uncovered in our qualitative analyses. We drew on ecological research on organizational founding for both our measures and our analyses (Hannan and Freeman 1989). Specifically, we modeled the effect of theater population dynamics, theater density, and a number of Branson-specific events on the theater founding rate using Poisson regressions. Table 1 presents the results of our Poisson regression analyses, on which we selectively draw to substantiate assertions and elucidate interpretations, consistent with the research tradition employed in this study (cf. Glaser and Strauss 1967). In citing regression results in the interpretation section that follows, we adopt the notational convention of enclosing these results within parentheses, e.g., (Model 1: 0.415, $p < 0.001$). For a description of the technical procedures employed in our Poisson regression analyses, see the appendix.

Validity

The following three forms of triangulation provide checks on the validity of our study.

(1) We triangulated data obtained from interviews, questionnaires, observations, documents, and secondary sources. Only data that were corroborated across multiple sources are reported here.

(2) We triangulated among methods of analysis by invoking grounded theory, pattern matching, visual mapping, narrative writing, temporal bracketing, and quantification.

(3) We achieved cross-temporal triangulation by comparing historical accounts written by key figures with informants' current recollections of past events and processes.

Throughout, we used the constant comparative method, which includes internal validity checks as new data are integrated into emerging categories and relationships. When incoming data conflicted or offered additional insights, we modified our conceptual framework to incorporate them, repeating this process to the point of theoretical saturation (Glaser and Strauss 1967).

Finally, we conducted two verification studies to help ensure that our interpretations and analyses were valid. In 1997, we asked three pioneering theater owners to provide detailed feedback on our preliminary findings. Following the procedures outlined by Miles and Huberman (1994), we mailed these informants analytical summaries along with instructions for evaluating their accuracy and comprehensiveness. In the main, their responses were confirmatory, but one informant persuasively argued that our summaries understated the impact of entrepreneurial actions undertaken by individuals. His comment helped shift our focus away from the top-down causes favored by established organization theory toward the bottom-up self-organization emphasized in complexity theory. In 2000, with a revised interpretation in hand, we again solicited feedback from these pioneers. This time, we received only affirmative comments.

A Theoretical Interpretation of the Dynamics of Emergence in Branson

We now turn to our complexity theory interpretation of the origin and transformation of Branson, Missouri's musical theaters, organized using the four primary dynamics of emergence: fluctuation, positive feedback, stabilization, and recombination. This theoretical framework reveals the story of Branson's evolution as initiated and periodically reinitiated by fluctuations or "punctuated emergences," each of which qualitatively transformed the system, ushering in one new regime of order after another. Over a century, four sets of fluctuations gave rise to four new orders in Branson. Each new order took hold and gained momentum through numerous positive feedback loops, five of which we highlight because of their central role in Branson's evolution. Local culture as well as government and collective organizations provided stability throughout that evolution. And entrepreneurs continually recombined existing resources, available as a result of prior success and failure, to create new theaters that fueled positive feedback processes, generated variety, and held the potential to initiate new orders.

Fluctuation Dynamics

Order Through Fluctuations: Emergence of a Tourism Niche. At the turn of the century, "Three simple elements—a lake, a book, and a train" (3)—ended Branson's era of isolation and initiated its emergence as

Table 1 Poisson Regression Results[a]

Model	Constant	Prior theater foundings (t − 1)	Prior theater failures (t − 1)	Prior theater foundings squared (t − 1)	Prior theater failures squared (t − 1)	Theater density (t − 1)	Tourist demand (t − 1)	Highway infrastructure improvements (t − 2)	Gasoline shortages (t − 1)	Shepherd of the Hills movie in 1963 (t)	Beverly Hillbillies shows (t − 2)	60 Minutes shows (t − 1)	Table Rock Dam (t)	−Log likelihood	Likelihood ratio test against Poisson, $X^2(1)$[b]
1	−0.133 (0.199)	**0.415***** (0.057)		−0.015*** (0.003)										73.486	0.444
2	−0.220 (0.207)	0.273** (0.097)		−0.011** (0.004)		**0.028*** (0.015)								71.839	1.740†
3	−0.755** (0.284)	0.164* (0.080)		−0.007* (0.004)			**0.00012***** (0.00002)							64.427	−0.003
4	−2.040*** (0.543)	0.125† (0.086)		−0.004 (0.004)				**0.043***** (0.010)	−0.766† (0.591)					62.920	−0.000
5	−0.119 (0.215)	0.385 (0.066)		−0.014*** (0.004)						0.812 (0.739)	0.440 (0.726)	**0.381**† (0.241)		71.523	−0.000
6	−1.494† (1.000)	0.388*** (0.058)		−0.014*** (0.003)									**1.480**† (1.018)	71.758	0.252
7	−0.047 (0.198)		**0.580***** (0.091)		−0.031*** (0.009)									73.484	0.791
8	−0.119 (0.201)		0.400** (0.143)		−0.023** (0.010)	**0.022*** (0.013)								72.116	1.090
9	−0.680** (0.294)		0.146 (0.140)		−0.009 (0.010)		**0.00013***** (0.00003)							66.010	−0.000
10	−2.236*** (0.589)		0.036 (0.151)		0.0007 (0.011)			**0.051***** (0.012)	−0.726 (0.602)					63.107	0.000
11	−0.054 (0.206)		0.567*** (0.094)		−0.033*** (0.009)					0.213 (0.722)	0.213 (0.722)	**0.644**** (0.233)		69.833	0.000
12	−1.386† (1.000)		0.535*** (0.093)		−0.027*** (0.009)								**1.447**† (1.029)	72.275	0.565

Notes. Parameter estimates and levels of statistical significance in boldface text were referred to in this paper. DV = Theater founding rate (t); Baseline for Models 1–6 = Prior theater foundings ($t − 1$) and Prior theater foundings squared ($t − 1$); Baseline for Models 7–12 = Prior theater failures ($t − 1$) and Prior theater failures squared ($t − 1$).

[a]Based on one-tailed significance tests (standard errors in parentheses); † $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

[b]Lack of statistical significance at the 0.05 level indicates that Poisson regression provides a more appropriate model than negative binomial regression (STATA 5).

a tourist destination. Together they provided sufficient energy to usher in a qualitatively new regime of order in which what had been a "rugged, untouched, undiscovered" region, where natives "scraped out their existence by farming the rocky soil or cutting timber" (19), became a "mecca" for outdoors vacationers (20).

Wright's Novel. Branson's origin can be traced to a chance interaction of a traveling minister, a flooding river, the region's scenic beauty, and the charm of its people (4, 21, 22). In 1896, the Reverend Harold Bell Wright was on his way to Arkansas when flooding blocked his way across the White River near Branson and he sought shelter with a local family. The area's natural beauty and the residents' friendliness and simple folkways left a lasting impression on Wright, who returned many times in the following years to pen a novel about the area and its people. Published in 1907, *The Shepherd of the Hills* became a national best-seller and "served as a magnet, drawing many curious visitors" to Branson to experience Wright's characters and setting firsthand (5). The book "was the first thing that created real awareness of the area," according to a local historian, and it "began Branson's long history as a tourist destination" (6).

Passenger Railroad Access. In 1902, plans called for adding a rail spur to Branson, primarily as a terminal point for lumbering. However the rail line, which linked Branson to the nation's railway network in 1906, proved far more pivotal for transporting visitors in search of the people and places described in Wright's novel than for transporting lumber (23). By making Branson accessible, the railroad "marked the end of an era" (2), "sparked the beginnings of real growth" (18), and "brought the town to life" (6).

Lake Taneycomo. Local business leaders lobbied to have the White River declared unnavigable, paving the way for the area's first dam in 1913 (1). Powersite Dam and the impounding of Lake Taneycomo generated not only electricity, but more tourists (24). The lake played a "monumental" role (25) in "shifting the town's emphasis to tourism" (26), and in so doing, it "changed the character of the region from a largely rural area of subsistence farms to a tourist center" (27).

Order Through Fluctuations: Emergence of a Stage for Live Musical Theater, Ozark Style. Once the tourism niche was established, a new series of fluctuations in the 1950s and 1960s, including the impounding of Table Rock Lake and the activities of a handful of pioneering entrepreneurs, "created the first real 'boom' in the White River Hills since the early years of the century," ushering in a qualitatively new order in which "tourists came to characterize the region as never before" and in which "the city's tourist industry [shifted] toward performances in theater venues" (18). These performances featured

local families offering down-home, folksy, Ozark-related music and comedy, according to informants. This series of fluctuations was sufficient to trigger the transformation of Branson from "a pretty sleepy little [tourist] town" (28) to its new regime of order as an entertainment environment featuring "creative artists" (18).

Table Rock Lake, like Lake Taneycomo before it, brought an influx of tourists (10), especially those who enjoyed fishing, said informants. According to pioneers, it was one of the primary "catalysts" that triggered development, providing "continued growth" and "momentum" for the tourism industry, which "began to multiply rapidly" (29). Moreover, the building of the federal dam that impounded Table Rock Lake had a positive effect on the theater founding rate (Models 6 and 12: 1.480, $p < 0.10$; 1.447, $p < 0.10$), ushering in "a new phase in the area's tourist development" (18).

Pioneering entrepreneurs ignited "a creative explosion" in the 1950s and 1960s by expanding existing tourist businesses or establishing entirely new ones (30). When asked how Branson came to be, one theater owner replied: "I'd say it was the Shepherd of the Hills show, Silver Dollar City, the Baldknobbers, and the Presleys. All that combined gradually started the ball rolling" (7). Two theaters—Shepherd of the Hills (founded in 1955 through collective action) and Old Mill (founded in 1960 by the Trimble family)—performed the Shepherd of the Hills show, which dramatized the story of Wright's novel in combination with musicals, comedies, square dancing, and hillbilly music. Expecting an influx of Table-Rock-bound tourists, the Herschend family in 1960 opened Silver Dollar City, a theme park featuring Ozark music, folkways, and handicrafts, which "more than any other [factor] was responsible for catalyzing growth," said one informant. Two families of musicians, the Mabes and the Presleys, are often credited with "sparking Branson's emergence" as a live music theater cluster (27). Their theaters, Baldknobbers Jamboree and Presleys Jubilee, followed the model of a radio barn dance, a popular format on U.S. radio stations at the time (cf. 18, 31), and like the theaters performing the Shepherd of the Hills show, capitalized on "fishermen visiting the area and looking for nighttime entertainment" (8): "It was in answer to this need that the music show industry as we know it had its humble beginnings" (32). These pioneering entrepreneurs, acting on their perceptions that tourists needed "something to do at night" and seeking "to fulfill a market that wasn't being fulfilled," as one pioneer put it, helped to create a whole new era, breaking existing patterns of behavior and establishing new ones that matched environmental realities better (Gemmill and Smith 1985, Lichtenstein 1995).

Order Through Fluctuations: Emergence on a National Stage—The Arrival of Country Music Stars. Additional fluctuations in the early 1980s started a chain reaction

that moved the system into a new order. A change in strategy at Nashville record companies and the founding of a theater in Branson by country music star Roy Clark initiated "the second cycle of growth" in Branson's theater population (7). This "new era" (8) was defined by theaters linked with headliners who had been driven from Nashville by the country music industry's attempt to appeal to younger audiences. Attracted to Branson by the presence of Clark and other country music stars, as well as the hordes of tourists who flocked there, these performers firmly established Branson's national image as a country music town.

Roy Clark Arrives in Branson. Branson emerged on the national stage in 1983, when Roy Clark of Grand Ole Opry and *Hee-Haw* television show fame founded the town's first celebrity theater with local entrepreneur Jim Thomas, who had hatched the idea three years earlier (33). These entrepreneurs had discovered a new way to create value, "filling a void that wasn't being filled by others," according to Thomas, and ushering in a new regime of order in the evolution of Branson's theaters. This single business venture signified the "start of the entertainment industry as we know it today," according to one pioneer and numerous documentary sources. During this era, the country music stars who came to play for limited engagements at Clark's theater often decided to stay and establish their own theaters in Branson, helping the area attract a broader audience (8).

According to Thomas, Branson's emergence as a country music venue took awhile before "it finally boiled": "Local stars would not bring in 'big name' stars because they were the stars. And 'big name' stars...didn't realize that [here] the market would come to you and turn over every few days." However Thomas "wanted to create a market," so he "encouraged stars to start their own theaters." Eventually, entrepreneurs and performers began to change their approach once they recognized the unique set of opportunities Branson offered. As complexity theorists argue, fluctuations often do more than break down existing functional relationships and patterns; they sometimes involve teaching the system's participants how to decommit themselves from existing mental models (Leifer 1989, p. 907; Lichtenstein 1995, p. 294).

Nashville Record Companies Change Strategy. Branson's entry onto this new, larger stage was possible because, as country music star Mel Tillis explained, "About 1981 or 1982, the record companies started to change the image of their labels...to attract the younger audience, and they dropped a lot of artists who had been on the labels" (7). As a result, many older country stars were driven away from Nashville to Branson (23, 34), a town that attracted older tourists and retirees who were their loyal fans (30).

Order Through Fluctuations: Emergence on an Even Larger National Stage—The Arrival of Mainstream Pop Music Stars. New fluctuations in the early 1990s transformed Branson into a "boomtown," according to numerous sources, moving the system into a qualitatively new order. This transformation was triggered by pop music icon Andy Williams's 1991 announcement that he would build a theater in Branson and by positive national media coverage provided by two *60 Minutes* segments on the "Branson phenomenon" in 1991 and 1992. The arrival of pop celebrities ended "the hegemony of country" (6) and transformed Branson into a nationally known, mainstream tourist destination. The continuing influx of stars into Branson came to include artists whose music and comedy reflected a popular aesthetic. These stars brought higher performance standards, bigger theaters, and even bigger celebrity names. As a result, "Branson is a very different place today. It takes big money, deep pockets, and a corporate worldview," according to one pioneer.

Andy Williams Arrives in Branson. The opening of Andy Williams's theater in 1992 marked "a distinct break from the country music on the strip" (8). It "went against the norm," said his manager, "filling [a big] hole that's not being [filled by anyone] else." It changed the "frame of reference," broke the "mindset" of Branson as a country music venue, and ushered in a new regime of order in which pop music stars with "mainline names" established theaters in Branson, according to informants and documents (8). Here again, as complexity scholars argue, we see a fluctuation that educates system participants, this time by way of example, about decommitting themselves from existing mental models and establishing "a new kind of comprehension, a new view, where contradictions are resolved in a 'reframing' of what is considered true" (Leifer 1989, p. 908).

60 Minutes Shows. Because of all the announcements about new theaters, the national news media converged on Branson in 1991 (8). A *60 Minutes* segment that aired in 1991 and 1992 was "a real catalyst" for a "major explosion" that brought more tourists, theaters, and businesses, and even bigger stars, according to informants, and it took Branson to "a whole different level" (34). Our quantitative results show that *60 Minutes* had a significant effect on the rate of subsequent theater founding (Models 5 and 11: 0.381, $p < 0.10$; 0.644, $p < 0.01$).

Positive Feedback Dynamics

An organizational community—tourism feedback loop helped drive the emergence of Branson's organizational community of theaters, restaurants, motels, shops, theme parks, amusements, etc., which informants referred to as "a mall." This feedback loop involves "reciprocal conditioning," "mutual causation" (Menger 1991, p. 198), or "circular and cumulative causation" (Krugman 1995, p. 48) between tourists and tourist businesses.

Economies of location derive from the geographic attractiveness of a location in the absence of other firms and have traditionally been treated as a static property of the location (Arthur 1994). In this case, however, economies of location operated dynamically. Geographic attractiveness as a result of market demand (tourist arrivals) increases as more organizations (tourist businesses) establish themselves, and as geographic attractiveness increases, even more organizations establish themselves. As Krugman (1995, p. 46) explains: "Firms want to locate where market potential is high; that is, near large markets. But markets will tend to be large where lots of firms locate." In Branson, a market ecology was formed and sustained as the events described above, along with others, including *Shepherd of the Hills* movies and *Beverly Hillbillies* episodes filmed in Branson (see Models 5 and 11), catalyzed tourist arrivals, which led to the formation of a host of tourist businesses that in turn attracted even more tourists. Tourist arrivals—a powerful and "renewable" source of imported energy—thus catalyzed the founding of tourist businesses, which injected more energy into the system through the efforts of entrepreneurs, many of whom were a "catalyst for Branson's growth" (29). On the one hand, tourists catalyzed the formation of tourist businesses: "Without tourists, these theaters would have never happened! ...It was opened for tourists," said one pioneer. Likewise, our quantitative results suggest that tourist demand had a positive effect on the theater founding rate (Models 3 and 9: 0.00012, $p < 0.001$; 0.00013, $p < 0.001$): On the other hand, tourist businesses catalyzed tourist arrivals. "Most visitors are now drawn by the shows," according to information at a local history museum (also see 7).

This self-reinforcing cycle brought a "more wide-ranging" group of tourists to Branson and drove the Branson Mall toward "increasing diversity" (18). "That [diversity] wasn't the case years ago," said one pioneer in 1984 (35). By the early 1990s, one local businessman observed, Branson was "a marvelous entertainment center with dozens of things to do once the tourists get here" (36). These empirical findings match complexity theory arguments that positive feedback processes drive systems toward increasing diversity (Gemmill and Smith 1985). With diversity as an indicator of disequilibrium (Kirzner 1973), our findings suggest that the organizational community emerged far from equilibrium, as scholars of dissipative structures stress (Leifer 1989). Further, our finding of increasing diversity/disequilibrium in the organizational community is consistent with those who argue that dissipative structures can operate in a state of ongoing disequilibrium without ever being in equilibrium (Smith and Gemmill 1991).

Moreover, this feedback loop produced in the Branson Mall a "hodge-podge configuration" (18) of components that was *not* "planned," "controlled," or "created" through overall "human design," according to informants. Rather, accounts of "spontaneous, relatively uncontrolled development" (18) suggest that self-organizing processes were at work here. "It was not created [by a central authority]," said one informant, referring to the Branson Mall; "it evolved. No one ever meant it; it's evolution."

A transportation—tourism feedback loop played an important role in the emergence of Branson's organizational community. At the turn of the century, few roads crossed the area (31), and those that did were crude (5), making the region virtually inaccessible to tourists (24). Over time, new and better highway infrastructure and increasing numbers of tourists reciprocally reinforced one another, making Branson accessible to the masses. Dynamic location economies—this time geographic attractiveness as a result of favorable transport possibilities and market demand—were again operating. Robinson (1976, p. 97) explains the process this way: "Transportation has been at once a cause and effect of the growth of tourism: improved transport facilities have stimulated tourism; the expansion of tourism has stimulated transport." Our data show a similar pattern: "Newly paved roads...enticed an ever-increasing number of tourists" to the Branson area (37), and this expansion of tourism stimulated improvements in transport facilities, including widening the main theater "strip" and building "a network of interconnected bypass roads" (38).

A finance—tourism feedback loop helped underwrite the emergence of Branson's organizational community. The area had long attracted retirees, beginning as early as the 1920s (6), continuing after World War II (38), and accelerating in the late 1950s (30). The financial capital these retirees brought with them was a key source of imported energy that was necessary to bankroll entrepreneurs' efforts. As one informant noted, "Retirement money, local money, paid for most of the theaters." Dynamic location economies were operating yet again; this time, geographic attractiveness as a result of the ready availability of financial inputs and market demand reciprocally reinforced each other. According to one long-time local banker, a steady influx of retirees deposited their retirement savings in local banks, and these monies were then used to finance new tourist businesses, including theaters, which in turn attracted additional older visitors to Branson and even more financial capital as they retired there (18). This positive feedback process was crucial for early theaters, but its importance diminished as bigger pop music stars with greater individual wealth and connections to "larger [nonlocal] sources" such as "financial groups" came to town.

An organizational community—collective marketing feedback loop helped facilitate the emergence of Branson's organizational community. Throughout Branson's history, collective organizations such as the White River Boosters League (WRBL, formed in 1914), the Ozark Playgrounds Association (OPA, formed in

1919), and the Ozark Marketing Council (OMC, formed in 1981) directly fueled this positive feedback loop by implementing a marketing strategy that was "well designed to attract the visitor to the Ozarks and then direct him to various attractions" (25). By generating more tourists, the efforts of collective organizations helped the organizational community develop, and collective organizations stepped up their marketing of a community that had more to offer. As one local historian observed, "development begets promotion and additional promotion leads to further development" in Branson, resulting in an organizational community with "a variety of different types of attractions" (25), a finding consistent with complexity scholars who argue that such processes generate variety (Leifer 1989).

A theater population feedback loop, in which organizational bandwagons powered positive feedback processes that built momentum, helped drive the emergence of Branson's theater population. Abrahamson and Rosenkopf (1993, p. 488) define bandwagons as "diffusion processes whereby organizations adopt an innovation...because of bandwagon pressure caused by the *sheer number* of organizations that have already adopted this innovation." Similarly, Arthur (1994) describes a positive feedback process, formulated as an Eggenberger-Polya urn scheme, in which the probability of a new organizational founding is a positive function of the number of existing organizations. Here, the more organizations that adopt a particular location, the more attractive it becomes; and the more attractive it becomes, the more it is adopted. Hannan and Carroll (1992, p. 241) further observe that "the negative binomial can be derived as a limiting distribution of an Eggenberger-Polya urn scheme." Our Poisson model, a special case of the negative binomial, indicated that in Branson the greater the number of existing theaters, the higher the theater founding rate (Models 2 and 8: 0.028, $p < 0.05$; 0.022, $p < 0.05$). Using transitive-property logic, this suggests that positive feedback processes were at work in the theater population.

Abrahamson and Rosenkopf (1993, p. 488) further characterize bandwagon processes as "cycles in which increases in the number of adopters raise bandwagon pressures, and raised bandwagon pressures cause the number of adopters to grow." Related reasoning suggests that a rising number of prior foundings can signal a munificent environment, inducing organizational formation (Hannan and Freeman 1989). Our analysis supports this logic, showing prior theater founding to be positively associated with the rate of subsequent theater founding (e.g., Model 1: 0.415, $p < 0.001$).

The actions of innovative entrepreneurs, serving as models, initiated bandwagon pressures in Branson (18). Considered the most influential, Baldknobbers and Presleys "set off...a chain reaction" (39). Attracted by their presence, "other theaters opened up around

them" (7). One pioneer asks, "Would we have started a theater here if there had been no others? No. Would we have with one? Maybe. Would we have with two? Yes, especially if they were as successful as Presleys and Baldknobbers." By the mid- to late 1970s, growth "really accelerated" (28) as "more music shows, most of them in the family mode, joined the bandwagon" (23). These shows "established...a momentum in development" on Branson's "strip" (18). "We moved to Branson because this is where country music is happening," said a pioneer who jumped on the bandwagon in 1980. By 1982, 20 theaters were clustered in Branson. According to one pioneer, Branson's theaters had achieved a "critical mass" necessary for further development.

The process accelerated when "people from Nashville started coming," beginning in 1983 when Roy Clark opened his own theater (23). By booking stars for limited engagements and continually rotating them, Clark's theater acted as an "incubator" that introduced them to Branson's possibilities, encouraging many to set up local theaters and driving a "Country Music Explosion" (8). Celebrities who founded theaters in Branson attracted other celebrities, some of whom also founded theaters after seeing the available opportunities, and these in turn attracted others. Among the "big name country music stars" who settled in Branson were Boxcar Willie, Mickey Gilley, and Mel Tillis (18). According to informants and documentary sources, Branson offered these older stars a place to be "classics" instead of "has-beens"; a ready market of loyal and adoring fans; a respite from the tedium and rootlessness of years of touring; a vehicle for unfettered artistic expression; and a chance to reconnect with family, community, and friends with whom they had grown up in the business.

The sheer number of theaters in Branson played a role in the arrival of Andy Williams in 1992. "We wouldn't have built a theater here if there were no previous theaters or even just a few," said his manager. Williams "really got the momentum going" (23), setting an example for a flood of stars with "mainline names" (32) who jumped on the bandwagon, including Wayne Newton, Tony Orlando, and Bobby Vinton. As in the previous era, many of these stars were first introduced to Branson by way of incubating theaters.

Consistent with complexity theory arguments that positive feedback processes drive systems to become increasingly diverse (Leifer 1989), the theater population feedback loop built an increasing diversity of theatrical entertainment. While theaters followed the same general model (see discussion of "Bransonizing" below), as institutional theorists assert (DiMaggio and Powell 1991), they also continuously differentiated themselves from rivals, as Austrian economists argue (Lachmann 1986), along such dimensions as type of entertainment (Barn Dance-style show, Broadway-style show, Las Vegas-style show), musical genre (country, gospel,

pop), music-comedy mix (music with comedy, comedy with music), venue (indoor theater, amphitheater), location (on the strip, downtown), and show time (morning shows, matinees, evening shows). In addition, theaters from older regimes (e.g., local family theater form) came to reside alongside those from newer regimes (e.g., country music and pop music celebrity theater forms). As one pioneer observed, "People want to see their favorite star and the local flavor too because it's a representation of the Ozarks." Given the "diversity of talent coming in" (23) by the mid-1990s, Jim Thomas concluded, "You take a little bit of Nashville, a little bit of Las Vegas, and a little bit of Broadway, and you put them all in a bag and shake it up. You know what you'll take out? Branson" (9). The theater population had experienced a diversification of entertainment (40). Our data show 1 local pioneering theater in 1955, 4 in 1965, 8 by 1975, and 28 by 1985, with increasing diversity in each decade. Additionally, by 1985, there was one country music celebrity theater and one large outdoor amphitheater that brought in top stars primarily in country music. By 1995, Branson boasted about 30 local theaters, 11 country music and 9 pop music celebrity theaters, 2 large outdoor amphitheaters and 1 large indoor theater that brought in top stars, 1 Las Vegas-style and 1 Broadway-style theater, and several theaters developed by nonlocal investor groups. Our findings of increasing diversity suggest that the theater population, like the broader organizational community, emerged far from equilibrium (Kirzner 1973, Leifer 1989), and reinforce Smith and Gemmill's (1991) argument that dissipative structures do not have to seek equilibrium.

Stabilization Dynamics

Local Culture. Branson's widely held, deep-seated values and beliefs provided a powerful, stabilizing mechanism that shaped the character of the new theater population and guided participants' choices in a way consistent with the town's accumulated evolutionary learning (Gemmill and Smith 1985). That is, Branson's strong local culture served as its self-referenced deep structure, providing an internal reference point that preserved its identity and core behavioral patterns throughout many transitions to new regimes of order (Smith 1986). As a result of this strong culture, participants shared the same basic schemata and, consequently, exhibited many of the same behaviors, resulting in system stability (Stacey 1996).

Core elements of the local culture embodied in Wright's book, including Christian ethics, family values, country aesthetics, and Ozark folkways, not only attracted tourists and residents interested in "a clean, innocent, outdoors life" and "hillbilly ways" (6), but also "shaped the character and social attitudes" of local entrepreneurs (5). Informants referred to Branson as a

"wholesome" community with "traditional moral fiber and friendliness," as it had been in the early 1900s. "The people coming here are those looking at America as it's supposed to be," said another. "This is the Bible Belt area here. It's a family atmosphere" (7). The early family theaters communicated these widely shared values through performance. One theater pioneer who brought in small-time guest performers (some of whom went on to establish theaters of their own) would ask, "Did they fit the mold?" and invited only those who did. Like such pioneers, older, nationally known Nashville stars adopted common behavioral and organizational practices consistent with the stabilizing continuities of a local culture rooted in family, country, patriotic, religious, and nostalgic values (18). With the arrival of even bigger stars in the early 1990s, however, this consistency was challenged. Despite self-selection by G-rated stars such as the Osmond Brothers, John Davidson, and the Lawrence Welk family, who in many ways fit well with Branson's cultural values, informants cited a process called "Bransonizing" in which locals counseled newcomers on the importance of fully reflecting local cultural values in their performances and maintaining the cultural consistency that had become central to Branson's national image (also see 18). "Branson is still family oriented," explained one pioneer. "If you come in and do 'blue' or 'off-color' humor, you'll be written up in the newspaper. There'll be letters to the editor."

Governmental Organizations. Such cultural policing has its roots in Branson's early history when, between 1906 and 1930, morality ordinances were enacted to maintain a friendly, wholesome, church-going atmosphere (19). These laws prohibited gambling, horse racing, cockfighting, card playing, square dancing, and bars (19, 29). As early as 1908, Branson was advertised as "a town with no saloons or gambling houses" and touted as "an ideal environment for healthy outdoor family vacations" (6). Regulations such as these, established by local governmental organizations to reflect and reinforce the local culture, provided a "common signpost" (Lachmann 1971) or "reference point" (Smith and Gemmill 1991) for Branson's residents, tourists, and entrepreneurs to orient their behavior and stabilize the system.

Policies governing business activities in Branson revealed another side of local culture. From the start, local government policy was in the "Ozark tradition of laissez-faire," according to one informant. The absence of controls on business activity reflected and reinforced an attitude that "we'll do what we please with our land" (28). Branson's regulatory policies remained "very probusiness" into the mid-1990s, according to informants. While such policies afford freedom of contract necessary for the emergence of novelty, they also provide a source of stability (Vaughn 1994).

Government policies, mostly at the state and national level, were instrumental in marshaling resources necessary for infrastructure development throughout Branson's history. These improvements, in turn, provided a sense of the area's direction of development and prospects for the future in tourism, giving entrepreneurs the confidence to establish tourist businesses in Branson. Several pioneers emphasized that "Table Rock Lake was the biggest" factor in their decision to found a theater in Branson, and along with Bull Shoals Lake (as well as the presence of theaters and attractions) "told us that the place was on a roll." As noted earlier, our quantitative results indicated that Table Rock Dam positively affected the rate at which theaters were established. Branson's tourism industry was also "guided" by the development of better roads (18, 22). Our quantitative results confirmed that highway improvements had a positive effect on the theater founding rate (Models 4 and 10: 0.043, $p < 0.001$; 0.051, $p < 0.001$). In this way, government policies provided "points of orientation" for entrepreneurial behavior that stabilize the system by giving individuals confidence in carrying out their plans and in predicting the actions of others (Lachmann 1971).

Collective Organizations. While the names changed over the years, collective organizations had long been a part of the area's tourism landscape. By implementing a strategy of "delivering customers" to Branson, collective organizations played a role in most of the feedback loops described above; however, they also focused their marketing efforts to tell a single story consistent with the local culture, helping to solidify the area's thematic configuration (18). The OPA, for example, marketed the area as "The Land of a Million Smiles," emphasizing a country aesthetic consistent with "the true Ozarkian spirit of hospitality and fair dealing" (23). The OMC continued in this vein by capitalizing on the arrival of country music stars with spots on the *Nashville Now* show with the message: "If you like country music in the city, you'll love country music in the country—Ozark Mountain Country" (36). By the mid-1990s, the OMC was emphasizing all aspects of local culture in its video productions (41), as well as focusing on patriotic values with the marketing of Bob Hope's Veteran's Day celebration and religious values with national television spots for the annual Christmas spectacular (42). Collective organizations thus coordinated the activities of participants to a common "reference point" that channeled individual action into the well-worn grooves of Branson's value system, helping stabilize each new order (Smith 1986).

Recombination Dynamics

Existing elements are often recombined to create new ones in self-organizing systems (MacIntosh and MacLean 1999, Lichtenstein 2000). Branson's entrepreneurs were adept at recombining existing elements such as abandoned airfields, used folding chairs from area attractions, old skating rinks, available dance pavilions, and vacant theater buildings in their efforts to create new theaters. Although a few scholars have given passing mention to the creation of new elements through recombination of either previously successful (Anderson 1999) or unsuccessful (Romanelli 1991) elements, our data reveal a fuller picture of the dynamics of recombination through success and failure. Entrepreneurs in Branson typically created new theaters and generated greater variety in the theater population by continually recombining their human and reputational capital with physical capital (Lachmann 1986) that was available because of prior success (Anderson 1999) and failure (McGrath 1999), usually refurbishing it to reflect their unique style and performance standards.

Recombination Through Success. This dynamic gave impetus to the theater population feedback loop as successful theaters left facilities vacant to build larger, more modern ones. "The theaters...change hands overnight, as established stars build bigger, better facilities" (23). Informants referred to this as a game of "musical theaters": "Unlike the 'musical chairs' game of childhood, however, the number of theaters in Branson is not diminishing and the number of players seems to be growing" (6). According to some complexity scholars, continuous innovation by entrepreneurs based on improved knowledge over time about how to better satisfy customers (Vaughn 1999) requires the continual recombination of human and physical capital (Lachmann 1986). The recombination involved in trading up to bigger, better facilities allowed theater entrepreneurs to better satisfy their patrons (many of whom were repeat customers) with an experience that was new and improved, and it freed physical capital that was recycled, refurbished, and recombined with the human and reputational capital provided by another headliner to better satisfy patrons, and so on in a continuous process of systemwide innovation and upgrading that "keep the stages looking fresh" (6).

Recombination Through Failure. This dynamic fueled the theater population feedback loop as failed theaters left facilities vacant and available to new entrepreneurs. "Theaters never stand empty for long in Branson," one observer noted; "If an act folds in midseason...there will be another to take up the lease in a week or two" (7). One pioneering theater owner explained how he twice bought the buildings of the same failed theater and exclaimed of the previous owner, "He was building our theaters!" The vacancies created through prior organizational failure free scarce organizing resources necessary for new founding, increasing the founding rate (Hannan and Freeman 1989), a conjecture supported by our quantitative analyses, which showed prior theater failure to be

positively associated with the rate of subsequent theater founding (e.g., Model 7: 0.580, $p < 0.001$).

Recombination through failure was such an integral part of the dynamics of emergence that some early theaters were even designed for failure and renewal through reconfiguration, as one pioneer explained: "We built the theater so that if it didn't work, we could put in boat storage for the lakes. That's why we built it with no slope, with a flat floor." This suggests that rather than trying to avoid theater failure, Branson's entrepreneurs embraced it as a natural part of the recombinative, invisible-hand process in which slack resources are allocated to higher valued uses (McGrath 1999).

Discussion

This paper offers a new theoretical explanation of the evolution of organizational collectives that highlights how new ones emerge rather than how existing ones persist. We aspire to move organization science beyond the prevailing neo-Darwinian evolutionary approach (Aldrich 1999), which has posited a variation-selection-retention (VSR) model that emphasizes selective-retention processes that reduce diversity and drive social systems toward equilibrium. To complement established thinking on organizational evolution, we employ a complexity model (Prigogine and Stengers 1984) whose evolutionary epistemology differs significantly from that of the dominant VSR model (Hayek 1988). In the complexity model, dissipative structures drive social systems toward increasing diversity while maintaining a state of perpetual disequilibrium. This model includes four dynamic mechanisms of emergent self-organization: (1) spontaneous fluctuations that initiate a new social order; (2) autocatalytic feedback loops that amplify and reinforce these fluctuations; (3) coordinating mechanisms that help stabilize the emergent order; and (4) recombinations of preexisting resources that renew the social order, add variety, and fuel positive feedback processes. Attending to these dynamics that underlie emergence helps to fill an important gap in the literature on organizational applications of complexity science.

Empirically, our analysis shows how these four theorized mechanisms led to the emergence of order in an organizational collective in Branson, Missouri: not a single order, but a cascade of new orders over the course of a century. We have described how three initial fluctuations—a lake, a book, and a train (3)—were amplified by self-reinforcing processes that gathered momentum, created a tourism niche from what had been a subsistence existence in Branson, and eventually brought the system to the threshold of a new regime of order. This set the stage for the live musical performance theater population to emerge through the creation of one new organizational form after another in a series of three "punctuated emergences," each of which qualitatively transformed the

system. Together these findings show how an organizational collective accrues through the aggregated (and punctuated) emergence of path-dependent orders, each building on the next in a nonlinear accumulation and interaction of countless events and each setting the stage for greater diversity. This is a story of evolution proceeding from one "punctuated emergence" to the next in an ongoing series of whole-system transformations to qualitatively new ways of operating, each "reinventing" Branson (40), allowing it to cope with greater energy flow and to accommodate increasing complexity/diversity (Leifer 1989).

We found evidence of increasing diversity in both the theater population and the broader organizational community, consistent with complexity theory arguments that positive feedback processes drive systems toward diversity (Leifer 1989), but counter to the dominant view that organizational homogeneity should increase within populations as differential survival winnows variety (Astley 1985) and institutional isomorphism leads to convergence (DiMaggio and Powell 1991). Further, because diversity is an indicator of disequilibrium (Kirzner 1973), our study suggests that Branson's organizational collective emerged far from equilibrium, in a state of perpetual disequilibrium, as scholars of dissipative structures (Smith and Gemmill 1991) and Austrian economics (Lachmann 1986) stress. Our study suggests that instead of privileging equilibrium and equilibrating change, organization science should treat disequilibrium and disequilibrating change as natural and ongoing rather than exceptional and episodic (Lachmann 1986, Tsoukas and Chia 2002). These findings, coupled with those in the preceding paragraph, support a "punctuated *dis*equilibrium" view of change, extending adaptation theorists' "punctuated equilibrium" view in new and important ways: Equilibrium need no longer be viewed as the natural state to which a system returns, and small as well as large events can trigger transformations.

We base these conclusions on a painstaking comparison of patterns deduced from complexity theory with patterns induced from field data. We found a good match between the two sets of patterns, closing a gap in the literature by providing an empirical test of complexity theory at the collective level. We complemented this pattern matching with other strategies for theorizing from process data (Langley 1999), all of which drew on multiple sources (and types) of data and methods of analysis. We believe the methods used in this study were crucial not only to providing a richer, more accurate explanation of organizational emergence at the collective level (Baum 1996), but also to remaining true to the process-theoretic nature and distinct ontological assumptions of complexity theory (Drazin and Sandelands 1992).

Our aim is not to discredit the VSR approach and replace it with a new model and methodology from complexity science, but to address an issue that the

received VSR model is not strongly suited to take up: the ongoing emergence of novelty. Here, complexity theory and dissipative structures have a particularly strong contribution to make—as a complement to what we already know. We view emergent self-organization and selective-retention not as competing, but as fundamentally related perspectives (cf. Kauffman 1993). By incorporating self-organization into an expanded evolutionary perspective, "nothing of value is lost . . . . It simply gets reframed, reintegrated from a different viewpoint" (Goodwin 1994, p. 4). For example, our Poisson regression results were consistent with the findings of population ecologists (Baum 1996). (See population dynamics and density results in Table 1.) Further, our findings concerning the importance of collective action and social norms were consistent with those of neoinstitutionalists (Scott 2001). However, these ecological results and institutional findings were reframed/reintegrated from the complexity viewpoint.

Additional Implications for an Evolutionary Theory of Organizations

The received wisdom on organizational evolution says that (1) the actions of particular individuals are unlikely to have an impact at the population level (Baum 1996); (2) entrepreneurs act in isolation and secrecy—in basements and garages, in college dorm rooms, and in corporate skunkworks—to create new products and business models that form the basis for new markets and new industries (Gartner 1988); (3) competition for material resources creates industries, and social structures eventually form around them (Chandler 1977); (4) government policies can play a direct, top-down role in establishing new organizational populations (Russo 2001); (5) researchers should study the early days of new organizational populations (Aldrich 1999); and (6) reductionism, "the idea that all aspects of a complex phenomenon must be explained in terms of one level" (Hodgson 1997, p. 401), is good science.

Our findings suggest otherwise.

(1) From Harold Bell Wright, through a handful of local families, to Roy Clark, Jim Thomas, and Andy Williams, the entrepreneurial actions of key individuals powerfully influenced the emergence, diversity, and character of the theater population. Complexity theory helped us understand that small actions by individuals at critical times can dramatically affect population-level outcomes, and it shifted the emphasis of our analysis from central tendencies to idiosyncratic exemplars (Stevenson and Harmeling 1990).

(2) Collective action, from early associations such as the OPA to the advent of the OMC, played a key role in channeling and accelerating Branson's emergence. Because collective organizations are often better positioned than individuals to influence the feedback that brings about the emergence of new organizational

collectives, they play an integral role in the management of self-organizing processes, with implications for collective entrepreneurship in new industry formation (Chiles and Meyer 2001).

(3) In Branson, social norms played a powerful role in shaping the character of the organizational collective *from the very beginning* and continued to do so through time. As actors in a disequilibrium market process, Branson entrepreneurs continually generated novelty through their discovery of market gaps (Kirzner 1973) and creative imagination (Lachmann 1986), but their alertness/creativity was not unfettered; it was "Bransonized," constrained and shaped by the local culture (Scott 2001).

(4) Government in Branson had a more indirect, bottom-up role, in which laissez-faire economic development policies that reflect and reinforce the local culture give individuals the latitude and confidence to implement their plans.

(5) Our study shows the value of investigating historical events *prior to* the focal population's inception to ensure complete understanding of its origin. In Branson, this meant delving into the 60-year history of the tourism niche into which the theater population later emerged, thereby linking the study of niche origins with the study of population origins.

(6) Cross-level influences characterized emergent order in Branson. The emergence of the theater population, the distinct theater forms, and the broader organizational community could not be disentangled. Theater forms were "building blocks" (Vaughn 1999, p. 243) for the theater population, and the theater and other interdependent populations were building blocks for the community of populations that made up the "Branson Mall." These findings (combined with those demonstrating the importance of individual agency, the pivotal role of specific organizations, and the interplay of the broader social system) suggest that a rich theory of organizational evolution must adopt a multilevel approach: focusing from the individual and organization, through the organizational form and population, to the organizational community and social system. By explaining how micro-processes generate macro-order, complexity theory is ideally suited to such a multilevel approach, providing scholars with a fuller understanding of the dynamics of change that allows for emergence and surprise (Tsoukas and Chia 2002, p. 568).

Future Directions

Some limitations of this study suggest possible directions for future research. (1) Studies of other collectives are needed to generalize our findings more broadly. (2) Owing to space limitations, this paper explored only a limited number of feedback loops. A simulation model based on the categories and relationships in our causal network display (see http://www.informs.org/Pubs/Supplements/ORSC) could be built and put in

motion through repeated iterations to study the results when all factors and relationships are included. (3) While we took a number of measures to guard against biased findings based on retrospective reports, organizational ethnographers able to devote their scholarly careers to fieldwork in newly emerging, fast-growth industries may be better positioned to overcome this limitation. (4) Future researchers with larger archival data sets than ours may wish to use statistical methods for estimating change points (e.g., West and Ogden 1997) to triangulate qualitative findings about the timing of "fluctuations" and duration of "regimes of order." (5) More sophisticated measures, such as the index of qualitative variation (Weisberg 1992), could be employed to track organizational diversity over time across different dimensions of organizational form, and the resulting data could be used to triangulate narrative accounts. Such studies could shed brighter light on the evolution of diversity across multiple stages of a population's life cycle, including the relative influence of variety-reducing, negative feedback processes associated with selection and institutionalization and of variety-generating, positive feedback processes associated with self-organization. (6) We considered only two sources of order. The first was *self-organization*. As their unprompted choice of terms like "critical mass," "momentum," "chain reaction," "bandwagon," and "catalyst" attest, our informants understood that self-organizing processes that give rise to new order played a central role in structuring Branson's emergent organizational collective (cf. Krugman 1996). The second was *institutions*. Our study suggests that organizational evolution can be viewed as a self-organizing process that operates alongside and within the context of stabilizing social, political, and economic institutions (cf. Lachmann 1971). We did not, however, consider *selection* as a source of order (Kauffman 1993). Collaboration among researchers with a detailed qualitative understanding of the emergence of organizational collectives and those versed in the new generation of "history-friendly" models (Malerba et al. 1999) may offer a promising direction for combining all three sources of order.

We caution organization theorists against viewing institutional and selection forces driven by negative feedback as the only sources of order; self-organizing processes driven by positive feedback are also an important source of order in disequilibrium systems far from equilibrium (Prigogine and Stengers 1984). Order does not imply equilibrium. Future research is needed to further confirm our observation that self-organizing processes not only usher into existence the truly new and novel, but also generate new order.

Appendix. Technical Procedures for Poisson Regression Analyses

Measures

We used *theater founding rate*, measured as the number of theaters founded in Branson in a given year, as our dependent variable. In a small number of cases, a theater was founded, failed, and was later refounded. Consistent with prior research, refoundings were counted as foundings.

We used five independent variables common in ecological research. We used four population dynamics variables: (1) *prior theater foundings*, measured as the number of theater foundings in Branson in the prior year; (2) its second-order effect, *prior theater foundings squared*; (3) *prior theater failures*, measured as the number of theater failures in Branson in the prior year; and (4) its second-order effect, *prior theater failures squared*. In addition, we used *theater density*, measured as the number of theaters operating in Branson in a given year. Because theater density had yet to reach a peak and decline, no second-order density term was warranted (Hannan and Freeman 1989). The data for these measures, as well as for the dependent variable, came from sources containing theater names and dates of theater foundings and failures, as described in the text's "Secondary Data" section.

We chose the remaining independent variables because of their relevance to the specific case under investigation, a standard practice in ecological research. First, *tourist demand* was measured using annual traffic count data along Branson's theater "strip." Second, two transportation infrastructure variables were measured. *Highway infrastructure improvements* were measured using the questionnaire results provided by our panel of transportation experts, who rated on a 7-point scale the extent to which 12 highway infrastructure improvements affected the accessibility of Branson to tourists. The scores of the three experts were averaged for each improvement (Cronbach's alpha $= 0.79$) and allowed to accumulate with time. *Gasoline shortages* in the United States in 1973, 1974, and 1979 were measured using a period-specific dummy variable set equal to 1 in years of shortages and 0 otherwise. Third, three mass media events that provided positive exposure for Branson and its theaters were measured as separate period-specific dummy variables set equal to 1 in years of the event and 0 otherwise: (1) *Shepherd of the Hills movie*—Wright's novel was made into a movie in 1963; (2) *Beverly Hillbillies shows*—Five episodes of the popular television show *The Beverly Hillbillies* were shot in Branson in 1969; (3) *60 Minutes shows*—*60 Minutes*, a popular television show, in 1991 and 1992 ran a feature story that portrayed Branson's theaters in a positive light. Finally, the effect of *Table Rock Dam* was

measured using a period-specific dummy variable set equal to 1 for all years after the completion of the dam and 0 otherwise. These measures were constructed such that a positive relationship between them and the dependent measure corresponds to a positive regression coefficient in the analyses described below.

Analyses

To analyze these measures, we followed Hannan and Freeman (1989) and others in using an event count model that adopts a log-linear relationship between theater foundings and independent variables and treats events as conforming to a Poisson process. A Poisson model assumes a Poisson distribution: $\Pr(Y_t = y_t) = (e^{-\lambda_t} \lambda_t^{y_t})/y_t!$, where the founding rate parameter, λ_t, is related to the vector of independent variables, $\mathbf{X}_t$, in the following log-linear fashion: $\ln \lambda_t = \beta \mathbf{X}_t + \varepsilon$, with β representing the Poisson regression parameter and ε following a Poisson probability distribution. The Poisson model is a special case of the more general negative binomial model, in which the mean and the variance of the number of founding events per unit time are equal. If the mean and the variance are found to be unequal, then negative binomial regression provides a more appropriate analysis than Poisson regression. Using the likelihood ratio test against Poisson provided in STATA 5, we tested for and found mean-variance equivalence in our data (see Table 1). Accordingly, we used Poisson regression rather than negative binomial to model the effects of our independent variables on the theater founding rate. Table 1 reports maximum likelihood estimates of the Poisson regression parameters, computed using STATA 5. We identified through trial and error the time lag that provided the best-fitting model for each independent variable. This type of log-linear, lagged regression analysis is, as Langley (1999, p. 698) notes, "particularly useful for the verification of dynamic theories that include causal feedback loops."

Despite analyzing the entire history of the theater population through 1995, we were forced to construct extremely parsimonious models because of the relatively small number of annual observations and concomitant degree-of-freedom limitations. To this end, we ran the two sets of models shown in Table 1: (1) using prior theater foundings and its second-order effect as the baseline (Models 1–6) and (2) using prior theater failures and its second-order effect as the baseline (Models 7–12). If assessed according to the norms developed for testing hypotheses, our models are less than fully specified. However, from our position as case researchers seeking theoretical as opposed to statistical significance and employing various types of data and methods of analysis beyond the purely quantitative, the models not only serve as useful instruments that advance understanding, but are entirely appropriate in the context of the methodological approach adopted in this study (cf. Glaser and Strauss 1967).

Endnotes

[1] We cite Branson-specific references by using numbers corresponding to a list at http://www.informs.org/Pubs/Supplements/ORSC.

[2] A good example of this problem is Haveman and Rao's (1997) study of the early California thrift industry, which, owing to data limitations, begins 25 years *after* the advent of the first thrift in that state.

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