

# Institutional-Level Learning: Learning as a Source of Institutional Change

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## INTRODUCTION

Institutional theory tells us that as a new idea or business practice diffuses through a population, some firms adopt it early on for efficiency reasons (they have considered the merits of the idea and believe it to be beneficial to their business), while others resist until later in the diffusion curve (they are either not aware of the idea or do not feel it is applicable or advantageous to their situation). When these later adopters do finally succumb, they do so out of social pressures to conform and believe that the primary benefit for adopting is the legitimacy gained by acceding to societal norms (Galaskiewicz, 1985; Parsons, 1956; Suchman, 1995). For these later adopting firms, institutional theory tells us that the prospective efficiency benefits of the idea in question are not a concern – they have either not been considered, or are believed to be too slight to be of significant value to the firm (Westphal, Gulati, & Shortell, 1997; Zajac & Westphal, 2004).

It is not clear, however, that this dichotomy of economic (early) versus institutional (late) actors provides a sufficiently comprehensive spectrum of adoption behaviors by firms. Consider the example of Walmart, which has started to adopt social responsibility practices, particularly in relation to environmental sustainability<sup>1</sup> (including the launch of its ‘Sustainability 360’ plan in February, 2007),<sup>2</sup> and is recognized as being relatively progressive in this respect by a broad section of the media.<sup>3</sup> An institutional theorist might argue that this adoption behavior (which is occurring later, in the diffusion cycle) happened because the idea of environmental sustainability (*going green*) had diffused throughout society to such an extent, and the firm was facing so much criticism for its failure to adopt previously, that it adopted in search of social legitimacy (DiMaggio & Powell, 1983; Meyer & Rowan, 1977). This pattern of behavior, however, would be out of character for a firm that focuses so strongly on minimizing operating costs and passing those cost savings on to

customers in the form of 'Always Low Prices,'<sup>4</sup> and that has resisted conforming to pressure on several previous occasions.<sup>5</sup>

An alternative explanation of Wal-Mart's decision to make a large-scale move into the *green* area is that it is learning from the experience of other firms who have already *gone green*, and is adapting its own behavior accordingly. Once the diffusion of an idea has progressed beyond its initial stages, a track record of success and failure of firms that previously adopted similar policies is established, and firms pressured to adopt at later stages are sometimes able to cherry-pick the most appropriate (and potentially profitable) policies that suit their situation and needs, while still conforming to institutional norms that dictate some form of response. We suggest that this is a possible driver of the decision to adopt an idea or business practice by firms later in the diffusion curve that is not theoretically integrated within the institutional literature. Thus, institutional theory would currently say that Wal-Mart is simply responding to societal pressure and legitimacy threats. Yet Wal-Mart could instead (or also) be *learning* from the experiences of prior adopter firms and adopting these policies later in the diffusion process, at least partially, for anticipated *efficiency* benefits. For example, Wal-Mart's decision to start selling organic foods might have been stimulated by the success of Whole Foods and other organic retailers. At the same time, however, Wal-Mart is showing consistency with the institutional environment (*going green*) with statements about how the firm wants to 'democratize organic food, making products affordable for those who are reluctant to pay premiums of 20 percent to 30 percent.'<sup>6</sup> The dual institutional/efficiency rationales inherent in Wal-Mart's activities are also reflected in statements by one senior level executive who admitted that he was initially unenthused about *going green*, because he thought such a move was all about 'saving the whales and the trees.'<sup>7</sup> He became more enthusiastic when he realized that these practices could increase Wal-Mart's efficiency through lower costs.

This expanded perspective still recognizes the institutional pressures to adopt that Wal-Mart faces (like all firms, Wal-Mart is susceptible to the increased prevalence of calls for greater social responsibility and was likely disturbed by the criticism it was facing in this respect), but it also provides an additional explanation of observed behavior that is more consistent with the firm and its corporate strategy. The concept of *inferential learning*<sup>8</sup> (Miner & Haunschild, 1995), placed in this context, implies that firms facing strong institutional pressures are not *stuck* with adopting unprofitable practices – they have the potential to learn from the successes and failures of earlier adopters to maximize the efficiency benefits they receive from adopting later in the diffusion curve. Wal-Mart is responding to institutional pressures, but is doing so in a way that provides anticipated economic benefit.

This complicated, cause-effect process of change concerning firm adoption behavior blends two large bodies of work in organization theory – institutional theory and the organizational/interorganizational learning theories. On the one hand, institutional theorists recognize that firms are susceptible to coercive, normative, and mimetic isomorphic forces (DiMaggio & Powell, 1983; Scott, 2001) and that such social pressures to conform are powerful predictors of firm behavior – usually seen as independent of, or even in opposition to, economic benefit. On the other hand, however, a learning perspective provides an explanation of firm behavior that allows for firms to respond to social pressures in ways that are economically beneficial. We contend that it is only when this learning perspective is added to the institutional perspective that a more complex, holistic change process that spans the complete range of potential firm behavior in the face of institutional forces can be appreciated. Our understanding of the various conflicting interests, motivations, and learning processes that interact to instigate change is enhanced by this blend of learning and institutional theories.

To some extent, the thesis we present in this chapter builds on existing research within institutional theory and concepts already embedded in learning theories, such as the concept of mimetic learning – consciously or unconsciously learning from the routines, actions, and outcomes of others (Miner & Mezias, 1996). Mimetic learning is quite similar to the concept of mimetic isomorphism (DiMaggio & Powell, 1983) and both concepts are usually measured as the prevalence of adoption by other firms in a given field (e.g., Greve, 1998; Haunschild & Miner, 1997). In other ways, however, we draw on unique work within the learning theories in areas that institutional theory has yet to explore fully, such as the process of inferential learning (Miner & Haunschild, 1995) and the emergence of unintended consequences from everyday routine actions (March, 1981).

Applied examples of the benefits of integrating these two theories exist all around us. As with the Wal-Mart example outlined above, it is relatively easy to think of cases where both theories collectively provide a more effective explanation of the antecedent conditions, processes, or outcomes of organizational action. It is to be expected that these two theories interface across multiple aspects of organizations' day-to-day activities. After all, institutional theory is primarily an attempt to locate the organization within its social and cultural context and analyze the extent to which social institutions (rules, rituals, routines, beliefs, and so on) shape organizations as they pursue the legitimacy necessary to ensure success and survival over the long term (DiMaggio & Powell, 1983; Meyer & Rowan, 1977; Suchman, 1995), while learning theories seek to explain the shaping of organizations through the interaction and influence of various social and cultural forces (Huber, 1991; Levitt & March, 1988).

It is our contention, therefore, that understanding the processes and consequences of organizational and interorganizational

learning as firms adapt to their evolving sociocultural environment can contribute significantly to institutional theory in explaining institutional change (Dacin, Goodstein, & Scott, 2002). Yet, in spite of these potential benefits, the intersection of these two theories has received scant attention from scholars to date. An attempt to identify where these two literatures overlap, so that knowledge is shared and replication is avoided (wherever possible), constitutes, we hope, a constructive addition to the institutional theory literature.

We start with a definition of the process that constitutes the focus of this chapter, a process we call *Institutional-Level Learning*. Institutional-level learning occurs when institutions<sup>9</sup> change due to some learning experience. Such change might result from three possible sources: (1) an institution might evolve deliberately over time, adapting to field-level changes in experience affecting values, beliefs, and attitudes; (2) an institution might be affected by a specific agent of change (an *institutional entrepreneur*) that learned from its own experience or the experiences of others and initiated change; or (3) an institution might undergo unintended change as the result of boundedly rational action, imperfect imitation, or ordinary routines that led to unintended outcomes.

In terms of the structure of this chapter, we begin by discussing definitions of organizational learning and identifying how they relate to institutional change. We then provide a brief overview of how institutional theory has begun to incorporate the concepts of organizational agency and address the notion of active change. Shedding further light on the relatively unexplored area of overlap between the two bodies of work, we then consider how organizational learning theories can inform institutional theory by highlighting a number of important mechanisms by which institutional evolution and change occur, but which the institutional literature has yet to incorporate. These mechanisms

include the following: institutional change resulting from the unintended outcomes of everyday action; interfirm and inter-population learning processes that flow along geographic and network lines; change produced through imperfect mimesis; change produced by field-level underperformance and slow adaptation processes; institutional change resulting from unlearning caused by factors like field-level personnel turnover; efficiency-based change due to inferential learning from earlier adopters; and institutional change driven by heterogeneity in regulation, firm responses to regulation, and competition based on novelty or extreme values.

We believe that these mechanisms provide a research agenda for future work within institutional theory that begins to address some of the unanswered questions generated at the boundary of these two important organization theories.

## ORGANIZATIONAL LEARNING AND INSTITUTIONAL CHANGE

We begin by discussing definitions of organizational learning, its fundamental assumptions, and identifying how learning relates to institutional change. These definitions and assumptions form the foundation upon which we analyze the intersection between institutional and learning theory.

The literature on organizational learning is large and does not fit well into any single classification scheme. Several good reviews of the literature exist (Argote, 1999; Easterby-Smith, 1997; Fiol & Lyles, 1985; Hedberg, 1981; Huber, 1991; Levitt & March, 1988; Shrivastava, 1983); thus, we will not attempt to replicate such work here, except to indicate the definitions of key terms that inform our discussion of organizational learning in an institutional context. In terms of specific definitions, Huber (1991: 89) breaks his review of organizational learning into four constructs: knowledge acquisition;

information distribution; information interpretation; and organizational memory, defining learning in its broadest sense:

learning need not be conscious or intentional .... Further, learning does not always increase the learner's effectiveness, or even potential effectiveness. ... Entities can incorrectly learn, and they can correctly learn that which is incorrect. Finally, learning need not result in observable changes in behavior. ... *An entity learns if, through its processing of information, the range of its potential behaviors is changed.* [Emphasis in original.]

Another classic definition of learning comes from Levitt and March (1988: 320), who note that organizations are 'seen as learning by encoding inferences from history into routines that guide behavior.' The important characteristics of these definitions for us are the following: (1) routines are independent of individual actors and are history-dependent; but (2) they change based on interpretations of past experience (interpretations that are not necessarily coherent); and (3) they change as new experiences accumulate. Such experiences can be the individual actor's own experience or the experiences of others that the actor has observed. Thus, learning and change, whether deliberate or unintended, are unavoidably intertwined.

Much of the empirical work on learning is focused on examining the impact of these various types of experiences on organizational outcomes, generally in the form of improvements. Early work tended to be based on a learning curve perspective (Lieberman, 1984), predicting and finding positive returns to gaining experience (Dutton, Thomas, & Butler, 1984). Much of this early work was conducted in manufacturing settings, but recent work has moved to more complex empirical contexts like strategic decisions (Beckman & Haunschild, 2002; Hayward, 2002). Empirical research in the learning literature has also moved away from a focus on the *amount* of experience to a more comprehensive view of *different types* of experiences; for example, experiences gained in heterogeneous as opposed to

homogeneous settings (Miner, Haunschild, & Schwab, 2003). There is also a growing body of empirical work on the conditions that stimulate learning and change. In this vein, Cyert and March's (1963) behavioral theory of the firm provides the foundation for understanding aspiration levels (both individual and social) as a determinant of change (Greve, 1998).

A further contribution in understanding the concept of learning on a more macro level was made by Miner and Haunschild (1995), who explicitly moved the definition of learning to the population (or field) level of analysis. They achieved this by defining learning at that level as occurring from changes in population level routines that are based either on the experiences of that population or of another population whose experiences can be observed. This higher-level view of learning makes the concept much more accessible to institutional theorists in terms of definition, level of analysis, and accounting for how change occurs at the field-level.

In two important respects in relation to our thesis, however, organizational learning departs from the fundamental assumptions that have informed much of the more recent work within institutional theory – level of analysis and change processes.

### **Levels of analysis**

Aside from Miner and Haunschild's (1995) expansion of the learning literature to consider population-level learning, much of the work within the learning literature has been conducted at the individual (Simon, 1991), group (Hutchins, 1991), and organizational (Cyert & March, 1963) levels of analysis (cf. Miner & Mezias, 1996). Historically, this has been problematic in terms of any attempt to integrate the body of learning literature into contemporary institutional theory, which is conceptualized almost exclusively at the level of the organizational field (DiMaggio & Powell, 1983: 148).<sup>10</sup> Recent developments in

both literatures, however, reflect movement toward a meeting of the minds in terms of level of analysis as institutional theory begins to reassess its focus on the organizational field and allow for the prospect of individual actor agency (change driven from below), while learning theory begins to account for change that occurs at the population level (change driven from above). This (re-)emergence of a more micro-perspective within institutional theory,<sup>11</sup> combined with the emergence of a more macro-perspective within the learning theories, has resulted in greater overlap between the two areas and, thus, increased the potential for comparison.<sup>12</sup> For the purposes of this chapter, therefore, we intend to focus on those areas of organizational learning that have something to say to institutional theory, especially institutional change, at the field (a.k.a. population, interorganizational, community, industry) level of analysis (Anderson, 1999; Haunschild & Miner, 1997; Miner & Anderson, 1999). Levitt and March (1988) theorize about learning at this macro-level in their discussions of vicarious learning among organizations and ecologies of learning. Miner and Haunschild (1995: 118) build on this work by defining population-level learning as a 'systematic change in the nature and mix of organizational action routines in a population of organizations, arising from experience.'

We contend that reconciling this distinction between levels of analyses in learning and institutional theories, while attending to the growing overlap between the two, is important for advancing both theories, in general, and for advancing our understanding of institutional change, in particular. In addition to levels of analysis, another difference between the two theories lies in their approach towards *change*.

### **Processes of change**

In addition to differences in the key assumptions of institutional and learning theories

concerning levels of analysis, both theories have also differed in their understanding of how change occurs.

A key part of the argument against the ability of organizations to adapt to change via learning (Cyert & March, 1963) can be found in arguments made in support of population ecology – that firms are inherently inertial and find it difficult to adapt substantially to changes in their environment (Hannan & Freeman, 1984). As firms survive longer, their competitive advantage/routines become entrenched and outdated, and any innovation that occurs is more likely to be incremental and travel ‘along existing technological trajectories’ (Sorensen & Stuart, 2000: 83). This inertia results in a focus on the refinement of existing processes and, thus, contributes to their institutionalization by making firms less able to instigate radical leaps in technology or other major changes in firm strategies, structures, or processes. These assumptions of inertia featured prominently in early statements of neoinstitutional theory where change, if it occurred at all, happened in punctuated leaps (DiMaggio & Powell, 1983; DiMaggio & Powell, 1991: 9–11), rather than incremental adaptation (Kraatz & Zajac, 1996; Selznick, 1948, 1957). The distinction in these positions speaks largely to the debate between *old* and *new* institutional theorists (DiMaggio & Powell, 1991; Greenwood & Hinings, 1996; Hirsch & Lounsbury, 1997; Scott, 1987; Selznick, 1996; Stinchcombe, 1997) and is still contested. In contrast, however, learning theories have consistently assumed that change occurs in an incremental fashion as actors learn from their own experience or the experience of others and adapt accordingly (Huber, 1991; March, 1991; March & Olsen, 1976; Miner & Haunschild, 1995).

We believe that it is important to appreciate these differences in fundamental assumptions regarding change (in addition to reconciling differences in terms of levels of analysis) in any attempt to compare institutional and learning theories. As such, we now turn to a review of recent developments in institutional

theory that have expanded its scope to incorporate the idea of institutional change, in general, and individual actor agency as the source of such change, in particular. In introducing this broader perspective, contemporary institutional theory has moved closer to the learning view of the world and, in the process, established itself on a firmer theoretical footing.

## INSTITUTIONAL THEORY AND CHANGE

Institutional theory places socially constructed beliefs, norms, and rules at the center of organizational routines and structures (Berger & Luckmann, 1967; Meyer & Rowan, 1977; Scott, 2001; Zucker, 1977). As outlined by DiMaggio and Powell (1983), agents for the diffusion and dissemination of these cultural beliefs, models, and schema include the state and the professions. Such agents act to influence organizations via *coercive* pressures through government regulations, *normative* pressures through professional associations, and *mimetic* actions resulting from cultural-cognitive processes, such as *taken-for-granted* meanings and schema. Over time, these pressures result in practices that diffuse through a population and converge around an institutional norm (Baron, Dobbin, & Jennings, 1986; Greenwood & Hinings, 1996; Strang & Meyer, 1994). Institutional theorists believe that the reason for this convergence is that actions by firms that conform to institutional expectations help these firms maintain sufficient legitimacy to prosper and survive in the long term (Baum & Oliver, 1992; Galaskiewicz, 1985; Parsons, 1956; Pfeffer & Salancik, 1978; Suchman, 1995). Institutional theorists have found that the longer an organization waits during the diffusion process before adopting a business idea or practice, the more likely the reason for eventual adoption is a desire for conformity and legitimacy by that firm (Tolbert & Zucker, 1983; Westphal et al., 1997),

irrespective of the efficiency benefits (or even harm) that adoption might cause (Davis, Diekmann, & Tinsley, 1994; Rao, Greve, & Davis, 2001; Zajac & Westphal, 2004).

Although early iterations of neoinstitutional theory stressed the constraining influence of institutions on individual actors (DiMaggio & Powell, 1983; Meyer & Rowan, 1977; Zucker, 1977), however, more recent developments in the field allow for a greater interplay between constraints and proactive, strategic actions by actors who instigate change. During this process, two areas of thought have evolved within institutional theory around the notion of change: The first concerns the general concept that institutions *can* change, while the second concerns the *sources* of that change and *conditions* under which it occurs. In the following sections, we briefly review this work. This review is central to our task because learning theory's main contribution to institutional theory is as an additional (and unexplored) source of both endogenous and exogenous change. We, therefore, first discuss how institutional theory views change in general, and then discuss the various exogenous and endogenous sources of change. We finish by noting how learning theories significantly expand our understanding in both these respects.

### ***Institutional change***

The process of institutionalization is a cycle – institutions emerge, diffuse, change, die, and are replaced by new institutions (Hinings, Greenwood, Reay, & Suddaby, 2004; Scott, 2001: Ch. 8). This idea was evident in the foundations on which contemporary institutional theory was built, but it was seemingly ignored in early theoretical statements (DiMaggio & Powell, 1983; Meyer & Rowan, 1977). Berger and Luckmann (1967), for example, discuss the notion of the 'change of institutions' (1967: 88) and 'deinstitutionalization' (1967: 81) as well as consider at length the potential for conflict

between competing institutions (1967: 63, 85). In particular, they talk of the conflict that occurs between an individual's 'primary' and 'secondary' internalization of competing, objective institutions – an integral aspect of socialization. Since Berger and Luckmann, many researchers have identified and empirically documented various instances of institutional change (Dacin et al., 2002). For example, researchers have investigated change in areas of workplace routines and practices (Baron et al., 1986; Mezas, 1990), forms and structures (D'Aunno, Succi, & Alexander, 2000; Davis et al., 1994; Greenwood & Hinings, 1993; Greenwood & Suddaby, 2006; Kraatz & Zajac, 1996), industry standards (Ahmadjian & Robinson, 2001; Leblebici, Salancik, Copay, & King, 1991), and institutional logics (Hirsch, 1986; Thornton & Ocasio, 1999).

Consistent with this idea of change, Friedland and Alford (1991: 232) contend that it is the potential conflict among competing institutions that produces the 'multiple logics' from which individuals and organizations select (see also Scott, 1991). And, closely combined with the notion that institutions change as a result of competition, is the implicit idea that institutional environments change when one institution replaces another (Greenwood & Suddaby, 2006; Hirsch, 1986; Thornton & Ocasio, 1999). Once the concept of institutional change is accepted, then the idea of deinstitutionalization – that in order to be replaced, an existing institution has to diminish in influence – is not far behind (Abrahamson & Fairchild, 1999; Barley & Kunda, 1992; Burns & Wholey, 1993; Davis et al., 1994; Leblebici et al., 1991; Oliver, 1992).

The combined effects of this evolving area of research is to overcome early interpretations of neoinstitutional theory that spoke to the permanence of institutions once formed (Scott, 2001: 109–110), as well as to highlight the necessity for institutions to be consistently reinforced if they are to be preserved – what Berger and Luckmann

(1967: 54) term 'reciprocal typification.' It is these preserved and reinforced 'taken-for-granted routines' that Berger and Luckmann (1967: 57) assert form such a central role in establishing and maintaining social order.

Although there is consensus within the institutional literature today that change occurs due to competition among institutions (Dacin et al., 2002), there is less agreement on whether such change is adaptive due to the flexibility of organizations/institutions (Kraatz & Zajac, 1996; Selznick, 1948; Selznick, 1957) or, instead, punctuated due to the inertia generated as a result of institutional isomorphism (DiMaggio & Powell, 1983; DiMaggio & Powell, 1991: 9-11; Greenwood & Hinings, 1996). In addition, there is disagreement about whether the driving force behind change emerges from forces at the environmental (exogenous) or at the individual actor (endogenous) level (Mezias, 1990). As noted above, the distinction in these positions concerning the sources of institutional change speaks largely to the debate between *old* and *new* institutional theorists (DiMaggio & Powell, 1991; Greenwood & Hinings, 1996; Hirsch & Lounsbury, 1997; Scott, 1987; Selznick, 1996; Stinchcombe, 1997) and remains a point of contention within the field.

### **Sources of institutional change**

While it is universally accepted that environments, to varying degrees, influence organizations (Meyer & Scott, 1983; Scott & Meyer, 1994; Thompson, 1967), it is less clear to what extent individual actors (i.e., organizations) are able to influence the institutional makeup of the environments in which they operate. This debate between exogenous and endogenous sources of institutional change is one that has featured strongly within the neoinstitutional literature since its origin (Meyer & Rowan, 1977; Zucker, 1977).

### **Exogenous sources of change**

There are three exogenous conditions that have been discussed broadly within the literature as necessary (in part or combination) for change to occur: the influence of institutional and technical forces in the environment; a state of incomplete institutionalization (the absence of a dominant logic) and other contextual factors; and an exogenous shock that significantly alters the firm's environment.

(a) **Institutional/technical forces** In institutional theory, researchers have identified both institutional and technical forces as sources of change, but different forces have predominated in various iterations at different times. Neoinstitutionalism presents a view of the organization that is active and conscious, but also represents a rejection of the rational- and efficiency-based theories that grew in prominence within organization theory during the 1960s and early 1970s (Kraatz & Zajac, 1996). DiMaggio and Powell (1991: 3) state starkly that neoinstitutional theory represents an attempt 'to replace rational theories of technical contingency or strategic choice with alternative models that are more consistent with the organizational reality that researchers have observed.' As such, early iterations of neoinstitutional theory perceived institutional forces as acting at the level of the field, constraining organizational behavior. Firms were deemed to adopt specific business practices, especially those acting later in the diffusion of an innovation, in search of institutional and societal legitimation, rather than any technical benefits the specific practice might generate for the firm (DiMaggio & Powell, 1983; Meyer & Rowan, 1977), which were either not considered or deemed to be insignificant (Westphal et al., 1997; Zajac & Westphal, 2004).

Since the early iterations of neoinstitutional theory, however, many key researchers have emerged to correct this stark contrast between the influence of institutional and technical environments (Meyer, Scott, & Deal, 1983: 61-64; Powell, 1991: 183-186;

Scott, 1983: 159–160; Scott, 1991: 167–169). A shift in thinking that presented the two states as extremes on a spectrum along which different environments contain different mixes of the two was the first step on this journey (Scott, 1991). Kraatz and Zajac (1996: 832) then went further, showing that organizations are able to adapt their structures to technical pressures in the environment and benefit from change, even to the extent that such change challenges taken-for-granted institutions within the organizational field. More recently, researchers have begun to question more directly the artificial dichotomy of economic and institutional actors (Fiss & Kennedy, 2006; Lounsbury, 2007), suggesting that institutional theory has yet to develop a comprehensive understanding of the complex motivations that drive firm adoption behavior.

(b) *Incomplete institutionalization and other contextual factors* Institutional theorists have also framed the environmental heterogeneity that results from incomplete institutionalization in terms of competing, complementary, and conflicting logics that create a second condition under which change can occur. D'Aunno, Succi, and Alexander (2000: 680), for example, demonstrate that, in specific circumstances, divergent organizational change follows 'varying market and institutional changes' within fragmented organizational fields.

In spite of this work, however, a tension in the literature remains regarding other general conditions that can facilitate change. While it is accepted within institutional theory that change driven by institutional entrepreneurs is likely to occur in emerging (Maguire, Hardy, & Lawrence, 2004) and fragmented (D'Aunno et al., 2000; Seo & Creed, 2002) fields, hierarchical fields, where dominant actors have vested interests in maintaining the status quo, are cited as less likely to experience such change. On this point, however, the literature offers contradictory evidence. One stream of empirical studies suggests that *marginal actors* are more likely to act as institutional entrepreneurs (Ingram & Rao,

2004; Leblebici et al., 1991) and bring change to fields. The necessary conditions under which such change is expected to occur include high levels of existing legitimacy (Zimmerman & Zeitz, 2002), established authority (DiMaggio, 1988), and social capital (Maguire et al., 2004). Common sense tells us, however, that the more marginal the actor, the lower their level of legitimacy, formal authority, and social capital is likely to be, which would imply a relative ineffectiveness as an agent of change. This apparent contradiction has been identified by another stream of research that notes the key conditions necessary for the emergence of institutional change and entrepreneurial action by actors firmly embedded within mature organizational fields. Although a number of studies in the late 1980s and early 1990s identified that *central* actors can act as instigators of institutional change (Baron et al., 1986; Davis, 1991; Fligstein, 1985; Palmer, Jennings, & Zhou, 1993), however, it is only recently that this issue has been revisited and built upon (Greenwood & Suddaby, 2006; Rao, Monin, & Durand, 2005). This confusion regarding the characteristics of those actors most likely to instigate change requires further empirical clarification if we are to have a better understanding of whether it is more central or more peripheral actors who are more likely to act as 'institutional entrepreneurs' (DiMaggio, 1988: 14). Perhaps one possible solution is to distinguish between an *entrepreneur*, who is more likely to be a peripheral player, and *entrepreneurial action*, which can be performed by anyone (given the appropriate conditions), including more established and central actors?<sup>13</sup>

(c) *Environmental shocks* Finally, a third source of potential change in an organizational field comes from dramatic shifts in environmental conditions. If environments are dynamic, the possibility of radical change increases (Meyer & Scott, 1983; Scott & Meyer, 1994). 'Environmental jolts' (Greenwood, Suddaby, & Hinings, 2002; Meyer, 1982) come in many forms (such as

shifts in technology, regulatory change, or sudden resource scarcity) and stimulate the opportunity for change by opening the door for new entrants (Thornton, 2002; Thornton & Ocasio, 1999), accepted norms (Hirsch, 1986), organizational forms (Davis et al., 1994; Greenwood & Suddaby, 2006), and population-wide shifts in operating practices (Baum & Oliver, 1992).

In the process of identifying the various exogenous sources of potential change outlined in this section, however, institutional theorists also broadened their search to include endogenous factors – first discussing strategic (Oliver, 1991) and then adaptive (Kraatz & Zajac, 1996) elements of change that emerge at the level of the individual actor.

#### *Endogenous sources of change*

Building on the exogenous sources of change outlined above, institutional theory has also begun to recognize the importance of individual actors (organizations) as sources of institutional change. DiMaggio (1988: 12), Powell (1991: 194–200), DiMaggio and Powell (1991: 22–27), and Leblebici et al. (1991: 335–338) all noted that limiting explanations of change within institutional theory to exogenous sources alone limits the theory merely to explaining the diffusion and reproduction of institutional practices. Endogenous explanations of interest, agency, and institutional entrepreneurship, however, help constitute institutionalism as a more complete theory of organizations, releasing the ‘full power of the institutional perspective’ (Powell, 1991: 183). Such ideas have since become central to the contemporary institutional literature.

(a) *Interest, agency, and institutional entrepreneurship* DiMaggio (1988: 14) first introduced the term ‘institutional entrepreneur’ as part of his call for institutional theory to include a more complete explanation of individual interests and agency. Institutional entrepreneurs are agents who deploy the resources at their disposal to create, alter, and empower institutions. Such actors serve as agents of legitimacy who support the

creation of new institutions and reform existing institutions in ways that they deem to be appropriate and aligned with their interests. These agents have the resources and, hence, the power to shape the character of institutions and enact institutional change (Dacin et al., 2002: 47).<sup>14</sup> Scott (2001: 74–77) discusses the concept of agency in terms of a firm’s ability to influence the institutional logics that constitute its environment. Following DiMaggio’s (1988) lead, this proactive perspective diffused throughout institutional theory as institutions were seen as providers of the framework within which actors are able to define and pursue their interests (Leblebici et al., 1991; Oliver, 1991). Powell (1991), in particular, sought to identify variation in firm responses to institutional forces, as well as the organizational heterogeneity and institutional change that such varied responses generate.

Oliver (1991: 151) made a crucial contribution to this debate, noting five specific strategic responses that are employed by organizations in response to institutional pressures. Each response varies in the degree of ‘active agency’ employed by the firm: acquiescing, compromising, avoiding, defying, and manipulating. Several researchers have since utilized this framework to look at the implementation of these various strategies within fields (Covaleski & Dirsmith, 1988; Elsbach & Sutton, 1992; Westphal & Zajac, 1994), thus expanding our knowledge of agency within different empirical contexts (Davis et al., 1994; Leblebici et al., 1991; Zucker, 1991).

Many of these researchers, however, were focused on endogenous sources of institutional change that are internal to the *firm*. As noted earlier, our primary focus in this chapter is on change at the level of the *field*. While such change may occur as a result of endogenous change by a subset of population members, it may also occur as a result of endogenous processes at the level of the field. There is some (though not a lot) of work that examines the role of endogenous field-level processes instigating field-level

change (Hinings et al., 2004). Fligstein (1990), for example, notes the rise of the finance conception of control with the spread of financially trained professionals among organizations. These professionals brought a set of values and beliefs to their work that, as they diffused within the population of large industrial firms in the U.S., transformed the view of control from the notion of the firm as a single entity, to one of the firm as a bundle of assets to be bought and sold. Others have also noted the importance of professionals, marginal players, and reform agents as sources of endogenous change in institutional fields (Greenwood & Suddaby, 2006; Strang & Sine, 2002). Empirically, Brint and Karabel (1991) and Miner, Haunschild and Schwab (2003) identify specific, endogenous field-level processes that induce change, including the presence of an industry structure that rewards *winner take all* models and imperfect inter-firm copying of routines (Miner et al., 2003).

(b) **The paradox of embedded agency** An analysis of endogenous sources of change, however, brings into focus a central debate within institutional theory concerning the *paradox of embedded agency* (DiMaggio & Powell, 1991; Greenwood & Suddaby, 2006; Leblebici et al., 1991; Seo & Creed, 2002). Institutional theorists who advocate the notion of agency as a source of institutional change face an inherent paradox – if institutions and institutional logics form the social environment, which, in turn, shapes our perceived reality (Berger & Luckmann, 1967) that is structured at the level of the organizational field (Giddens, 1984), then how do entrepreneurs perceive the need to instigate change and put their plan into action?

This contradiction has come to be known within institutional theory as the paradox of embedded agency, or, what Berger and Luckmann (1967: 13) refer to as ‘somewhat like trying to push a bus in which one is riding.’ Although perplexing if thought through to the extreme, this paradox is partially neutralized by adopting the perspective of multiple, coexisting institutional logics

(Friedland & Alford, 1991; Scott, 1991) from which individual actors select (Greenwood & Suddaby, 2006; Hirsch, 1986; Suddaby & Greenwood, 2005; Thornton & Ocasio, 1999).<sup>15</sup> Contemporary institutional theorists believe, therefore, that firms are not always passive recipients of institutional forces, but have the strategic potential both to select from, and also to influence and change, the institutional logics that are prevalent in their environment when it is in their best interests to do so (Oliver, 1991).

This development, theoretically, brings us full circle within institutional theory. By recognizing that, under the right circumstances, actors have strategic alternatives that allow them to break the bonds of their institutional constraints, the paradox of embedded agency dissolves (Seo & Creed, 2002); moreover, the sociological foundations of the theory again become apparent. Yet, institutional theory still has far to go in terms of a complete theoretical understanding of the endogenous mechanisms of change. There are many more sources of change than agency or other deliberate processes of institutional entrepreneurship. We contend that the learning theories are a fruitful place for institutional theorists to discover such sources and processes.

### **INSTITUTIONAL LEVEL LEARNING: A NEW SOURCE OF CHANGE**

Below we review six key areas of inquiry within learning theory – areas that, we believe, have received little attention within institutional theory, yet have strong implications for helping to understand and explain the nature of institutional change. Our key argument is that agency and other deliberate processes of institutional entrepreneurship are not the only sources of change in institutional fields and that there is a vast and relevant body of research in organizational learning that can provide institutional theorists with a much broader perspective on

change. For example, the role of unplanned change resulting from the enactment of prosaic routines, local and boundedly rational action, and ad hoc decision-making processes (March, 1981) can all result in shifts in institutions and institutional fields. Very little attention has been given within the institutional literature, however, to processes of change resulting from these types of unintended consequences. In the following sections, we will discuss how these components of learning theories can inform our understanding of institutional change.

Organization theorists have long recognized the importance of environmental influence on organizational structure and actions (Meyer & Scott, 1983; Scott & Meyer, 1994). It is also recognized that environments are dynamic and unpredictable (Pfeffer & Salancik, 1978; Thompson, 1967). The ability of actors to respond to their environments – with action that both shape and are shaped by dominant institutions – is also gaining support within institutional theorists.<sup>16</sup> Given the dynamic and unpredictable nature of environments, however, it would be strange if actors were always able to retain control over their actions as well as the subsequent consequences of those actions. On the contrary, firms that act in response to a complex environment are often unable to react with unified goals, abilities, and intentions, let alone control the outcomes of their actions (March, 1981: 573). The consequences of these reactions, in other words, cannot always be planned. In his path-breaking work in this area, March (1981) presents the notion that the stable and deliberate processes of firm action can lead to unintended change. This idea is well established in the learning literature, but has received little attention in the institutional literature; although the work on actors' interests and agency (DiMaggio, 1988) and the more recent scholarship on change in general (Dacin et al., 2002) provide both a solid foundation for such a discussion and indicate a positive shift of thinking in this direction.

Within this overarching framework at the intersection of the learning and institutional literatures, therefore, we offer the following six areas in which advances made within the learning literature can provide insight or value to the field of institutional theory.

### ***The role of unintended consequences***

As indicated above, a relatively under-explored area of organization theory that is relevant to institutional change is the notion of the unintended consequences of deliberate action. March (1981) notes how organizational action – even prosaic, everyday actions, routines, and processes that relate an organization to its environment – have the potential to produce unintended consequences in organizations and organizational populations. Within neoinstitutional theory, the institution has traditionally been the final arbiter of organizational action. The idea that institutional change might result from the unplanned and unpredictable outcomes of deliberate action is not addressed in any depth in institutional theory. Nonetheless, we see such action/consequence disjunctions every day.

March (1981), for example, notes how rational organizations with normal mobility among managers will be more concerned with the measurement of performance than actual performance. This is especially true of long-term performance. He further observes how this preference can lead to actions devoted to refining and managing performance measurement systems, rather than a focus on the underlying actual performance. At the field-level, this might lead to something like the emergence of an approach to executive compensation that is measurement-oriented, yet divorced from actual performance. And, in fact, we see things like this in stock option plans where the originally granted *strike price* (the price at which executives are able to buy the option) gets reset after the price has declined. The frequency with which

this was done in the late 1990s suggests the practice was institutionalized and had become a widely accepted business norm – albeit one that is now facing deinstitutionalization.<sup>17</sup>

As a second example of the unintended consequences of everyday action, Denrell (2003) notes that ordinary inter-firm learning processes will lead to an under-sampling of failure (as failed organizations and failed individuals are excluded from the sample), which then leads to the widespread acceptance of practices that are not actually related to performance. For example, there seems to be a widespread acceptance of the idea that strong organizational cultures are superior to weaker ones. Yet, this idea (which has taken on a rule-like status in thought and practice) is likely the result of an under-sampling of failure, since the performance of firms with strong cultures is likely to be higher than the performance of those with weaker cultures, even though strong culture firms are also more likely to fail during periods of market change as their culture falls out of step with changes in the environment.

#### *The consequences of unintended consequences for institutional theory*

What are the implications of these types of unintended consequences for institutional theory? One implication is that institutions will not automatically reproduce themselves. Institutional theory has fruitfully explored the idea of institutional reproduction (Hinings et al., 2004; Scott, 2001). Yet, if we allow for the prosaic role of unintended consequences occurring in institutional fields, change will develop as a matter of course and institutions will not automatically reproduce. Another implication of unintended consequences is that it is not just agency that produces change in organizational fields. That is, the deliberate actions and interests of individuals and organizations are not the only driver of change in institutional norms, rules, or other practices. The unintended outcomes of everyday routines also generate change. The examples outlined above show how the unintended consequences of action

(e.g., concern over performance measurement at the expense of actual performance) have the potential to produce change in institutions (e.g., the acceptance of stock option repricing as a ‘normal’ business activity).

#### ***The role of learning processes and field-level change***

A consideration of organizational learning theory leads to additional potential mechanisms by which endogenous change may occur in organizational fields. Organizations frequently show evidence of having learned various routines, practices, and structures from each other (Argote, Beckman, & Epple, 1990; Rogers, 1995). Some of this learning occurs at the inter-firm level and some occurs at the inter-population level, where industries or other collective bodies learn from the experiences of similar others (Miner & Haunschild, 1995). When such learning occurs, it reshapes the distribution of routines in the population of firms and, thus, reshapes the institutional context within which firms operate. The processes through which this inter-firm and inter-population learning occurs include social connections, geographic proximity, and other mechanisms of social comparison, such as size similarity (Rogers, 1995; Strang & Soule, 1998). While reviewing all these mechanisms is beyond the scope of this chapter, they are all conceptually related to the boundary between institutional and learning theories, and all provide potential explanations for institutional-level learning.

There is much evidence, for example, that firms will learn from the experiences of others to whom they are connected through various networks – including interlocking directorships, common social club memberships, and Business Roundtable connections (Beckman & Haunschild, 2002; Davis & Greve, 1997; Haunschild, 1993; Henisz & Delios, 2002; Palmer et al., 1993; Westphal & Zajac, 1994). This implies that institutional change (especially endogenous change) can occur along these interorganizational

pathways with the extent of change dependent on the level of interconnectedness among the organizations in a particular field.

Learning also tends to flow along geographic lines such that organizations in close proximity tend to learn more from each other than organizations that are more geographically distant (Burns & Wholey, 1993; Davis & Greve, 1997; Marquis, 2003). This means that institutional change is also more likely to occur in geographic clusters by starting in co-located firms and then spreading to more distant ones (Greve, 2002).

### *The consequences of learning processes for institutional theory*

The implication of these learning processes for institutional theory is that institutional mechanisms and the spread of institutionalized practices may be affected significantly by specific contextual factors for which institutional theory has failed to fully account – factors such as geographic co-location, network ties, and learning/information flows between organizations and populations of organizations.

In early versions of neoinstitutional theory where the idea of mimetic isomorphism was a central tenet (e.g., DiMaggio & Powell, 1983), the assumption was that such imitation processes are relatively straightforward, with one firm copying the practices of another. Yet, learning theories have discussed the problematic aspects of imitating others in some detail (Levinthal, 2000; Miner & Raghavan, 1999). Imagine, for example, the problems inherent in an attempt to imitate a *Toyota* production system (Levinthal, 2000). It is not clear which of the many underlying routines, practices, and structures employed by *Toyota* are good targets for imitation. Is the uniform dress of management important? What about the *just-in-time* supply of materials?

While institutional theory has advanced our knowledge of the isomorphic processes that act as forces for field-wide convergence over time, there is also the issue of imperfect imitation (which results in divergent change).

Suppose that an organization is able to decipher the core processes that deserve to be imitated in the *Toyota* production system; its attempts to imitate these systems will still be affected by its own local context, the other practices existing in its portfolio, the responses of competitors to the imitation of these practices, as well as a number of other dynamic variables. These *complications* are all a potential source of imperfect imitation – where the practice is changed (for better or worse, consciously or unconsciously) to fit the local context, competitor responses, and so on. Organizational learning studies have noted such issues and the factors that make them more or less likely (e.g., Miner & Raghavan, 1999). Learning studies also observe that such imperfections increase the chances of divergent or heterogeneous outcomes (in other words, they are a source of inconsistent change in the institutional environment) in the sense that there is now a greater variety of routines in the population.<sup>18</sup>

### ***The role of search: exploration versus exploitation***

The role of search in learning theory is central to an understanding of population-level shifts in routines, practices, and structures. One key distinction in learning theory that differentiates search from other firm strategies is contained within the roles of exploration and exploitation (March, 1991; Miner, 1994). *Exploration* involves search directed toward new knowledge and competencies, while *exploitation* involves search directed toward the better utilization of existing competencies. It has been noted that organizations will generally tend toward the exploitation of existing competencies (March, 1991; Starbuck, 1983), in part because exploitation generates clear feedback and tends to yield positive, short-term results (Levinthal & March, 1993). At the field-level, this means that exploration will tend to produce more dramatic and varied

change, while exploitation will tend to produce more incremental and localized change (March, 1991). Thus, any factors that lead a field toward a preponderance of exploration are also likely to be associated with field-level change in institutions. For example, emerging fields such as the treatment of HIV/AIDS patients in Canada (Maguire et al., 2004) and government incentives for new entrants in the *green* technology sector (Sine, Haveman, & Tolbert, 2005) can be considered fields where exploration-driven search processes led to field-level fragmentation that encouraged change (D'Aunno et al., 2000). Other work has identified conditions in well-established, more coherent fields like the accountancy profession, and represents examples of invested actors exploring beyond established institutions in an attempt to instigate change in an established organizational form (Greenwood & Suddaby, 2006).

Yet, if we look at the learning literature, there are additional factors likely to affect institutional change, including problemistic search and slow adaptation. We know from the learning literature that performance that does not meet aspirations triggers search and learning (Cyert & March, 1963; Greve, 1998). We also know, however, that these search processes for new knowledge and routines are more likely to result in riskier approaches that, in turn, can pose greater danger to firms (March, 1991). This means that, at the field-level, a preponderance of underperforming organizations will likely lead to an increased acceptance of risk and changes that produce greater variance in outcomes. For example, the institutional forces that lead to a preponderance of conglomerate firms adopting the M-form structure are well documented in research by Fligstein (1985; 1991) and Palmer, Jennings and Zhou (1993). Yet, the use of such strategy/structure combinations comes with corresponding issues and, in general, firms that adopt institutional structures can end up underperforming in comparison to those that did not (Davis et al., 1994). Some of these firms

died, some switched to a different structure through the process of divestiture of underperforming assets, but some firms continued to underperform until a new wave of de-conglomeration activities occurred at a later period. Thus, the institutionalization of an organizational form resulted in underperformance, which then triggered learning processes, which led to institutional change – a shift from conglomeration to de-conglomeration as an *accepted* form of doing business (Davis et al., 1994).

Another factor that seems to lead to a preponderance of exploration (riskier change resulting in greater leaps of innovation) is slow adaptation (Denrell & March, 2001). Slow adaptation benefits an organization because it encourages the incorporation of new and divergent ideas (March, 1991). Fast learning, on the other hand, tends to drive out alternatives, narrowing the body of knowledge within the organization, which limits the available options and encourages more conservative exploitation in the system. The implication is that systems of fast adaptation will tend to exhibit more exploitative behavior, even in situations where the long-run implications of exploration are positive. Fads, for example, which tend to be adopted quickly, are less likely to be altered in substantial ways by the firms adopting them. A slowly adopted field-level change, however, such as the finance conception of control (Fligstein, 1990), is a practice that might engender more exploratory processes and, consequently, result in greater change during the adaptation process. This argument presents an alternative explanation to institutional persistence, but one that is related to timing (overly fast versus beneficially slow adaptation), rather than taken-for-granted assumptions and isomorphic processes. The important implication for this argument is that institutional change is more likely to occur with slow, rather than fast, field-level adaptation. Future research could explore profitably these differential processes as a function of adaptation rate.

### *The consequences of exploration/ exploitation for institutional theory*

It is well-established within institutional theory that new ideas and business practices diffuse among firms within organizational fields at different times, for different reasons (Baum & Rowley, 2002; Scott, 2001) and at different rates (Argote, 1999; Tolbert & Zucker, 1983). Some practices diffuse quickly, whereas others do so more slowly. In addition, some firms are early adopters, while some are later adopters. Institutional theory has explored this latter distinction (early versus late), but has yet to discuss the implications of fast versus slow adoption/adaptation.

In addition, institutional theory has largely limited its focus to adoption in response to coercive, normative, or mimetic isomorphic forces (DiMaggio & Powell, 1983). The adoption of a new practice due to the underperformance or failure (Strang & Sine, 2002: 507) of the existing dominant institutional practice (i.e., adoption due to efficiency reasoning) has generally only been considered as a factor driving early adoption (c.f. Fiss & Kennedy, 2006; Lounsbury, 2007). Later adopters are considered to adopt not as a result of underperformance, but rather as a response to uncertainty and a desire for conformity as well as the social legitimacy that comes with adopting highly institutionalized practices (DiMaggio & Powell, 1983). Firms at this stage often adopt reluctantly and without customization because the practice has become taken-for-granted (Rao et al., 2001; Westphal et al., 1997). In doing so, later adopting firms typically pay little heed to the potential advantages or disadvantages of the practice in relation to its best interests (Davis et al., 1994; Zajac & Westphal, 2004). Thus, considering the predictions of learning theories with respect to adoption behavior, the concepts of exploration and exploitation can provide a fuller picture of the various firm actions at various points in the adoption/adaptation process and, thus, afford a more complete picture of institutional change in various societal sectors.

### ***The role of forgetting (unlearning, disadoption and deinstitutionalization)***

As noted by DiMaggio (1988), we know relatively little about incomplete institutionalization, and even less about why institutionalized forms and practices fall into disuse. Organizational learning theory, on the other hand, has addressed the issue of 'unlearning,' as well as the disadoption or 'negative diffusion' (Rao et al., 2001: 509) of organizational forms and routines. This literature can contribute to institutional theory in its quest to provide insight into institutional change, in general, and deinstitutionalization, in particular (Oliver, 1992).

In the learning curve tradition, there are studies showing that organizations forget. Various factors have been proposed to explain forgetting or the depreciation of knowledge, including asset shortages and personnel turnover (Argote, 1999; Argote et al., 1990). In addition, there appear to be more permanent and transitory types of memory in organizations, and the results of empirical studies tend to find that transitory memory is more subject to being forgotten (Argote, 1999). It may also be the case that more technologically sophisticated organizations have less forgetting than less sophisticated organizations, in part because the knowledge embedded in technology is more stable than knowledge embedded in routines, interactions, or other forms of human interactions and, thus, more resistant to change.

This suggests that institutional fields in technologically sophisticated areas (e.g., aerospace) may have less *forgetting* and, thus, will exhibit more institutional stability than fields in less technologically sophisticated areas (e.g., restaurants). Another implication from the learning literature is that field-level turnover of personnel is a source of forgetting and, therefore, change in institutions. Ingram and Simons (2002), for example, found no evidence of depreciation over time in the profitability of kibbutz agriculture, which Argote (1999) suggests may be due to the fairly stable

membership that is typical of these organizations. The kibbutz is also relatively stable and institutionalized as an organizational form. In contrast, consider the substantial amount of change that has occurred in hospitals and healthcare over the past half century, as well as the field-level turnover of personnel that has accompanied this change (Scott, Ruef, Mendel, & Caronna, 2000).

Another area of learning that might have relevance for institutional theory is the work on cycles of adoption and abandonment of practices (Abrahamson & Fairchild, 1999; Barley & Kunda, 1992; Burns & Wholey, 1993; Davis et al., 1994; Rao et al., 2001; Strang & Macy, 2001). Strang and Macy (2001) note that faddish cycles of adoption and abandonment can occur in fields and that the dynamics of fads are sustained, in part, because modestly successful firms tend to copy the practices of very successful firms that are more likely to have *satisfied* in their search for success (Abrahamson & Fairchild, 1999; Strang & Macy, 2001). This view of the role played by satisficing in promoting fads and by constraining the institutionalization of practices provides a deeper understanding of the factors driving the institutionalization process than currently suggested by institutional theory.

#### *The consequences of forgetting for institutional theory*

Work on organizational forgetting can contribute to institutional theory in expanding the mechanisms that drive deinstitutionalizing forces. Currently, deinstitutionalization is seen as occurring due to the actions of outsiders or institutional entrepreneurs. Instead, the characteristics of the technologies involved in the field (whether these technologies are producing good or modest returns), the roles played by unlearning (disadoption and/or forgetting) due to personnel turnover and other factors, and the concept of satisficing can all play a role in instigating the diminishment of established institutions, as well as the rise of new institutions to replace them and renew the dominant order.

#### ***The roles of selective and inferential learning***

In opposition to established theory within the institutional literature (Rao et al., 2001; Westphal et al., 1997), the learning literature tells us that sometimes later adoption may not be due to conformity pressures, but may instead be caused by learning processes that occur at the field-level. These processes are selective and inferential, rather than mimetic. Sine, Haveman, and Tolbert (2005), for example, discuss learning by firms that observed the earliest market entrants into the unproven *green* technology sector (themselves prompted by government incentives), before deciding themselves to enter. By entering this sector later in the diffusion curve, these firms were able to *infer* potential efficiency benefits for themselves, based on the combined experiences of earlier entrants. Such performance-based imitation is not done during a period of uncertainty (uncertainty is reduced by the experiences of prior firms), is not the implementation of a practice that is *taken-for-granted* within the industry (the sector is not yet sufficiently established for this to occur), but is a decision made, at least partially, for economic and rational reasons. All of these criteria resist easily categorizing the adopting firm as responding to mimetic institutional forces but, instead, seem to fit into a learning model that is based on the experiences of others.<sup>19</sup>

There is also research that discusses how entire fields learn from the experiences of other fields. For example, Cho, Kim and Rhee (1998) discuss how Korean firms achieved success in semiconductors, despite their late entry into this market, precisely because they learned from the experiences of the United States and Japanese semiconductor industries. Similarly, the Microelectronics and Computer Consortium (MCC), the first major electronics research consortium in the U.S., is recognized as successful, in part, because of its observation and imitation of similar consortia in Japan (Aldrich & Sasaki, 1995; Miner & Haunschild, 1995).

As noted earlier, social ties and geographic proximity are two factors likely to affect endogenous institutional change. These factors may also affect exogenous change when fields learn from the experience of other fields. Miner and Haunschild (1995), for example, examined how the existence of strong inter-firm ties between small biotech firms and large pharmaceutical firms in the U.S. facilitated the learning and integration by the pharmaceuticals of the successful organizational routines and technologies of the biotechs. Consequently, this is another example of field-level change that was facilitated by learning processes among socially connected firms. The consideration of this type of change is of noteworthy value to institutional theory in its quest to explain such instances of change.

#### *The consequences of selective and inferential learning for institutional theory*

The potential benefits of selective and inferential learning for institutional theory were first highlighted by Miner and Haunschild (1995: 126). As illustrated above, these two processes describe the means by which firms (or fields) either copy routines they believe have been successful elsewhere (*selective copying*) or use the experiences of other organizations or fields as a natural experiment, drawing conclusions and adapting the processes to suit their specific circumstances (*inferential learning*). If institutional theorists are able to build a body of research that successfully integrates and uses these concepts, they will be filling a significant gap in the institutional literature, which to date has no explanation for late adoption based on an efficiency rationale.

#### *The role of heterogeneity versus homogeneity*

According to an institutional perspective of organizations, firms facing similar institutional environments experience isomorphic forces that tend toward convergence in their

structures and activities over time (Baron et al., 1986; Greenwood & Hinings, 1996; Strang & Meyer, 1994). In one of the key formulations of the theory, DiMaggio and Powell (1983) discuss the very strong institutional (as opposed to competitive) mechanisms by which this convergence occurs: coercive, mimetic, and normative isomorphism. It is increasingly accepted within institutional theory, however, that different strategic responses by firms to the same institutional stimuli can result in greater, rather than less, field-level heterogeneity (Oliver, 1991; Powell, 1991).

Thus, it becomes important to distinguish under what conditions firms converge in the face of institutional pressures and when the opposite result occurs. The organizational learning literature has begun to specify some of these conditions, in part because learning theories are at least somewhat concerned with sources of variance in routines, processes, and structures (Miner & Haunschild, 1995), whereas the preponderance of work within institutional theory has focused more on sources of institutional retention and replication. Learning theories have specified three key field-level conditions/processes that will tend to divergence (and, thus, institutional change) rather than convergence: imperfect copying; regulatory pressures; and field-level competition.

#### *Imperfect copying*

The first key field-level process is mimetic learning, in which the learning involves not simple copying but, instead, imperfect copying or, at times, even doing something entirely different. We noted earlier how imperfect copying is a process by which field-level change can occur. In addition to imperfect copying, however, there is also work on other experience-based responses that might occur, including what has been called *non-mimetic learning*. For example, research shows that some conditions produce action that, while informed by the experiences of others, results in outcomes that are unique to the focal firm (Greve &

Taylor, 2000). When imitation results in action that differs in this way, the result is likely to be field-level heterogeneity (Greve, 2005; Miner et al., 2003) and, therefore, a possible source of new institutions and institutional change.

### *Regulatory pressures*

The second key field-level change process specified in the learning literature is the result of regulatory pressures, which were initially theorized by DiMaggio and Powell (1983) to lead to convergence. More recently, however, such pressures have been shown also to produce divergence when firms respond differentially (D'Aunno et al., 2000). Examples in the learning literature note the changes that can result from differential learning in response to regulation – either learning from the experiences of other firms (Sine et al., 2005), or learning from the experience of one's own firm (Haunschild & Rhee, 2004). In addition, whole industries can learn from the regulatory responses of other industries. An example of this occurred when the medical industry learned from the airline industry in relation to regulatory procedures surrounding accidents, subsequently installing similar regulation within hospitals (Miner et al., 2003). Thus, learning from another population in response to regulation can also lead to change in the institutional environment.

### *Competition*

The third key field-level condition occurs in industries that are highly competitive. In contrast to DiMaggio and Powell's (1983: 149–150) argument that competitive forces are one of two types of isomorphic tendencies among firms and industries, learning theorists have argued that, under specific conditions, competition can generate heterogeneous outcomes (Miner et al., 2003). Miner, Haunschild and Schwab (2003) identify two conditions under which such competitive heterogeneity might occur – competition based on novelty and competition based on extreme values. The first of

these occurs in instances where there is benefit to an actor in promoting novelty – in other words, where it pays to be different. Many arts-based organizations operate within such industries. Such an extreme incentive-based industry will encourage established firms to innovate and also encourage new entrants to the field, which generates both field-level heterogeneity and change. The second condition is likely to occur when maximum performance is disproportionately rewarded – in other words, in a winner-takes-all environment. Such environments encourage high-risk strategies that tend to result in greater variance rather than higher average performance (March, 1991), which has a diversifying impact on the industry as a whole.

### *The consequences of heterogeneity/homogeneity for institutional theory*

The implications of this body of work within the learning theories for institutional theory are significant, especially for those researchers who have begun to consider how variations in actor responses to the same institutional environments can produce greater heterogeneous, rather than homogeneous, outcomes (Oliver, 1991). Integrating these three key field-level learning processes (imperfect copying, regulatory pressures, and competition) will add significant depth to discussions in this area of work that are only just beginning within institutional theory.

## **CONCLUSION**

We have argued that both institutional and learning theorists have considered the important issue of change in organizational fields, although largely in isolation from each other. The purpose of this chapter has been to try and open up a beneficial avenue of communication between the two theories, believing that understanding the processes and consequences of organizational and interorganizational learning can contribute significantly to

institutional theory in its quest to explain institutional change. Our goal has been to identify where these two literatures overlap, so that knowledge is shared and replication is avoided (wherever possible), in a way that constitutes, we hope, a constructive addition to the institutional literature.

To this end, we have identified areas where we feel learning processes and mechanisms can work in conjunction with our existing knowledge of institutions to inform our understanding of field-level change. These processes and mechanisms include the idea that ordinary organizational processes can lead to unintended outcomes, which can then lead to the disruption of existing institutions. The processes also include the effect of network ties, geographic location, and information flows as sources of institutional reproduction (and non-reproduction). Furthermore, these mechanisms investigate the idea that processes of exploration engender dramatic institutional change and that such processes are more likely to occur under slow adaptation and underperformance in relation to specific institutional norms, rules, and models. They also include the idea that forgetting may erode institutions, a situation that is more likely in conditions such as high personnel turnover. Finally, these processes and mechanisms explore the idea that selective and inferential learning processes, both within and across fields, produce institutional change, as well as the view that heterogeneity produced by imperfect copying, regulatory pressures, and competition based on novelty or extreme values can lead to institutional change.

This is an exciting time for institutional theory. The relatively recent focus on change opens up huge possibilities for understanding how institutions adapt and what the consequences of such adaptation might be. We believe that the learning theories can supply at least some of the answers that institutional theorists seek. Yet, in spite of the potential benefits, the intersection of these two theories has received scant attention from scholars to date. We hope that the consideration of learning

theory contained within this chapter has deepened our understanding of what is possible and begun to hint at a research agenda for future work within institutional theory that addresses some of the unanswered questions generated at the boundary of these two important organization theories.

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## NOTES

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7 Ann Zimmerman, 'Wal-Mart Sees Profit in Green—Some Recycling Initiatives Are Helping Retailer's Bottom Line,' *Wall Street Journal*, August 21, 2006, p. B3.

8 We outline this concept in greater detail later on in this chapter.

9 We do not take a stand here concerning the debate within institutional theory between competing conceptualizations of institutions at the organizational (Selznick, 1957) or field (DiMaggio & Powell, 1983) levels. Instead, we perceive of an institution in

its broadest and most inclusive sense, utilizing Jepperson's (1991: 145) definition where '*Institution* represents a social order or pattern that has attained a certain state or property; *institutionalization* denotes the process of such attainment.'

10 For a discussion of the multiple definitions of an organization's environment that have emerged from the assumption of a field level of conceptualization within the institutional literature over time, see Scott (1983: 161–162) and Scott (1991: 172–174).

11 See the section titled 'Institutional Theory and Change' later in this chapter.

12 There are also learning theories at lower levels of analyses, however, that can be used to illuminate institutional processes and we will incorporate these theories as appropriate.

13 See the discussion below for an indication of the role played by *institutional entrepreneurs* within institutional theory as instigators of change.

14 For a comprehensive review see Leca, Battilana, & Boxenbaum (2006).

15 Institutional logics are described as societal-level 'beliefs, norms, routine practices' (Scott, 2001: 134).

16 See the section titled 'Institutional Theory and Change' earlier in this chapter.

17 James Surowiecki, 'The Dating Game,' *The New Yorker*, November 6, 2006, <[www.newyorker.com/archive/2006/11/06/061106ta\\_talk\\_surowiecki](http://www.newyorker.com/archive/2006/11/06/061106ta_talk_surowiecki)>.

18 The role of divergent versus convergent forces for change is discussed in greater detail later in this section.

19 Our initial example of Wal-Mart learning from examples provided by earlier adopters of *environmentally-friendly* policies is also of this nature.

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