

Unfreezing the Future

Exploring the Dynamic of Time in Organizational Change

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Episodic attempts at organizational change have proven to be unable to keep pace with continuous change. The challenge of emergent and continuous change calls for new ways of understanding time, particularly with regards to knowing the future. This article begins by reviewing classic organizational change theory in terms of its underlying temporal assumptions along with its epistemological stance toward effecting change in time. Drawing on the ideas of Henri Bergson, an alternative view of time as a dynamic flow—or duration—is presented, suggesting that linear, detached, and episodic methods lack knowledge of the future as a temporal dynamic and that popular visioning approaches that rely on future perfect assumptions fail to engage that dynamic directly. The authors propose that the future is unconditioned, what they refer to as the future infinitive. Knowing the future directly through deep improvisation bypasses sense making in favor of cultivating presence and acting in real time.

Keywords: organizational change; time; future orientation; vision; sense making; action inquiry

Time is the substance I am made of. Time is a river which sweeps me along, but I am the river; it is a tiger that devours me, but I am the tiger; it is a fire that consumes me, but I am the fire.

—Jorge Luis Borges

Despite the intense focus on the management of organizational change, little attention has been given to considering the temporal dimension that underlies and informs such theorizing. Burrell (1992) argues that “the whole notion of change relies heavily upon a conception of temporality,” yet he finds it “remarkable that the philosophy of time has been a neglected issue” (p. 165). At first glance, as Burrell observes, the emphasis on constant change, turbulence, and chaos suggests that a Heraclitean view of time (“one can never step into the same river twice”) has become a meta-theoretical principle for organizing. Alvin Toffler’s (1970) popular book, *Future Shock*, produced in the public consciousness a sense that the world seemed to be entering a state of continuous flux, evidenced by the unrelenting dynamic of change and incessant emergence of novelty in every segment of society. Yet despite the emphasis on the pervasiveness of change and flux, organizations continue to struggle with the challenges of anticipating and responding to rapid and unexpected change in their industries. Indeed, in modern organizations, change/flux is not embraced as a natural and universal condition in the Heraclitean sense but is seen more as a potential threat to an organization’s existence.

The field of organization development has focused on “change processes,” yet few theorists have paid attention to the temporal assumptions underlying organizational change theory and practice (Bluedorn, 2002; Huy, 2001; Purser, 2002; Purser, Bluedorn, & Petranker, 2004; Purser & Petranker, 2000; Wiebe & Gordon-Biddle, 2002). Although planned change methods aim to move organizations into a new future state, an understanding of the future as a temporal dimension with its own unique dynamics has been virtually ignored. Organizational change implies a temporal dimension—a movement in a direction that actualizes a new reality that differs significantly in form or function from the current state of affairs. This movement, or transition, is conventionally considered to take place in some projected or imagined future. However, conceptualization of the future in organizational change as a temporal dimension worthy of theoretical exploration has received scant attention. Similarly, as Das (2002) points out, in the field of strategy, the future as a temporal dimension has been taken for granted, conceived as a constant and not a variable in the strategy-making process. Das goes on to state that

the flow of time in the future as visualized by strategy makers is routinely treated as non-problematic. . . . Most of the thinking in the temporal research area, with very few exceptions, is based on the unexamined assumption of the linear flow of time or clock-time conception of the time dimension. (p.) [P# OF QUOTE?]

This article begins by reviewing the theory and practice of planned change in terms of its underlying temporal assumptions. The following section examines the challenge

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of continuous and emergent change as well as recent theoretical advances but concludes that such emergent approaches that depend on sense making are limited in coming to terms with time as duration. This inability to change in time is often translated as a need to plan for the uncertain future. So-called real-time change and visioning methods rely however on constructing an image of the *future perfect*, which is ironically derived from the past. The remainder of this article goes on to explore a new conceptualization of the future as an infinite dimension that engages time as duration directly.

CLASSIC ORGANIZATIONAL CHANGE THEORY

Kurt Lewin's (1951, 1958) planned change theory is a widely accepted dictum in the field of organizational development. Lewin's well-known three stage model of change, unfreezing→moving→refreezing, is essentially an equilibrium/transition model. Lewin's model differentiates between two main stages, equilibrium periods and transition periods. The major insight was that organizations need a special preperiod of reflection and involvement to become ready for change. In Lewin's terms, organizations had to become unfrozen to counter complacency and stasis and uproot habitual patterns and routines. The following stage of moving is assumed to be a relatively short stressful period; inherent forces press for restabilization. In the refreezing period, the system has to settle down soon; otherwise it could not continue its existence. From a managerial point of view, organizational change is conceived as a project that has to be guided through the three stages to be successful.

The underlying and common assumption among organizational change theories is the conception that transitions in time crystallize into states of quasi-equilibrium where organizational identity can once more be stabilized. Although widely varying approaches have been developed within the field of organization development (Porras & Silvers, 1991; Van de Ven & Poole, 1995), almost all of them have stayed with this basic, temporal logic of the change process (Wiebe & Gordon-Biddle, 2002). Even a more recent theory of organizational change based on the punctuated equilibrium point of view (Gersick, 1991) also locates change in a special phase that is sharply at variance from the stability phase; it is a short, clear-cut sequence of upheaval that is followed again by a long stage of stability. Drawing from the Kuhnian distinction between normal and revolutionary science as well as theoretical formulations in the field of biology, this theory posits long, stable periods of organizational functioning infrequently punctuated by relatively short periods of transition or dramatic shifts that take the form of an organizational revolution characterized by confusion and disarray (Greenwood & Hinings, 1993; Miller & Freisen, 1984; Sastry, 1997; Tushman & Romanelli, 1985). The periods of stability are equilibrium points during which organizations progress smoothly along a well-established path that is itself the outcome of past conditions. In the terms discussed here, the Lewinian approach is a recipe for organizations to temporarily enter the time of becoming to make modifications to their identity and then to refreeze into a condition of stasis, preserving those modifications in the time of being.

EPISODIC VERSUS CONTINUOUS CHANGE

Weick and Quinn (1999) trace a growing shift toward understanding the temporal processes associated with organizational change. Whereas traditional Lewinian approaches mainly rely on an episodic conception of change processes, emergent understandings suggest a continuous, evolving, and incremental view of change. This signals a major shift in the field toward the Heraclitean time of becoming polarity and away from the Parmenidean fixation on stasis (a view of time as a state of permanent being). Weick and Quinn call attention to the tempo of change, which means paying attention to such factors as the “characteristic rate, rhythm, or pattern of work or activity” (p. 365).

The contrast between episodic and continuous change may reflect differences in the perspectives of the observers. From a distance (the macro level of analysis), when observers examine the flow of events that constitute organizing they see what looks like repetitive action, routine, and inertia speckled with occasional episodes of revolutionary change. But a micro-level view suggests ongoing adaptation and adjustment. Although these adjustments may be small, they may also tend to be frequent and continuous across units, which means they are capable of altering structure and strategy. Some observers (Orlikowski, 1996) suggest that these ongoing adjustments are the essence of organizational change. Although this may be true, the source or temporal dynamic responsible for such adjustments still remains mysterious and unexplained by organizational theorists.

Another main property of the episodic framework is that change often occurs through replacement (Ford & Backoff, 1988; Ford & Ford, 1994). The idea of replacement is that

one entity sequentially takes the place of or substitutes for a second. The first identity does not become the second but is substituted for it. . . . [The] change process becomes a sequence of events in which a person (a) determines or defines what currently exists (what is A), (b) determines or defines its replacement (Not-A), (c) engages in action to remove what is currently there, and (d) implants its replacement. (Ford & Ford, 1994, pp. 773-775)

Three important processes in the depiction of episodes are inertia, the triggering of change, and replacement. Lewin’s ideas remain central to episodic change because they assume that inertia in the form of a quasi-stationary equilibrium is the main impediment to change. Lewin’s insight was that an equilibrium would change more easily if restraining forces such as personal defenses, group norms, or organizational culture were unfrozen. The following five additional assumptions about change (Marshak, 1993) informed by Lewin also remain relevant to this analytic framework: (a) linear assumptions (movement is from one state to another in a forward direction through time), (b) progressive assumption (movement is from a lesser state to a progressive state), (c) goal assumption (movement is toward a specific end state), (d) disequilibrium assumption (movement requires disequilibrium), and (e) separateness assumption (movement is planned and managed by people apart from the system).

Referring to the lack of theoretical alternatives to episodic conceptions of change, Weick and Quinn (1999) contend that “the continuing centrality of these established

ideas may suggest a certain torpor in the intellectual life of scholars of change” (p. 363). Remedies to the aforementioned problems are seen to lie in the direction of greater efforts to articulate the situated, continual nature of organizational action and change. The notion of continuous change is used to group together organizational changes that tend to be ongoing, evolving, and cumulative. A common presumption is that change is emergent, it is “the realization of a new pattern of organizing in the absence of explicit a priori intentions” (Orlikowski, 1996, p. 65). It is a process of “accommodations to and experiments with the everyday contingencies, breakdowns, exceptions, opportunities, and the unintended consequences” (Orlikowski, 1996, p. 65). In contrast to episodic change, the dynamics are different and based on the assumption that everything changes all the time (Ford & Ford, 1994). It may involve an imposed temporal ordering and bracketing where “change is a phenomenon of time. It is the way people talk about the event in which something appears to become, or turn into, something else, where the ‘something else’ is seen as a result or outcome” (Ford & Ford, 1994, p. 759).

Images of organization that are compatible with continuous change include those built around the ideas of improvisation (Barrett, 1998, 2000; Crossan, Cunha, Vera, & Cunha, 2002; Crossan, Lane, White, & Klus, 1996). Improvisation suggests a process of continuous change that is realized through ongoing variations that emerge frequently, sometimes even imperceptibly in the slippages and improvisation of everyday activity, that involve simultaneous composition and execution or repeated acts of learning that enlarge, strengthen, or shrink the repertoire of responses.

The temporal framework associated with continuous change appears not to be one of a sequential ordering of discrete events. Rather, as laid out by Orlikowski (1996),

Each variation of a given form is not an abrupt or discrete event, neither is it by itself discontinuous. Rather, through a series of ongoing and situated accommodations, adaptations and alterations (that draw on previous variations and mediate future ones), sufficient modifications may be enacted over time that fundamental changes are achieved. There is no deliberate orchestration of change here, no technological inevitability, no dramatic discontinuity, just recurrent and reciprocal variations in practice over time. . . . Such variations are ongoing; there is no beginning or end point in this change process. (p. 66)

Complexity theorists have also noted that the organizational change may not be an orderly, sequential, linear process that is controlled by the organization (or change agents) (Brown & Eisenhardt, 1997; Fonseca, 2002; Sanders, 1998; Stacy, 1996; Wheatley, 1992). The apparent evolution from a present state to a future state may be more a result of a number of interactions between events that are emergent and unpredictable in nature, creating a dynamic that is not susceptible to rational control.

Lewin’s change model, with its assumptions of inertia, linearity, progressive development, goal seeking, and disequilibrium as a motivator, is not very applicable when change is viewed as continuous, complex, and nondiscrete. In contrast to inertia and episodic change, where the stages of unfreeze, transition, and refreeze may be appropriate actions, in the face of continuous change, a more plausible change sequence, in the opinion of Weick and Quinn (1999), may be freeze, rebalance, and unfreeze. To freeze continuous change is to make a sequence visible and to show patterns in what is

happening through cognitive maps, schemas, or war stories. To rebalance is to reinterpret, relabel, and resequence the patterns so that they unfold with fewer blockages—such as reframing issues as opportunities and reinterpreting history. Finally, to unfreeze after rebalancing is to resume improvisational processes that are more mindful of sequences, more resilient to anomalies, and more flexible in their execution. Although apparently novel in its conception, we argue in the next section that this formulation is grounded in a bystander epistemology that locates the change agent as being outside of the flow of time (in the time of being). Because this is the case, this supposedly continuous change sequence will suffer from the same inadequacies that were found to be the case with episodic change theory.

CONTINUOUS CHANGE AND *DUREÉ*

The proposition put forth by Weick and Quinn (1999) using the freeze, rebalance, unfreeze sequence as a means for dealing with the challenges of continuous change (as well as an alternative to Lewinian episodic models of change processes) is based on an assumption that a position external to continuous change and the ongoing flow of time and movement can be safely secured. Weick and Quinn propose that as long as things remain in balance, new knowledge is not required, and the organization can flow within the stream of time. But when perturbations occur, when difficulties arise, change agents must first freeze the flow cognitively, mapping it to make sense of it. Only then is it possible to rebalance what has gone out of alignment, after which the flow can resume. Freezing is enacted by assuming a position outside of the movement, allowing change agents to work offline (for a period of time) to make sense of the changing situation.

The problem with this formulation is that time keeps moving on, that is, continuous change is unceasing. Temporarily stepping outside of the flow (freezing) to engage in sense making—which amounts to accounting for and reflecting on what is by now the past—fails to engage the dynamic of the time of becoming directly. One can freeze time conceptually, just as one can take a photograph of a constantly changing scene. But time itself does not stop. The future continues to arrive, and soon the cognitive map generated from a frozen image becomes outdated.

The French philosopher Henri Bergson (1911/1944) argues that it is impossible to constitute movement, change, or momentum out of the immobile: “Every attempt to reconstitute change out of states implies the absurd proposition, that movement is made of immobilities” (p. 308). Although a freeze, rebalance, unfreeze perspective may allow us some small degree of control over continuous change, it does not bring us any closer to actually understanding the nature of time and change—what Bergson often refers to as *becoming*. As Bergson points out, “Instead of attaching ourselves to the inner becoming of things, we place ourselves outside them in order to recompose their becoming artificially” (p. 306). Weick and Quinn’s position is just such an attempt to stand outside of the time of becoming to freeze its flow and to recompose its movement toward a desired future state.

Attempts to deal with continuous change, such as those proposed by Weick and Quinn (1999), have thus adhered to a bystander relation to time, which requires maintaining a position external to time's flow. The model of sequential change also subscribes to this assumption, ignoring what Bergson (1911/1944) refers to as "true duration" or *durée*. According to Bergson, our fixation on form makes us lose sight of *durée*, or continuous movement that is ongoing. For Bergson, stability is merely a cultural convention, and nothing is itself even for an instant. Because the ceaseless flux of change is unavoidable, we must resort to words and language as a means to pin down experience—to freeze it—to make it appear immobile for conventional utility. What is problematic is that we forget that our perceptual processes are involved in freezing what is essentially a ceaseless flux or flow of movement. As Bergson states:

Now, life is evolution. We concentrate a period of this evolution in a stable view which we call form and, when the change has become considerable enough to overcome the fortunate inertia in our perception, we say that the body has changed form. But in reality the body is changing form at every moment; or rather, there is no form, since form is immobile and the reality is movement. What is real is the continual *change* of form: *form is only a snapshot view of a transition.* (p. 301)

The focus on identity and form "solidifies into discontinuous images the fluid continuity of the real" (Bergson, 1911/1944, p. 303); it turns organizational attention toward the "unmovable plan of the movement rather than the movement itself." For example, when change processes become invested in "the plan" as a means to generate movement from the present state to the desired future state, that movement is mistakenly analyzed in terms of a sequence of frozen moments. Weisbord (1988) calls this approach "snapshooting" and presents it in a positive light. He describes it as follows:

We freeze the action at a moment in time, arrange key factors in a conceptual framework, and observe—with our clients—the relationship highlighted in the conceptual frame. Diagnosis has two purposes: to produce valid guidelines to action and to stir up more people than the person we first contacted to want to do something. This stirring up can be thought of as a movie-making problem. (p. 65)

The need to "stir up" change, to go from the frozen moments and still frames of the snapshot to creative and dynamic action—what Weisbord (1988) calls the "movie-making problem"—goes to the heart of the issue. However, Bergson (1911/1944) argues that it is impossible to constitute movement, change, or momentum out of the immobile: "Every attempt to reconstitute change out of states implies the absurd proposition, that movement is made of immobilities." He argues that instead we must enter the flow of time directly: "It is no use trying to approach duration: we must install ourselves within it straight away. This is what the intellect generally refuses to do, accustomed as it is to think the moving by the means of the unmovable" (p. 299).

The field of organizational development and change reflects this perspective of "trying to approach duration" in its core assumptions. Emphasizing form over movement, it emphasizes the state to be achieved and the causal sequence of intermediate states that will make the change possible (Schreyogg & Noss, 2000). Weick and Quinn (1999) in their review of the field propose that an emergent understanding of change as

nondiscrete and continuous requires a focus on *changing* rather than *change*. At first glance, their focus on changing appears to be aligned with the Bergsonian notion of *durée*, but on closer inspection, it is apparent their understanding of time is one of spatial extension within a causal framework:

A concern with “changing” means greater appreciation that change is never off, that its chains of causality are longer and less determinate than anticipated, and that whether one’s viewpoint is global or local makes a difference in the rate of change that will be observed, the inertias that will be discovered, and the size of accomplishments that will have been celebrated. (Weick & Quinn, 1999, p. 382)

Weick and Quinn in effect are viewing time from a safe distance, assuming a detached stance or viewpoint relative to its flow. Such claims are outputs of a bystander perspective. Their formulation on changing simply proclaims that the flow is continuous and less predictable, with exhortations for more appreciation that this is the case. For Weick and Quinn, time is reduced to simply a framework for experience, in which changing is enacted.

Another, more radical way of “installing ourselves in duration” is to accept (on more than just an intellectual level) that everything is impermanent, everything is change, which goes against the Western tradition that has privileged the time-of-being perspective. There are not so much “things that undergo constant change,” but rather, “things are constant change” (Low, 2002). For Bergson (1911/1944), impermanence is a fundamental assumption:

Reality is flowing. This does not mean everything moves, changes and becomes; science and common experience tell us that. It means that movement, becoming, change is everything; there is, there is nothing else. There are no things that move and change and become; everything is movement, is change. (p. 28)

Whereas our desire for permanence is biased toward the time of being (the identities of things, forms, and organizations), our experience of transience suggests otherwise, indicating that the time of becoming is in force (entropy, decay, change, irreversibility, evolution, and impermanence). Bergson (1911/1944) is not in denial of continuity but recognizes the connection of identity with time vis-à-vis his idea of duration:

The universe endures. The more we study the nature of time the more we comprehend that duration means invention, the creation of forms, the continual elaboration of the absolutely new. . . . Continuity of change, preservation of the past in the present, real duration—the living being seems then to share these attributes with consciousness. (p. 23)

Using the stream metaphor, rather than viewing identity as a solid form—a rock protruding in the flow of time—within *durée* it appears as a bubble or whirlpool that is of the same nature as the current of the water. Installed directly in the movement, there is no secure perch or nontemporal position for the bystander perspective to take a stand. More specifically, there is no separate identity relative to the ceaseless flux of change—an unchanging position from which to be aware of the changing current can

no longer be found. From this perspective, all objects/identities are abstractions from an undivided and flowing movement. As the late physicist David Bohm (1995) put it,

This view implies that flow is, in some sense, prior to that of the “things” that can be seen to form and dissolve in this flow. . . . In spite of the undivided wholeness in flowing movement, the various patterns that can be abstracted from it have a certain relative autonomy and stability, which is indeed provided for by the universal law of flowing movement. Now, however, we have the limits of this autonomy and stability sharply in mind. (p. 11)

Within this schema, organizational identity is not actually separate from the flow of time; there is no solid ground for staking a permanent position that could support the claims of identity. The energy usually consumed in maintaining organizational identity is liberated for changing, that is, for creative action within ongoing change. Time is not understood as an abstraction or as an external force opposed to form but is instead seen as the dynamic nature of identity.

With sequential change models, organizational identity is conceived as a substantial entity that moves in time from the past to present; change or transformation is attainable only in the distant future. Although a desired future state is defined as a “change goal,” the temporal conditioning of history and tradition takes on a gravity that increases the perceived gap between the present and the future. Change is perceived as something that might happen in the future if the time and conditions are right, if restraining forces are reduced, if the right method or technique is employed, and so on. What is happening right now (the present state) is seen to be deficient and lacking in the resources for creative change. The immediacy and creative dynamic of time (Bergson’s [1911/1944] *durée*)—the generative energy and inventiveness needed for change—seems remote, inaccessible, and unavailable.

Planned change assumes that organizational actors are either attached to the current state of affairs (resistance to change) or rejecting the present state as undesirable, deficient, and in need of change (projecting change in some desirable future). Organizational actors are either seeking the continuation of an experience that provides psychological security, or they are looking for an end to an experience that they find problematic. In either case, they are not in touch with the immediacy of Bergson’s (1911/1944) duration, the creative dynamic that is inherent within unconditioned time.

PLANNED CHANGE AND NOT-KNOWING THE FUTURE

It stands as a truism in organizational development literature that the purpose of planned change is to enable the organization to cope with the future. As Bennis, Benne, Chin, and Corey (1976) put the point,

Whatever else planning may mean, it signifies an anticipation of some future state of affairs and the confirmation of a vision of that future in the present in order to motivate, guide, and direct present action. A planner’s present situation always includes a time perspective forward—a future different from the present, yet populated with more or less clearly delineated agents and counteragents,

objects to be avoided, objects to be embraced, means to empower avoiding or embracing, and some context of interrelated factors and forces, human and non-human, benign, hostile, or neutral. (p. 427)

Planning in the terms Bennis et al. (1976) describe is a means-end structure, which presupposes a linear temporal framework. Change agents start from a set of beliefs or expectations about the future, or alternatively, they start from actions and then impose structures of meaning retrospectively (Choo, 2002). In either case, the means-end structure for gaining knowledge about the future proceeds along a set path as determined by the methodology. Reliance on such a means-end analysis amounts to what Simon (1976) calls human problem solving, and it aims at forging a path from an initial starting condition to a desired goal (Das, 2002). Organizational diagnosis conforms to the problem-solving process that usually entails identifying the presenting problem, conducting a diagnosis, formulating a solution, and implementing an action plan (Beckhard, 1969; Burke, 1982; French & Bell, 1999).

In the aforementioned quotation, Bennis et al. (1976) also identify the knowledge that makes the formulation of planned change possible: the ability to delineate (i.e., discover and differentiate) “agents and counteragents, objects to be avoided, objects to be embraced, means to empower avoiding or embracing, and some context of interrelated factors and forces” (p. 427). However, when such knowledge is lacking—when the future differs so sharply from the past that it cannot be known in advance through extrapolation from the past—the accuracy and efficacy of any plan or diagnosis becomes questionable. The extrapolations from past experience are bound to be inaccurate given our contemporary business environment where change is rapid and planning horizons are shrinking (Hamel & Prahalad, 1994; Stacy, 1996). The future will be different from the past in ways that cannot be predicted or accurately forecasted (Cunha, 2002). Moreover, even assuming the plan to be accurate in key respects, when change comes too rapidly, there will no time to consult the plan and determine how it applies. As Das (2002) points out, the recommendations for change produced from an organizational diagnosis usually arrive too late; when it is time for implementation, the action plans already are out of date.

The limits on planned change (and planning) as a response to a rapidly changing future helps bring into focus the following key fact that the organizational change theory tends to overlook or ignore, though of course we all acknowledge it as true: We cannot know the future in advance. Planning starts from ignorance, and in a sense it can never go beyond that ignorance. Such ignorance is rooted in the bystander position and the stance it takes toward the flow of time; standing outside the flow of time, this perspective is based on not knowing the immediacy of experience. This seems consistent with the following claim Weick (1979) makes, which forms the cornerstone of his sense-making theory:

The reader may object that his experience seldom has this quality of a continuous merging and melting of phases into phases. In fact, experience, as we know it has the quality of being bounded, distinct, episodic, particular. But the only way a person can sense the separateness of experience is to step outside the stream of experience and direct attention to it. When a person does this it is only possible to direct attention at what has already passed, not at what is yet to come. All understanding originates in reflection and looking backward. (p. 194)

Weick's (1979) description of stepping "outside the stream of experience" to "sense the separateness of experience" is problematic. Experiencing a sense of separateness only perpetuates the illusion that organizational actors can secure a position external to the flow of time. Merely experiencing a sense of separateness does nothing to remedy the fact that knowledge of time in its immediacy is lacking. The assumed separation is attributed to an image of stepping outside of the stream, and that image (sense) as experienced is taken as proof that its separateness is real (Bohm, 2003). However, the flow of time is a dynamic unity (Low, 2002), an undivided movement, pure becoming, continuous change; any sense of separateness is purely illusory (Bergson, 1911/1944; Bohm, 2003). By taking up a position that is distanced from the flow of time, the bystander perspective is concerned with making sense of what has happened or what might happen. Bystander consciousness retraces the content of what already has passed in time; its attention is fixated on interpreting, selecting, and reenacting its own self-reflexive constructions.

According to Weick's (1979) theory of sense making, limits on knowing are enacted from the outset. No knowledge is present within the immediacy of action itself; instead, knowledge is constructed only after action occurs by making sense of the event retrospectively, that is, by imposing meanings and overlaying past schemas of experience. Retrospective sense making is a particular way of knowing time and can be likened to "a prerecorded tape of knowledge being played forward, subject only to a second rewinding" (Tulku, 1994, p. 187). In this respect, sense making is the outcome of a bystander perspective; it is a way of knowing time that is fundamentally dualistic and past centered. As a basis for planned change, the bystander/sense-making model presupposes that knowledge of the future is not available in the present or within the immediacy of action or direct experience.

Visioning and the Future Perfect

A popular response to the lack of knowledge dilemma of planned change is to reject the significance of knowledge in favor of will. The idea is that organizational change agents can shape the future through vision. Bennis et al. (1976), in the continuation of the passage cited earlier, state the point clearly in the following:

Man as planner must climb out of his involvement in present transactions to look beyond the horizon of the present and to bring back a vision of the future to modify the tempo, quality, and direction of his present transactions. (p. 427)

However, this attempt to bring visioning under the ambit of planning is misleading. Considered as an ideal type, visioning is the exact opposite of the rationality endorsed by planning. The focus is not on the rationality of forecasting or diagnosis but on the subjective will, whose power can shape events in accord with the change agent's wishes and desires. In practice of course, the subjectivity of the vision is at some point linked to the rationality of the plan. More important for the analysis here, visioning is a response to the limitations of planning: When the plan proves inadequate in the face of rapid change, the "vision of the future" will come to the rescue (Boulding, 1976). If

knowledge is lacking, that does not matter for in the vision, knowledge takes a backseat to desire—the dream of what can be.

Many contemporary organizational development methods advocate building a shared vision (Ackoff, 1981; Drucker, 1997; Kotter, 1995; Porras & Collins, 2002; Senge, 1990), which suggests a possible escape from past-bound planning as the emphasis is on bringing future goals and intentions into being. Davis (1996) argues that this shift amounts to a revolutionary approach to time, a shift from a Newtonian to an Einsteinian model of the temporal framework. On closer inspection however, this shift proves largely illusory for both real-time change methods (Bunker & Alban, 1992) and visioning (including related methods, e.g., scenario planning) are based on a problematic conceptualization of the future. The future that visioning aims to bring into being turns out to be in essence a hypothetical version of the past. Ironically, attempts to know or envision the future by theorists and practitioners (as conventionally understood) are actually dependent on “analogous actions in the past” (Weick, 1979, p. 102).

This point was clearly worked out by the sociologist and phenomenologist Alfred Schutz (1932/1972), whose insights inform the work of such organizational theorists as Weick (1979), Das (1986), and Davis (1996). For Schutz, the future is available to us only when we imagine it to have been already completed; only, that is, in the future perfect tense:

The actor projects his action as if it were already over and done with and lying in the past. It is a full-blown, actualized event, which the actor pictures and assigns to its place in the order of experiences given to him at the moment of projection. Strangely enough, therefore, because it is pictured as completed, *the planned act bears the temporal character of pastness*. . . . The fact that it is thus pictured as if it were simultaneously past and future can be taken care of by saying that it is thought of in the future perfect tense. (p. 61)

Because the future perfect is a past-centered version of the future, it is entirely subjective. As Das (1986) makes clear in his analysis of the subjective side of strategic decision making, the future perfect has everything to do with the way we think about or project the future and nothing to do with the happening of the future as such. It is often said that the present is real in a way that the past and the future are not, but in this context, it makes more sense to say that the past and present are real in a way that the future is not. For the past is what really happened, but the future is simply what we expect, imagine, or project will happen. In approaching the future, we draw on elements or entities familiar from the past—the “agents, counteragents, objects and means” Bennis et al. (1976) identifies as being the counters that change agents manipulate in trying to control the future.

In this model, knowledge about the future depends on selecting content, and content comes from the past. The planning mentality has always been based on the attempt to wrest knowledge from ignorance, to respond to the unknown future by imposing on it a vision derived from memories, images, and past constructs. The past however is no longer an accurate guide to the future; planned change methods that rely on envisioning a future perfect are bound to go astray when such images are at variance with the actual arising of indeterminate and ultimately “imperfect future.”

EMERGENT CHANGE AND THE FUTURE INFINITIVE

To be effective in dealing with emergent, unplanned change requires a nondual approach to time that is based on a fundamentally different way of knowing the future. Viewing change as continuous and emergent rather than episodic calls for approaches that rely less on planning/visioning that are based on constructing a future perfect and more on creative action, or improvisation, in real time. However, to do so requires coming to know the future on its own temporal terms rather than relating to the future as a spatial dimension that is simply a not-yet-happened extension of the past.

The future is the locus of time's dynamic, its "coming toward" us. Knowing the future in terms of this dynamic is to focus on knowing as a capacity within the immediate flow of time. As Bergson (1911/1944) points out, such knowing is more akin to intuition than intellect for it amounts to a letting go of the familiar bystander position. Once we perform this act of letting go, we see that the future can never truly be known by relying on sense making because it has not happened yet. It is by definition unmanifested, or formless. And because the future never truly arrives (if it did, it could no longer be considered the future), as an open dimension, its source is inexhaustible. Rather than thinking in terms of a future perfect, we can think in terms of a "future infinitive" (Tulku, 1994, p. 93).

The real nature of the future is unconditioned. It is neither a cause nor an effect and is thus not subject to the limits inherent in conditioned time. Unconditioned (future infinitive) time is void of content; it cannot be known as an object of knowledge. In other words, knowing the future cannot be approached from a dualistic position but must be entered by, using Bergson's (1911/1944) phrase, "installing directly" in the flow.

The proposition being advanced here is that it is possible to know the "real future" not simply in terms of projections of the future based on past constructs (the future perfect)—the stuff visions, predictions, scenarios, or desirable images are made of—but in terms of the actual dynamic of the future, which constitutes the flow of time. Tulku (1994) distinguishes our conventional constructed and conceptualized future from the "future infinitive" that gives access to this dynamic.

This constructed future has little to do with the future as time's transitional indeterminacy: the future infinitive of time. The future located "up ahead," projected forward along linear lines of force, is not the same as the future that will never arrive and thus never restrict. It is in this "never arriving" of the future that the dynamic and power of time makes themselves available. (p. 93)

If knowing an unconditioned future is not based on content or intellectual discrimination, what kind of knowledge does it make possible? Here it is important to differentiate between *knowing the future* versus *knowledge about* or *knowledge of* the future. The difference is not merely semantic. Knowledge about the future is dependent on content, and content must be constructed from the storehouse of memory (sense making), projecting images forward from the past. The focus on content directs attention to what is known, conditioned, and already established. In contrast, knowing the future is direct and immediate; it can be equated to a contentless, creative dynamic that is infi-

nite in its potential for giving rise to phenomena (content). Creative insights, inspiration, epiphanies, sudden breakthroughs, inventions, peak experiences, and even paranormal events associated with precognition and unexplainable synchronicities may all be attributable to knowing the future as an unconditioned dynamic (Tulku, 1994). Li Destri and Dagnino (2003) allude to this creative dynamic of the future in that they suggest that the real nature of dynamic change processes “does not reside in the mere recombination of a given set of data or variables, but must grant a critical role to *surprise* and *unforeseen* events” (p. 7). In this sense, time is not simply an abstract framework that events are in or an interval between two points but a creative dynamic that is inseparable from experience (Low, 2002). Organizing does not occur in time but is time.

Knowing the future can be thought of as knowing the light that illuminates the images on the film rather than merely paying attention to the substance of the images. The actual cinematic image as projected on the screen is dependent on the light, for without it, the image could never appear to the senses. Knowledge of the future relies on sense making; it is concerned with trying to know (or project) what the content of the image will be at some distant point in time. On the other hand, knowing the future occurs prior to sense making; it is concentrated on the dynamic flow of experience that is immediately and always available on the “edge of the present,” before content takes form, that is, before conditioned time comes into being. It is dependent not on sense making but on pre-sensing, or presencing, what might be called *sense emptying*. Presence implies a way of knowing that is open to the never arriving future, focusing attention on the border or edge between the conditioned and unconditioned. Perception arises out of the vitality of the future, before cognition freezes experiences into conceptual categories, past associations, and habits of mind.

Another way of distinguishing the temporal dynamic from the substance of the image is to consider the following simile for the stream of consciousness put forward by William James (1890):

The traditional psychology talks like one who should say a river consists of nothing but pailsful, spoonsful, quartpotsful, barrelsful, and other moulded forms of water. Even were the pails and the pots all actually standing in the stream, still between them the free water would continue to flow. It is just this free water of consciousness that psychologists resolutely overlook. Every definite image in the mind is steeped and dyed in the free water that flows round it. (p. 225)

This image suggests how knowledge of the future might be possible. Instead of focusing on the “definite images” (i.e., the pailsfuls, spoonsful, etc.) that are the basis for sense making, attention can be redirected to the “free water” of time’s flow. Let us be clear about this distinction. The unconditioned future is not some distant point or horizon but the immediacy of time’s dynamic. Following William James (1890), we can say of the future that it is the contentless flow of time, which is why it will always be opaque to theories of planned change and strategic planning that rely on gathering data (content) as a precursor to initiating change.

The temporal dynamic of the future “arrives” without taking form, manifesting as pure becoming. Thus, instead of trying to project knowledge of content forward into the future, knowing the future is paradoxical, expressed through an “active not-know-

ing” of forms or limits. In the following, Tulku (1994) describes what a practice of not-knowing or presence might entail:

To engage the future directly, we can practice coming toward the future with a way of knowing suited to its ongoing becoming. This means coming to each moment with an active not-knowing, aware that there is nothing to be known. If we are truly confident “anything can happen,” we will find that the future activates a powerful new dynamic of knowledge. Because it never comes to be, it opens immeasurable opportunities—not for “later”, but “right now”, in the heart of a time that is no longer conceived in linear terms. (p. 94)

Conventional methods that attempt to know the future by projecting content and images forward are a response to the discomfort and intolerance for ambiguity that arises in the face of uncertainty and periods of discontinuity (Stacy, 1996). The attachment to preserving identity produces an unconscious drive to avoid ambiguity and reduce uncertainty by relying on the known, the past, and the familiar. Sense making and envisioning a future perfect feed this incessant need to know and reduce equivocality by grasping onto constructs, narratives, and content from the past. In contrast, knowing via the future infinitive develops a capacity to be more tolerant of not-knowing, therefore increasing the capacity for openness and flexibility in the face of the unknown. This way of knowing the future means going beyond the known and not steering change toward some preestablished aim, what Hatch (2000) refers to as “jazz time.” Rather than conditioning the future based on past projections, the future is improvised or invented.

IMPLICATIONS FOR THEORY AND PRACTICE

Clearly, there can be no sequence of activities and thus no processes without time. Change—actual, perceptible, incremental, or discontinuous—not only implies time; it is time in operation. Yet change process theories, as we have shown, view time merely as an abstraction or index. Theorists and practitioners have largely ignored investigating the fundamental structuring dynamic of time itself. As a result, time has remained a hidden factor that limits the efficacy of change theories as well as the ability to put them into practice.

One of the major implications here for the theory and practice of organizational change and development is the need to explore temporal structures of change at a deeper level. Table 1 summarizes the key differences between conditioned and unconditioned future approaches to organizational change.

The unconditioned time approach is insight driven, aimed at transforming the limits on knowing the future in ways that are immediate, embodied, and lived, making change agents into true visionaries. Vision implies a panoramic perspective, an ability to know the future with clarity and imagination, and an energetic relationship with the dynamic of time that creates a sense of possibility. Ultimately, this means that managers and change agents can learn to embody a new vision of time, one that does not rely exclusively on gradual step-by-step methods and detached approaches to change. Such conventional, conditioned time methods unquestioningly and unknowingly per-

TABLE 1
Conditioned Versus Unconditioned Temporal
Approaches to Organizational Change

| <i>Conditioned Time Approach</i> | <i>Unconditioned Time Approach</i> |
|--|--|
| Method driven, gradual, detached (bystander model) | Insight driven, immediate, embodied (dureé flow model) |
| Focus on constructing and solving problems, maintenance of identity narratives in conditioned time | Deconstructive conversations that release fixations on problems and identity, giving direct access to unconditioned time |
| Embracing the rational plan, low tolerance for ambiguity | Embracing uncertainty and high tolerance for ambiguity |
| Conditioning the future (future perfect) | Improvising the future (future infinitive) |
| Knowing about, knowledge of (content based) | Active not-knowing (dynamic oriented) |
| Deliberate, willful, compulsive action | Spontaneous, effortless, uncontrived action |
| Reliance on sense making | Reliance on presence |

petuate the linear view of time and the limits associated with it. The unconditioned time approach does not require tools, techniques, or methods (all of which assume transitions through a linear series of temporal events) because it fosters the insight that there is no actual path to traverse, no goal to arrive at in some distant future. Rather, the higher-order change unique to this approach is embodied as a sense of immediacy and is more a matter of relaxing into a way of knowing the future that does not depend on ordinary movement that usually proceeds by moving from one state to another. Transformational change occurs when a critical mass of people actually can live the vision, embody the vision, and enact the vision in everyday organizational life. This occurs however not by engaging in detached, rational planning to avoid uncertainty or by plotting new future directions, scenarios, or courses of action within the linear temporal order—but by unfreezing the constricting structures of the temporal order itself. The new task of change agents is to thaw and unfreeze the temporal limits on knowledge that were constructed without awareness. In other words, what is unfrozen is not a series of event sequences within the ordinary temporal order but perceptual dependence and habitual knowing of the order.

Such unfreezing of the future may account for the suddenness of profound or illuminating insights that seemingly come out of nowhere, breakthrough ideas, spontaneous actions, or unexplainable synchronicities. Similarly, extraordinary creativity—the realm of genius—appears to transcend the ordinary temporal structures as we often describe the genius as someone who was “ahead of his time.” However, rather than accepting such transformational events and peak experiences as mystical, rare, and infrequent occurrences, the unconditioned time approach proposes that the interventions are close at hand. By engaging in deconstructive conversations (or other forms of action/creative inquiry), managers and change agents can enhance their capacities for

asking questions that release the temporal fixations that prevent them from knowing the future directly. As this occurs, managers and change agents learn to rely more on their own sense of presence than on sense making, embodying a more dynamic, creative time for improvising the future.

To know the future is to tap the source of creativity, the novel, and the unexpected. Such an approach cannot rely exclusively on the rationality of intellect, so highly conditioned by Aristotelian logic, with its intolerance of ambiguity, uncertainty, and not-knowing (Low, 1993). Bergson (1911/1944) maintains, "Precisely because it is always trying to reconstitute, and to reconstitute with what is given, the intellect lets what is new in each moment of a history escape. It does not admit the unforeseeable" (p. 167). By knowing the future directly, the energy for change becomes newly available. Improvisation can complement planning, and creativity can come to the aid of rational thinking. Seen from this perspective, change is not a potential that may or may not be actualized or the outcome of an effect that will occur in some distant future (if the conditions are right) but an actuality available in real time.

As for the implications of this unconditioned-time approach, we acknowledge that the presentation here has remained primarily at the level of theory. Practical implementation will have to come over time and will depend on the contributions of organizational development practitioners and managers willing to experiment with the unconditioned time approach. Moreover, the very nature of this approach, centered as it is in the immediacy of experience as it unfolds, does not lend itself to the formulation of rules for implementation. The role of the organizational development practitioner using an unconditioned time will be to find ways to encourage these capacities and skills in their client organizations. We introduce at the end of the next section some emerging approaches that could help make this possible.

CONCLUSION

Continuous and emergent change present a challenge for organizations given the limitations of planned change methods that are informed by a limited conceptualization of the future. Episodic attempts to control time from a timeless position (the bystander position of the planner or change agent) have proven to be unable to keep pace with the continuous flow of time (Robertson, Roberts, & Porras, 1993). The challenge of emergent and continuous change calls for new ways of knowing time, particularly with regards to knowing the future on its own terms as a creative, unconditioned dynamic. Tapping the future as a source of the creativity provides a real-time approach to change, one that the present time demands: generating the right response at the right time. Indeed, in times of turbulence, knowing the right response and when to act is the knowledge that matters most. In real time, the knowledge needed to implement change is not lacking but is available within the situation. Engaging the future directly requires the cultivation of a nondual knowing capacity that is not based on sense making but on deconstructing fixations that give identity form, enacted and reinforced through past conditioning (Fenner, 2001).

A new conceptualization of the future in terms of unconditioned time and the future infinitive could provide a theoretical framework for understanding how organizations and managers can develop more appropriate and effective methods for dealing with emergent and continuous change. The task here is to develop new interventions that facilitate the process whereby members can learn how to engage the dynamic of the future directly, fostering capabilities for deep improvisation. Although this is not the place to undertake that challenge, it may be worthwhile in closing to mention briefly several emerging disciplines that offer fruitful possibilities for such innovative methods. These include deconstructive contemplation (Fenner, 2003a, 2003b), action inquiry (Chandler & Torbert, 2003; Torbert, 2002), first-person methodologies in consciousness studies (Low, 2002; Petranker, 2003a; Varela & Shear, 1999; Varela, Thompson, & Rosch, 1991), and creative inquiry (Petranker, 2003b).

Deconstructive contemplation. The principal assumption of deconstructive contemplation is that reality—including the nature of our temporal experience—is created through our beliefs. Deconstructive contemplation is a discipline for investigating and changing those beliefs through the disclosure of fixations that freeze and solidify our experience by interpreting the world through dualistic categories (Fenner, 2003a). All forms of fixation can be traced to a core assessment that something is missing in our experience. An assessment is made that “This isn’t it”—where *it* represents a particular version of how things should be. With regards to organizational change, managers are sure that something is happening that should not be happening or that something that should be happening is not. In either case, the dynamic of change is seen to be temporally missing, distant, and not available in the present. Often a great deal of time and energy is invested in constructing stories and interpretations that organizations are progressing toward their preferred future or that they are missing opportunities due to cultural inertia and attachment to past routines, but such explanations and self-referencing stories obscure the underlying fact that the dynamic of time as the future infinitive has been lost.

Deconstructive contemplation has potential for helping managers and change agents to dissolve fixations by revealing their professionally informed interpretations of reality as self-referencing mechanisms for deceptively validating the core fixations “This is it” and “This isn’t it.” Contemplation in this context does not refer to a formal method compartmentalized from everyday activities but to practice carried out in the context of deconstructive conversations. Because it discloses temporal fixations as concepts superimposed on the flux of experience, deconstructive contemplation discloses the open and fluid texture of reality.

Action inquiry. Action inquiry is an approach suitable to studying the ongoing dynamics of human interactions in which one is a participant, especially as this pertains to creating future intentions that inform the process of organizational change. As Chandler and Torbert (2003) point out, “Inquiry conducted in the present and for the future by co-participants are critical kinds of social science and social art that remain unexplored in most empirical scholarship to date” (p. 134). Torbert’s pioneering work has expanded action research by showing “how fundamentally different the first- and

second-person participatory study of the present and the future is from the third-person detached study of the past” (Chandler & Torbert, 2003, p. 133). Acting in a “timely fashion” (Torbert’s phrase) is similar to what we mean by “deep improvisation” (Torbert, 2002). It involves a process of increasing self-awareness and overcoming habitual patterns. This requires, according to Torbert, conducting “first-person” research with regard to future intentions, which facilitates experiences of presencing (Scharmer, 2000, 2002). As Torbert and Chandler (2003) explain, “Only as we exercise such attention do we begin the journey toward intentionally, rather than accidentally or habitually, generating timely action, action that does not merely conform to existing norms of timeliness, but can also transform existing norms” (p. 140). With regards to the future, action inquiry offers a process for recognizing our largely undeveloped potential for intentionally shaping our emergent experiences with ourselves and others by allowing numerous possibilities to arise in our minds and actively choosing among them rather than passively having our choices shaped by personal habits, familiar patterns of thought, or institutional patterns from the past (Torbert, 2002).

First-person methodology in consciousness studies. The field of consciousness studies has come into being over the past decade through the encounter of neuroscientists, philosophers, cognitive psychologists, phenomenologists, and others. The key insight that could be said to have given rise to the field is that although many aspects of consciousness can be measured and tested from a third-person perspective, these forms of inquiry typically leave out of account the core fact about consciousness, namely, that there is “something it is like” to be conscious or to be conscious in the particular way that “I” am conscious (Nagel, 1974). The ongoing debate in consciousness studies is whether it will be possible to account for and work with the “what it is like” of phenomenal consciousness through third-person methods or whether new methodologies must be developed that rely on first-person inquiry.

Concerned as it is with individuals interacting in groups, management theory unavoidably operates with a fixed set of assumptions about human consciousness. As consciousness studies begin to draw on first-person methodologies, it offers new tools for questioning those assumptions. With respect to the temporal dimension, the issues it raises are similar to those canvassed in this article: Are the key elements for understanding consciousness exhausted by investigating conscious contents, or is there a layer of consciousness more fundamental than the stories within whose context conscious contents unfold (Petranker, 2003a)? If such a fundamental layer can be accessed, it will not be bound by the past-centered stories and fixations on which third-person inquiry necessarily depends but will find its appropriate subject matter in the unfolding dynamic of the future. For scholars in the field of organizational change and development, this possibility offers the prospect of creating structures and circumstances in which organizational actors can learn to “be conscious differently” (Petranker, 2003a) and thus to bring new resources for effective action into play.

Creative inquiry. The standard assumption in social science, as in the physical sciences, is that knowledge is either discovered or assembled. However, the guiding principle of creative inquiry is that inquiry itself creates knowledge, in somewhat the same

way that swimming creates the knowledge of how to swim or teaching creates the knowledge of how to teach. In this sense, creative inquiry is a universal tool, a resource that can be brought to bear on any set of problems or concerns. It always looks in two directions: toward the topic under investigation and toward the experience of investigating itself (Petranker, 2003b). In temporal terms, creative inquiry starts from the past as given by the emerging future, but its natural home is in the dynamic flow of time. As Tulku (1987) puts it, “Retracing *through its own momentum* the dynamic that experience embodies, analysis allows active knowing to emerge” (p. 301).

As should be clear from these brief descriptions, the four methodologies singled out here share a commitment to setting aside what is already known in favor of a knowledge that emerges through inquiry. The present article has singled out the need for a transformation in the prevailing understanding of the temporal dimension as a prerequisite for such a transformation. As long as academics and practitioners cling in subtle ways to a past-centered form of understanding, they will continue to encounter stubborn resistance to effective change. Only by unfreezing the future will it be possible to clear the way for the kind of comprehensive and ever-evolving organizational change that the times demand.

REFERENCES

- Ackoff, R. (1981). *Creating the corporate future: Plan or be planned for*. New York: John Wiley.
- Barrett, F. J. (1998). Creativity and improvisation in jazz and organizations: Implications for organizational learning. *Organization Science*, 9, 605-622.
- Barrett, F. J. (2000). Cultivating an aesthetic of unfolding: Jazz improvisation as a self-organizing system. In S. Linstead & H. J. Hopfl (Eds.), *The aesthetics of organizations* (pp. 228-245). London: Sage.
- Beckhard, R. (1969). *Organization development: Strategies and models*. Reading, MA: Addison-Wesley.
- Bennis, W., Benne, K. D., Chin, R., & Corey, K. E. (1976). *The planning of change* (3rd ed.). New York: Holt, Rinehart and Winston.
- Bergson, H. (1944). *Creative evolution* (A. Mitchell, Trans.). New York: Modern Library. (Original work published 1911)
- Bluedorn, A. (2002). *The human organization of time*. Stanford, CA: Stanford University Press.
- Bohm, D. (1995). *Wholeness and the implicate order*. London: Routledge.
- Bohm, D. (2003). *The essential Bohm*. London: Routledge.
- Boulding, E. (1976). Learning to image the future. In W. Bennis, K. D. Benne, R. Chin, & K. E. Corey (Eds.), *The planning of change* (3rd ed.). New York: Holt, Rinehart and Winston.
- Brown, S. L., & Eisenhardt, K. (1997). The art of continuous change: Linking complexity theory and time-paced evolution in relentlessly shifting organizations. *Administrative Science Quarterly*, 42, 1-34.
- Bunker, B. B., & Alban, B. (1992). Editor's introduction: The large group intervention—A new social innovation? *Journal of Applied Behavioral Science*, 28, 473-479.
- Burke, W. W. (1982). *Organization development: Principles and practices*. Toronto, Canada: Brown.
- Burrell, G. (1992). Back to the future. In M. Reed & M. Hughes (Eds.), *Rethinking organizations* (pp. 165-183). London: Sage.
- Chandler, D., & Torbert, W. (2003). Transforming action inquiry: Interweaving 27 flavors of action inquiry. *Action Research*, 1, 133-152.
- Choo, C. W. (2002). Sensemaking, knowledge creation and decision making: Organizational knowing as emergent strategy. In C. W. Choo & N. Bontis (Eds.), *Strategic management of intellectual capital and organizational knowledge* (pp. 79-88). Oxford, UK: Oxford University Press.

- Crossan, M., Cunha, J. V., Vera, D., & Cunha, M. P. (2002, June). *Time and organizational improvisation: Kairos meets Chronos*. Paper presented at the Dynamic Time and Creative Inquiry in Organizational Change conference, Cape Ann, MA.
- Crossan, M. M., Lane, H. W., White, R. E., & Klus, L. (1996). The improvising organization: Where planning meets opportunity, *Organizational Dynamics*, 24, 20-35.
- Cunha, M. P. (2002, July). *Foresight at time traveling: Complexity, improvisation and organizational foresight*. Paper presented at Probing the Future: Developing Organizational Foresight in the Knowledge Economy conference, University of Strathclyde, Glasgow, Scotland.
- Das, T. K. (1986). *The subjective side of strategy making: Future orientations and perceptions of executives*. New York: Praeger.
- Das, T. K. (2002, July). *Strategizing and time: Recognizing the future*. Paper presented at Probing the Future: Developing Organizational Foresight in the Knowledge Economy conference, University of Strathclyde, Glasgow, Scotland.
- Davis, S. (1996). *Future perfect*. Reading, MA: Addison-Wesley.
- Ducker, P. (1997). The future has already happened. *Harvard Business Review*, 75, 20-24.
- Fenner, P. (2001). *Essential wisdom teachings*. York Beach, ME: Nicolas-Hays.
- Fenner, P. (2003a). *Deconstructive contemplation*. Unpublished manuscript.
- Fenner, P. (2003b). Nonduality and therapy. In J. Pendegrast, P. Fenner, & S. Krystal (Eds.), *The sacred mirror: Nondual wisdom and psychotherapy* (pp. 23-56). St. Paul, MN: Paragon House.
- Fonseca, J. (2002). *Complexity and innovation in organizations*. London: Routledge.
- Ford, J. D., & Backoff, R. (1988). Organization change in and out of dualities and paradox. In R. Quinn & K. Cameron (Eds.), *Paradox and transformation: Toward a theory of change in organization and management* (pp. 81-121). New York: Harper.
- Ford, J. D., & Ford, L. W. (1994). Logics of identity, contradiction, and attraction in change. *Academy of Management Review*, 19, 756-785.
- French, W. L., & Bell, C. H. (1999). *Organization development* (6th ed.). Englewood Cliffs, NJ: Prentice Hall.
- Gersick, C. J. (1991). Revolutionary change theories: A multilevel exploration of the punctuated equilibrium paradigm. *Academy of Management Review*, 16, 10-36.
- Greenwood, R., & Hinings, C. R. (1993). Understanding strategic change: The contribution of archetypes. *Academy of Management Journal*, 3, 1052-1083.
- Hamel, G., & Prahalad, C. K. (1994). *Competing for the future*. Boston: Harvard Business School Press.
- Hatch, M. J. (2000, August). *Jazz time*. Paper presented at the annual meeting of the Academy of Management, Toronto, Canada.
- Huy, Q. (2001). Time, temporal capability, and planned change. *Academy of Management Review*, 26, 601-624.
- James, W. (1890). *Principles of psychology*. New York: Holt.
- Kotter, J. P. (1995). Leading change: Why transformation efforts fail. *Harvard Business Review*, 2, 59-67.
- Lewin, K. (1951). *Field theory and social science*. New York: Harper and Brothers.
- Lewin, K. (1958). Group decision and social change. In E. E. Maccoby, T. M. Newcomb, & E. L. Hartley (Eds.), *Readings in social psychology* (pp. 197-211). New York: Holt, Rinehart and Winston.
- Li Destri, A. M., & Dagnino, G. B. (2003, May). *Monotemporalism versus pluraltemporalism: Concepts of time and the strategic theory of the firm*. Paper presented at the In Search of Time conference, ISIDA, Palermo, Sicily.
- Low, A. (1993). *The butterfly's dream*. Rutland, VT: Tuttle Publishing.
- Low, A. (2002). *Creating consciousness: A study of consciousness, creativity, evolution and violence*. Ashland, OR: White Cloud Press.
- Marshak, R. J. (1993). Lewin meets Confucius: A re-view of the OD model of change. *Journal of Applied Behavioral Science*, 29, 393-415.
- Miller, D., & Freisen, P. (1984). *Organizations: A quantum view*. Englewood Cliffs, NJ: Prentice Hall.
- Nagel, T. (1974). What is it like to be a bat? *Philosophical Review*, 83, 435-450.
- Orlikowski, W. J. (1996). Improvising organizational transformation over time: A situated change perspective. *Information Systems Research*, 7(1), 63-92.

- Petranker, J. (2003a). Inhabiting conscious experience: Engaged objectivity in the first-person study of consciousness. *Journal of Consciousness Studies*, 10(12), 3-23.
- Petranker, J. (2003b). *What is creative inquiry*. Retrieved November 30, 2003, from www.creativeinquiry.org/what-is/
- Porras, J., & Collins, J. (2002). *Built to last*. New York: HarperBusiness.
- Porras, J. I., & Silvers, R. C. (1991). Organization development and transformation. *Annual Review of Psychology*, 42, 51-78.
- Purser, R. E. (2002). Contested presents: Critical perspectives on "real time" management. In B. Adam, R. Whipp, & I. Sabelis (Eds.), *Making time: Time and management in modern organizations* (pp. 155-167). Oxford, UK: Oxford University Press.
- Purser, R. E., Bluedorn, A., & Petranker, J. (2004). Time and causes of flow in organizational change. In R. Woodman & W. A. Pasmore (Eds.), *Research in organizational change and development* (pp. [000-000]). Greenwich, CT: JAI.
- Purser, R. E., & Petranker, J. (2000, August). *Timescapes in management*. All-Academy symposium presentation at the Academy of Management conference A New Time, Toronto, Canada.
- Robertson, P. J., Roberts, D. R., & Porras, J. I. (1993). An evaluation of a model of planned organizational change. In R. W. Woodman & W. A. Pasmore (Eds.), *Research in organizational change and development* (Vol. 7, pp. 1-39). Greenwich, CT: JAI.
- Sanders, T. I. (1998). *Strategic thinking and the new science*. New York: Free Press.
- Sastry, M. A. (1997). Problems and paradoxes in a model of punctuated organizational change. *Administrative Science Quarterly*, 42, 237-275.
- Scharmer, C. O. (2000, May). *Presencing: Learning from the future as it emerges*. Paper presented at the Conference on Knowledge and Innovation, Helsinki School of Economics, Finland.
- Scharmer, C. O. (2002). Presencing: A social technology of freedom. *Trigon Themen*, 2, 1-4.
- Schreyogg, G., & Noss, C. (2000, August). *Reframing change in organizations: The equilibrium logic and beyond*. Paper presented at the annual meeting of the Academy of Management, Toronto, Canada.
- Schutz, A. (1972). *The phenomenology of the social world* (G. Walsh & F. Lehnert, Trans.). London: Heinemann Educational Books. (Original work published 1932)
- Senge, P. (1990). *The fifth discipline*. New York: Currency-Doubleday.
- Simon, H. A. (1976). *Administrative behavior* (3rd ed.). New York: Free Press.
- Stacy, R. (1996). *Managing the unknowable*. San Francisco: Jossey-Bass.
- Toffler, A. (1970). *Future shock*. New York: Bantam Books.
- Torbert, W. (2002). *Learning to exercise timely action now*. Retrieved November 30, 2003, from torbert@bc.edu
- Tulku, T. (1987). *Love of knowledge*. Berkeley, CA: Dharma Publishing.
- Tulku, T. (1994). *Dynamics of time and space: Transcending limits on knowledge*. Berkeley, CA: Dharma Publishing.
- Tushman, M. L., & Romanelli, E. (1985). Organizational evolution: A metamorphosis model of convergence and reorientation. In L. L. Cummings & B. M. Staw (Eds.), *Research in organizational behavior* (Vol. 7, pp. 171-222). Greenwich, CT: JAI.
- Van de Ven, A. H., & Poole, M. S. (1995). Explaining development and change in organization. *Academy of Management Review*, 20, 510-540.
- Varela, F., & Shear, J. (Eds.). (1999). The view from within: First-person approaches to the study of consciousness [Special issue]. *Journal of Consciousness Studies*, 6(2/3).
- Varela, F., Thompson, E., & Rosch, E. (1991). *The embodied mind*. Cambridge, MA: MIT Press.
- Wiebe, E., & Gordon-Biddle, K. (2002, June). *Change in time, time in change: Addressing temporal dualism in the study of organizational change*. Paper presented at the Dynamic Time and Creative Inquiry in Organizational Change conference, Essex, MA.
- Weick, K. E. (1979). *The social psychology of organizing* (2nd ed.). Reading, MA: Addison-Wesley.
- Weick, K. E., & Quinn, R. (1999). Organizational change and development. *Annual Review of Psychology*, 50, 361-386.
- Weisbord, M. (1988). *Productive workplaces*. San Francisco: Jossey-Bass.
- Wheatley, M. (1992). *Leadership and the new science*. San Francisco: Berrett-Khoeler.