# The Episodic Spiral Model: A New Approach to Organizational Processes

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## ABSTRACT

**Purpose:** This article seeks to develop a new model for depicting organizational processes: the Episodic Spiral Model (ESM).

**Design/methodology/approach:** Based on a strong process view as the orienting paradigm, we demonstrate the need for the ESM by discussing the shortcomings of two specific spiral types in the organizational literature-the knowledge creation spiral and the efficacy spiral.

**Findings:** A review of each spiral type through the lens of nonlinear assumptions reveals the treatment to date of organizational spirals as uni-directional and insufficient for understanding organizations. We propose that managers must undertake a paradigm shift in order to gain a greater awareness of both the environment in which they operate, as well as their process actions. To facilitate this shift, the ESM depicts choice points, chosen and rejected trajectories, and upward and downward environmental-drafts, as well as a multi-dimensional environment, as a way of re-conceptualizing approaches to space, time, and change in organization studies.

**Originality/value:** We propose that our model provides a way for scholars to enhance the study of organizations by 1) Understanding that organizations exist in a more dynamic environment than previously studied, 2) Recognizing that the organization has a wider range of choices available, and acknowledging the long-lasting ramifications of both choices made and choices

discarded, and 3) Obtaining a more comprehensive look at the way the organization moves through space and time at any given moment. Taken together, we hope that these contributions allow organizational scholars a new approach to theorizing, exploring, and writing about the organizations they study.

## INTRODUCTION

How can the field of organizational studies cultivate nonlinear models of processes? More academic scholars are now "favoring conceptions of change and pluralism that are more consistent with nonlinear notions like chaos and complexity, as opposed to a more Newtonian view of the world" (Eisenhardt, 2000: 703). The spiral is an increasingly popular way to model nonlinear organizational activities. However many accounts privilege either an upward or downward direction (Nonaka, 1994; Lindsley, Brass, & Thomas, 1995), clockwise or counter-clockwise rotation (Minahen, 1992), or amplifying or counteracting turn (Minahen, 1992) to model organizational activity. Could it be that spiral processes are nonlinear and multidirectional?

Linear, 'Newtonian' conceptualizations of the organization fail to realistically explain organizations and the environments in which they operate (Eisenhardt, 2000). Particularly, linear theories tend to portray a static view of space, time and change, thereby inhibiting them from being able to acount for dynamic and pluralistic processes in organizations. Nonlinear, spiral conceptualizations are increasingly being proposed as an alternative to this linear thinking, many of which partially overcome linear assumptions. For example, Weick and Quinn (1999: 382) posit that "…the trajectory of change is more often spiral or open-ended than linear." However, there are at least two important obstacles in theorizing about spirals.

First, as we move from linear to spiral models, problems arise with how to reconceptualize space and time to incorporate a dynamic and pluralistic reality in order to move beyond the duality of theorizing spirals as either upward or downward forces. Second, spiraling events are not without context. In our view, there needs to be theorizing about the way in which organizations change in space and time, which we believe can best be described as a spiral rather than as a linear or recurring cyclical process. Although space, time, and change alternatives have more recently begun to receive attention in the organizational sciences (e.g., Eisenhart, 2000; Wiebe, 2010), their roots date back to Mead's (1932) calls for a re-consideration of space in relation to time-duration, a passage in the moving present, rich in novelty. Recent scholars (e.g. Bargal, 2012) demonstrate how Lewin's (1938, 1951) landscape conceptualization also puts space in relation to time.

In understanding the move toward looking at organizational activity as a spiral process in space and time, we consider the criticisms of a 'general linear reality (GLR)' worldview (Abbott, 1988). In addition, and in response to repeated calls (e.g., Bettis & Prahalad, 1995; Burrell,1992; Filipcová & Filipec, 1986; Meyer, Gaba, & Collwell, 2005), we develop a spiral alternative to linear and cyclical conceptions of space, time, and change. Simply put, "complex [adaptive] systems generally exhibit nonlinear behavior" (Bettis & Prahalad, 1995: 11, bracketed addition, ours). The ability of individuals to access the spiral as a more dynamic model for understanding such complex organizational systems is a difficult but necessary challenge (Burrell, 1992) to which we wish to respond. The argument and accompanying model we construct upon these alternative assumptions is the main contribution of our article. We propose that our model provides a way for scholars to enhance the study of organizations by 1) Understanding that

organizations exist in a more dynamic environment than previously studied, 2) Recognizing that the organization has a wider range of choices available, and acknowledging the long-lasting ramifications of both choices made and choices discarded, and 3) Obtaining a more comprehensive look at the way the organization moves through space and time at any given moment. Taken together, we hope that these contributions allow organizational scholars a new approach to theorizing, exploring, and writing about the organizations they study.

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The article is structured as follows: First, we discuss the 'general linear reality' (GLR) assumptions prevalent in the organizational sciences today and what they mean in practice. Using a strong process perspective (Van de Ven & Poole, 2005; Tsoukas, 2005; Tsoukas & Chia, 2002), we then discuss GLR assumptions in relation to two types of spirals common in the literature: knowledge and efficacy spirals. Our goal in reviewing these two specific spiral types is to point out that spirals are being theorized dualistically, as either upward or downward, using uni-directional, structural models. This results in considerable limitations. Next, we discuss how space, time, and change can be conceptualized to move beyond these assumptions. We then introduce our alternative, the Episodic Spiral Model (ESM) that reconsiders space, time, and change in a strong process perspective of organization. Subsequently, we consider how researchers seeking to move beyond a linear worldview can apply the ESM to existing and future observations within organizations through an illustrative case study. Lastly, we explore the implications that the ESM model provides for the future study of organizations. We begin by reviewing typical linear assumptions used to model organizational reality.

## GENERAL LINEAR REALITY (GLR) ASSUMPTIONS

For the past century, organizational studies literature has been dominated by what Andrew Abbott (1981, 1988, 1990, & 2001) defines as a set of six "general linear reality" (GLR) assumptions:

1. That the social world consists of fixed entities with variable attributes.
2. That cause cannot flow from "small" to "large" attributes/events.
3. That causal attributes have only one causal pattern at once.
4. That the sequence of events does not influence their outcome.
5. That the "careers" of entities are largely independent.
6. That causal attributes are generally independent of each other.

In the fixed entity approach, only variables/attributes can change, such as size, governance, formalization, standardization, centralization, routinization, and technology, while organizations themselves remain interchangable, fixed entities. Sandberg and Tsoukas (2011:341) argue that scientific rationality, which often assumes that organizations are interchangable, "ignores the situational uniqueness that is characteristic of the tasks practitioners do." Rather than causal attributes being generalizable to all organizations, this would suggest that attributes for organizations are unique and individual, and can explain why firm performance is so difficult to predict. Similiarly, chaos in unique weather patterns makes the accurate prediction of long-term weather forecasts, including the exact occurrence and magnitude of a particular weather event, impossible with current technology. In the same way that weather 'performance' cannot be predicted, neither can organization performance. Both phenomenon contain unique, seemingly chaotic but nonrandom patterns which affect their predictability.

Marxian, Weberian, ethnomethodological, hermeneutical, and symbolic interactionist researchers are among those who reject the assumption of fixed entities, and they "all approach social causality in terms of stories, rather than variable attributes" (Abbott, 1988: 171), providing rich context and meaning to their studies.For these scholars, the social world is one of inter-connectivity and interpretation rather than fixed entities, leading to a much more fluid and evolving reality (e.g., Barad, 2007; Burrell, 1992; Deleuze, 1994; Eisenhardt, 2000; Feldman, 2004; Sandberg & Tsoukas, 2011; Tsoukas & Chia, 2002; Wiebe, Suddaby, & Foster, 2012). The relevance of this for today's organizations can be seen as a broadening of the scope of interactions, activities, and artifacts that may be understood as relevant for competing in a world of evermore closely interconnected processes.

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The second way in which GLR misconceives reality is that cause is seen as only flowing from large to small. Contrary to this belief, complexity and chaos studies highlight flow from small to large, as exemplified by the 'butterfly effect' (Bettis & Prahalad, 1995; Thietart & Forgues, 1995). Indeed, it is not unusual for individual or group action to influence the organization. For example, the small event of Sherron Watkins discovering an accounting irregularity spelled the beginning of the end for Enron – which at the time was one of the world's largest companies. This type of individual influence often exists within organizations, for example when small occupational stressors have a negative effect such that they result in either micro- (e.g., relationship breakdown and family discord) or macro-level (e.g., chronic illness/disease and strain on infrastructure) negative consequences (Grant, 2013).

Another misconception identified byAbbott states that scholars often assume that causal attributes are uni-directional and have only one causal pattern at once. This assumption is

challenged by scholars concerned with the issue of reverse causality, as well as more recent complex statistical techniques for assessing mediation, moderation, and moderated mediation (see Muller, Judd, & Yzerbyt, 2005). For example, if we know the rate of drowning deaths increases sharply as ice cream sales increase, we may assume that ice cream consumption causes drowning. This is the most simplistic evaluation of two causal attributes related to the same outcome. However, with a bit more logic, we understand that ice cream sales and increased swimming (and thus, potential drownings) are both attributes that occur in response to warmer temperatures – i.e., summer. In looking more closely at causal attributes, we can understand their multi-causality and even the potential for underlying additional variables (in this example, temperature and time of year). In addition, the notion of causal attributes being uni-directional runs counter to the concept of reciprocal determinism, which stresses the point that relationships between causal attributes are multi-directional (see, for example, Bandura, 1997 and Lindsley, Brass, & Thomas, 1995). Marxist dialectical causality models also reject this assumption, which can be very important for managers, as their actions may have unintended consequences. Often, an action that was intended to produce a particular result may yield that result, but may also yield other, unexpected, results. A realization that multiple consequences of a particular action will likely help managers to be better prepared for change in their organizations.

The fourth general linear reality assumption posits that the sequence of events does not influence their outcomes. Sandberg and Tsoukas (2011: 341) identify that such scientific rationality "abstracts away from time as experienced by practitioners." Historical studies, such as those of Alfred Chandler (1962), assume instead "a historical narrative [that] is organized around a central subject" (Abbott, 1988: 171). Understanding time and place as experienced by the

individuals living these experiences in organizations plays an integral role in understanding the range of alternatives open to those individuals and their organizations at any given moment. As Johns (2006: 389) notes, it is not that today's researchers are never studying context. Instead, "its influence is often unrecognized or underappreciated." Organizations that do not take the past sequence of events into consideration when making decisions risk losing valuable insight into how their decisions will be received, and perceived, in a given context.

In assuming that "carriers" of entities are largely independent, one would logically conclude that what one manager does will not affect another, and by extension, that what one business does will not affect another Sandberg and Tsoukas (2011: 341) believe that such scientific rationality "underestimates the meaningful totality into which practitioners are immersed." Further, a strong case can be made here that globalization has far reaching consequences for the interconnectivity of managers and the businesses that they run. Now more than ever, a failure to recognize the interdependence of the market will lead to a naïve position that leaves managers, their businesses, and society at large in a very vulnerable place.

The final general linear reality assumption identified by Abbott is that causal attributes are generally independent of each other. Although this would make the study of organizations much easier, "simplicity is elegant but often untrue" (Eisenhardt, 2000: 704). Rejecting the assumption that causal attributes are independent of each other opens up some interesting possibilities for why upward or downward trends can often be observed across an industry. Rather than one main cause, it seems more plausible that many causal attributes feed into each other to produce an upsurge or downsurge within an industry, and identifying these attributes may help to follow or avoid similar trends in the future.

In sum, while there may be instances where linear depiction is appropriate (e.g., linear hierarchical models that can distinguish between within and between group variance; Hofmann, 1997), strict adherence to the GLR assumptions neglects the majority of occurrences in organizations for which a linear depiction is inappropriate. In addition, there is the potential for managers to be unaware of nonlinear occurrences as they blindly follow 'business as usual' routines. Following GLR thought processes can also lead to situations where managers cannot understand why desired outcomes were not achieved by following a prescribed step-by-step plan. Breaking away from the GLR assumptions in favor of a strong process orientation allows for a more dynamic characterization of nonlinear organizational activity. Further, a strong process orientation provides the ability to recognize upward or downward surges in a market, as well as the ability to identify and implement a wider range of strategic options available at any given point in time.

In order to embrace a move beyond the GLR assumptions, this paper proposes a spiral alternative to understanding organizational processes. In order to support this spiral alternative, we will first discuss the way that spirals have previously been depicted in organizational studies literature. Because this literature varies greatly, we have chosen to focus on two prevalent spiral types. Although breaking away from GLR assumptions in some areas, these spirals also display shortcomings that are consistent with the GLR assumptions.

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## SPIRALS TO DATE: A CONSIDERATION OF TWO TYPES

Spiral theories have the ability to make significant strides towards overcoming the GLR assumptions identified by Abbott (1988). To date, however, spirals found in the organizational science literatures have been distinctly dualistic, either upward or downward. We demonstrate

this notion through the exploration of two specific types of spirals: knowledge creation and efficacy spirals, each of which are uni-directional spirals. We also recognize that while our focus will be on these two spiral types, many other uni-directional spirals exist in the literature for a variety of topics. For example, Andersson and Pearson (1999) and Brett, Shapiro, and Lytle (1998) consider downward spirals in addition to those of knowledge creation. More recently, Ferguson and Peterson (2015) considered downward trust spirals occurring in small groups. Examples of wholly downward spirals also exist in the strategy literatures (i.e., Hambrick & D'Aveni, 1988; Hambrick, Li, Xin & Tsui, 2001). Wholly upward spirals are also theorized in the literature. For example, Brousseau, Driver, Eneroth, and Larsson (1996) and Carson and Carson (1997) consider upward career spirals, while Halbesleben and Wheeler (2015) more recently used an upward spiral to conceptualize their research on the cyclical relationships among support, trust, and resource investment among co-workers.

From the above list of examples, we have adapted Eisenhardt's (1989) prescription to select cases that are 'polar types' to use as examples. While Eisenhardt's (1989) protocol was written for those undertaking case studies to inductively derive theory, we believe the suggestion to select cases which are opposite in order to enhance the generalizability of new theory across organizational types is fitting for our undertaking as well.

Thus, the following discussion considers one upward and one downward spiral type, critiquing each and ultimately noting where each type is consistent or inconsistent with the GLR assumptions. The exploration of each example will lead to our proposal of a new model to move beyond a uni-directional static spiral model towards a more holistic and accurate paradigm. The knowledge creation spiral is our chosen example of a wholly upward spiral, while the efficacy

spiral is our chosen example of a wholly downward spiral. Table 1 depicts the six key assumptions of GLR in relation to both the knowledge and efficacy uni-directional spiral examples.

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**Knowledge Management Spiral: A uni-directional, upward spiral type**

Knowledge creation spirals commonly refer to Ikujiro Nonaka's 'spiral of organizational knowledge creation,' containing the four stages of: 1) socialization, 2) externalization, 3) combination, and 4) internalization (SECI) (see Nonaka, 1994; Nonaka & Takeuchi 1995). Nonaka proposes that, "Dialectic thinking is a repetitive, spiral process in which affirmation and negation are synthesized to form knowledge" (1994: 25). Inkpen (1998), Inkpen and Dinur (1998), and Kim (1998) are among the scholars to have used Nonaka's knowledge spiral. Inkpen (1998: 76), for example, describes that, "As the knowledge spirals upward in the organization, it may be enriched and extended as individuals interact with each other and with their organizations." Acknowledging that individuals influence each other through interactions is one way in which the knowledge spiral partially overcomes the GLR assumptions.

Despite this partial movement beyond the GLR assumptions, the knowledge creation spiral continues to adhere to four particular GLR assumptions. First, Gourlay (2003) and Gourlay and Nurse (2005) challenge the SECI model for its ongoing tacit to explicit phases. In other words, as Tyler and Boje (2008) and Tsoukas (2003) contend, the knowledge creation spiral literature has a very questionable understanding and interpretation of Polanyi's (1966) 'tacit

knowledge' theory. In particular, it may not be quite so easy to move from tacit to explicit knowledge, nor to internalize and externalize it in the form of the neat recurrent cycles of SECI. In this way the knowledge creation spiral adheres to GLR assumption one, as it treats organizations as fixed entities with the variable attributes identified in the spiral, and only under the correct conditions can the SECI steps occur.

Second, the SECI 'knowledge creation' model is always upward-moving, with sequential, recurring phases. Because the model does not allow for deviation from these upward cycles, it is in fact a disguised linear model, rather than an actual spiral (Gourlay, 2003; Gourlay & Nurse, 2005). The knowledge 'spiral' takes for granted that the organization will progress through the SECI model as prescribed, and that through the 'phenomenon' which is the spiral itself, the organization's culture will be infused with knowledge creation and sharing (Hildreth & Kimble, 2002). However, any manager in an organization that has actually achievied Nonaka's integration phase could tell you that sharing knowledge is not a step-by-step 'beginning, middle, end' progression. Conflict and crisis is a part of the process and may even contribute to creating new knowledge, and this development will almost certainly deviate from the SECI model along the course of action leading to knowledge integration. As it stands, the knowledge creation spiral has not completely moved beyond GLR assumption three, as only positive 'flow' is permitted in a particular succession. Conflict and other sources of negative 'flow' (e.g., Elias, 2009; Kim, 1998) are neglected, as is research suggesting that creation can occur from negative interactions as well as positive, as in the case of creative deviance (Mainemelis, 2010). Moreover, as the knowledge spiral authors (Nonaka in particular) borrow heavily from Kitaro (1970/1933-34), who defined place and temporality from Heidegger's (1962) ontology

perspective, it could further be beneficial to re-theorize space, time, and change as occurring within a "field of motion" (Kitaro, 1970/1933-34: 117) with the potential for both upward and downward movement.

Third, Bereiter (2002) argues that the knowledge spiral does not address how knowledge extracted from context can be managed in different and dynamic environments. This is a problem since Nonaka's model is applied universally without addressing changing environmental conditions favoring more tacit or more explicit knowledge. In neglecting context, the knowledge creation spiral adheres to the fourth GLR assumption, as the sequence of external events does not influence the outcome of the SECI model. The knowledge creation spiral does not consider other patterns of occurrence from similar or disimilar processes.

Lastly, the knowledge creation spiral partially adheres to GLR assumption five. While it does allow the 'careers' of entities to interact within groups, between group interaction is minimized. As Jackson (2005: 193) points out, organizations using the knowledge creation spiral are self-referential systems where "Each unit, like an autonomous cell, controls all changes occurring continuously within itself." This conceptualization of the organization as self-referential 'pieces' neglects the interdependence of entities across all organizational boundaries. Such a self-referential system also neglects the unfolding reciprocal processes at work within and across the organization.

In sum, the knowledge creation spiral adopts a weak process view that conceptualizes knowledge as a succession of recurring cycles, rather than muliple processes of flux and change. Its uni-directional, wholly upward nature may benefit from a consideration of the counteracting forces of space, time, and change, and the potential for multi-directionality. Such 'stage models'

as those used to characterize the knowledge creation spiral, and other spirals (Guy 1989; Weitzel & Jonsson, 1989), do move beyond the GLR in describing organizational activity as a spiral. However, the process view presented by these scholars is weak, where simple stage-by-stage succession omits the possibility of understanding multiple, dynamic, and simultaneous processes. We now turn to the efficacy spiral, typically depicted as downward (see Hostager, Neil, Decker, & Lorentz, 1998, for an exception).

**Efficacy Spiral: A uni-directional, downward spiral type**

Bandura (1997) has argued against conceiving of efficacy beliefs in a linear fashion, and the efficacy-performance spiral proposed by Lindsley, Brass, & Thomas (1995) does, with limited success, attempt to move beyond the assumptions associated with the GLR. In particular, Lindsley, Brass, & Thomas' propositions address the ways in which feedback impacts efficacy spirals, thus partially overcoming the third GLR assumption that causal attributes are uni-directional and have only one causal pattern at once. Despite this partial movement beyond the GLR assumptions, the efficacy spiral continues to adhere to three particular GLR assumptions. First, the efficacy-performance spiral is narrow, partially adhering to the first GLR assumption, in that it treats efficacy and performance as being the only two variables within a downward spiral. For example, it is proposed that a decrease in self-efficacy will be accompanied by a similar decrease in performance, which in turn, results in a further decrease in self-efficacy. Lindsley et al. (1995: 645) refer to this relationship as being "deviation-amplifying," which we believe is limiting in that there is no room for the organization or other attribute to impact this relationship.

Second, although Lindsley et al. (1995) discuss the relationship between efficacy and performance in terms of spirals, the spiral itself is somewhat linear in that efficacy leads to performance and vice versa. Lindsley et al. (1995: 651) propose that this linearity is preferred, as "self-correcting cycles are preferable to both upward and downward spirals." This argument seems to adhere to the third GLR assumption relating to causal attributes only having one pattern at once. Once a spiral process is identified, the authors see it as continuing, rather than allowing for the possibility that it is simultaneously impacted by other attributes that would cause different patterns of events to unfold.

Third, while the downward spiral proposed by Lindsley et al. (1995) does place an emphasis on internal personal factors (i.e., self-efficacy), as well as behavioral factors (i.e., performance), environmental events are not emphasized, nor is the issue of multi-directionality. These are weaknesses associated with GLR assumption four (sequence of events does not influence outcome). Although the sequence of events may initiate the downward efficacy spiral, subsequent events within the environment seem more or less irrelevant or 'fixed' as individuals spiral downward, losing more and more self-efficacy. They do not take into account the sources of efficay and their multi-level and bi-directional relationships with self-efficacy and performance. As Bandura (1997: 7) has written, "Because most behavior is codetermined by many factors operating interactively, given events produce effects probabilistically rather than inevitably within the reciprocally determined system." Therefore, while Lindsley et al. do allow for sequence to influence outcome, we believe the sequence – outcome relationship is far more complex.

Lindsley et al. (1995) discuss the spiral as an uncontrollable freefalling occurrence in which an individual is caught. However, it might be more useful to recognize a spiral as a natural process that is able to be influenced. While never completely controllable, an awareness of the forces acting on individuals during the decision-making process within the spiral provides an increased measure of control not allowed for in Lindsley et al.'s (1995) depiction.

In order to embrace a move beyond these GLR assumptions, and to move from a weak process view (Lindsley, Brass, & Thomas, 1995; Nonaka, 1994) to a strong process view (Van de Ven & Poole, 2005; Tsoukas, 2005; Tsoukas & Chia, 2002), it is important to more fully understand spirals in the context of space, time, and change. Therefore, we next discuss an alternative approach to spirals and its impact on conceptualizations of space, time, and change in an effort to move beyond traditional GLR assumptions.

**The need for a new spiral approach: Space, time, and change beyond GLR**

Reviews of the knowledge creation and efficacy spirals reveal that both spiral types are lacking in important areas for accurately explaining organizational life. While we chose these two specific spiral types as examples to illustrate their shortfalls in explaining organizational activity, the problems recognized here are prevalent more generally in attempts to depict and understand organizational activity. The main problem is that spirals are typically seen as being either upward or downward. This conceptualization oversimplifies what we understand to be a dynamic and complex process. We define a spiral as revolving motions (acting and counteracting) around a center or axis, contributing to a trajectory of movement through its environment. Rather than linear or cyclic recurrent events, we understand spirals as having diverse movements in time and space. In essence, we are attempting to advance spiral theory by

contextualizing the spiral in a multidimensional environment that takes the evolving nature of space, time and change into consideration.

Our definition builds on the work of Merleau-Ponty (1962) and Deleuze (1994). First, Merleau-Ponty (1962: 315), who conceives of "… a spiral revolving round its centre…," also recognizes the complex nature of the spiral, due to the fact that our five senses cannot completely grasp the dynamics of space. Merleau-Ponty attributes this inability to grasp such dynamics as being due to the fact that space is "enveloped in one and the same temporal wave" (1962: 321). Extending this notion to our conceptualization of a spiral, an individual will have a difficult time grasping the facets of his or her environment because these facets occur simultaneously and change throughout time. Second, we build on what Deleuze (1994: 21) terms "left and right," which identifies the posibility for amplifying and counteracting forces occuring simultaneously within the spiral. This is consistent with Prigogine and Stengers (1984: 266) contention that complexity processes in a spiral are not the same as repeating phases in a cycle. Although we believe that spirals can provide a conceptual framework for extending these concepts, there is a need for a more holistic model in order to benefit from the advantages that dynamic spiral thinking holds; one that provides a strong, rather than weak, process view of the organization.

In integrating the existing critiques of a dualistic linear/cyclical depiction of the organization, we also considered the cycles inherent in structuration theory (Giddens, 1984; Feldman, 2004; Orlikowski & Hoffman, 1997; Orlikowski & Yates, 2002). Seeking to go beyond the narrow conceptualizations of time (e.g., clock time) set forth by these theories (see Adam, 1990, for a brief critique), we chose to explore the neglected temporality of current research (Adam, 2004). To do so, we draw primarily from the work of Mead (1932) and Lewin

(1938, 1951) to put forth a more dynamic depiction of organizational activity. Indeed, Mead (1932) and Lewin (1938) debunked the GLR 50 years before Abbott (e.g., 1988) proposed debunking it.

A paradigm shift from GLR to a strong process view may helpfully reconsider space, time, and change based on the work of such scholars as Mead, Lewin, Waddington, Kaufman, and Sheldrake. If scholars can better understand the dynamics of space, time and change within which the organization operates, it may provide an opportunity to: recognize a wider range of choices available to the organization; identify various upward/downward forces acting on the organization at a particular point; and explain ways in which the organizaton can more easily circumvent the trappings commonly associated with GLR. Such circumventing will allow for better organizational processes.

Both George and Jones (2000) and Adam (1998) discuss the need for context in space and time. Spirals are proposed by George and Jones (2000) as one of six time dimensions which may contain both clock time and subjective 'experience' time. Further, George and Jones (2000) propose that such dimensions of time (the 'when' of theory building) must be included in the 'what,' 'how,' and 'why' of theory building in order to adequately create, define, specify and explain relationships among constructs. Adam (1998) identifies that we cannot 'de-temporalize' or 'de-contextualize' our efforts as scientists. Our mere existence in the world, which we seek to define, means we are vulnerable to the very constructs we seek to understand. This 'inescapable connectivity' undermines the GLR's assumption that third-party science is possible and necessitates a more encompassing understanding of the scientist's participation in the world, as well as a deeper understanding of the individual's participation within an organization. This

leads us to propose that an effort needs to be made to consider the movement, in space and time, of individuals through their organizational trajectory.

**A multi-dimensional, multi-level understanding of space, time and change**

Each organization, within itself, contains space, time, and change. In addition, the organization is simultaneously operating within a wider external environment also characterized by space, time and change. To date, depictions of organizational activity have been flat, neglecting the totality of this environment. Therefore, it is not enough to conceptualize the space, time and change of the organization's internal spiral without also noting the space ('landscape'), time ('timescape'), and change ('performance under conditions of change and fluidity') of its external environment. Consider the following example: an organization has its own measures of space (e.g., the individual's physical place in the office), time (e.g., timesheets), and change (e.g., a new marketing plan). The environment in which this spiraling activity occurs is what allows the spiral to be multi-dimensional, as it also has landscape (the organization's market), timescape (the series of events culminating in a new store opening), and performance under conditions of change and fluidity (economic fluctuations).

Therefore, when we present space, time, and change in this section, we are speaking of these occurring within the organization's spiral. Later, when we present landscape, timescape, and performance under conditions of change and fluidity, we are speaking of the three dimensions of the organization's external environment. It seems appropriate to clarify this here, so as to provide our reader with this distinction up front.

A consideration of the spiral and its environment necessitates a multi-level analysis. On this point, we do agree with and utilize the guidelines prescribed by Lindsley, Brass, and Thomas

(1995:7), who articulate that "many different factors may trigger a spiral at different levels of analysis" in discussing the occurrence of spirals. Further, Adam (1990: 162) notes that the use of 'levels' to depict the different ways in which we experience time, "needs to allow for everything to be connected and implicated without a claim of pre-eminence of any one." Also, in accordance with the scholars Hambrick, Li, Xin & Tsui (2001) we understand there to be an interplay between individual, group, organizational and interorganizational levels. This interplay occurs because of multiple simultaneous connecting activities, rather than isolated critical incidents. Therefore, analysis cannot be isolated to a particular level; instead it must be seen as occurring across individual, group, and organizational levels. With this understanding, let us now examine the concepts of space, time and change (within an organization) via a more directed discussion of each.

**Space:** In response to Einstein's Theory of Relativity, Lewin (1938) developed his notion of Hodological Space (i.e. the study of pathways through a *landscape*). He proposed this alternative to Euclidean Space (i.e., geometry based on three-dimensional space) because he was interested in examining a more ontological meaning of space. In line with this understanding, the Lewinian Equation takes into account that an individual's behavior is determined by both the situation and the individual's predispositions to act in a particular manner. The power of the situation, and the situation's ability to drastically impact human behavior among diverse individuals, has also been demonstrated in empirical studies (e.g., Asch, 1951; Milgram, 1974; Haney, Banks, & Zimbardo, 1973). Interestingly, while the situation itself is believed to influence behavior, the individual's interpretation of the situation is also understood as impacting social behavior (Lewin, 1951).

Following Lewin, Waddington (1940, 1962) developed a *landscape theory* to explain how organisms choose a 'root or path' that requires the lowest amount of energy and the path of least resistance. In sum, Lewin's theory influenced Waddington's causal analysis of paths, which inspired Kaufman (1993, 1995) and Sheldrake (2009) to consider how individuals and organizations can become caught up in pathway processes that include resistance to movement and require energy expenditures. This article proposes that organizations need to recognize, and overcome, reliance on the 'path of least resistance.' Although it may require more energy for individuals to consider a wider range of options, especially in the external landscape, the benefits can also be far reaching-- for example, taking advantage of an upsurge in a market (which may require new investment), or avoiding downsurges (which may require redirecting products or services).

Afuah and Tucci (2012) apply Kaufman's (1993, 1995) spatial landscape to acts of search and problem-solving in evaluating 'crowdsourcing' (the act of choosing an individual for a specific task). They point out how decision-makers' current positions in *the rugged landscape model* are affected by time, a history of prior choices, and anticipated futures, thus indicating the need for a simultaneous understanding of time *and* landscape when making decisions.

**Time**: Mead's (1932: 36) conceptualization of 'time' goes against the GLR model because of his understanding that "the future is continually qualifying the past in the present." Mead (1932: 21-26) was critical of Bergson's (1911) "spatialization of time" because it turned the structure of a passage, understood here as spirals, into an abstraction or "psychological illusion." What we can extract from this is that past, present and future belong to a continuously spiraling passage in the moving present. This continuous activity was the subject of recent work

on strategic change, with the authors reporting that total inactivity is so rare that the normal state for an organization is one of change with varying duration and intensity (Dominguez, Galan-Gonzalez, & Barroso, 2015). Further, calls to treat change as a 'continuous process' as opposed to 'detached episodes' have been proposed by top management scholars (Pettigrew, Woodman, & Cameron, 2001). This renewed attention to time and its relationship with change alters the manager's old adage "Those who cannot remember the past are condemned to repeat it" (Santayana, 1905: 284) into something along the lines of: "those not paying attention to episodes in the present can be blind to other pasts and possible futures." Indeed, Mosakowski & Earley (2000) suggest that managerial awareness of time perceptions may result in less 'surprise' behavior on the part of subordinates. For organizational studies scholars, this understanding of time calls for a reorientation in the way we conceptualize the phenomenon, connecting it with the surrounding internal and external organizational environment of which it is part as well as the internal time kept by the organization's actors and the social time kept by its groups (Huy, 2001). By doing this, scholars may enhance their ability to more fully understand and explain past organizational events, as well as understand and explain a broader range of opportunities for organizations in the future.

**Space, Time, and Change:** Space and time exist within change (activity); they are not external 'markers' (Sherover, 2003) used to explain change (activity). For example, Ancona et al. (2001) present 'activity mapping' as a way to understand how actors create and navigate different temporal zones. In this way they present space and time as being connected with change (activity). Similarly, Tsoukas and Chia (2002) propose that organizational change must be examined from within, not as an abstracted concept of time and space imposed on the activity of

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change to explain it. This necessitates a move beyond the GLR assumptions that involve a deterministic set of 'rules' constraining both space and time, and neglect the interaction of the two. If, however, space and time are considered simultaneously as 'spacetime,' (thus highlighting their interconnectivity) it may be possible to more fully understand change processes in their proper context, and thus gain more meaning from observations that are made.

We have now discussed the shortcomings of the GLR assumptions, including a review of two alternative spiral types. We have also established what a move away from general linear reality can mean for organizational activity, occuring as a spiraling change process within space and time. Taking this into consideration, we now propose a multi-dimensional spiral model as a new approach to studying organizations within their environments. We believe that this model can provide a more complete understanding of the way organizations navigate through time and space and aid in identifying how organizations may be able to effectively break away from 'business as usual' routines.

## THE EPISODIC SPIRAL MODEL

### Components of the ESM

The episodic spiral model is one of organizational and environmental occurrences that consist of choice points, chosen trajectories, discarded trajectories, and changes in performance occuring in an environment defined by three dimensions: landscape, timescape, and drafts within spacetime. The ESM is also consistent with Weick and Quinn (1999) in that the model itself is one of continuous change, with "fast mini-episodes of change" (Weick & Quin, 1999: 375) occurring at each choice point in the organization's environment. Thus, the ESM is representative of continuous organizational change which is "ongoing, evolving, and

cumulative" (Weick & Quinn, 1999: 365). Each choice point additionally represents an opportunity for episodic change that is "infrequent, discontinuous, and intentional." Refer to Figure 1 for an illustration of each component.

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Insert Figure 1 about here

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**Choice points**: Choice points represent the range of options available at the intersection of any given place in space (landscape) and time (timescape). Each choice made by a member of an organization will help to propel that organization to a new turn in its spiral process as it responds to, and impacts, environmental changes. Choice points are consistent with Mead (1932) and Lewin's (1938) notion of the moving present, where newness impacts our understanding of past and future events. Choice points can further be supported by Barad's (2007: 182) contention that "…each moment is alive with different possibilities for the world's becoming and different reconfigurations of what may yet be possible." Extending the work of Mead and Lewin, our model theorizes choice points at which the manager(s) of an organization arrive. There are multiple possibilities for the organization's 'becoming,' with the choice point a culmination of influencing forces that will propel the manager into choosing one of these possibilities. One of these culminating forces is indeed the 'time' of the organization, including its history and those espoused plans for the future. 'Choice points' represent opportunities for management to alter the spiral, and thus directionality in spacetime.

**Chosen trajectory:** The chosen trajectory is defined as episodes spiraling from one set of choices to the next, through history, affecting strategic choice. It is the chosen course of action.

Lewin's (1951) work on *Field Theory* is relevant to trajectories (i.e., chosen and discarded) in that one's life space includes those trajectories taken and those trajectories not taken. Choice points of speech and action are numerous along the chosen trajectory, and a derivation from the chosen trajectory can occur at any such choice point, creating an episode in a similar, or completely new direction

As the scholar Etienne Wenger so elequently states: "It is a trajectory in progress that includes where you have been and where you are going, your history and your aspirations. It brings the past and the future into the experience of the present." (Wenger, 2003: 94) In relation to the spiraling of the trajectory, Pondy (1967, 1992) proposed that felt and perceived conflicts escalate or deescalate, depending on suppression and attention-focusing processes and conflict management resolution techniques in play. Because individual managers make decisions in unique and contested contexts based on combinations of experience, knowledge, and information, concord and conflict accompanies strategic and even routine decision-making. Additionally, because there are a continuous number of interactions among individuals, 'complexity of meaning' in this web of interaction expands. Indeed, Czarniawska (2004: 12) terms such interactions 'action nets' and argues that even the most established of these are "constantly remade and renewed" in time and space. These 'encounters' (Heidegger, 1962) occur across the organization, at every level, and contribute to the dynamic nature of the episodic spiral.

**Discarded trajectory:** Defined following Heidegger (1962) as a null set of courses of action, or trajectories not taken, but still co-present. An example is opportunity costs and speech acts such as, "How would our operations be if Joe had not been let go?" The null set of paths not

taken is neglected, yet still exists within a person's consciousness. This represents the null set of alternatives discarded by the organization's decision makers, yet still remaining. Each choice point represents an opportunity to choose a particular trajectory. Once chosen, the discarded choices compile to form trajectories not taken by the organization. Although discarded, these trajectories still may be able to exert influence on future choices.

**Change in performance:** Performance is understood here as an inclusive, and process-oriented, view of organizational performance – gains or losses at an individual or group level contributing to the overall standing of the organization (Bandura & Wood, 1989), relative to internal expectations and the external environment over time. Change in performance is further defined as the outcomes of strategies enacted in the environment (Bandura, 2000). Higher peaks have greater performance opportunities, but steeper peaks have higher costs, and more organizations attempting to get there. As organizations spiral through time along their chosen trajectory, change in performance can be seen as the success or failure of the organization relative to the industry or industries in which it operates. This performance is the interplay between individual choices made within the organization at choice points, and the environmental conditions discussed below. Lewin (1951) was concerned with forces and locomotion through one's life space (i.e., the individual and his or her interpretation of the psychological environment), and in particular, the impact of forces acting on the individual at any specific point in time. Lewin (1951) conceived of people as being located with a specific psychological space, within which they are limited to move in specific ways, as dictated by forces operating within that space. This notion supports our contention that performance is the interplay of individual choices and environmental conditions.

In increasing the awareness of managers, the ESM can become a tool for influencing organizational change via decision-making which takes into account the components of the model, including time and momentum. The focus is on awareness and understanding, rather than measurement, as unique situations yield uniqe results. In other words, contrary to the static spirals reviewed above, contextual elements prevent the effect of any particular occurrence from being exactly the same as another, even if the content of the occurrence itself is the same. Each choice made, by individuals and groups within an organization, is unique in space and time, and has a  a certain degree of momentum. While traditional performance indicators may help to inform the understanding of choices available, it is important that organizational members also look at their environment and understand the context in which different choices become available, and the range of consequences that a particular choice may have.

As choices are made, the confluence of spiraling events within the organization pick up momentum once actions have been taken, which is then carried in a upward or downward direction, thus leading to a change in performance at an organizational level over time. In this context, choosing not to act on information received can have just as much of an impact on the direction of the organization as taking action. In agreement with chaos theory, it is our contention that small decisions can lead to major changes in performance, based upon the unique environmental context in which the decision is made.

**Environment: Landscape, timescape, and drafts**

Next, special attention is given to the environment of the ESM, which includes three dimensions: landscape (space), timescape (time), and drafts (change). Each of these is discussed in turn to provide a greater understanding of the ESM.

**Landscape:** Landscape is defined as a dimension of the environment, the contextual 'playing field,' or physical *space* within which the episodic spiral is situated. Like Emery and Trist (1965), we are looking at an environment of action with causal textures, and want to understand the nature of turbulence in interconnected environments. Environment here is not just inter-organizational, but is composed of processes that constitute what Waddington, Kaufman, and Sheldrake call landscape. From a strong process perspective, this landscape of action is an unfolding of episodic events, taking into consideration situations, moves, agents, intentions, and goals (Tschuggnall & Welzer, 2002). This is not one universal performance landscape, but rather a dynamic space changing over time, where size, location, personal networks, financial resources, et cetera all impact the range of choices available to actors within their respective organizatons at any given moment.

**Timescape:** Timescape is defined as measured time, timing of strategies, retrospective-histories, and anticipated-futures (Adam, 1998). Mead (1932) and more recently Adam (2004) propose that the past, present, and future are constantly in interplay.

This raises the problem of how to treat spatial landscape in relation to timescape. Sherover (2003:112) looks at places in time, such that "A date is nothing temporal." Rather than a day in the calendar year locating some "mythic point 'in' time" (Sherover, 2003: 112), these markers are ways to define the relationships existing among events. A particular organization may publish its founding as date 'X.' This date is actually a way to describe a culmination of episodic events which led to the organization first opening its doors for business. The founding itself is not located along a sequential timeline, but is a part of a broader, interrelated set of events, or what Heidegger (1962) calls datability.

This aligns with the view of Sherover (2003) that time is not merely an external marking system imposed on the phenomena in which we are participants (in this case, the organization). Instead time is inherent in the phenomena itself. Sorokin and Merton (1937) recognize this conceptualization in their proposal that time be understood not as a measurement of equal values, but as containing subjective consideration. The past can not be considered separate from the present, and the past "is continuously reconstituted with references to the future" (Adam, 2004: 65). Thus, any conscious decision by managers "fundamentally embraces both past and future" (Adam, 2004: 65). Such a consideration, then, can actually become a source of competitive advantage, as described by Suddaby, Foster, and Trank (2010:160), whereby the organization can use its history as "an organization resource designed to confer identity, motivate commitment, and frame action." This is an example of how individuals can grapple with a past that is ever-present and deliberately use it to their advantage.

The timescape itself is not a static, fixed, stagnant point in time. Treating progression through the landscape as a linear path, then, is incorrect. As stated by Abbott "causal paths aggregate a set of stories… But aggregating these sequences throws away the narrative patterns that link the elements into individuals' stories" (1988: 178). The 'patterns' discussed by Abbott are not uni-directional, and these non-linear pathways play an integral role in every unique organizational storytelling of present, past, and future. For purposes of our model we will refer to these non-linear 'pathways' as 'trajectories,' in order to emphasize their non-linearity, as well as the concept of movement that time necessitates.

Laboring in cycle time, methodically trying to control the future by repeating patterns of the past is a choice often made by bureaucratic enterprises. Such strategies work well in linear,

flat, landscapes as exemplified by Emery and Trist's (1965) observation that where resources are evenly or randomly clustered or distributed, linear-sequence or cyclical-repetition strategies of movement are optimal.

Further related to the intersection of time and momentum is the concept of human deliberation. As humans leading an organization, managers have the opportunity to alter their temporal frames of reference (past, present, or future), thereby altering the options available (Emirbayer & Mische, 1998). However, as Sandberg and Tsoukas (2011) point out, managers make decisions in the moment, as they are entwined with their practice until a breakdown occurs which allows for some level of detachment. Recognizing this, Wiebe, Suddaby, and Foster (2012: 238) provide an approximation of what the ESM depicts: "Time, then, forms an important basis for linking momentum, organizational change, and human agency."

**Updraft/Downdraft:** An updraft is defined as multiple organizational trajectories converging in space and time to create upward surges in the environment. Conversely, a downdraft is defined as multiple organizational trajectories converging in space and time to create downward surges in the environment. Like a glider catching a current of air and traveling upon it, once started, drafts carry momentum that propel them up or down, creating the peaks and valleys in the Episodic Spiral Model. Momentum as it is currently depicted in the literature is static - it is 'inherent' (past), 'exploratory' (future), or 'emergent' (present) (Wiebe et al., 2012). Such treatment neglects continuous change and the presence of past, present, and future simultaneously within the flow of momentum, or 'momentum in the flow of time' (Wiebe et al., 2012). Recognizing the way in which momentum affects the environment through updrafts and

downdrafts may help individuals to decide which spiral trajectories are most viable at any given point in space and time.

**Spacetime:** Spacetime is the concept that every choice we make is made in a particular place in both space (landscape) and time (timescape). In our model above, each square on the grid represents a unique point in spacetime. When making choices, space and time are occurring simultaneously, and this is important to remember when taking options into consideration. Making a decision today would have very different consequences if the same decision was made 50 years ago – time evolves, and creates new conditions. Similarly, if two people simultaneously choose to start a small business (one in a big city, and one in a small town), the condition of space will be very different, and will greatly impact the choices that need to be made. It is easy to see the impact of space and time when separated, but it is also essential to remember that they do not occur in isolation of one another. We believe that viewing space and time together as spacetime will not only help to overcome GLR, but it can also help scholars to better understand the complex reality in which all choices are made.

Landscape (space) and timescape (time) interact, as those applying Einstienian spacetime, such as Mead (1932) and Bakhtin (1981), have suggested. This change is continuous, as the landscape is ever-changing and 'stretching-along.' For Shipp and Jansen (2011), person-environment fit is constantly being crafted and re-crafted as a narrative. It is important to recognize that individuals do not "experience current fit in isolation from fit at other points in time", rather, they " recollect and anticipate fit, creating a story of fit over time that influences current attitudes and behavior" (Shipp & Jansen, 2011: 27). Shipp and Jansen's treatment of fit crafting as narrative reflects Mead's (1932) simultaneous presence of past, present, and future,

and continuous change occurring within this intersection. Context changes across space and time, and the landscape navigated by the organization is anchored by the peaks and valleys (drafts) of the environment and the temporal context of time. Dutton, Ashford, O'Neill, and Lawrence (2001: 716) found attention to context in their study of managers attempting to affect change from the bottom up by "directing the attention of top management." The managers instinctively knew the proper time to make a move towards affecting change. Thus, their efforts were context specific and 'temporally embedded' (Dacin, Ventresca, & Beal, 1999). Sandberg and Tsoukas (2011: 344) succinctly state, "… to practice is to anticipate." As context is linked to spacetime, the decisions to be made, the alternatives available, and the ultimate decision made are all context-specific. Hence, business decisions that are made in one place today would have very different consequences if made somewhere else ten years from now.

In sum, the ESM represents non-fixed entities with left/right (timescape), front/back (landscape) and upward/ downward (change in performance) directionality episodes. As indicated in the figure, many choice points carry the momentum of a spiral along a particular trajectory within the organizational landscape, while changing the trajectory in minor or major ways. However, there are also discarded trajectories, which remain as potential opportunity costs. Both escalating and de-escalating (as in the butterfly effect) causal flows are possible, as well as multiple causal patterns. These patterns arise by placing differential relevance (choosing one choice point over another) from nonlinear iteration-to-iteration of the spiral along many episodes over time. Causal meaning depends on context, which shifts in spacetime, and events impact one another to provide momentum in different directions.

According to the ESM, momentum is such that episodes (or trajectories following choice points) can rarely change the entire momentum of the spiral. The spiral, as a series of episodes, can be nudged by many day-to-day choices, but does not typically change its directionality as it has developed over time, and instead may serve to reinforce the spiral in its current direction. This does not, however, discount the idea that given the right circumstances (in spacetime) a small and seemingly insignificant choice may have a large impact on the spiral, turning it in a new and unforeseen direction. Deleuze (1994: 21) says that spirals have certain directionality, because they do not repeat perfectly, as do cycles: "spirals whose principle is a variable curve and the trajectory of which has dissymmetrical aspects as though it had a right and a left." Only in the abstract, do recurring cycles play out in perfect curves.

Past contentious issues or positive experiences become a part of the history of the organization, a characterization of its encounters. While such experiences do belong to the past, the remnants can still manifest themselves in actions and reactions here and now (Heidegger, 1962). This is consistent with the notion of 'rhetorical history' (Suddaby, et al., 2010), in which remnants of past experience can become something different retold than what they were thought to be at the time, and thus influence the direction of the organization present and future in wholly new ways. In this context, the importance of each choice point for the business professional intensifies as he or she carries the remnants of past decisions, conflicts, and resolutions to each choice point along the organization's landscape.

Our hope is that a greater understanding of each of the elements in the ESM, and their interconnectedness through a strong process perspective, may shed light on approaching nonlinearity in organizations in a more holistic and realistic way. For scholars, this means

recognizing the importance of the past and possible future events at choice points within a dynamic organizational environment. This increased recognition should lead scholars towards being able to recognize a greater number of choices available at any given point in spacetime, and may further aid them in identifying drafts to be exploited or avoided. In the next section, we apply the ESM to an existing case study and demonstrate its utility for expanding organizational research.

**ESM Case Study Application**

In order to further communicate these important but abstract ideas, we have chosen to include a concrete case to explain each component of the ESM. The case that has been chosen is an empirical organizational change article published in *The Academy of Management Journal* (Plowman et. al. 2007), providing an in-depth, 'thick description' (Geertz, 1973) of a church undergoing what the authors identify as continuous, radical change. The purpose of using the ESM to interpret this case is to demonstrate new insights which the model can provide for scholars.

Plowman et al. (2007) begin their article by providing a description of the *environment* of 'Mission Church' (including *landscape, timescape and performance).* Mission Church is described as located in 'the middle of a large southwestern U.S. city,' facing a scenic downtown park, and 'wedged between two historic hotels' providing expensive wedding and seminar services, all of which are attributes of the church's physical *landscape*, traditionally attracting wealthy patrons with its 'silk-stocking' image. *Timescape* is also discussed up front in the article, where: "for more than 50 years, the church was in decline, as people found suburban churches

more attractive." (Plowman et al. 2007: 115) So, Mission Church had steadily decreasing *performance*, which followed a *downdraft* due to changing preferences of church patrons. Despite attempts to turn things around, the church continued on a *downdraft* for over fifty years, where leadership changed often, membership declined, and the church experienced an ongoing identity struggle.

Then through a series of changes made by Mission Church at *choice points*, the church began to change its *trajectory*. Plowman et al. (2007; Table 1: Timeline of Organizational Change) identify these choices in chronological time and space by isolating over 30 *choice points* made by Mission Church between 1999 and 2005. To demonstrate the range of choices that were available at each of these choice points, as well as the discarded trajectories, or alternatives that making different choices could have produced, let us examine two concrete examples. In 1999, a new church member suggested that they serve breakfast to the homeless. This suggestion represents a *choice point* for other church members to either support or reject this idea. As it happened, the idea was supported by a handful of people, including the pastors, and five-weeks later the church hosted 75 homeless people for Sunday breakfast. This seemingly small choice that was made to serve breakfast to the homeless led to 30 volunteers serving breakfast to up to 200 homeless by the end of the same year. Here the *discarded trajectory* could easily have been 'business as usual,' continuing to provide church services only to the 'typical' patrons.

One of many consequences of providing services to the homeless, identified by Plowman et. al. (2007) was that local businesses were upset by the increasing number of homeless coming into their neighborhood. For this reason, in 2003 local business leaders invited one of the

Mission Church pastors to a breakfast to discuss the 'homeless problem.' The pastor chose at this point to take 12 'freshly showered marginalized people' along to the breakfast meeting. This action sent a very strong message to the local community that Mission Church was dedicated to serving the increasing number of homeless congregants. The pastor could easily have gone to the breakfast alone, and tried to help the local business community in some way by striking a deal about the degree to which the church helped the homeless, which could have altered the trajectory of the church, and can therefore be seen as a plausible *discarded trajectory*. Instead, the pastor's choice to attend the breakfast with the homeless turned the church's *chosen trajectory* in a new direction, following an *updraft* of increased church membership, engagement and funding due to increased commitment to the 'marginalized.'

Because of the thick description provided by Plowman et al., (2007) the ESM can easily be applied to this case, using each element of this new model to understand the context and chosen trajectory of Mission Church, upward and downward environmental drafts, and discarded trajectories. However, we would argue that the thick description provided by these scholars is rare in organizational studies literature, many of whom still cling to aspects of general linear reality, excluding context in time and space, and therefore drawing unrealistic conclusions about either-or prescriptions for managers. The ESM, we believe, provides a systematic way to identify many of the important elements often overlooked by researchers trying to understand organizations and their actions. Our hope is that this example can provide insight into how the ESM can be further applied by scholars, and which new insights it can provide: clarifying context in time and space; identifying the non-linear spiral trajectories that organizations proceed

along; and better understanding the large range of alternatives that can be affected by major, or seemingly minor, choices.

**The ESM and limits of managerial action**

The managers of an organization do indeed affect the trajectory of the organization through their "potential effects [on] strategic decisions" (Hitt & Tyler, 1991: 327). This acting is often imperfectly informed and affected by the dispositional and situational factors that influence behavior. The ESM recognizes the forces which will affect the behavior of managers and still places the power of decision-making in the hands of those managers responsible. This is in alignment with Child's (1972) contention that theories of organizational structure fail to include 'the dominant coalition' in organizational decision making. Those individuals who are a part of this coalition (in our model, the organizational manager moving along the organizational trajectory) move through a process of choice. At each choice point, the manager weighs the options, but the number of options is larger than typically imagined-the manager can also choose to "operate a structure of their own and/or other organizational members' preferences" (Child, 1972: 16). Thus, within the ESM, and in keeping with Child (1972, 1997), strategic choice is not as limited as typically depicted, as "leaders of organizations, whether private or public, [are] able in practice to influence organizational forms to suit their own preferences" (Child, 1997: 43). Further, strategic choice with its limitations offers a 'deterministic view' of the organization. It is essentially a linear view of the organization upon which the ESM attempts to improve.

Not only does the ESM bring to light a broader range of managers' strategic decision-making opportunities, but it is our belief that through this expansion of strategic choice and weakening of deterministic constraints, the ESM can promote the path breaking encouraged by

Sydow, Schreyogg, and Koch (2009). While the manager is 'caught' on a path in the linear traditional sense, our model theorizes that these paths are actually trajectories upon which the manager is being propelled. In taking into account the forces acting upon the manager, we do recognize that "it is unrealistic to assume that the development of an organization is completely under management's control" (Sydow, Schreyogg, & Koch, 2009: 703). However, identifying the intersection and forces inherent in time, disposition, and situation may provide a better understanding of path dependency and how to break away from a particular path without a major shock to the organizational system.

## ESM: NEW PERSPECTIVES ON SPACE, TIME, AND CHANGE IN ORGANIZATION STUDIES

The alternative hypothesis presented here is that there is one collective process of spiraling, where a confluence of forces is encountered at each episodic choice point, constituting subsequent directionality. A significant gap remains to be filled before nonlinear thought can be integrated in a way that provides sufficient richness to the understanding of social processes in organizations. We propose to fill this gap through use of the ESM illustrated in Figure 1.

Philosophers of time have noted that things move from past to present to future (e.g. we age; houses are built, lived in and break down over time), but human intention and action move differently. We understand managers, and thus the organizations that they represent, to be influenced by both individual and collective histories; operating within both unique and collective contexts. Rather than being 'fixed entities,' organizations are more or less fluid entities, continually forming and transforming, merging, splitting apart, and ceasing to exist as they are navigated by individuals and organizational actors who make decisions based on past

experiences, readily available information, and bets on what the future will hold. All of this can be contradictory and complex in relation to how it may affect the organization.

The spiral process of an organization occurs as individuals make conscious choices not to follow the same routine or pattern that they have in the past, but instead 'turn' in a new direction and explore new opportunities as they arise. Even when routines are followed, changes in the environment will cause repetitive action to yield different consequences over time. Such a reality is not addressed within the predominant GLR paradigm discussed above. Relying on a strong process approach, the following demonstrates how the ESM offers an improvement over the GLR assumptions.

1. While GLR assumes the social world consists of fixed entities with variable attributes, the ESM allows for strong processes grounded within the environment.
2. While GLR assumes cause cannot flow from "small" to "large" attributes/events, the ESM allows for seemingly small events to have large consequences within given processes.
3. GLR assumes causal attributes have only one pattern at once, while the ESM allows for a plurality of simultaneous processes.
4. GLR assumes the sequence of events does not influence their outcome, while the ESM understands episodes as cumulative, impacting subsequent outcomes.
5. The GLR assumes the "careers" of entities are largely independent, while the ESM allows for interdependence of episodes in spacetime, causing complex patterns of change.
6. The GLR assumes causal attributes are generally independent of each other, while the ESM indicates causal meaning depends on environmental context.

Like McCarthy, Lawrence, Wixted, and Gordon (2010), we observe neglect in the literature of multidimensionality of the temporal intersections occurring in organizations. For the Episodic Spiral Model, components of this multidimensionality include past, present and future choice points that have been presented, chosen and discarded by organizations. The resulting spiraling trajectory leads to a change in performance, while discarded trajectories can impact organizations in the future. Further, we have theorized a multi-dimensional environment containing landscape, timescape, and drafts in the context of spacetime. To our knowledge, such multi-dimensionality has not been explored in either the management or the organization science literature.

## CONCLUSION AND EXTENSIONS

Based on a strong process view as the orienting paradigm, the argument we have constructed throughout this article is that by overcoming common problems of general linear reality, scholars can more clearly recognize organizations as moving through a dynamic (rather than static) environment, impacted by space, time and change. Also, by studying available choices in this environment, we hope to provide scholars with the means to identify a wider range of alternatives available to organizations at any given point *in* time, as well as the pluralistic spiral processes that develop within organizations *over* time.

Leading away from repetition of the same must begin with a reconsideration of time. Thus, we encourage scholars to put aside time in its traditional, linear, sense and then to consider a more interconnected approach to how time is manifested in organizations, taking the past and future into consideration for present decision making processes and actions. As Adam (1994) indicates, our understanding of the world as linear or nonlinear depends upon the framework of

observation and interpretation. We have proposed the spiral as a framework for observation and interpretation of organizations and their environment.

However, scholars who have taken a snapshot of a spiral in order to consider it at a given point in time, and further classify it based on that cross-section, are inaccurately linking the spiral to GLR assumptions through a misrepresentation of the past and present contexts and their connectedness. In their discussion of 'practical rationality,' Sandberg and Tsoukas (2011) propose that theories incorporating process and context can be diagrammed using 'multi-directional arrows' (Orlikowski, 2000), 'recursive patterns' (Jarzabkowski, 2008; Orlikowski, 2000; Sandberg & Pinnington, 2009), 'circular interactions' (Feldman, 2000; Whittington, 2006), or 'narrative' (Weick, 1995; Orr, 1996). The ESM developed in this article provides yet another way to diagram the "open-ended and context-specific character of practical rationality theories" (Sandberg & Tsoukas, 2011: 352).

Czarniawska (2004: 1) urges scholars interested in "escaping the iron cage of research tradition" to consider 'action nets,' or the process of continous interaction between an actor and his or her network. Such attention to these interactions requires us, as scholars, to relinquish our attachment to sameness, despite its predictive promises. 'Repetition of the same' is often used to describe the tenor of life in bureaucratic or slow-changing organizations. Yet for physicists, the "assumption of sameness is highly problematic" (Adam, 1994: 520). For example, taking millions of samples of cubic meters of air, researchers would be hard pressed to find any two with an identical material composition. This raises a very pertinent question, namely: Why should we in organization studies assume that a linear or cyclic process would recur with any degree of accuracy, repeating the same sorts of social events?

We encourage scholars interested in answering this question to extend the ESM into the literature and their own research by considering: 'How is this repetition different?' Adam (1994) focuses on repetition with difference, and the irreversibility presenting opportunities to theorize directional change (Adam, 1990: Adam, 1994). Therefore, use of the ESM requires a questioning of each move, or choice point, along the the organizations chosen trajectory. The purpose of such a methodology is not to create dueling linear, cyclical, and spiral depictions of organizational activity, but rather to provide the ESM as a possibility for filling the gap in the literature for organizational phenomenon which is not wholly linear or cyclical. Future research in this area may usefully help craft ways to take measurements of nonlinear spiraling, ways to assess the direction of trajectories, and understand connections to landscape, timescape, and drafts.

The main contribution of this article is to provide the ESM as an alternative spiral model for organizational studies scholars seeking to move beyond a linear worldview. Specifically, we theorize the ESM as a confluence of amplifying and counteracting forces, in a series of episodic situations where choice points propel the organization along its chosen trajectory. Further, we position the ESM within a multi-dimensional environment consisting of landscape (space), timescape (time) and drafts (change). This re-conceptualization moves beyond the GLR assumptions and static metaphors previously relied on to depict organizational activity, providing a strong process view of the organization. It is our hope that in providing a new model of organizations for the social sciences, the field will further embrace a move to "organize away from equilibrium" (Meyer, Gaba, & Collwell, 2005: 456), in order to more clearly theorize, explore, and write about the organization, which has itself 'organized away from equilibrium.'

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**TABLE 1**

**Critique of GLR Assumptions in Relation to Knowledge & Efficacy Spiral Cases**

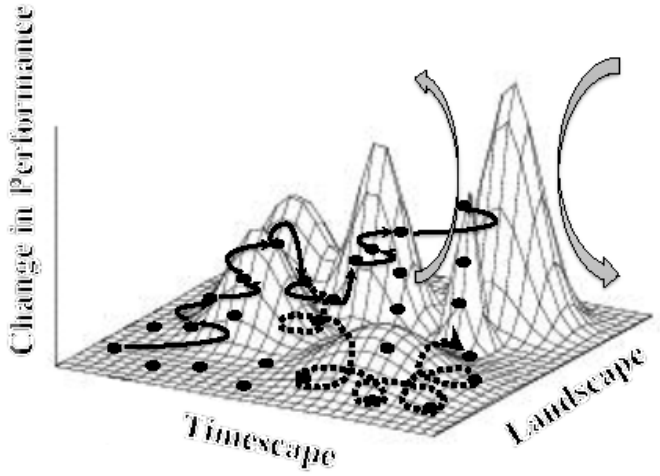
| | **General Linear Reality** | **Knowledge Spiral** | **Efficacy Spiral** |
|---|---|---|---|
| Assumption 1 | The social world consists of fixed entities with variable attributes | *Organizations are fixed entities in which attributes vary, and under the right conditions, SECI attributes can occur* | *Organizations are fixed entities, and attributes of decreased self-efficacy lead to attributes of decreased performance* |
| Assumption 2 | Cause cannot flow from "small" to "large" attributes/events | Individuals can and do influence group knowledge | Individuals are the focus and they have an impact on group dynamics |
| Assumption 3 | Causal attributes have only one pattern at once | *the SECI spiral leads only from one step to the next step, and does not consider other* | *Decrease in self-efficacy leads only to decreased performance, leading only to further decrease in self-* |

| | | | |
|---|---|---|---|
| | | *patterns from similar processes* | *efficacy* |
| Assumption 4 | The sequence of events does not influence their outcome | *The sequence of events does influence outcome flowing in uni-directional upward knowledge spiral loops, without amplification, and which are too simplistic* | *The sequence of events does influence outcomes flowing in a downward deviation-amplifying loop, which is too simplistic.* |
| Assumption 5 | The "careers" of entities are largely independent | *"careers" of entities are partially interdependent within groups, but each organizational unit is self-referential, minimizing cross-group interaction* | "careers" of entities can impact one-another, and cause downward spiraling to grow |
| Assumption 6 | Causal attributes are generally independent of each other | Causal attributes are generally dependent upon one another – creating the knowledge spiral | Causal attributes are generally dependent upon one another – creating a spiral of inefficacy |

**FIGURE 1**

*Note: Italicized text indicates adherence to the GLR assumption*

**dic Spiral Model (ESM)**




**Key:**

- **Choice point:** Choice points represent the range of options available at the intersection of any given place in space (landscape) and time (timscape).

- **Chosen trajectory:** The chosen trajectory is defined as episodes spiraling from one set of choices to the next, through history, affecting strategic choice.

- **Discarded trajectory:** Defined following Heidegger (1962) as a null set of courses of action, or trajectories not taken, but still co-present.

**Change in Performance:** change in performance is defined as the outcomes of strategies enacted in the environment (Bandura, 2000). Higher peaks have greater performance opportunities, but steeper peaks have higher costs, and more organizations attempting to get there.

Environment

**Timescape:** Timescape is defined as measured time, timing of strategies, retrospective-histories, and anticipated-futures (Adam, 1998).

**Landscape:** Landscape is defined as a dimension of the environment, the contextual 'playing field,' or physical *space* within which the episodic spiral is situated.

 - **Updraft:** An updraft is defined as multiple organizational trajectories converging in space and time to create upward up surges in the environment

 - **Downdraft:** A downdraft is defined as multiple organizational trajectories converging in space and time to create downward down surges in the environment.

 - **Spacetime:** Spacetime is the concept that every choice we make is made in a particular place in both space (landscape) and time (timescape).