Understanding Corporate Life-Cycles

Ousanee Sawagvudcharee[1*], Maurice Yolles[2], Gerhard Fink[3], Paul Iles[4], Chanchai Bunchapattanasakda[1],
Buncha Limpabandhu[1]
School of Management, Shinawatra University, Thailand
Liverpool John Moore University, United of Kingdom
WU Vienna University of Economics and Business, Austria
University of Salford, United of Kingdom
Ousanee.s@siu.ac.th[*], prof.m.yolles@gmail.com, gerfink@wu-wien.ac.at, P.A.Iles@salford.ac.uk,
chanchai@siu.ac.th, buncha@siu.ac.th

Abstract: This paper considers the nature of the dominant corporate paradigm, its change, failures or successes, and its relationship with the homeostatic organization. There is a popular way of understanding the dynamics of organizational change and that is through the pre-configured sequence of stages in a corporate life-cycle. Through there are a number of competing models for this kind of analysis. In all of them, the sequence of stages is defined by that which configures the life-cycle deterministically. However, there is little discussion given for how these models of organizations shift between stages, and none appear to dominate in the literature. A major criticism of these models is that they do not represent complex organizational processes of change. Therefore, this paper represents an alternative model, called "the paradigm life-cycle", which is connected to the homeostatic processes that maintain an organization, and which is, in principle, capable of generating corporate life-cycles under conditions of complexity.

Keywords: *Corporate paradigms, paradigm change, paradigm life-cycle, corporate life-cycle*

1. Introduction

The idea of corporate bodies passing through processes of change goes back at least 100 years, to 1912, with Ludwig von Mises's work on the theory of money. A more modern development of this envisages that every organization goes through predictable and repetitive patterns of behavior as it grows and develops through stages of transition and that it may, or may not, end well (Adizes, 1999). If such changes can be understood and tracked, it can hopefully lead to improved strategic control and corporate viability. This can be enhanced if it is possible to assign a pattern to the change process. A typical illustration of a preconfigured stage model for a corporate life-cycle is given in Figure 1. This is an adaptation of a model by Daft (2008), itself an adaptation from the considerations of Quinn and Cameron (1983), who undertook a comparative examination of approaches to life-cycle studies. In our adaptation, we include in the last stage *morphing*, which occurs when corporate identity is either lost (with decline or death) or changed (transformed). Life-cycles can only develop for a durable collective, and this requires that people come together and develop a dominant culture from which collective identity arises and, in doing -so drive normative processes and operative behavior. It is this collective identity that may shift during the morphing stage with transformation. The revitalisation crisis for Figure 1 may also become an identity crisis when the corporate manager finds all old assumptions challenged (Tofler, 1980), and this occurs together with the need to redefine core purposes (Stone & Heaney, 1984).

There are criticisms of such life-cycles (Stubbart & Smalley, 1999; Phelps, Adams & Bessant, 2007), but for Levie & Lichtenstein (2008), these are not founded on a sufficiently broad study of the literature. So they undertake a larger, more comprehensive study, performing an in-depth analysis of 104 scholarly papers on the life-cycle, published over a 45-year period. Consistent with Yan (2006), their conclusion was that there has been no consensus on specific models, nor have they found a dominant model. Deterministic models work well under conditions of equilibrium, where homeostatic action for organizational control can be predetermined and problems predicted. However, change can also occur under non-equilibrium conditions when the organization is said to be dissipative (Sundarasaradula & Hasan, 2004). In concert with this, Levie & Lichtenstein (2008) argued that organizations grow as though they are organisms, and pass through dynamic processes of complexity (that involve non-equilibrium conditions). This facilitates their entry into different life-cycle configurations, but not ones necessarily set to any order. Levie & Lichtenstein (2008) noted that Miller & Friesen (1984) undertook an empirical test of a configuration life-cycle model that arose as a

composite from a number of other models, and tested it on longitudinal data from 36 firms. It was uncovered that much organizational growth and change was discontinuous in nature, with varying periods of organizational "momentum," in which were there were quantum leaps in organizational form. Also detected was a tendency for firms to adopt a limited number of organizational forms, which differed from one another in multi-faceted ways. These different forms were not necessarily connected to each other in any deterministic sequence. Levie & Lichtenstein (2008) also noted that Raffa, Zollo & Caponi (1996) found the growth paths of 32 young, Italian software firms were quite complex, with the firms moving between seven different identifiable configurations, but not in any set order. Overall, a number of empirical studies have been undertaken on the predictive utility of corporate life-cycles, (e.g., Drazin & Kazanjian,1990; Birch, Haggerty & Parsons, 1995; McCann, 1991; Yolles, Sawagvudcharee & Fink, 2010).

Figure 1: Pre-Configured Stages in the corporate life - cycle (adapted from Daft, 2008)
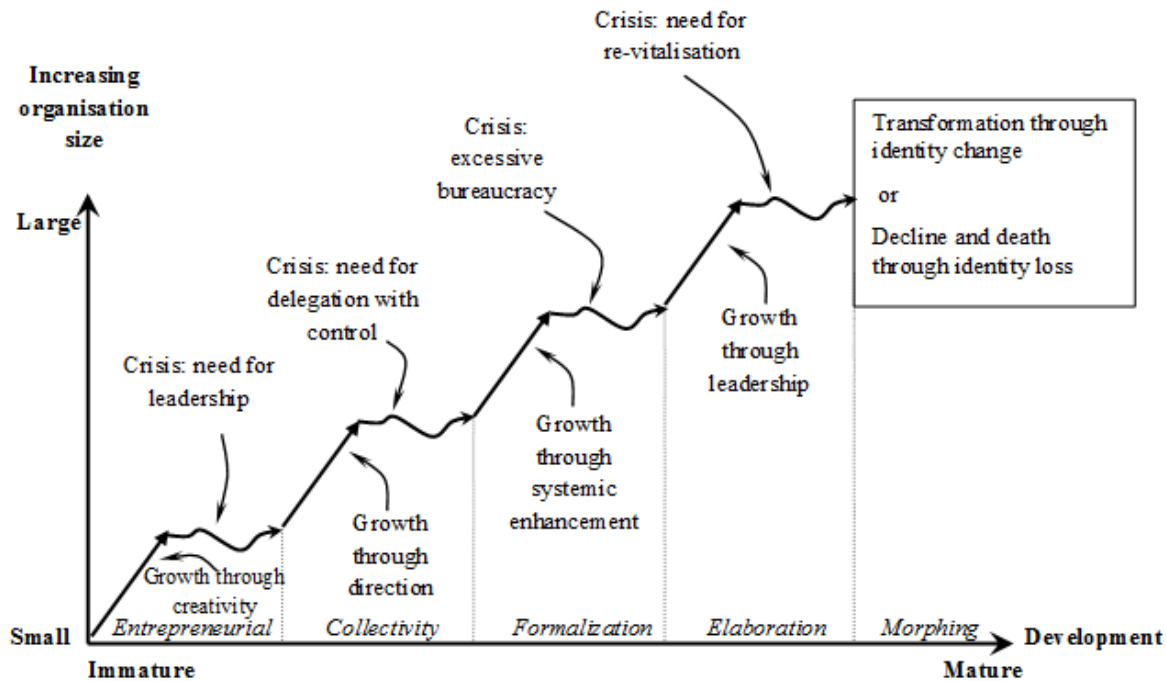
Following on from the Levie & Lichtenstein (2008) studied, as well as Perényi, Selvarajah & Muthaly (2011) iterated four major points of criticism of corporate life-cycle theory: (1) the lack of empirical validation; (2) a focus on symptoms and not explanations; (3) configuration problems (such as a one-way progression through the cycle sequence, where regression is not considered); and(4)a linear developmental pathway, where branching-off is not considered (Lester, Parnell & Carraher 2003; Massey et al., 2006; McMahon 2001). Perényi, Selvarajah & Muthaly (2011) also noted that for Small to Medium-Sized Enterprises (SMEs), rather than turning into decline, they grow out of the size category, though this is explained through a change in identity as indicated in Figure 1. In this paper, our interest will be to create a paradigm cycle for an organization that is connected with the homeostatic processes that underpin and drive it, and we shall explain how a sequence of corporate life-cycle stages can be configured, over time and according to circumstances. The frame of reference that will be used to examine paradigmatic change is that of the meta-theory of Knowledge Cybernetics (KC), where the human activity systems that are responsible for the development of paradigms, are seen to be themselves "living systems".

2. The Corporate Paradigm

The ideas of paradigmatic change proposed by Kuhn (1970) have led to not only some criticism, connected, for instance, with the way paradigmatic incommensurability is dealt with (Budd & Hill, 2007), but also to the
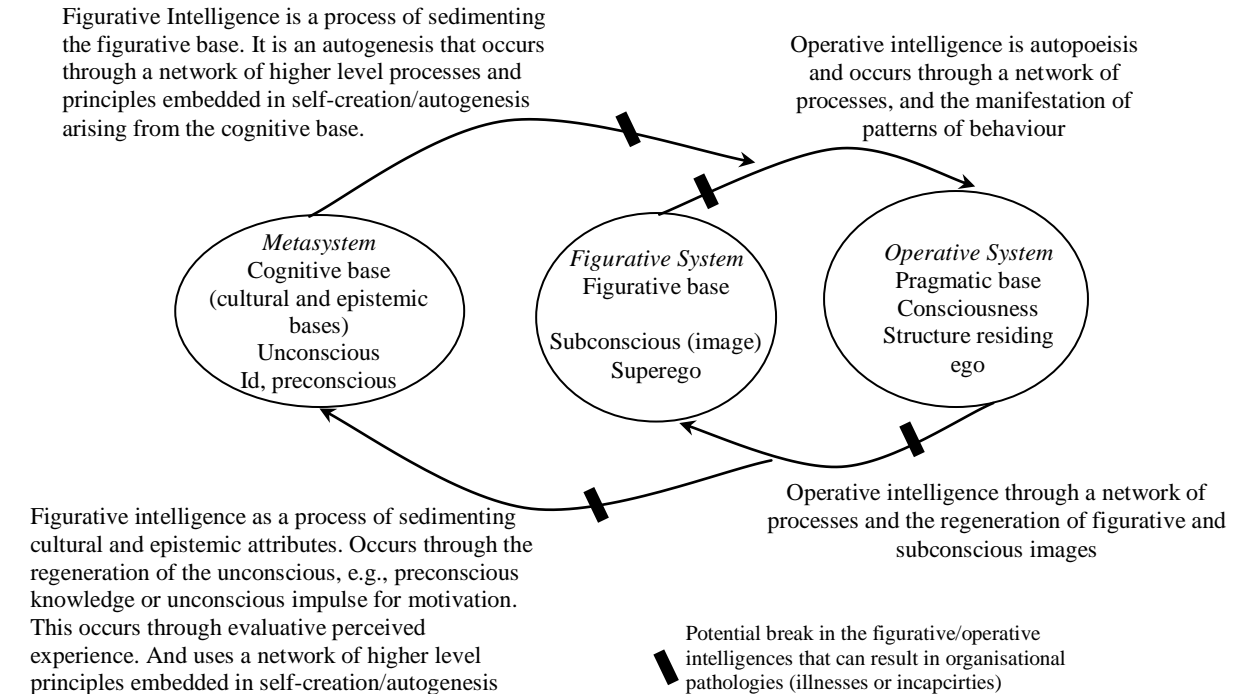
elaboration of notions about paradigm change through the cognitive properties and functioning of the human groups who socially carry them (e.g., Fischer, 1992). Developing on Yolles (1999), a paradigm can be defined as being composed of three ontologically distinct components within the portfolio of beliefs and knowledge that defines it: (1) a group-based *cognitive base* that constitutes the "truths" that form its *epistemic base* (patterns of analytic knowledge) and its *cultural base* (normative standards of conduct), and both are connected with assumptions, beliefs and trusted propositions that arise within cultural development; (2) a *figurative base* that is composed of relationships that can be construed as information rich conceptual models, constructed from its cognitive base; and (3) a *pragmatic base* that is constituted by its normative modes of practice that respond to standards of validity that constitute evidence. A paradigm, far from being a disembodied entity, is carried by dynamic autonomous human activity groups who are responsible for its cognitive, figurative, and pragmatic bases and their developments. The paradigm is a cognitive map for autonomous durable human activity groups that are purposeful, adaptive, survive through homeostasis, and have a culture and normative operative processes that can be applied in complex situations (Yolles, 2000). Such a group can be represented as a living system with three ontologically distinct domains, as indicated in Figure 2, in which homeostatic processes are represented. Here, Yolles, Fink & Dauber (2011, 2011a) developed a model of the durable organization as a social collective that operates through a socio-cognitive normative personality, and is a function of the immanent dynamics of the organization. It operates through traits that control the organization and determine its states of being, and hence by implication, has an influence on the configuration of its stages of development. Traits are variables that create generic characteristics for the organization, and regulate the importance attributed to different classes of information. They do this through *type values* (that constitute a specific score levels of a trait) and define a collective personality style that creates an expected behavioural orientation.

In developing the model, we adopt notions supported by Kets de Vries (1991), in which organizations may be seen to have an unconscious as part of its controlling meta-system, subconscious as part of its figurative system, and conscious as part of its operative system. These components are also interconnected through operative and figurative intelligences, terms that are an adaptation from the work of Piaget (1950). Figurative intelligence provides a copy of states of reality or precise information about them, and involves any means of representation used to keep in mind the states that intervene between transformations, i.e., it involves perception, drawing, mental imagery, language and imitation. Hence, figurative intelligence will be a reflection of patterns of knowledge, and will exist through visual imagery and information. In terms of the paradigm there is a figurative base that is composed of models, which entail structured relationships and epistemological and information properties. The capacity of the figurative base to adequately reflect the cognitive base of the paradigm and maintain pragmatic interpretations constitutes its *figurative intelligence* (Piaget, 1950; Piaget & Inhelder, 1969; Montangero & Maurice-Naville, 1997). In contrast, *operative intelligence* is dynamic and intimately connected to understanding. It is responsible for the representation and manipulation of the transformational aspects of reality. It involves all actions that are undertaken so as to anticipate, follow or recover the transformations of the objects or persons of interest. Within the context of the paradigm, operative intelligence provides an indication of the ability of its holders to map its figurative base pragmatically. So, figurative intelligence involves experiential reflections from operative intelligence. Since states cannot exist independently from the transformations that interconnect them, figurative intelligence derives its meaning from operative intelligence. Strategies 'for sense making' in detection of 'patterns in processes or their driving mechanisms', as well as with respect to 'prediction' or 'detection of meaning of processes for people involved' (Langley, 1999) are related to figurative and operative intelligence. Figurative and operative intelligence have central importance to the homeostatic nature of the organization, and in this modelling approach they are representative of the cybernetic autogenesis (Schwarz, 1997 & 2009) which is an indicator of a self-creating system, and autopoeis (Maturana, 1975) which is an indicator of a living system.

There are implications for the paradigm when we can include these Piagian concepts in a model of the organization. Embedded within the paradigm there is a transformative potential that can be manifested as these two forms of intelligence. Figurative intelligence provides core relational explanations of reality, while operative intelligence provides an organization with the capacity to evidence its figurative base. Paradigms with a potential to manifest only poor figurative intelligence do not enable the maintenance of goods representation in their figurative base of elements of their cognitive base. Those with a potential for poor

operative intelligence cannot adequately manifest elements of their figurative base pragmatically, so that it has limited capacity to evidence models. Since figurative and operative intelligence are closely connected, understanding the developmental process of paradigms is central to understanding development, especially when normative epistemologies constitute a central cause for paradigmatic failure (Yolles & Sawagvudcharee, 2017).

Figure 2: Conceptual Model of an organization in three connected ontologically distinct but homeostatic connected parts

Figurative Intelligence is a process of sedimenting the figurative base. It is an autogenesis that occurs through a network of higher level processes and principles embedded in self-creation/autogenesis arising from the cognitive base.

Operative intelligence is autopoeisis and occurs through a network of processes, and the manifestation of patterns of behaviour

Metasystem
Cognitive base
(cultural and epistemic bases)
Unconscious
Id, preconscious

Figurative System
Figurative base

Subconscious (image)
Superego

Operative System
Pragmatic base
Consciousness
Structure residing
ego

Figurative intelligence as a process of sedimenting cultural and epistemic attributes. Occurs through the regeneration of the unconscious, e.g., preconscious knowledge or unconscious impulse for motivation. This occurs through evaluative perceived experience. And uses a network of higher level principles embedded in self-creation/autogenesis

Operative intelligence through a network of processes and the regeneration of figurative and subconscious images

Potential break in the figurative/operative intelligences that can result in organisational pathologies (illnesses or incapcirties)

A more detailed representation of Figure 2 can be provided through Figure 3. This illustrates that the nature of the corporate paradigms is a cultural phenomenon, and it upholds the notion that they operate as vehicles from which corporate figurative and operative attributes develop. Though the paradigm resides in the meta-system, it has figurative and operative system drivers that are manifested in each of those system components. Hence, the strategic perspectives, ideology, ethics of the figurative system and modes of practice of the operative system arise in the paradigm. The Figure also posits two additional forms of intelligence than have so far been introduced, cultural and social. Cultural intelligence can be most simply defined as the ability to successfully adapt to a change in cultural settings attributable to cultural context (Earley & Ang, 2003). Social intelligence may be defined, following Thorndike in 1920, as the ability to understand and manage other people, and to engage in adaptive social interactions (Kihlstrom & Cantor, 2000**).**

Consequently, just as corporate ideology and ethics derive from the knowledge embedded within the paradigm, operative behavioural norms are additionally subject to figurative regulations. While regulation is implicit in the couple that links the operational and figurative systems, this couple itself is a function that is also controlled at a higher level by the cultural attributes of the paradigm. It can be elaborated further on Figure 3 in relation to the connection between the paradigm and the transitive systems (i.e., meta, figurative and operative systems). In the meta-system interaction occurs between the paradigm and cultural knowledge. Here the corporate paradigm identifies desired characteristics (elements) from culture and available knowledge. This may be referred to as the *parsimony* of the corporate paradigm in comparison to the complexity and richness of a societal value system. Instead of numerous values that arise from the dominant culture, only a few may count in relation to the corporate paradigm. Similarly, instead of reflecting on all available knowledge, only a selection from available knowledge is defined as being appropriate for the corporation. In the figurative system, the system of thoughts is defined by the corporate paradigm as a

manifested selection from the cultural domain of the meta-system. The polity induced order is also defined by the corporate paradigm as a selection from the knowledge domain of the meta-system. Finally, in the operative system, the actor system follows more or less from the system of thought. It contains two sub domains: rules of interaction within the corporation, and rules of interaction with the external environment of the corporation. The actor system interacts with operative behavior, which becomes manifested as paradigmatic knowledge and observable action within the corporation and with the external environment. The "impact of phenomena" arises as a *relativistic internal manifestation* that derives from feedback (or more correctly a "structural coupling" (Maturana, 1975)) with the external environment, not represented in the diagram.

Figure 3: More detailed explanation of the systemic dimensionality of the organize
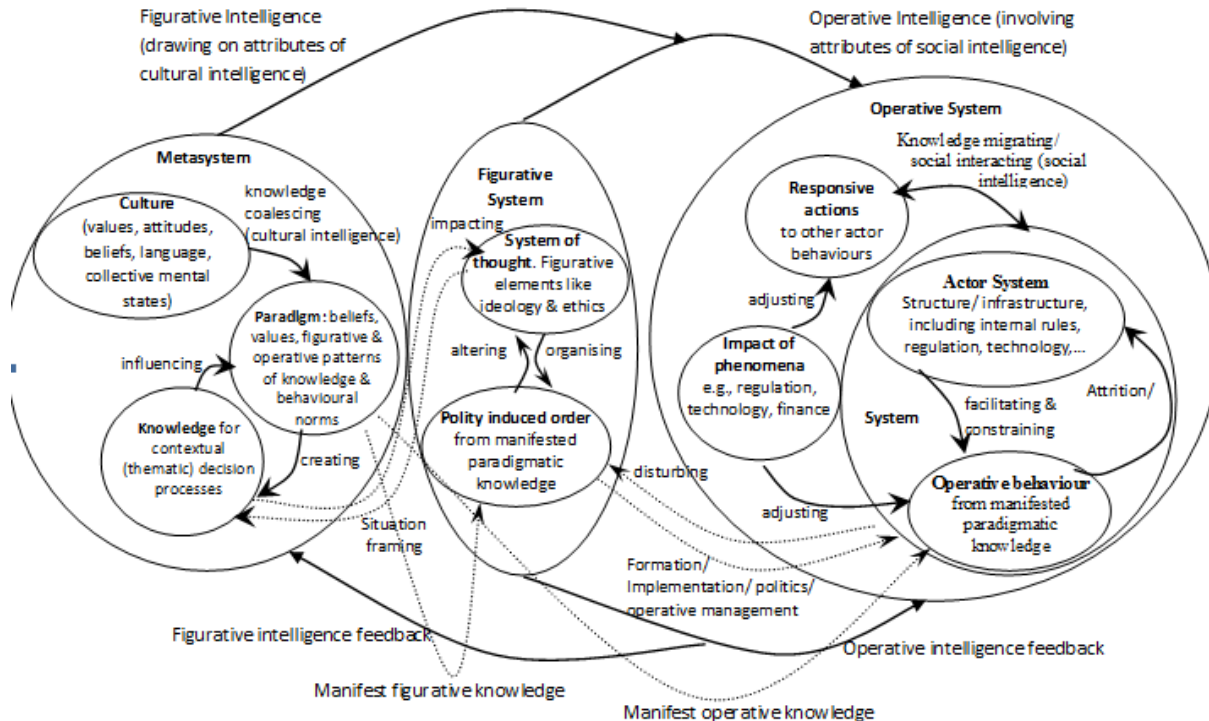
3. Paradigms under Change

The paradigmatic development process that crosses both equilibrium and non-equilibrium processes of paradigm change was first explored by Kuhn (1970), who argues that science passes from a *normal* mode through one of *crisis* and then to one of *revolution*. Indeed, it is as part of the normal mode that a "normal" corporate life-cycle develops, while revolutions are beyond this life-cycle occurring at its tail. The normal mode is realist in nature (Rauterberg, 2000), and has its history in the ideas of Descartes who believed that foundational concepts are known intuitively through reason, and that truths can be deduced with absolute certainty from our innate ideas. In essence, the development of normal science embraces processes of continuous change in theory when the implications of its logical base pass through a morphogenesis. It operates in a thematic application domain that supports a dominant epistemology that allows for only a unitary perspective for the construction of knowledge. It also assumes certainty, and the possibility of making predictions. The term *normal* mode refers to the routine work of those who operate within a paradigm, slowly accumulating knowledge in accord with established theoretical assumptions. For Kuhn, it involves puzzle-solving, through which it becomes enlarged as its frontiers of knowledge and techniques are pushed forward (Yolles, Sawagvudcharee & Fink, 2010).

The revolutionary mode is transformative, and refers to a prerequisite condition of paradigmatic crisis. The

transformative mode arises when paradigms, with a normative epistemology, have poor operative intelligence, with inadequacy in their ability to support their figurative base through the normal inquiry process. The revolutionary period results in confusion within a framework of presuppositions about what constitutes a problem or its resolution, a method, and where the rationality of issues is replaced by emotionality, and are settled not by logic, syllogism, and appeals to reason, but by irrational factors like group affiliation and majority or 'mob rule' (Casti, 1989: 40). Beyond Kuhn (1970; Ravetz (1999) and Funtowicz & Ravetz (1993) introduced the notion of the *post-normal* mode, indicating a condition where situational facts are uncertain, values in dispute, stakes high and decisions urgent. This definition arises because of the realization that post-normal science; "lies at the contested interfaces of science and policy" (Ravetz, 1999). The idea that decisions are urgent comes from the specific context that Ravetz adopts, in the field of ecology and the political urgency, for decisions that might address the possibility of environmental disaster. Hessels &van Lente (2008) in their discussion of the post-normal mode, recognized that it refers to the limitations of rational decision-making, and engages with value plurality and public participation in attempts to facilitate outcomes to complex public policy decision. In a broader sense than that posited by Ravetz, the post-normal mode engages with uncertainty for complex situations in which there exist plural relativist political processes. So, more generally the post-normal mode arises at the dissipative edge of cultural crisis, involving competing values, uncertainty and relativism. When referring to the dissipative edge, we are suggesting that normal modes of science operate through homeostatic processes of inquiry. Systems that maintain homeostasis tend not to be able to deal with fundamental change since the feedback processes that maintain their equilibrium can overwhelm their capacities to respond. In stable situations, the creation of new approaches is difficult. Structures, rules, procedures and plans need to be changed when shocks are encountered; but this is problematic because of the norms and cultural attributes of a given system. In contrast, post-normal modes involve a competitive plurality that operates in an essentially dissipative environment in the sense of Prigogine & Stengers (1984). Thus, they manifest interactive processes that are non-equilibrium, are dynamically and inherently unstable, absorb energy so that outside resources are required to maintain order, and their behavior is subject to fluctuation. In such situations, defenders of challenged paradigms usually refer to 'paradox', i.e. a false dichotomy that can be supported by the dominant paradigm, and thus, should serve to silence the critics who apparently are incapable of logical thinking.

Since paradigms are subject to change in their knowledge structures, and are thus dynamic, it should be possible to track them, and their ability to survive reflects on the organization's durability itself. The idea that paradigms may survive different modes of existence, from normal to post-normal and through crisis to transformation, raises the question whether paradigms can, and if so how, they may be able to survive shifts in their stages of existence. To begin to respond to this, one really needs to appreciate the distinction between the processes of change that a paradigm goes through when it is in normal and post-normal mode. For Kluver et al. (2003), their distinction can be highlighted by the realization that in normal mode there is the tendency for paradigms to change incrementally, beginning with rather simple system of thought and developing complexity. In contrast, a post-normal mode is often transformative, embracing the early capture of as much of the complexity that a conceptual framework is capable of. Paradigms that survive the trials and tribulations that its holders experience over time (and are thus durable) are said to be *viable*. Viable paradigms are able to survive both normal and post-normal situations. To understand how this may occur, paradigms should be seen as autonomous systems which define, create and manage their own futures. Through their holders, they are also able to self-organize and hence alter their own logical base. They produce the laws that rule them (Schwarz, 1997), and they do this because they are logically closed, a condition that occurs, according to Parsons (1937) when all its propositions are interdependent, in that each has implications for the others, and each of these implications finds its statement in another proposition of the same system.

While paradigms may be logically closed, they are also open systems in that they take in data from their environment which comes both from measurement, knowledge and narratives from experiences and other paradigms. Their outputs are knowledge and narrative. If the paradigm is to be able to provide a narrative, through its advocates who adequately explain all of the inputs that relate to their interests and purposes, then its propositions must be able to conceptually respond to the inputs. Where it cannot do this, the paradigm fails. In normal mode, paradigms operate as homeostatic systems that are controlled and deterministic, and hence certain in their patterns of knowledge. Over time paradigms change deterministically and reversibly (Prigogine & Stengers, 1984). Processes of change involving randomness or irreversibility are exceptional.

However, when uncertainty occurs within the paradigm, it shifts to a far-from-equilibrium state. Here the paradigm's logical structure, defined by its propositions and principles; becomes dissipative and subject to fluctuation, and it is unable to provide a stable narrative that adequately explains its environment. Demand for phenomena driven research is emerging (Cheng, 2007). New types of structures may originate spontaneously as the paradigm moves from organizational chaos to greater order. A viable paradigm that is able to survive this experience can become classed as part of *post-normal* mode.

Paradigms only exist through their holders who define and maintain them. As such, durable paradigms may be seen as viable human activity systems that are both complex, adaptive, and are able to maintain a self-organizing separate existence within the confines of their existential or other constraints. Their existential nature consists of the belief system and patterns of knowledge that arises through the coherent group of people who maintain them. They have an at least potential independence in their "self-processes" for regulation, organization, production, and cognition. According to Schwarz (1999), viable systems can pass through processes of emergence and evolution towards complexity and autonomy, though autonomy does not mean that there is no interactive influence from its environment. The passage occurs through the development of patterns of self-organization that accommodate phenomenal change in the paradigmatic practices and behaviors that paradigm holders pursue. This occurs through morphogenesis and new forms of complexity; patterns for long-term evolution towards autonomy; and patterns that lead to systems functioning viably through their capacity to create variety, and indeed respond to, environmental situations with the matching *requisite variety* (Ashby, 1956), which is required to maintain balance and enable a paradigm (through its carriers) to respond adequately to its environment. The dynamic processes that are associated with autonomous self-organizing systems, and their viable paradigms, are illustrated in Figure 4 (adapted from Schwarz, 1997). It explains the cycle of change for viable paradigms that are able to survive by transforming their natures, initially by developing through normal mode, experiencing uncertainty, and moving into post-normal mode and hence to metamorphosis. During this process, non-viable paradigms decease, while a viable paradigm will become complexities as it develops more attributes and explanatory power in its theory.

Figure 4: Cycle of Paradigmatic Change and the Relationship between Four Modes
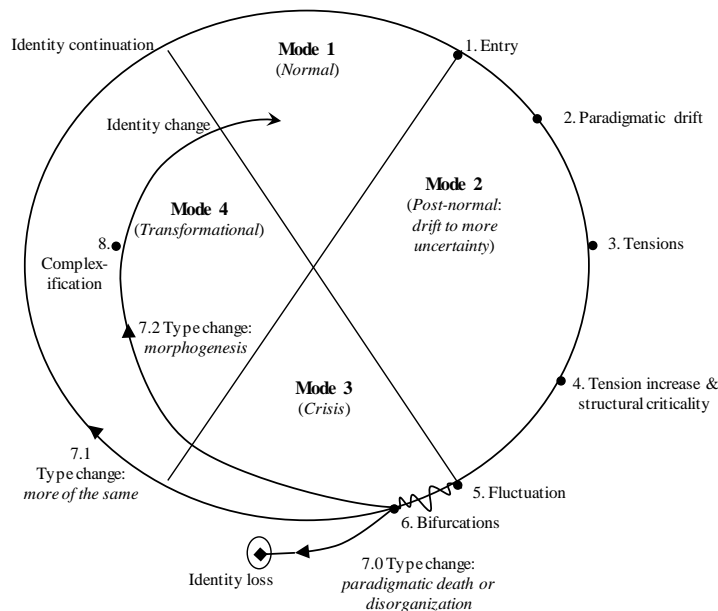
While Figure 3 shows which sub-domains and internal processes operate in each domain, and how sub-domains have homeostatic linkages with each other, Figure 4 shows the actual life-cycle processes. The core logic is that without challenges and crises there is no change. The direction of change is always subject to discussion, condition and countervailing forces. There are always three ways that events may go: one after a

crisis the situation may remain more or less the same as before the crisis when it retains its identity and core purposes, or, the organization may cease to exist when its identity ceases, or there will be change through metamorphosis and a new paradigm may emerge, accompanied by a new identity and core purposes. Figure 4 does not show the causes of a crises, and the domains which are affected, because a crisis may become visible or felt in all domains simultaneously, or it may also be felt only in one domain, e.g. then the tasks delivered by the organization are not perceived as adequate by prospective users or consumers of the services provided.

It should be noted at this point that the paradigm life-cycle given in Figure 4 is a generic model that, under the right conditions, it is able to generate other corporate life-cycle configurations, like that of Figure 1. Here the pre-configured stages are; Entrepreneurial, Collectivity, Formalization, Elaboration, and Morphing, and each has its own growth activity (creativity, direction, systemic enhancement, leadership, and identity change or loss). How such configurations develop is, according to Levie & Lichtenstein (2008), a function of the immanency of the organization, with influences by the interaction with its environments. The paradigm cycle embraces this by generating a single cycle of change, and the named stages have to emerge from an explanation of the homeostatic organization. Each paradigmatic stage passes through its normal mode of existence, and then enters a post-normal mode with the development of a paradigm drift and then tensions. It is at the point of fluctuation that the crisis mode develops, and in Figure 1 these crises are described as: the need for leadership; the need for delegation with control; excessive bureaucracy; and the need for re-vitalisation -- which may become an identity crisis. The conditions for the development of morphology in Figure 1 are quite special in that it concludes with an identity change -- this relating to the state of the culture of an organization in relation to its environment - and an understanding of this might be discerned from the cultural dynamic studies of Sorokin (e.g., Yolles, Frieden & Kemp, 2008). It is also worth noting that there is a connection between the modes of Figure 4 that arise from the circumstances as depicted in Figure 3, and the stages of Figure 1. In Figure 1, the entrepreneurial stage engages involves the growth of *creativity* that is part of the Entrepreneurial stage, and this is a function of the cognitive meta-system of the organization from, which arises figurative intelligence, which is itself influenced by cultural intelligence. Given that knowledge exists in the meta-system, the network of principles that constitute figurative intelligence map that knowledge into new strategic contexts in the figurative system, where strategic models develop in the figurative base. In this way the meta-system can provide the climate for invention and innovation, given that it has such an implicit capacity.

The stage of Collectivity demands direction and this is provided by leadership. This is not necessarily the personality-based leadership that is traditional to management studies, but it may refer to knowledge-related distributed leadership (Iles, Feng & Hao, 2011). The mechanisms that are involved here are outside the brief of this paper, and are part of the strategic cognitions of the normative personality (Yolles, Fink& Dauber, 2011). However, in the figurative system there is a recursive model of Figure 3 with its own lower-level figurative and operative intelligences; and, to avoid confusion here, we shall refer to these as "*local*" figurative and operative intelligences. Good *local* figurative intelligence provides clear direction. However, clear direction does not suffice if *local* operative intelligence is not well-developed or does not fit figurative intelligence. The need is to develop an adequate operative system that can result in appropriate structures and rules that guide behavior. If the system becomes too rigid, it moves towards bureaucracy as part of the Formalization stage, however, it also could be too flexible, i.e. it may lack coherence with the strategy. This may occur because there is a leadership ideas problem, where organizational culture has moved to an *instrumental*, as opposed to *ideas*, orientation (Yolles, Frieden & Kemp, 2008). In this context, Daft (2008) suggested that teamwork is the remedy, but perhaps other workable operational systems may exist, too. The direction it develops in necessarily is a function of the organizational traits that create a penchant for organizational processes and behaviors, and hence determine what might be possible in given situations. Therefore, traits are relevant, not only to organizational conduct, but to the potential stage of conduct in a configuration of stages.

Finally, the Elaboration stage may arise here, though a crisis that demands *revitalization* is not a logical consequence of team work. Apparently, Daft (2008) intuitively reflected on a lack of fit with the market, i.e. what we call "social intelligence" in other contexts. The crisis need for revitalization emerges, because the services offered by the corporation to its task environment (i.e. to the market) do not suffice. The needs of the

task environment are not satisfied. Therefore, the organization goes through a crisis. What it has to offer does not fit the requirements. There is some ignorance about the actual needs. The organization cannot create legitimacy through its activities. Thus, crises in organizations may emerge if:

- Traits take value assignments which while determining the penchants of the organization, may limit its contextual capacity to perform to its capability potential.
- Cultural intelligence is weak, i.e. if the organization does not permit creativity to emerge or if no coordination between forms of cultural knowledge can be achieved.
- Figurative intelligence is weak, i.e. if there is lack of clear direction (the leadership issue), particularly if knowledge and knowledge processes are confused.
- Operative intelligence is weak, i.e. if structures and rules are too rigid (the issue of bureaucracy) or if they are too loose (the issue of control) and if, in both cases, motivation for task achievement is poor, or if there is a lack of strategic coordination or cooperation among the groups that participate in the network of processes that constitute this intelligence.
- Social intelligence is weak, i.e. if the services of the organization do not meet the requirements of the task environment and/or are not considered as legitimate, or if the means by which the organization interacts its environment is not competent.

The notion of immanence will now be set within a cultural context as part of the theory of paradigmatic change.

4. Paradigmatic Transformation and Immanent Change

The rise of paradigms is intimately connected with the rise of culture, which is influenced by the immanent micro-actions of individuals, and which becomes symbolized and hence normatively anchored into the paradigm (Staw, 1991). As a result, it develops a cognitive base, which is both culture and knowledge centred, and is hence sensitive both to knowledge and cultural challenges, the two necessarily being related. The normal mode of a paradigm exists through its adoption of a normative epistemology, which lies at the basis of its formalized patterns of knowledge. This may be challenged with the development of doubt about its veracity (e.g., Meehl, 1997). Such challenges can result in structural changes that lead to pragmatic adjustment when modes and mechanisms of practice alter. When a paradigm exists in normal mode, and is challenged in this way, the result can be a shift into a post-normal mode. We can adapt an argument from Rummel (1979) to explain how this can happen in one of two ways. Firstly, change can occur more rapidly than the ability of a culture has to adjust. This creates a *cultural lag* that leads to instability and conflict. It occurs when the realization of values fails, and values disparity develops. Now, cultural lag is constituted as the difference between what is and what some segments of a culture consider *ought to be*. Interestingly, this engages with ideology and ethics, since both involve a coalescence of values. In the case of ideology, the values are orientations towards action, but this is constrained by ethics, which identifies what *ought to happen* and involves processes of judgment. New modes and means of practice create the means to satisfy certain values, even while existing norms, attitudes, or institutions inhibit or block such satisfaction.

Secondly, the effect of new modes and means of practice can also be considered through the idea that, within periods of normal mode, paradigms under homeostasis fall into an equilibrium of values that relates to the complex of desires and attitudes. Values in a culture may be seen here to ultimately balance out, and a general equilibrium emerges between wants and costs, investments and rewards, capabilities and power. Among possible states of a system, it is the balance of power that Rummel (1979) saw as such equilibriums. This explanation can be elaborated on through the notion of *culture shock* (Dahl, 2000). Culture shock is normally taken to mean the anxiety and related feelings that arise when people are faced by a sudden change in their socio-cultural environment, and it grows out of an inability to assimilate new elements within it. Thinking beyond the initial shock, Adler (1987) considered that culture shock is the opportunity of a "profound learning experience that leads to a high degree of self-awareness and personal growth" as adaptation to new situations arise. So, when a paradigm resides in normal mode, its gradual development occurs through homeostatic processes that many consider to represent its "advancement." The rise of challenge to the use of a particular normative epistemology results in cultural uncertainty, when predominant values become challenged. This leads to the onset of culture shock and cultural instability, and the eventual development of

new modes and means of practice. During this process, conflicts and relativisms are likely to arise, and the paradigm shifts into post-normal mode. This process may not be inevitable, particularly when the holders of a paradigm are imbued with cultural intelligence.

There is another quite distinct issue in corporate paradigmatic change when one realizes that corporate paradigms do not develop in isolation, but rather are responsive to their ambient host culture. Through the human activity groups that carry their paradigm, an individual corporate culture is created which determines its orientation and possibilities. This culture, however, is influenced by the ambient cultural environment into which corporate culture is embedded (e.g., Sørnes et al., 2004, Sagiv & Schwartz 2007). Following Rummel (1979), when a culture shifts from one stable state to another, it first becomes unstable since opposing interests arise. In terms of Sorokin's theory (1939-1942), this leads to a loss of ideological and ethical stability, affecting the dominant paradigm and its development. Previously, dominant corporate paradigms may not have the potential to survive, while a new dominant paradigm has yet to emerge.

5. Conclusion

Corporate life-cycles are popular, but there are clear indications that deterministic stage configurations are problematic. Drawing on notions of complexity, it has been argued that a generic model referred to as the paradigm cycle can be formulated that is able to generate corporate life cycles. Paradigms exist under a number of frames of reference. Kuhn was interested in the scientific frame, while our interest lies in the corporate frame. Predominant paradigms may go through a cycle from *normal* mode to *post-normal* mode, fall into *crisis* and finally to one of *revolution*. Paradigms change normally as part of the business cycle, and as they do this, they pass from normal equilibrium conditions to post-normal and then through to crisis. Under the normal business cycle that then simply moves into a "more of the same". This latter outcome simply suggests that the organization has not passed through an identity crisis and maintains it core purposes. When the organization instead passes through a transformational change, its identity and core purposes change. As a paradigm enters its post-normal mode, the normal prevailing confirmatory mode approaches to theory must be considered to have lost their capability to make useful predications - something that is not always recognized by researchers. This leads to crisis and may result in a paradigm revolution that would be needed to transform or replace extant theories. New sets and systems of classifications, emphasis on relations between events and occurrences rather than on substances, and new motivation oriented theories, might emerge that emphasize motivational aspects and address the concerns of individuals with newly emphasized shared needs and desires. A meta-view of phenomena, and the ability to identify redundancies and variety in a system, create views of patterns of change and capabilities to adapt to new challenges by self-organization. The emerging frames of thought are then considered to be post-normal and value-laden. In this sense post-normal mode is concerned with complexity and has interests in aspects which relate to uncertainty, assigned values, and a plurality of legitimately argued perspectives. The paradigm life-cycle has the capacity to explain dissipative processes that cross both normal and transformational modes of being and can, in principle, through its underlying homeostatic organizational model, explain how any configuration of stages in a corporate life-cycle can develop. The need now is to demonstrate the practical utility of this through detailed case studies.

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