MANAGEMENT:

THESIS, ANTITHESIS, SYNTHESIS

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Abstract

Increasingly, managers live in a world of paradox. For instance, they are told that they must manage by surrendering control and that they must stay on top by continuing to learn, thus admitting that they do not fully know what they do. Paradox is becoming increasingly pervasive in and around organizations, increasing the need for an approach to management that allows both researchers and practitioners to address these paradoxes. A synthesis is required between such contradictory forces as efficiency and effectiveness, planning and action, and structure and freedom. A dialectical view of strategy and organizations, built from four identifiable principles of simultaneity, locality, minimality and generality, enables us to build the tools to achieve such synthesis. Put together, these principles offer new perspectives for researchers to look at management phenomena and provide practitioners with a means of addressing the increasingly paradoxical world that they confront.

Keywords: dialectics, improvisation, paradox, synthesis

Introduction

Few words appear more often in the recent literature on management than 'paradox'. In the popular business press, managers are alerted to the emergent trends of the "age of paradox" (Handy, 1995). That Master of Paradox, Tom Peters (1987: 391-397), tells them to "master paradox". Peters – probably the most well-known business 'guru' – when asked what would be the most important lesson he would like to teach humanity, answered as follows: "success is the result of deep grooves, but deep grooves destroy adaptability [which is the touchstone of success]." In this he identifies the "great paradox" (Peters, 1992: 616).

Although explicit recognition is recent, in the academic literature on management and organizations, paradox can be traced back at least as far as Adam Smith's 'pin factory', where integration and differentiation surfaced as the major tensions underlying the rise of the modern industrial organization (Smith, 1776/1991). The paradox was that master craftsmen were less efficient and effective at producing pins than were simple hired hands. Paradoxically, ingenuity and dexterity were antithetical rather than related. Work had to be precisely prescribed (or de-skilled) to produce the most efficient results – an insight that survived right through early twentieth century Taylorism up to the more recent Quality movement. More recently scholars have identified similar paradoxes in diverse areas of organization theory (Weick, 1993a; Hatch, 1999), including specific applications concerning time and organization (Burrell, 1992), organizational change (Orlikowski & Hofman, 1997; Edelman & Benning, 1998), organizational culture (Machin & Carrithers, 1996), leadership (Thayer, 1988) and communication (Yates & Orlikowski, 1999).

In this light, paradox is not really new to either management researchers or practitioners. From scientific management onward (Taylor, 1947) the attempts to

tackle paradox fall mainly into two approaches. These have succeeded each other historically and can now be said to co-exist. First, scholars attempted to find the 'best way' to come to grips with central tensions. For as long as most organizations enjoyed a relatively unturbulent environment, researchers chose to address the central paradox bounded by the poles of differentiation and integration. Thus, Taylor (1947) sought to find the best way to differentiate tasks along a production line and to define the principles that should guide managers' behavior for integration to be as efficient as possible, while Fayol (1949) and Barnard (1938) aimed at the higher echelons of the corporation. For Fayol, formalization of administrative principles, focusing on integration more than on differentiation was the loci of solution. Barnard was more ambitious and coupled a normative statement of the functions of the executive – all related to coordination roles – with a descriptive statement of the basis and need for differentiation that aimed to answer the ever-present economists question: why organizations?

A different approach, often labelled contingency theory, emerged around the middle of the century. Different environments (Burns & Stalker, 1961) and technologies (Woodward, 1965) – as key contingencies – determined adoption of the 'correct' organizational structure, inspiring a stream of research aimed at mapping different states of possible contingent factors and the organizational configurations adequate to each of those states (Lawrernbce & Lorsch, 1967). Later, a dynamic element – structural adjustment to regain fit – would be added by Donaldson (1997). Hence, paradox arose when different environmental and organizational states became misaligned. Being paradoxical was a dysfunctional fate that any organization might face when its structural pose and contingencies were out of kilter with each other – and thus would have to be realigned as a central element in strategy.

For management academics the best practice approach prescribes contingency – where patterned indeterminancy predominates, not defining any thing specifically so much except a means of analysis. By contrast, in the practitioner literature, the best practice approach prescribes not so much a method of analysis – an episteme – so much as a mode of organizational being – an ontology (e.g. Peters & Waterman, 1982; Peters, 1987, 1992, 1994; Shapiro, 1995). Ontological changes in organization are not randomly patterned or required – they are a response to a specific social construction of the future of the business environment. These includes features such as 'hypercompetition' (D'Aveni, 1995), the shortening of product life cycles (Bettis & Hitt, 1995), the need for a highly educated work force (Drucker, 1996; Handy, 1991), and significantly shifting consumer tastes (Peters, 1992). A view of the future emerges that produces a series of standard prescriptions for organizational practice and strategies in an age of paradox.

Three reasons for the increasing pervasiveness of paradox have been identified. The first relates to the adoption of information technology, which is inherently paradoxical (Johnson & Rice, 1984). For example, e-mail communication is at the same time both formal – it is a recorded medium – and informal – because it invites rapid and irretrievable response often in contexts where there is little room for reflection (Yates & Orlikowski, 1999). Its implementation is often both planned *and* emergent – as people develop informal and organizationally unapproved uses for it (Orlikowski & Hofman, 1997). Second, environmental changes place increasingly contradictory demands on organizations. Taking the personal computer industry as an example, successful companies require a high rate of innovation while lowering costs: thus, the paradox they must master remains bounded by the opposite poles of effectiveness and efficiency (Brown & Eisenhardt, 1997). Not only has paradox

become more pervasive in organizations; it has also been felt and perceived more acutely by organizational managers. 'Management gurus' articulate the problems organizations face in ways that enable managers readily to perceive their importance and urgency. However, when 'gurus' switch from being problem-tellers to problem-solvers the policies and practices they commend often seem extremely counter-intuitive for the average manager raised on a strict diet of rationality (Micklethwait & Wooldridge, 1996). In addition, these prescriptions are frequently contradictory, not only between authors but also within the work of the same author. Tom Peters offers a striking example of this feature of 'guru' advice. In a clear allusion to the runaway success *In Search of Excellence*, he wrote later that "Excellence isn't, there are no excellent companies" (Peters, 1987: 3), arguing that the prescriptions he offered with Waterman in the first book were wrong and fallacious. Where not seemingly irrational the solutions profferred more often than not involve large, multinational companies; thus, the resources required to deploy a problem-solution are often far beyond the reach of the 'average' company. These contradictions increase the perception of paradox felt by managers by creating bipolar tensions not only in the problems they face but also in the solutions available to handle them.

Under the circumstances outlined, the presence of paradox becomes a problem in its own right (Shapiro, 1995; Peters, 1992), to which three possible – and paradoxical – answers emerge in the literature. The first, present in both business and academic literatures, states that paradox is essentially unsolvable – something to be sustained or endured and not to be resolved. In this vein, Miller (1993) has shown that success inevitably breeds failure and Mintzberg and McHugh (1985) demonstrated that planning always brings unintended consequences that may end up jeopardizing the plan itself. In the practitioner oriented literature, Peters (1992) argued that success

comes from both adaptivity and 'deep grooves' (from exploration and exploitation) which are outright irreconcilable while Senge (1990) contended that learning breeds ignorance (by hampering new learning).

The second strategy for dealing with paradox is to reach a compromise between the two poles that frame it. From a contingency approach, the organization may choose an appropriate mix of opposites (e.g. foregoing some effectiveness in order to obtain more efficiency). Alternatively, deriving from an outright inability to maintain such a state of contingent tension, pragmatic compromise may be sought in the actually existing pattern of organizational actions and decisions, through managers coming out in favour of one side rather than the other.

Finally, one can attempt to integrate these opposites and 'solve' the paradox through a synthesis. The organization will seek to be efficiently effective, loosely tight coupled, and follow a deliberately strategy of emergent change. Dialectical reasoning, where thesis and antithesis are combined into a synthesis, is a potentially useful framework to help managers tackle paradox without having to subdue any of the contradictory goals it often entails.

We will argue for the relevance of this view, showing the need for an integrative 'dialectical view of management. We will present its potential for both theory and practice by discussing its application to what Mintzberg, Quinn and Ghoshal (1995) labelled manager's foremost concerns – strategy and organization. We will show that this perspective is relevant in terms of both theoretical and practical implications. Benson (1977) argued that four overarching principles need to guide any approach to organization theory that is to be considered dialectical and we will demonstrate the goodness of fit of our criteria in these terms.

Fundamentals of Organizational Dialectics

Understanding dialectical phenomena as a process means that a given condition and its negation come in a never-ending succession in which a thesis gives birth to its antithesis which in turn is transformed into its own antithesis. This view of dialectics started as a rhetorical strategy developed by Socrates (Durant, 1991) and found its highest modern expression in Marx's (1867/1978) explanation of the historical evolution of society and attempt to extrapolate the future transcendence of capitalist systems. The underlying principles of this approach were articulated as follows by Engels in the *Dialectics of Nature* (Engels, 1873). First, the mutual struggle of opposites (a phenomenon inevitably generates its opposite); second, the negation of the negation (the struggle of opposites is cyclical and never-ending); and third, the transformation of quantity into quality (incremental changes lead to discontinuous change).

Blau and Scott (1962) first elaborated the merits of a dialectical approach but it was Benson (1973, 1977) who built an overarching argument for its relevance for organization theorists. Drawing on Mill's (1962) criticisms of the analytical reliance of sociologists on natural dialectical laws for understanding social phenomena, Benson (1973) reframed bureaucratic-professional conflicts as dialectical, formulating four underlying principles of a dialectical approach to the study of organizations. These were social construction, totality, contradiction and praxis (Benson, 1977). Other authors followed, addressing organizational phenomenon dialectically. Lourenço and Glidewell (1975), for example, explicitly treated organizational conflict in dialectical terms, while Greiner's (1972) understanding of the evolution of organizational structures shows a clear, if somewhat implicit, manifestation of this approach. Echoes of Engel's principles resound in this work:

> [D]elegation, which grows out of and becomes the solution to, demands for greater autonomy in the preceding [revolution] eventually provokes a major revolutionary crisis that is characterized by attempts to regain control over the diversity created through increased delegation (Greiner, 1972: 84).

Insert table 1 about here

In essence, a dialectical approach develops a process model of organizations through contradictory, antithetical stages (table 1 categorizes major contributions towards a dialectical view of management). Contemporary representations of contradictions, tensions and paradoxes in the management literature suggest that thesis and antithesis not only occur in succession but can also be present simultaneously (Clegg & Hardy, 1996). In consequence, some authors have adopted a more 'static' approach to dialectical phenomena in organizations. Such views are grounded in Heraclitus' view of dialectics, as developed by Hegel (1892), as a phenomenon where two distinct/contradictory entities engage each other in conflict generating a synthesis that incorporates, and differs from, them both (Durant, 1991; Van de Ven & Poole, 1995). The application of this approach to organizational research, however, has been limited to isolated themes. Historically, Follett (1940a; 1940b) showed how autonomy and control could be coupled in an organization. More recently, Edelman and Benning (1998) argued for the possibility of incrementally punctuated organizational change. Yates and Orlikowski (1999) and Orlikowski and Yates (1998) showed how organizational communication can be both formal and informal and how opposite views of organizational time can be integrated. Brews and Hunt (1999) contended that strategy could be simultaneously emergent and deliberate. Nonetheless, none of these authors has put forth an integrative view of management from a 'static dialectics' lens, such as Benson (1977) has done for 'process dialectics'.

However, they have suggested both the pervasiveness of paradox in organizational life and the potential that dialectics has in providing insights for researching and resolving these paradoxes. Drawing on these streams of research, a dialectical model of organization, strategy and change can be developed. The point of doing this is to show the potential integration of these findings as groundwork for future dialectical understanding of organizational phenomena. To accomplish such a task, we will look at research on the workings of opposing forces in organizations, such as planning and action (Crossan & Sorrenti, 1997; Moorman & Miner, 1998a, 1998b), organization and disorganization (Weick, 1995), incrementalism and punctuated equilibrium (Brown & Eisenhardt, 1997), and exploration and exploitation (March, 1991; Orlikowski, 1996). We will argue that these can be harnessed via synthesis for the benefit of an organization's competitiveness and sustained success.

Dialectical Strategy

One of the most pervasive debates in management is that between the 'planning school' (Ansoff, Avner, Brandenburg, Portner, & Radosevich, 1970) and the 'learning school' (Mintzberg, 1990; Mintzberg & McHugh, 1985). Proponents of planning argue that the main triggers of organizational action are pre-planned events (Miller & Cardinal, 1994). The way to sustained competitiveness is seen to derive from excellence in environmental scanning and organizational assessment. Using these, organizations must combine their strengths with market opportunities to form a plan for subsequent implementation (Porter, 1982). This approach produces high efficiency outcomes because resources are allocated only to more profitable business units (Wooldridge & Floyd, 1990). However, it is a process of low effectiveness because organizationally committed obedience to plan hinders managers' flexibility and

reaction speed. From this perspective, strategy results from mostly deliberate action, emanating from the organization's will as expressed in the discipline of a long-range plan.

From the other perspective, those that espouse the 'learning' school contend that the high level of turbulence most companies now experience cannot be handled via reflection alone (or at all) (Lindblom, 1959). Instead, organizational action should be triggered by any event in the environment that is perceived as either a threat or as an opportunity, not only by those events prescribed in the plan. The members of the 'action school', who are the more radical adherents of this view, argue that even without the presence of environmental stimuli for action, organizations must change and experiment. The rationale for this statement is twofold. First, since environments are social constructions (Berger & Luckmann, 1967; Smircich & Stubbart, 1985) and are enacted (Weick, 1995), stimuli may be misperceived as absent when they are in fact present; thus, uncalled-for action allows for refinement of the organization-wide perception of the environment. Second, experiments allow the organization to shape its environment, increasing its competitive basis and depleting that of its competitors (Hamel & Prahalad, 1994). In this vein, strategy is a highly effective process rather than a determinate plan. The non-existence of a formal plan permits high flexibility and reaction speed, allowing organizational members to reap unexpected opportunities or parry unexpected threats from the environment (Eisenhardt, 1989).

There is a downside to the process view. What is gained in effectiveness is often lost in efficiency. The use of experiments is costly, due to the often low ratio of successes over failures (Cooper, 1979) and the danger of the organization 'spreading itself too thin' over numerous opportunities. Very flexible strategic processes carry no guarantee of being effective (Miner, Moorman & Bassoff, 1996). Thus, from this

perspective, the results of a company's strategy are mostly emergent and only appear coherent via a post-hoc interpretation of elapsed, and future perfect, actions (Mintzberg & Waters, 1982).

Recently, a synthesis between these two views of strategy has been emerging. The synthesis of organizational improvisation allows for an integration between planning and action, without calling for a compromise between these opposites nor for the presence of one despite of the other (table 2 summarizes this approach). The organizational improvisation or 'real-time planning' approach, shows that learning/'action' strategies happen *because* of a plan and not *in spite* of it (Weick, 1998). Such a view of strategy sees organizational action being triggered when environmental stimuli call for fast, flexible action grounded on a pre-formulated plan, a plan aimed at providing the grounds for such a posture. Jazz musician's use of musical scores to improvise collectively (Berliner, 1994), and Shell's use of scenario planning to respond to an unexpected discontinuity in oil prices (Wack, 1985) are two examples. From this perspective plans can be used to foster adaptiveness and flexibility, resulting in a process that is both effective and efficient. It is effective because the plan is used to foster flexibility by creating an unobtrusive means of coordination that allows action to be integrated towards a common goal (Bastien & Hostager, 1988), thus permitting a substantial degree of flexibility. It is efficient because the bricolage dimension of improvisation (handling tasks with available resources) allows the organization to deploy its resources in multiple uses and thus escape from the increasing costs that use of specialized resources for planned or emergent activities normally entails (Scribner, 1986). As far as results go, one can classify improvisation as a deliberately emergent strategy inasmuch as a deliberate

plan is composed in order to facilitate the organization's ability to adapt and swiftly respond to emerging internal and external threats and opportunities (Barrett, 1998).

Insert table 2 about here

Organizational improvisation is grounded on the realization that organizations prefer following plans to constantly re-inventing themselves (Weick, 1998). From this perspective, organization depends on the pre-existence of a plan and organizational infrastructure to guide practice. However, these are not the only two factors needed to plan in real time. Some additional conditions are necessary for the practice of improvisation and one can unearth a set of influence factors that determine its success. These conditions and influencing factors can be grouped, using a dialectical lens, along three synthetic axes: (1) an experimental culture coupled with tight controls; (2) memory both as friend and foe; and (3) skilled individuals coupled with unskilled resources.

As far as the first synthesis goes, a mix of formal controls can help foster an experimental culture. Such a culture results from a set of values and beliefs that promote action and experimentation – as opposed to reflection and planning – as a way of understanding and dealing with reality. To paraphrase Peters (1992), one replaces a 'ready, …, ready, aim, aim, …, aim, fire' approach one that stresses 'fire, …, fire, aim, fire'. For this to happen, an organization has to, at a minimum, tolerate errors and ideally espouse what Weick (1999) calls an 'aesthetic of imperfection'. This kind of organization cultures have strong 'pro-innovation' biases that exhibit themselves in sensemaking: for example, in a belief that a great plan can only be

accomplished through finding an emerging pattern in actions taken in the past (Weick, 1995).

To foster innovative sensemaking cultures, such companies use two major mechanisms. First, they reward people based on the number of 'competent mistakes' they have made (a competent mistake resulting from novel ideas and not from flawed execution) (Picken & Dess, 1997). Second, they tap the power of symbolic action and stories as third order controls (Perrow, 1986; Weick, 1999), by diffusing tales of 'competent mistakes' as role models for the organization's members.

Another value that an organization must espouse for improvisation to occur is that of urgency. The occurrence of unexpected and 'unplanned-for' events is not enough for improvisation to happen. Additionally, those that address such irruptions should feel that it can only be addressed through fast action (Perry, 1991). Otherwise they can fall back on planning (because they perceive that they have time to do so) instead of being pushed to compose a course of action in real-time – a far more daunting process than the former (Eisenberg, 1990).

In order for enterprising, innovative sensemaking cultures must be coupled with a mix of control mechanisms that shape convergence around organization-wide goals. Otherwise they risk sharp disaggregation and might cross the thin line between flexibile and unproductive, random, action (Stacey, 1991).

The control mix comprises three major elements: these are first and second order 'invisible' controls, milestones and clear goals. On controls, most authors on improvisation argue that the only kind of mechanisms applicable in an organization that aims to improvise are third order, meaning indirect controls that coordinate via culture or ideology (Perrow, 1986; Mintzberg, 1995; Weick, 1993a). Justification can be found in the work of Dougherty who shows the difficulties in pursuing novel

actions in organizations stifled by first (direct supervision) and second (standardization) order mechanisms of coordination (Dougherty, 1996). However, drawing on recent findings in critical studies of organizational control, we contend that improvisation can occur in environments with abundant first and second order mechanisms in play. The touchstone of controlling improvisers resides not in the degree of obtrusiveness of such mechanisms but in their invisibility. Direct supervision can be 'delegated' from superior to peers allowing for the maintenance of coordination without hampering creativity (Sewell, 1998). For instance, in jazz, band members are often chosen because of their reputation as able improvisers not among critics but among fellow players (Hatch, 1999). Second order controls can also be rendered invisible by incorporating them in the production technology itself (be it one of tangible goods or services) (Joerges & Czarniawska, 1998; Barley & Kunda, 1992).

Second, milestones or action deadlines have been found to be an effective mechanism for maintaining the momentum/sense of urgency triggered by unexpected and 'unplanned-for' events (Gardner & Roggoff, 1990). Milestones represent opportunities to perform a check between current actions and the development of situations the organization is facing, allowing detection of what, from the legitimated perspective of the underlying organizational score, might be construed as deviations or misperceptions that need correction (Eisenhardt & Brown, 1998). Moreover, milestones are set in advance and planned, thus providing a sense of structure/routinization to improvisational activities often perceived to result from chaos and disorder (Eisenhardt & Tabrizi, 1995). Finally, milestones serve as moments of feedback as partial stages/steps are concluded and thus, potentially increase individual motivation – building momentum and the sense of urgency needed for improvisation to be sustained.

Finally, clearly articulated goals serve the all-important function of ensuring that improvisational activity amounts to the attainment of organizational objectives. Clearly articulated goals perform, in organizational settings, a very similar function to that of the song in jazz improvisation. They are akin to a magnetic field (or a strange attractor, to use the vocabulary of complexity theory) that, although not prescribing individual action, are strongly normative concerning the results of such action (Weick, 1993a). They also contribute to coordination among individual members by defining the results of their activity in a similar process to that of standardization of outputs (Mintzberg, 1995).

Memory, the second synthesis states, can be both helpful and harmful to improvisation. On the one hand, as far as procedural memory goes, a *small number of routines* are a central condition for improvisation. In this light, improvisation appears to occur only when an organization/individual does not have adequate routine/procedural memory to respond to an unexpected situation (Moorman & Miner, 1995). In situations for which an adequate routine does exist, then improvisation will be highly unlikely. The rationale for this hypothesis has several grounds. First, it would be inefficient to improvise when an effective response that covers the situation is already stored in memory; second, these response processes are often unconscious, automatic and undetectedly autonomous, lowering the deliberateness of choice. However, in spite of empirical proof that procedural organizational memory does hinder improvisation (Moorman & Miner, 1998b), it is at least theoretically arguable that the opposite is also true. If we understand routines as grammars (Pentland & Rueter, 1994), knowing that elements in a grammar can be combined in infinite possibilities, then procedural memory would be the organizational counterpart of a score, one that organizational improvisers could

embellish/modify at will during action (Moorman & Miner, 1998a; Weick, 1998). There is empirical evidence for this viewpoint. In a study of improvisation in the computer industry, Brown and Eisenhardt (1995) found that firms with established routines were *more likely* to improvise. Although organizational memory hinders improvisation, its effects can be severely attenuated if organizations use its elements to create new routines *as action is unfolding*.

Declarative memory, or knowledge of facts (Anderson, 1983), is related to qualitative variations of organizational improvisation. It plays an important role in the degree of improvisation: the more facts an organization knows the broader and, arguably, more diversified is its basis for creativity and thus for improvisation (Amabile, 1998; Woodman, Sawyer & Griffin, 1993; Moorman & Miner, 1998b). Nonetheless, a wide span of declarative memory may also slow the speed of improvisation because of the amount of time that individuals must invest in searching through all available alternatives (Moorman & Miner, 1998a), although one could argue that bounded rationality would act to counter this phenomenon (Simon, 1990). Regarding the synthesis between specialization and generality, improvisation seems to call for skilled individuals to deal with unskilled/general-purpose resources.

Having skilled individuals in an organization that aims to be proficient at real-time planning implies, first and foremost, that the level of performative skill that each individual possesses determines their ability to pursue improvisational activity distant from organizational routine (Weick, 1993a, 1999; Crossan, White, Lane & Klus, 1996). Additionally, when improvisation is a group phenomenon, the group's improvisational performance will be limited by the ability of its least skilled member (Bastien & Hostager, 1991; Hatch, 1999). The relevance given to skill rests on it being a vehicle for creativity to be put in practice. Thus, individual creativity is also

an important trait that improvisers must possess (Erickson, 1982; Crossan, 1998). Only high levels of individual creativity will allow for radical departures from current organizational practice. According to Weick, it is the latter that reflect "purer instances of improvisation" (1998: 545), with lower level being 'variations' or 'embellishments' that still retain much of the original routine/idea and that may not be as effective.

Another organizational attribute of improvisation is member skill diversity. Homogeneous organizations are not prone to diverse approaches in solving problems or to reaping opportunities (Hannan and Freeman, 1989). Thus, the 'novel' element of organization improvisation will be seriously compromised if the organization does not benefit from a diverse population. Such organizations will probably be limited to mere embellishments or small variations upon existing ideas, products, practices and routines (Weick, 1998, 1999; Hatch, 1997).

The resources that the individual/team/organization possesses are better able to improvise if they are less skilled and specialized. In fact, specialized and limited purpose resources can thwart improvisation by limiting organizational members' ability to turn their ideas into innovative practice. Conversely, multi-purpose resources are flexible enough to be deployed in a variety of uses, even if those uses were never part of the organization's stated intentions (or even imagination) for their applicability (Weick, 1993a). Thus, resource flexibility affects improvisation by augmenting the possible courses of action an organization can take. General-purpose resources reduce the number of constraints upon those conceiving action as it unfolds, thus augmenting their potential degree of departure from standard practice/ideas and ultimately, their ability to reach 'purer' forms of improvisation.Taking these three syntheses into account, improvisation can be seen as an integration between planning

and action and thus offers a path for those attempting to build a dialectical view of management.

Dialectical Organization

Paralleling the debate between the 'planning' and the 'action' schools, both academicians and practitioners have been discussing whether the hierarchical/bureaucratic organizational model should be maintained or whether organizations should migrate to self-management forms such as the network. Those espousing the 'hierarchy' school argue that the existence of tacit knowledge (Prigogine, 1984), technological, human physical and mental limitations (Barnard, 1938) and the appeal of lower transaction costs (Williamson, 1971), justify the need for hierarchy and order-based relationships. Their emphasis is on the mechanisms that allow differentiation of workers in specialized roles and on how to control their efforts in order to attain higher-order organizational goals. These control mechanisms are often of a formal nature because organizational growth makes interpersonal coordination (e.g. mutual adjustment and direct supervision) very inefficient and sometimes impossible (Greiner, 1972). Standardization of procedures, outputs and skills are thus favored integration devices (Mintzberg, 1995). Control, and not mere coordination, seems to be the main goal of this type of organizations.

Opposing this view are those claiming that changes in the environment, such as a higher competitive pressure (Bettis & Hitt, 1995) and a better educated worforce (Handy, 1991; Drucker, 1996) both allow and demand a shift towards self managed/network-based organizational forms. Drawing on research on organizational learning, this view argues that shared values and beliefs are more pervasive than the 'hierarchy' view holds. Moreover, these serve as a powerful normalizing force that

invisibly bind organizational members to shared mental models of themselves, the organization, and its relevant environments (Argyris & Schön, 1992; Senge, 1990). Thus, the major challenge for an organization is to harness this force in order to attain a higher integration level, one that allows employees as a group to meet the diversity/complexity of the environment (Emery & Trist, 1965; Stacey, 1996). Integration is thus assured by informal controls such as culture, transmitted by socialization and rituals (Schein, 1985), in an attempt to manage what the 'hierarchy' approach leaves unattended – and which thwarts its ability to change and adapt. The major goal of the 'self-management' view is to foster coordination by integration through engaging organizational members in the process of building a shared mental model of where the organization is and where it wants to go.

The integration of these two opposing perspectives into a synthesis has already been attempted. Mary Parker Follet's writings on business as an integrative unity (Follett, 1940a) showed how to integrate the disparate needs of employers and employees. When she addressed order-giving (Follett, 1940b) she showed how framing orders as a 'law of the situation' instead of as a personal demand from management allows the coordination and control of employee action while freeing it to take whatever course is adequate for the task at hand. Follett, however, did not take into account the pervasive role of culture and manufacturing technology as powerful, yet unobtrusive control and limitation mechanisms able to hinder diversity in responses (Barker, 1993).

Drawing on Follett's work, we propose an integrative view of organization, which favors integrative differentiation (table 3 summarizes this approach). Again, we present a set of syntheses to make this argument: (1) trusting unknown organizational members even at a distance (minimal trust), (2) uncommitted commitment (minimal

commitment), (3) agreeing on disagreeing (minimal consensus) and; (4) controlling to liberate (minimal structure).

Insert table 3 about here

In the first synthesis, the apparent paradox is the use of trust as an integrative mechanism when it is not grounded in interpersonal ties but in stereotypes. Such a use exempts organizational members from the personal disclosure that trust-based organizational forms often entail (McAllister, 1995) allowing for the necessary differentiation needed to meet the complexity of turbulent environments (Emery & Trist, 1965). Minimal trust amounts to organizational members trusting someone they do not know. The elements normally associated with building trust are kept at a minimum level, just about that necessary to fight fragmentation. The point here is to create the conditions needed for trust to emerge (the belief that the individual with whom one is interacting will act in a way that is beneficial or at least not detrimental to oneself) with the minimum level of commonality and personal disclosure. Such an outcome is accomplished by coordinating by means of a generalized other (Jarvenpaa and Shaw, 1998) instead of social similarity. In this type of coordination trust arises from a self-fulfilling prophecy of trustworthiness that the individual develops, based on stereotypes of interactants and on previous network/team experiences.

Indoctrination mechanisms have an important role to play in the trust process. The purpose of indoctrination is not just related to the inculcation of particular organizational values and beliefs but the facilitation of coordination by a generalized other. The process aims to create favorable stereotypes of the categories of people newcomers are prone to interact with and seeks to develop a favorable attitude

towards working in trust-based settings (Armstrong and Cole, 1995). Creating an attitude conducive to trusting other members of the organization is ultimately equivalent to fostering institution-based trust, in the sense that members are trusted on the basis of their affiliation with the organization (Frances, Levacic, Mitchell & Thompson, 1991). For this to be possible, a different (one is tempted to say 'minimal') conception of culture and structure must also be present.

The second and third synthesis can be grouped under the umbrella of a 'minimal' organizational culture. High levels of commitment and consensus, favored by much of the prescriptive management literature, will be replaced by minimal levels of each. As far as *minimal commitment* goes, its purpose is to promote the level of commitment needed to assure the necessary level of performance on behalf of the individual, while avoiding blind adherence to individual, group and organizational decisions. While organizational members take the success of the organization as a central value, they do so in the context of being open to information against the grain of this commitment – information that goes against decisions made by them both as individuals and as group or organization members.

The dynamics that underlie a 'healthy' level of commitment to an organization are coincidental with those that explain individual and group pathologies, such as groupthink and individual defensive routines (Janis, 1972; Argyris, 1992; Harvey, 1996). Commitment should be seen as the result of attempts to resolve cognitive dissonance that come from making public and explicit choices without sufficient external justification (Salancik, 1977; Eiser, 1980). The challenge lies in promoting a set of values and beliefs that fosters a positive attitude towards public and explicit errors (Weick, 1999). This attenuates the need for triggering dissonance reduction

processes because the organization values mistakes, as long as they are an input for learning (Sitkin, 1992).

Minimal commitment needs, however, to be coupled with *minimal consensus*, in order to more effectively avoid the negative consequences of strong cultures, without losing the unobtrusiveness of the controls they rely on. Minimal consensus is grounded on the premise that a diversity of perceptions favors a richer understanding of the environment and, therefore, allows an organization to act in a more informed way (Starbuck, 1965). Moreover, diversity in the composition of the organization's population allows a wider repertoire of solutions and a higher level of flexibility (Hedberg, Nystrom & Starbuck, 1976). These characteristics facilitate, in turn, a higher degree of adaptability to changing environments (Brown and Eisenhardt, 1997) – the reason why trust-based organizations are adopted in the first place (Powell, 1990). External complexity, which can reach significantly high values in this kind of environments (Emery and Trist, 1965), is matched with the complexity of individual organizational members, instead of with the complexity of organizational design (Weick, 1993a). In short, the organization copes with environmental complexity by having diverse members instead of adopting complex structural forms.

Minimal consensus rests on a deliberate and intentional effort to reduce commonalities among organizational members to the minimum level required for integration to be feasible. Thus, minimal consensus abandons the pursuit of common perceptions of the environment, values and beliefs, promoting instead the compatibility of perceptions, values and beliefs on the part of different organizational members. The purpose of this is to allow trust to emerge through a perception of compatibility rather than one of similarity (Weick, 1993b). In this way, individuals acknowledge that they hold a valuable perception of reality but also realize that this

perception is limited, and its real action taking and decision making power can only be harnessed when combined with different views from other members. It is important, though, that those perceptions, although not being identical, are compatible in the sense that they illuminate a certain reality from different but complementary (as opposed to antagonistic) perspectives (Hedberg et al., 1976).

Finally, the fourth synthesis, which we label 'minimal structure', is constituted by three elements: (1) coordination by action, (2) based on a minimal set of rules and on a (3) shared social objective. Due to the absence of a strong culture from which trust and coordination can be derived, this type of organization replaces a shared system of values, beliefs and perceptions, by coordination through action. This means that the integration of the individual efforts of organizational members does not rely on sharing the same culture but on having a *compatible* perception of the challenges posed by the environment (Weick, 1993a), one that creates a 'law of the situation' (Follett, 1940b) for individuals to obey. As in coordination by culture, this is still a third order control. However, it promotes, instead of hinders, diversity, by fostering the emergence of *compatible* (as opposed to *shared)* views of a problem or opportunity, that allow for a broad variety of alternative courses of action to appear (Eisenberg, 1990).

Control in minimal networks is also achieved through a small set of rules that govern the interaction among their members (Weick, 1999; Bastien and Hostager, 1991). These rules can emerge from the nature of the task faced by the group or from broader social norms (Hatch, 1997). As far as the nature of the task is concerned, these rules are embodied in a restricted set of cognitive and behavioral alternatives that the members can choose from. In spite of the diversity desirable in this kind of organization, the set of alternatives is restricted because of the necessary compatibility

among members for minimal integration to occur (Brown & Duguid, 1991). Such a set of alternatives can be equated to an organizational grammar: a set of elements and combination rules among elements that allow for the formation of an almost infinite set of different courses of action, from a limited set of inputs (Pentland and Rueter, 1994). In minimal networks, social norms are limited to those coming from the professional and industry-specific cultures of its members (Hutchins, 1991). The organization should restrain itself in adding to these rules, at the expense of limiting the scope of diversity (Weick, 1995).

Another important mechanism of coordination in minimal networks is a shared social objective. Because of the parsimony of control mechanisms, organization goals must be explicitly shared by members (Orr, 1990). Where they are not, although individual teams can respond adequately to problems or opportunities in the environment, they will do so on an ad hoc basis that can increase the fragmentation of the organization as a whole in a continuous fashion, compromising its long-term integrity (Senge, 1990).

In conclusion, we may note that a 'minimal' view insists that a dialectical approach to organization is not only possible but also desirable in light of the paradoxes managers and workers often confront. That the concepts of dialectical strategy and dialectical organization offers a synthesis between two opposing schools demonstrates that there is potential for a dialectical view of management. For this demonstration to be complete, we will draw on Benson's (1997) four principles of a dialectical view of organization theory. Although this author's approach is wedded to a 'process' view of dialectics, the underlying principles of his approach appear to apply to a 'static' perspective as well, as we elaborate in the next section.

Towards a Dialectical View of Management

The principle of *social construction* calls for the identification of both a source of constraint and a source of deviation/construction. As far as dialectical strategy goes, the source of constraint is the plan, i.e. the 'minimal' prescribed part of strategy that allows for adaptivity to emerge (Brews & Hunt, 1999). Its source of variation comes from the stimuli that press the organization/individual to adapt and to be flexible as action unfolds and from the ability to 'bricolate' with and around the prescribed plan (Berry & Irvine, 1986). As far as dialectical organization goes, the source of constraint is the minimally formalized structure, including shared goals and the stereotypes acquired in the indoctrination process. Deviation and construction comes from the perception of errors as learning opportunities (Sitkin, 1992) and from the role of action as a ground for coordination (Follett, 1940b).

The principle of *totality* calls for finding an underlying 'whole' to which semi-autonomous parts are linked. At the organizational level, the 'whole' behind an instance of a dialectical strategy is the overarching action culture that grounds it. Individually, looking at this phenomenon as an enactment of distilled experience (Crossan & Sorrenti, 1997), a high level of skill frames organizational members' life experiences as the background that allows for discrete instances of improvisation to appear (Hatch, 1999). These overarching elements notwithstanding, each dialectical strategy is autonomous in the way that it depends on the specific details of the plan driving it and on the people working towards it. Dialectical organizations, on their side, take much of their rules and structure from general societal norms (Bastien & Hostager, 1988; Eisenberg, 1990) and depend on the diversity of their members, encompassing a wide span of settings in which a particular organization is just a single element. Nonetheless, each organization deploys norms and diversity in a mix that renders it partially autonomous.

The principle of *contradiction* offers the clearest illustration of dialectics. Contradiction only emerges where two opposing forces are at work. The fact that plans necessarily possess an emergent component (Minztber & McHugh, 1985), either because of the complexity of environmental interaction or because of communication distortion, allows us to uncover this principle in a dialectical strategy. The fact that human interaction creates an informal 'shadow' system in every formal structure (Krackhardt & Hanson, 1993; Sayles, 1989) allows us to do the same regarding the concept of dialectical organization.

Finally, *praxis* (which Benson [1977: 5] defines as "free and creative construction of social arrangements") is also visible in both concepts. Dialectical strategies are often prone to formalization, which eventually ends up creating punctuated change via an incremental process (Edelman & Benning, 1998). Dialectical organizations, with their low levels of commitment and consensus, allow their arrangements to be in permanent reconstruction, in a state of 'organizing' and becoming rather than being (Weick, 1979).

Summing up, we go beyond the current state of the art of dialectical perspectives on management – which has been focusing on demonstrating its relevance and applying itself to several disconnected fields of management inquiry – by proposing a set of underlying principles for 'static' management dialectics. This is done with the purpose of providing a novel basis for research into the paradoxes present in organizations and a new understanding for practitioners to benefit from those paradoxes. Four principles guide this approach: simultaneity, locality, minimality and generality (table 2 contrasts these with those of a 'process' approach).

Insert table 4 about here

Simultaneity means that a dialectical view of management is grounded on the interplay of contradictory forces and not on the attempt to subdue one to the other. Under this principle, a thesis does not exist *despite* its antithesis but *because* of it. Each pole of the dialectic needs the other to sustain its presence. The concepts of dialectical strategy and dialectical organization support this argument. Research has shown that, from a dialectical view of strategy, the design of a 'minimal' plan, where goals and deadlines are scrupulously prescribed and enforced, enhances the firm's flexibility and adaptability to unexpected internal and external shifts (Brown & Eisenhardt, 1997). Additionally, Hutchins (1991) proved that some level of structure is needed for informal cooperation to emerge, and Ezzamel and Willmott (1998) found that loosely coupled structures were heavily dependent upon highly structured relationships and reward systems. Thus, a second insight from this principle is to shift the role of the manager from one of choice between the poles of a given paradox, as contingency theory prescribes (Lawrence & Lorsch, 1967). Instead, paradoxes will be surfaced, held, lived, experienced, their visiblity promoting integration between its opposites. In fact, Follett (1940b) contended that using the 'situation' as a source of 'law' (i.e. orders) allowed integration between a directive and a democratic approach to leadership and organization. Weick's research into firefighting has eloquently demonstrated this point and shown how rules and plans are critical in unexpected and unplanned-for situations (Weick, 1993b). Finally, simultaneity means that one can seldom escape paradox in managerial life. Mintzberg has documented the close linkage between deliberate and emergent strategy (Mintzberg & Waters, 1982; Mintzberg & McHugh, 1985), showing that emergent and unplanned/unintended action will probably sprout from the most deliberate of plans. There are two brief

explanations for this phenomenon. The first is that communication distortion impedes people in understanding a message exactly as its conveyor understands it (Mintzberg, 1990). The second is that changes in the environment surrounding most businesses (Bettis & Hitt, 1995) has shifted towards a state of turbulence, where emergence is the norm because of the complexity of relationships between environmental factors (Emery & Trist, 1965; Lane & Maxfield, 1996).

Locality means that the synthesis between two opposing poles of a paradox does not result from an overarching design effort but from case-by-case enactment. The first inference one can make from this principle is that a synthesis is a local phenomenon; it results from the decisions taken by an organization or individual concerning a specific challenge or problem. Secondly, this synthesis occurs not in reflection but in action. Given most organization's biases towards pre-conception (Weick, 1998), few would endure the poles of paradoxes dealing with deviation from current practice if it were not because of poignant challenges from the environment (Mintzberg, 1996). Moreover, it is these demands for action that permits and facilitates the integration between opposites *as action unfolds* (Crossan & Sorrenti, 1997; Crossan, 1997). Finally, and in spite of this, the transition from local responses to organizational (global) routines is possible. This is accomplished as positive results in responses circulate throughout the organization via stories (Orr, 1990) that get shared and slowly creep into the organization's memory (Moorman and Miner, 1998a, 1998b).

Again, the concepts of dialectical strategy and dialectical organization support these claims. The 'planned' part of a dialectical strategy would go forever undisturbed without an external event demanding flexibility because of the bias of most organizations towards planning (Weick, 1998). It is only in response to such an event

that organizations/individuals adapt in and around a plan and through action, creating novel solutions that may end up stored in the organization's memory, be it procedural or declarative (Miner, Moorman & Bassoff, 1996; Vera & Crossan, 1999). As far as organizing goes, research into innovation implementation and group cooperation has shown that structures are often as enduring as the life span of a project (Johnson & Rice, 1987) and that these structures emerge from action, which acts as the prime coordination mechanism (Bastien & Hostager, 1988). Additionally, these organizational configurations are often formalized and crystallized in the organization (Orlikowski, 1996).

Minimality means that the ability to use a paradox to build a synthesis depends on maintaining only sufficient levels of each of the paradox's poles in order to avoid one taking over the other. There are three arguments underlying this principle. The first is that, as complexity theory posits, big effects come from small causes (Prigogine, 1984). Thus, syntheses come from creating the necessary 'strange attractors' to create an 'organizational force field' that will bind corporate action, preventing it from falling into a too close orbit around one of the poles of paradox. Two different tasks are called for. These are the two remaining arguments sustaining this principle: creating the necessary (1) quantity and (2) quality of structure – *latu sensu* (i.e. plans, rules, procedures, and organizational configurations) for integration to be possible. As far as quantity goes, this implies searching the level that is sufficient for synthesis to emerge while taking care to stay on the thin line that separates stifling order from entropic disorder (the 'edge of chaos' [Stacey, 1991; Pascale, 1999]) and that integrates them both (Lane & Robert, 1996). As far as quality goes, this calls for procuring the type of structure whose unobtrusiveness allows for a dialectical strategy and a dialectical organization to thrive (Sewell, 1998). Otherwise,

independently of how small that structure is, its effect will always be more akin to restraint than to liberate. Thus, a dialectical strategy not only needs plans more akin to a jazz score than to classical music (the latter having many more prescribed notes to be played [Perry, 1991]), but also requires plans that do away with prescribed actions and replaces them with goals and deadlines (Eisenhardt & Tabrizi, 1995). In the same vein, a dialectical organization not only needs fewer controls but less visible ones. Although one can expand the span of control almost to infinity, this will not transmit the perception of freedom of action as might an empowerment program but it will reduce the perceived *amount* of control one has to endure (McGregor, 1960). Replacing orders with the law of the situation (Follett, 1940b), superior supervision with peer vigilance (Romme, 1999), and procedural specification with technological limitations, goes a long way to promoting nimbler organizational forms.

Generality means that the 'minimal' prescribed and pre-conceived resources possess a high degree of generality. The first insight emerging from this principle is the need to 'tolerate' opposites. If results have to be effective and efficient, structured and unstructured, and deliberate and emergent, then individuals and resources cannot be committed (i.e. specialized) to a set of courses of action/solutions.They must be flexible enough to accommodate several of these, which may be more contradictory than not (cf. the concept of patching [Eisenhardt & Brown, 1999]). The second insight is that the resources available to organizational members, be they materials, plans, structures or information systems, must be 'fool-proof'. This means shifting the responsibility for avoiding dysfunction from the individual to the organization (Anderson, 1983) by embedding what is formalized in mechanisms for avoiding such dysfunction. Instead of relying on recruiting some special kind of employees that do not fall to groupthink (Janis, 1972), one could build an organization and a strategy

that subsumes this type of behavior in an emergent strategy. Finally, generality allows us to answer what some consider the greatest paradox in modern organizations – the dilemma between effectiveness and efficiency (e.g. Peters, 1992; Bennis, 1989). By relying on general resources and plans, an organization can shift strategy and form using bricolage, i.e. 'making do' with available resources (Levi-Strauss, 1966) without having to acquire new ones and thus exploiting those it possesses even as it changes direction.

In a dialectical view of organization and strategy, plans and configurations, allow for several syntheses to emerge. Plans that do not specify steps but instead provide major goals and deadlines allow for innovation to take place with high levels of efficiency (Sobek, Ward & Liker, 1999). Such plans allow organizations to adapt to unexpected circumstances, as Perry (1991) shows, thus enabling realized strategy to be both a more deliberate endeavor and one that leaves space for opposite directions to be woven into a synthesis. Such plans are generally simple enough to be understood and improvised upon even by the most junior of organizational members (see Orlikowski, 1996, for an example). While organizing dialectically, one relies on systems which allow and facilitate apparently opposite goals (such as simultaneously controlling and liberating), which do not require considerable skill because they are embedded in the general organizational fabric or built into the technology of production (Ezzamel & Willmott, 1998). Examples would be the use of MBO and mentoring. Additionally, unobtrusive controls allow space for creative effectiveness-seeking behavior to emerge within the frame of the cultural normalization necessary for efficiency to be attained (Sewell, 1998).

Conclusion

Paradoxes flourish where environmental changes and situational opportunities are creatively engaged with organizational theory and practice. Traditionally, some authors have drawn on a process view of dialectics to show how the opposing poles of paradox succeed each other in through contradictions that are generated and resolved in the course of time. New competitive landscapes demand more of organizations. Contradictions co-exist in time and must be tackled simultaneously. The innovation is this paper is to suggest ways in which paradoxes may be a permanent and creative feature of organizational life – which we refer to (in the paradoxical spirit of our paper) as 'static dialectics' – where opposites exist simultaneously instead of in succession. We provided an integrative framework as a dialectial synthesis capable of development into insights for practice. We drew on four principles that underlie a 'static dialectical' view of management, in compliance with Benson's (1977) basic principles of dialectical analysis. The paper goes beyond current theory in several ways. It presents the potential for an *overarching* view of management as an act of synthesis. It provides a platform for integrating separate and somewhat implicit research findings from various fields of inquiry. Thus, it is *integrative.* Static dialectics, in its view of management, recognises the increasing importance of the *simultaneity* of *opposite forces and demands* upon organizations. Thus, it is *coherent* rather than incoherent in its view of organizational realities. Finally, its take on dialectical phenomena in organizations provides a basis for *empirical investigation* and *practical action*. Thus, it is *reflexive*, both for theory and practice. In terms of theory, we have shown the potential of our dialectical view to make sense of what managers do when they seemingly act diachronically in ways that are not sensible, according to non-dialectical or conventional theory, as well. We do not reconstruct sense through the application of a contrived chronology in the manner of traditional

process dialectics. As far as practice goes, a dialectical approach suggests that 'traditional' practices, such as planning and formal organization, do not need to be overthrown to reap the benefits of postmodern organization in current competitive environments as some gurus claim. On the contrary: plans foster adaptivity and flexibility while structure and norms foster creativity and liberation. The nature of true genius resides in the ability to hold two contradictory ideas in thought and in practice at the same point in time, as one of the most astute observers of the modern condition suggested (Fitzgerald, 1968). Excellent management involves no less.

References

Amabile, T. M. How to kill creativity. *Harvard Business Review*, 1988, *76* (4), 77-87.

Anderson, J.R. *The architecture of cognition*. Cambridge, MA: Harvard University Press, 1983.

Ansoff, H. I., Avner, J., Brandenburg R.G., Portner, F.E. & Radosevich, R. Does planning pay off? The effects of planning on success of acquisitions in American firms. *Long Range Planning*, 1970, *3*, 2-7.

Argyris, C. *Behind the front page*. San Francisco: Jossey-Bass, 1974.

Argyris, C. & Schön, D.A. *Theory in practice: Increasing professional effectiveness*. San Francisco: Jossey-Bass, 1992.

Armstrong, D. & Cole, P. Managing distances and differences in geographically distributed work groups. In S. Jackson & M. Ruderman (Eds), *Diversity in work teams: Research paradigms for a changing workplace*. Washington, DC. American Psychological Association, 1995, pp.197-216.

Barker, J. R. Tightening the iron cage: Concertive control in self-managing teams. *Administrative Science Quarterly*, 1993, *38*, 408-437.

Barley, S. R. & Kunda, G. Design and devotion: Surges of rational and normative ideology in managerial discourse. *Administrative Science Quarterly*, 1992, *37*, 363-399.

Barnard, C. *The functions of the executive.* Cambridge, MA: Harvard University Printing Office, 1938.

Barrett, F.J. Coda: Creativity and improvisation in organizations: Implications for organizational learning. *Organization Science*, 1998, *9*, 605-622.

Bastien, D.T. & Hostager, T.J. Jazz as a process of organizational innovation. *Communication Research*, 1988, *15*, 582-602.

Bastien, D. T. & Hostager, T. J. Jazz as social structure, process and outcome. In R. T. Buckner & S. Weiland (Eds), *Jazz in mind: Essays on the history and meanings of jazz*. Detroit: Wayne State University Press, 1991, pp.148-165.

Bennis, W. *Why leaders can´t lead*. San Francisco: Jossey-Bass, 1989.

Benson, J. K. The Analysis of the professional - bureaucrat conflict: Functional versus dialectical approaches. *Sociological Quarterly*, 1973, *14*, 376-394.

Benson, J.K. Organizations: A dialectical view. *Administrative Science Quarterly*, 1977, *22*, 1-21.

Berger, P. & Luckmann, T. *The social construction of reality: A treatise in the sociology of knowledge*. London: Penguin, 1967.

Berliner, P. F. *Thinking in jazz: The infinite art of improvisation*. Chicago: University of Chicago, 1994.

Berry, J. W. & Irvine, S. H. Bricolage: Savages do it daily. In R. J. Sternberg & R. K. Wagner (Eds), *Practical intelligence: Nature and origins of competence in the everyday world*. Cambridge: Cambridge University Press, 1986, pp.271-306.

Bettis, R.A. & Hitt, M.A. The new competitive landscape. *Strategic Management Journal*, 1995, *16*, 7-19.

Blau, P.M. & Scott, R. *Formal organizations*. San Francisco: Chandler, 1962.

Brews, P.J. & Hunt, M.R. Learning to plan and planning to learn: Resolving the planning school/learning school debate. *Strategic Management Journal*, 1999, *20*, 889-913.

Brown, J.S. & Duguid, P. Organizational learning and communities-of-practice: Toward a unified view of working, learning and innovation. *Organization Science*, 1991, *2*, 40-57.

Brown, S.L. & Eisenhardt, K.M. Product development: Past research, present findings

and future directions. *Academy of Management Review*, 1995, *20*, 343-378.

Brown, S. L. & Eisenhardt, K.M. The art of continuous change: Linking complexity theory and time-paced evolution in relentlessly shifting organizations. *Administrative Science Quarterly*, 1997, *42*, 1-34.

Burns, T. & Stalker, G.M. *The management of innovation*. London: Tavistock, 1961.

Burrell, G. Back to the future: Time and organization. In M. Reed & M. Hughes (Eds), *Rethinking organization: New directions in organizational theory and analysis*. London: Sage, 1992, pp.165-183.

Camillus, J.C. Reconciling logical incrementalism and synoptic formalism: An integrated approach to designing strategic planning processes. *Strategic Management Journal*, 1982, *3*, 277-283.

Chanin, N.M. & Shapiro, H. J. Dialectical inquiry in strategic planning: Extending the boundaries. *Academy of Management Review*, 1985, *10*, 663-675.

Church, M. Organizing simply for complexity: Beyond metaphor towards theory. *Long Range Planning*, 1999, *32*, 425-440.

Clegg, S.R. & Hardy, C. 'Representations', In S. Clegg, C. Hardy & W. Nord (Eds); *Handbook of organization studies*. London: Sage, 1996, pp.676-708.

Cooper, R.G. The dimensions of industrial new product success and failure. *Journal of Marketing*, 1979, *43*(3), 93-103.

Craig, A. & Hart, S. Where to now in new product development research. *European Journal of Marketing*, 1992, *26* (11), 2-49.

Crossan, M.M. 1997. Improvise to innovate. *Ivey Business Quarterly*, 62: 37-42.

Crossan, M.M. Improvisation in action. *Organization Science*, 1998, *9*. 593-599.

Crossan, M.M. & Sorrenti, M. Making sense of improvisation. *Advances in Strategic Management*, 1997, *14*, 155-180.

Crossan, M.M., White, R.E., Lane, H. & Klus, L. The improvising organization: Where planning meets opportunity. *Organizational Dynamics*, 1996, *24*, 20-35.

Cunha, M.P., Cunha, J.V. & Kamoche, K. Organizational improvisation: What, when, how and why. *International Journal of Management Reviews*, 1999, *1*, 299-341.

D'Aveni, R.A. Coping with hypercompetition: Utilizing the new 7-S's framework. *Academy of Management Executive*, 1995, *9*(3), 45-57.

Dougherty, D. Organizing for innovation. In S. R. Clegg, C. Hardy & W. R. Nord (Eds), *Handbook of organization studies*. Thousand Oaks, CA: Sage, 1996, pp.424-439.

Drucker, P.F. *Post-capitalist society.* New York: Harper Business, 1996.

Durant, W. *The story of philosophy: The lives and opinions of the great Philosophers*. New York: Pocket Books, 1991.

Edelman, L.F. & Benning, A.L. Incremental revolution: Organizational change in highly turbulent environments. Paper presented at the *Academy of Management meeting*, San Diego, CA, August, 1998.

Eisenberg, E. Jamming: Transcendence through organizing. *Communication Research*, 1990, *17*, 139-164.

Eisenhardt, K.M. Making fast strategic decisions in high-velocity environments. *Academy of Management Journal*, 1989, *32*, 543-576.

Eisenhardt, K.M. & Brown, S.L. Time pacing: Competing in markets that won't stand still. *Harvard Business Review*, 1998, *76*(2), 59-69.

Eisenhardt, K.M. & Brown, S.L. Patching: Restiching business portfolios in dynamic markets. *Harvard Business Review*, 1999, *77*(3), 72-82.

Eisenhardt, K. M. & Tabrizi, B.N. Accelerating adaptative processes: Product innovation in the global computer industry. *Administrative Science Quarterly*, 1995, *40*, 84-110.

Eiser, J. R. *Cognitive social psychology*. London: McGraw-Hill, 1980.

Emery, F. & Trist, E. The causal texture of organizational environments. *Human Relations*, 1965, *18*, 21-32.

Engels, F. *The dialectics of nature*. London: Lawrence & Wishart, 1873.

Erickson, F. Classroom discourse as improvisation: Relationships between academic task structure and social participation structure in classrooms. In L.C. Wilkinson (Ed), *Communicating in the classroom*. New York: Academic Press, 1982, pp.153-181.

Ezzamel, M. & Willmott, H. Accounting for teamwork: A critical study of group-based systems of organizational control. *Administrative Science Quarterly*, 1998, *43*, 358-396.

Fayol, H. *General and industrial management*. New York: Pitman, 1949.

Fitzgerald, S. *The great Gatsby*. New York: Scribner, 1968.

Follett, M.P. Business as an integrative unit. In H. C. Metcalf & L. Urwick (Eds), *Dynamic administration: The collected papers of Mary Parker Follett*. New York: Harper & Brothers, 1940, pp.71-94.

Follett, M.P. The giving of orders. In H. C. Metcalf & L. Urwick (Eds), *Dynamic administration: The collected papers of Mary Parker Follett*. New York: Harper & Brothers, 1940, pp.50-70.

Frances, J., Levacic, R., Mitchell, J., & Thompson, G. Introduction. In J. Frances, R. Levacic, J. Mitchell, & G. Thompson (Eds), *Markets, hierarchies and networks*. Newbury Park, CA: Sage, 1991, pp.1-9.

Georgiou, P. The goal paradigm and notes towards a counter paradigm. *Administrative Science Quarterly*, 1973, *18*, 291-310.

Goldman, P. & Van Houten, D.R. Managerial strategies and the worker: A marxist analysis of bureaucracy. *Sociological Quarterly*, 1977, *18*, 121-131.

Greiner, L.E. Evolution and revolution as organizations grow. *Harvard Business Review*, 1972, *50*(4), 83-92.

Hamel, G. & Prahalad, C.K. *Competing for the future: Breakthrough strategies for seizing control of your industry and controlling the markets of tomorrow*. Boston: Harvard Business School Press, 1994.

Handy, C. *The age of unreason*. Boston: Harvard Business School Press, 1991.

Handy, C. *The age of paradox*. Boston: Harvard Business School Press, 1995.

Hannan, M.T. & Freeman, J. *Organizational ecology*. Cambridge, MA: Harvard University Press, 1989.

Harvey, J.B. *The Abilene paradox and other meditations on management*. San Francisco: Jossey-Bass, 1996.

Hatch, M.J. Jazzing up the theory of organizational improvisation. *Advances in Strategic Management*, 1997, *14*, 181-191.

Hatch, M.J. Exploring the empty spaces of organizing: How Improvisational jazz helps redescribe organizational structure. *Organization Studies*, 1999, *20*, 75-100.

Hedberg, B.L.T., Nystrom, P.C., & Starbuck, W.H. Camping on seesaws: Prescriptions for self-designing organizations. *Administrative Science Quarterly*, 1976, *21*, 41-65.

Hegel, G. *The logic of Hegel*. Oxford: Claredon, 1892.

Hutchins, E. Organizing work by adaptation. *Organization Science*, 1991, *2*, 14-39.

Janis, I. *Victims of groupthink: A psychological study of foreign-policy decisions and fiascos*. New York: Houghton-Mifflin, 1972.

Jarvenpaa, S.L. & Leidner, D. Do you read me? The development and maintenance of trust in global virtual teams. Unpublished Manuscript. University of Texas at Austin, 1997.

Jarvenpaa, S.L. & Shaw, T.B. Swift trust in global virtual teams. Unpublished Manuscript. University of Texas at Austin, 1998.

Joerges, B. & Czarniawska, B. The question of technology, or how organizations inscribe the world. *Organization Studies*, 1998, 19, 363-385.

Johnson, B.M. & Rice, R.E. Reinvention in the innovation process: The case of word processing. In R.E. Rice (Ed.), *The new media*. Beverly Hills: Sage, 1984, pp.157-183.

Johnson, B.M. & Rice, R.E. *Managing organizational innovation: The evolution from word processing to office information systems.* New York: Columbia University Press, 1987.

Krackhardt, D. & Hanson, J.R. Informal networks: The company behind the charts. *Harvard Business Review*, 1993, *71*(4), 104-111.

Lane, D. & Maxfield, R. Strategy under complexity: Fostering generative relationships. *Long Range Planning*, 1996, *29*, 215-231.

Lawrence, P.R. & Lorsch, J. W. *Organization and environment*. Cambridge, MA: Harvard University Press, 1967.

Levi-Strauss, C. *The savage mind*. Chicago: University of Chicago Press, 1966.

Lindblom, C. E. 1959. The science of muddling through. *Public Administration Review*, 1959, *19*. 79-88.

Lourenço, S.V. & Glidewell, J.C. A dialectical analysis of organizational conflict.

Administrative Science Quarterly, 1975, *20*, 489-508.

Machin, D. & Carrithers, M. From 'interpretative communities' to 'communities of improvisation'. *Media, Culture and Society*, 1996, *18*, 343-352.

March, J.G. Exploration and exploitation in organizational learning. *Organization Science*, 1991, *2*, 71-87.

Marx, K. Capital. In R. C. Tucker (Ed), *The Marx-Engels reader* (2nd ed.). New York: Norton, 1967/1978, pp.294-438.

Mason, R.O. Commentary on varieties of dialectical change processes. *Journal of Management Inquiry*, 1996, *5*, 293-299.

McAllister, D.J. Affect and cognition based trust as foundations for interpersonal cooperation in organizations. *Academy of Management Journal*, 1995, *38*, 24-59.

McGregor, D. *The human side of enterprise*. New York: McGraw-Hill, 1960.

Micklethwait, J. & Wooldridge, A. *The witch doctors: What the management gurus are saying, why it matters and how to make sense of it*. London: William Heinemann, 1996.

Miller, C. C. & Cardinal L.B. Strategic planning and firm performance: A synthesis of more than two decades of research. *Academy of Management Journal*, 1994, *37*, 1649-1665.

Miller, D. The architecture of simplicity. *Academy of Management Review*, 1993, *18*, 116-138.

Mills, C.W. *The Marxists.* New York: Dell, 1962.

Miner, A., Moorman, C. & Bassoff, P. Organizational improvisation in new product development. Unpublished manuscript. University of Wisconsin at Madison, 1996.

Mintzberg, H. The design school: Reconsidering the basic premises of strategic management. *Strategic Management Journal*, 1990, *11*, 171-195.

Mintzberg, H. *The rise and fall of strategic planning*. New York: Free Press, 1994.

Mintzberg, H. The structuring of organizations. In H. Mintzberg, J. B. Quinn, & S. Ghoshal (Eds), *The strategy process: European edition*. Hertfordshire: Prentice-Hall, 1995, pp.350-371.

Mintzberg, H. & McHugh, A. Strategy formation in an adhocracy. *Administrative Science Quarterly*, 1985, *30*, 160-197.

Mintzberg, H., Quinn, J. B., & Ghoshal, S. Introduction. In H. Mintzberg, J. B. Quinn, & S. Ghoshal (Eds), *The strategy process: European edition*. Hertfordshire: Prentice-Hall, 1995.

Mintzberg, H. & Waters, J.A. Tracking strategy in an entrepreneurial firm. *Academy of Management Journal*, 1982, *25*, 465-499.

Mitroff , I. I. & Emshoff, J. R. On strategic assumption making: A dialectical approach to policy and planning. *Academy of Management Review*, 1979, *4*, 1-12.

Moorman, C. & Miner, A. *Walking the tightrope: Improvisation and information in new product development*. Report No. 95-101. Cambridge, MA: Marketing Science Institute, 1995.

Moorman, C. & Miner, A. The convergence between planning and execution: Improvisation in new product development. *Journal of Marketing*, 1998, *62* (3), 1-20.

Moorman, C. & Miner, A. Organizational improvisation and organizational memory. *Academy of Management Review*, 1998, *23*, 698-723.

Nielsen, R.P. Dialogic leadership as ethics method. *Journal of Business Ethics*, 1990,

9, 765-783.

Nielsen, R.P. Varieties of dialectical change processes. *Journal of Management Inquiry*, 1996, *5*, 276-292.

Orlikowski, W. J. 1996. Improvising organizational transformation over time: A situated change perspective. *Information Systems Research*, 1996, *7*, 63-92.

Orlikowski, W. J. & Hofman, J. D. An improvisational model for change management: The case of groupware technologies. *Sloan Management Review*, 1997, *38*(2), 11-21.

Orlikowski, W. J. & Yates, J. It's about time: An enacted view of time in organizations. Paper presented at the annual meeting of the Academy of Management, San Diego, CA, August, 1998.

Orr, J. Sharing knowledge, celebrating identity: War stories and community memory in a service culture. In D.S. Middleton & D. Edwards (Eds), ***Collective remembering: Memory in society***. Beverly Hills, CA: Sage, 1990, pp.35-47.

Pascale, R.T. Surfing the edge of chaos. *Sloan Management Review*, 1999, *40*(3), 83-94.

Pentland, B.T. & Reuter, H.H. Organizational routines as grammars of action. *Administrative Science Quarterly*, 1994, *39*, 484-510.

Perrow, C. *Complex organizations* (3rd ed.). New York: Random House, 1986.

Perry, L.T. Strategic improvising: How to formulate and implement competitive strategies in concert. *Organizational Dynamics*, 1991, *19*, 51-64.

Peters, T.J. *Thriving on chaos: Handbook for a management revolution*. New York: Alfred A. Knopf, 1987.

Peters, T.J. *Liberation management: The necessary disorganization for the nanosecond nineties*. New York: Alfred A. Knopf, 1992.

Peters, T.J. *The Tom Peters seminar*. New York: Vintage Books, 1994.

Peters, T.J. & Waterman, R.E. *In search of excellence: Lessons from America's best run companies*. New York: Warner Books, 1982.

Picken, J. C. & Dess, G.G. Out of (strategic) control. *Organizational Dynamics*, 1997, *25* (Summer), 35-47.

Porter, M.E. *Competitive advantage: Creating and sustaining superior performance*. New York: Free Press, 1982.

Powell, W.W. Neither market nor hierarchy: Network forms of organization. In L.L. Cummings & B.M. Staw (Eds), *Research in Organizational Behavior*. Greenwich, CT: JAI Press, 1990, pp.295-336.

Prigogine, I. *Order out of chaos*. New York: Random House, 1984.

Romme, A.G. 1999. Domination, self-determination and circular organizing. *Organization Studies,* 1999, *20,* 801-831.

Salancik, G.R. Commitment and the control of organizational behavior and belief. In B. M. Staw & G. R. Salancik (Eds), *New directions in organizational behavior*. Chicago: St. Clair Press, 1977, pp.1-21.

Sayles, L. The managerial world: Expectations vs. reality. In L. Sayles (Ed), *Leadership*. New York: McGraw-Hill, 1989, pp.1-24.

Schein, E.H. *Organizational culture and leadership*. San Francisco: Jossey-Bass, 1985.

Schumpeter, J.A. *The theory of economic development*. Cambridge, MA: Harvard University Press, 1934.

Scribner, S. Thinking in action: Some characteristics of practical thought. In R.J. Sternberg & R.K. Wagner (Eds), *Practical intelligence: Nature and origins of competence in the everyday world*. Cambridge, UK: Cambridge University

Press, 1986, pp.13-30.

Senge, P.M. *The fifth discipline: The art and practice of the learning organization*. London: Century Business, 1990.

Sewell, G. The discipline of teams: The control of team-based industrial work through electronic and peer surveillance. *Administrative Science Quarterly*, 1998, *43*, 397-428.

Shapiro, E. *Fad surfing in the boardroom: Reclaiming the courage to manage in the age of instant answers*. Reading, MA: Addison-Wesley, 1995.

Simon, H.A. Invariants of human behavior. *Annual Review of Psychology*, 1990, 41, 1-21.

Sitkin, S.B.Learning through failure: The strategy of small losses. In B.M. Staw & L. L. Cummings (Eds), ***Research in Organizational Behavior***. Greenwich, CT: JAI Press, 1992, pp.231-266.

Smircich, L. & Stubbart, C. 1985. Strategic management in an enacted world. *Academy of Management Review*, 1985, *26*, 724-736.

Smith, A. *The wealth of nations*. New York: Prometheus Books, 1776/1991.

Sobek, D. K., Ward, A.C., & Liker, J.K. 1999. Toyota's principles of set-based concurrent engineering. *Sloan Management Review*, 1999 (Winter), 67-83.

Stacey, R.E. *The chaos frontier: Creative and strategic control for business*. Oxford: Butterworth-Heinemann, 1991.

Stacey, R.E. *Complexity and creativity in organizations*. San Francisco: Berrett-Koehler, 1996.

Starbuck, W.H. Organizational growth and development. In J. G. March (Ed), *Handbook of organizations*. Chicago: Rand McNally, 1965.

Taylor, F.W. *Scientific management*. New York: Harper and Row, 1947.

Thayer, L. Leadership/communication: A critical review and a modest proposal. In G. M. Goldhaber & G. A. Barnett (Eds), *Handbook of organizational communication*. Norwood, NJ: Ablex, 1988, pp.231-263.

Van de Ven, A. H. & Poole, M. S. Explaining development and change in organizations. *Academy of Management Review*, 1995, *20*, 510-540.

Vera, D. & Crossan, M.M. Improvisation: A theoretical model of its dimensions, antecedents, outcomes and moderating variables. Paper presented at the Annual Meeting of the Academy of Management, Chicago, August, 1999.

Wack, P. Scenarios: Uncharted waters ahead. *Harvard Business Review*, 1985, 64: 72-89.

Weick, K.E. *The social psychology of organizing* (2nd ed.). New York: McGraw-Hill, 1979.

Weick, K.E. Organizational redesign as improvisation. In G.P. Huber & W.H. Glick (Eds), *Organizational change and redesign*. New York: Oxford University Press, 1993a, pp.346-379.

Weick, K.E. The collapse of sensemaking in organizations: The Mann Gulch disaster. *Administrative Science Quarterly*, 1993b, *38*, 628-652.

Weick, K.E. *Sensemaking in organizations*. Thousand Oaks, CA: Sage, 1995.

Weick, K. E. Introductory essay: Improvisation as a mindset for organizational analysis. *Organization Science*, 1998, *9*, 543-555.

Weick, K.E. The aesthetic of imperfection in organizations. *Comportamento Organizacional e Gestão*, 1999, *5*, 5-22.

Williamson, O. E. The vertical integration of production: Market failure considerations. *American Economic Review*, 1971, *61*, 112-123.

Woodman, R. W., Sawyer, J. E. & Griffin, R.W. Toward a theory of organizational

creativity. *Academy of Management Review*, 1993, *18*, 293-321.

Woodward, J. *Industrial organization: Behavior and control*. London: Oxford University Press, 1965.

Wooldridge, B. & Floyd, S.W. The strategy process, middle management involvement, and organizational performance. *Strategic Management Journal*, 1990, *11*, 231-241.

Yates, J. & Orlikowski, W. J. Knee-jerk anti-LOOPism and other e-mail phenomena: Oral, written, and electronic patterns in computer-mediated communication. Technical report #150, Cambridge, MA: Center for Coordination Science, 1999.

Table 1 – Major contributions towards a dialectical view of management

	Process dialectics	Static dialectics
'Total' approaches	Benson (1975, 1977) Goldman & Van Houten (1977)	–
'Partial' approaches	Blau & Scott (1962) Chanin & Shapiro (1985) Georgiou (1973) Greiner (1972) Lourenço & Glidewell (1975) Mason (1969, 1996) Nielsen (1990, 1996) Schumpeter (1934)	Authors on organizational improvisation (for a review see Cunha, Cunha & Kamoche [1999]) Brews & Hunt (1999) Brown & Eisenhardt (1997) Burrell (1992) Camillus (1982) Church (1999) Edelman & Benning (1998) Eisenhardt & Tabrizi (1995) Follett (1940a, 1940b) Mintzberg & McHugh (1985) Mintzberg & Waters (1982) Stacey (1991, 1996) Weick (1979, 1995)

Table 2 – A dialectical approach to strategy.

Thesis	Synthesis	Antithesis
Overarching synthesis		
Strategy is planned	Strategy is deliberately emergent	Strategy is emergent
Elements		
Complying with culture	Complying with experimental culture	Experimental culture
Past helps future success (memory as friend)	Past can be recombined to help future success (memory as friend and foe)	Past hinders future success (memory as foe)
Skilled / specialized individuals and resources	Skilled individuals with genralist resources	Generalist individuals and resources

Table 3 – A dialectical approach to organization.

Thesis	Synthesis	Antithesis
Overarching synthesis		
Hierarchy (tight organization)	Minimal structure (loosely-tight organization)	Self-managed teams (loose organization)
Elements		
Power/standardization (impersonal relationships)	Trust via standardization (impersonal personal relationships)	Trust (personal relationships)
Non-commitment	Committed uncommitment	Commitment
Homogeneity (ageeing)	Diversified homogeneity (agreeing to disagree)	Diversity (disagreeing)
Control	Control to be free	Feedom

Table 4 – Contrasting ‘process’ and ‘static’ approaches to management dialectics

Dialectics as process	Dialectics as a state
Social construction - Source of constraint - Source of deviation/construction	Simultaneity - Mutual support of opposites - Manager as ‘surfacer’ and holder of tension - Pervasiveness of paradox
Totality - Overarching whole - Determinants of parts autonomy	Locality - Local enactment - Action as arena of integration - Probability of formalization
Contradiction - Presence of embedded opposites	Minimality - Small causes lead to big effects - Quantity: border of necessity - Quality: unobtrusiveness
Praxis - Process of creative reconstruction of social arrangements	Generality - Toleration of opposites - Low skill resources - Efficient effectiveness

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