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A light gray world map is centered in the background of the page, showing the outlines of continents and major islands.

### The Business Case for Improving Customer Service at Leeds City Council

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## **Abstract**

Although the fervour proclaiming new forms of organizing as the latest management panacea has not yet subsided, the calls for caution and further investigation have been bolstered by empirical findings. A common outcome of studies concerned with new organizing forms has been a greater awareness of the tensions or dualities between traditional and new forms. In particular, the conventional assumption that the two forms represent contradictory, incompatible forces is coming under increasing scrutiny. The resulting either/or approach to organizing form may be viewed as an inappropriate perspective for researching organizational change as it ignores the complexity and subtlety of organizing form. The reality is that, as new forms of organizing are introduced, they are more likely to supplement rather than supplant existing forms (Sanchez-Runde and Pettigrew 2003). The way forward therefore is to learn how to work with, rather than eliminate, dualities in organizing forms. This paper contends that dualities represent a superior perspective for interpreting organizing forms, and perhaps, foreshadows the direction of a future organizational change research paradigm.

**Key words:** organizing, dualities, innovative forms, change management, paradigm

## **Introduction**

Management literature has never been short of terminology, and descriptions of organizing forms have not been in short supply either. Schilling and Steensma (2001) inventoried a proliferation of terms, most of which refer to new forms of organizing, including networks, platforms, hybrids, amoeba, boundary-less, flexible and virtual organizations. The common theme is the desire to highlight the replacement of traditional integrated hierarchies with 'loosely coupled networks of organizational actors' (Schilling and Steensma 2001, p. 1149). In other words, the contemporary business environment has encouraged experimentation with new organizational forms and numerous authors in the management literature have responded by proclaiming the need to replace traditional organizational forms (e.g. Goold and Campbell, 2003; Jackson, 2000; Quinn, Anderson and Finkelstein, 1998). However, despite the rhetoric advocating the introduction of new forms of organizing, the manipulation of organizing forms has not changed from the assumption that conceptual opposites like hierarchy and networks are mutually exclusive choices. This has proven a troublesome perspective for organizational change research, as the results of empirical work has demonstrated that the transplantation of new forms for old is not necessarily a practical or advantageous endeavour. Sanchez-Runde and Pettigrew (2003, p. 249), for example, counselled that 'new forms of organizing are supplementing and not supplanting older, more traditional organizational practices.'

If new forms of organizing are indeed supplementing rather than supplanting older forms, then a tension exists between what are ostensibly contradictory tendencies. Based on their investigation of the assumed trade-off between efficiency and flexibility, Adler, Goldoftas and Levine (1999) concluded that a dynamic reciprocal relationship exists between flexibility and efficiency in successful organizations. They noted that this is both paradoxical and normal. In contemporary organizations, the tension between new and old forms of organizing might be better understood in terms of complementary, synergistic tendencies rather than contradictory forces. These tensions have been labelled 'dualities' (Pettigrew and Fenton, 2000), which

'can be seen as opposing forces that need to be balanced because, even if they are seen as paradoxical or contradictory, in fact they are complementary' (Sanchez-Runde and Pettigrew 2003, p. 245). Sanchez-Runde and Pettigrew (2003) argued that we need to know much more about dualities, their antecedents and how they should be managed.

Dualism is a long-enduring approach to classification where the object of study is divided into paired and opposite elements, the most common examples being mind/body and theory/practice (Jackson, 1999). Dualities on the other hand—a by-product of Giddens's (1984) structuration theory—suggests that dualism elements may be independent and conceptually distinct, rather than opposed. According to Jackson (1999), the advantage of the dualities concept is its capacity to register related but distinct elements. Thus, change researchers who employ dualities "can maintain conceptual distinctions without being committed to a rigid antagonism or separation of the two elements being distinguished" (p. 549). In a management context within an organization, this kind of thinking implies that pairs like stability and change, order and disorder, and predictability and unpredictability operate by 'mutual specification' rather than mutual exclusivity (Ford and Backoff, 1988, p. 100).

Giddens's (1984) structuration theory focuses on the role of social structures in organizations. Specifically, Giddens argued that structures are enabling or disabling in nature and that the capability of individuals depends upon their social environment. At times structure may be constraining, but at others it is liberating. Hence, when structure and agency are aligned, the force to favour one pole over the other diminishes. As a result, thinking about structure and agency using dualities brings the two closer together without the pressure for a merger. Jackson (1999) wrote: "To deal with the complexity of modern societies and diminish the risks of reductionism, it may be desirable to increase the number of conceptual elements above two. The attraction of duality is not so much its doubleness as its ability to envisage a thoroughgoing interdependence of conceptually distinct elements" (Jackson, p. 557). Social systems like organizations are based on a dialectic of chance and necessity, and the principle of order through fluctuation in situations of instability and bifurcation (Fuchs, 2003). Stacey (1995) noted that outcomes are partly determined by self-organizing agents and partly by intentional choice of management.

As Kuhn (1970) argued, theory development is a process wherein existing theory is problematized as a result of the accumulation of anomalies that indicate change is needed. Our contention is that dualities help identify and solve the organizing forms anomaly and might even foreshadow part of an organizational change paradigm capable of embracing shades of organizing reality, and which provides change researchers with more robust theoretical tools. A paradigm here is seen as a disciplinary matrix comprising exemplars, heuristic models, ontological assumptions, and methodological principles (Curd and Cover, 1998). In other words, it is a kind of over-arching theory, although as with organizational change there are often numerous competing paradigms. We do not advocate dualities as a paradigm in itself, but rather as an heuristic, rule of thumb or principle that might form part of a new paradigm, and can be usefully overlaid with interpretations of organizing form change. To that end, we explore one conceptual framework – based on a triumvirate of structures, processes and boundaries – which can be employed with dualities to illustrate a potentially important mode of thinking for future organizational change research. We seek to present dualities as part of a conceptual explanation for the presence of contradictory organizing forms, and subsequently as a pivotal variable in organizational change research. Presenting an example of its implementation is an essential aspect of this objective. While we acknowledge the relevance of the Kuhnian incommensurability thesis, which specifies that the content of theories

cannot be compared because of translation failure arising from a variance of meaning contained in their vocabulary (Hassard 1988; Sankey 1997), its consideration is not within the purview of this paper.

This paper is structured into three additional sections. First, the pressures leading to changes in organizational form and the emergence of dualities for expressing the resulting ambiguity are explored. Here we argue that there is sufficient evidence to suggest that dualities are central to understanding organizing forms, and therefore are essential to future organizational change research. Second, we demonstrate the utility of dualities by exploring their deployment across three dimensions highlighted by the Innovative Forms of Organizing (INNFORM) project. Here we illustrate the practical utility of dualities in organizing forms. Finally, the concluding section reviews the implications of dualities for organizing forms and organizational change. Here we strive to draw together the implications of dualities for organizational change research. In particular, we argue that employing the mutual exclusivity organizing form perspective in research is simplistic and fails to account for the shades and complexities of its practical management.

### *The Emergence of Dualities*

Globalization, deregulation, privatization, and advances in information and communication technologies have intensified competition and impacted upon the structures, processes and boundaries that define organizations (DiMaggio, 2001; Pettigrew, Whittington, Melin, Sanchez-Runde, Van Den Bosch, Ruigrok and Numagami, 2003; Pettigrew and Fenton, 2000; Jackson, 2000; Nadler and Tushman, 1999). In an endeavour to manage the increased complexity and dynamism of their changing business environment, organizations have been experimenting with different forms of organizing in the hope that they will improve their flexibility, adaptability and responsiveness (Dijksterhuis et al., 1999). This has included flattening structures, devolving decision-making responsibility, encouraging greater collaboration and knowledge transfer across functional areas, developing partnerships and alliances within and between organizations, evolving a more participative and personalized managerial style, and fostering more creative, responsive and learning oriented organizations (DiMaggio 2001; Pettigrew et al. 2003; Dijksterhuis 1999; Volberda 1998). In short, organizational responses to changing environmental conditions have been numerous, but connected with a departure from bureaucratic, Taylorist models. Instead a flexibility and innovation theme has emerged that has come to be encapsulated in the term, 'new forms of organizing.'

For knowledge-based companies in particular, the Taylorist model with its adherence to hierarchy, stability, uniformity and specialization, designed to exert authority and control over a largely uneducated workforce, is regarded as ineffectual. Specifically, it fails to make the best use of highly skilled knowledge workers or respond quickly and decisively to the demands of a technology-driven, customer-focused and increasingly global marketplace (Doz and Thanheiser, 1993). Ireland and Hitt (1999), for example argued that in a global economy knowledge is the critical currency to cultivate, own and leverage. Indeed, if organizations hope to survive and succeed in complex, 'high velocity' (Brown and Eisenhardt, 1997) and 'chaotic' (Dijksterhuis, Van den Bosch and Volberda, 1999) environments, they must use human capital to enhance strategic flexibility (Schilling and Steensma, 2001). Similarly, Rindova and Kotha (2001) pointed to a mutually dependent relationship between an organization's form and its dynamic capabilities or flexibility potential. They argued that the acquisition of

competitive advantage in turbulent environments demands an appreciation of both function and form (Rindova and Kotha, 2001).

In their extensive work on innovative organizational forms, Pettigrew and Fenton (2000) identified three driving, interrelated themes: changing organizational boundaries, an increased importance of the knowledge firm, and the emergence of networks. Similarly, DiMaggio (2001) emphasized greater permeability of organizational boundaries, the flattening of hierarchies along with more cooperative managerial styles, and the drive to develop more creative, responsive and learning oriented organizations which can manage the competitive imperatives of the market. In summary, bureaucracy has been challenged by trends encouraging the flattening of hierarchies, horizontal collaboration, diminished formalization, and a weakening of ties between workers and firms (DiMaggio, 2001).

The trend toward new forms of organization has also brought about a conundrum. New forms rhetoric implies that network-driven, flat, permeable forms of organizations should be conferred with advantages over more hierarchical, rule-centred bureaucracies. However, although knowledge-intensive firms have been shown to respond to new forms of organization, it is not clear that an exchange of new forms for old is an effective strategy. After all, as DiMaggio (2001) observed, 'redundancy makes bureaucracy resilient' (p. 218). On the other hand, bureaucracy is not particularly responsive; efficiency relies upon control, which in turn encourages inflexibility. New modes of organizing are required like Stark's (2001) heterarchies, which are neither market nor hierarchy driven. Where hierarchies involve relations of dependence, markets involve relations of independence. Heterarchies are characterized by minimal hierarchy and by organizational heterogeneity; a combination reflective of an awareness of a concomitant presence of new and old forms of organizing in a manner that does not assume that an increase in one brings about a corresponding decrease in the other, and vice versa.

A growing body of studies indicates that while innovative forms of organizing are emerging within organizations, hierarchy and other traditional organizational practices are not being summarily removed (O'Reilly and Tushman, 2004; Palmer and Dunford, 2002; Raynor and Bower, 2001; Volberda, 1998). Palmer and Dunford, for example, observed that the co-existence and integration of traditional and new forms of organizing is increasingly salient (2002, p. 220). As Fenton and Pettigrew (2000, p. 280) observed, it is more a case of the 'new *supplementing* the old, rather than the new *supplanting* the old.' In a similar vein, Quinn, Anderson and Finkelstein suggested that what is evolving are 'forms of organizing, not forms of organization', which are 'typically embedded in larger organizational structures that are still at least partly bureaucratic' (1998, p. 162).

Reporting on the findings of the INNFORM study, Sanchez-Runde and Pettigrew (2003) referred to the series of dualities organizations must learn to manage as they seek higher performance through greater innovation and flexibility. The high performing, innovating organizations identified in the INNFORM study were seen to be adopting 'ambidextrous' (O'Reilly and Tushman, 2004) forms of organizing as they concomitantly developed networks alongside hierarchies, supported horizontal integration while promoting upwards performance accountability, and maintained central control of strategy-making as they decentralized operations (Sanchez-Runde and Pettigrew, 2003). Dualities were viewed as a by-product of contemporary business. It is also noteworthy that similar observations have been made by numerous researchers who have responded by inventing a cluster of solutions, each highlighting some dissatisfaction with the assumption of mutual exclusivity in organizing forms. They have included notions such as complexity theory (e.g.



Stacey, 1995), coupling (e.g. Limerick and Cunnington, 1993), modularity (e.g. Schilling and Steensma, 2001), dialectics/dilemmas (e.g. Stace and Dunphy, 2001) and improvisation (Clegg, da Cunha and e Cunha, 2002). For the purposes of our argument, we are employing the overarching term duality/ies (Evans and Doz, 1992).

The empirical findings reveal two important facts. The first is that a consistent and growing body of evidence supports the simultaneous and non-exclusive presence of new and traditional forms of organizing. The second is that although the evidence is robust, the presence of both forms of organizing is regarded as a paradox and has been for some time (Cameron, 1986; Cameron and Quinn, 1988; Lawrence and Lorsch, 1967). As Kuhn (1970) noted, social scientists will articulate and develop a paradigm in an attempt to accommodate for all the behaviour they observe. In doing so, however, they will encounter falsifications; examples where the paradigm fails to provide satisfactory explanations. If such paradoxes continue to be uncovered, a crisis state is precipitated and persists until a new paradigm emerges. Although we do not claim to be able to articulate the new paradigm, it is our view that sufficient anomalies have illuminated an impending crisis, beginning with the new forms of organizing rhetoric, deepening with their failure as an exclusive solution to environmental uncertainty, and culminating in the quandary over the simultaneous existence of seemingly paradoxical organizing forces. We argue that by viewing traditional and new organizing forms as dualities, the nature of paradox in organizing forms is surfaced and challenged, and the relationships rather than contradictions between traditional and new forms becomes the focus of action. In order to venture further than a label, we attempt next to indicate how dualities affect organizational forms analysis.

### *Exploring Dualities*

In order to discuss the impact of dualities on forms of organizing in particular, and organizational change research in general, it is advantageous to provide a structure for analysis. The structure selected here serves as a vehicle for exploration of dualities, rather than as a prescriptive tool to manage organizing form change.

The importance of adopting a systemic, complementary approach to organizational change was borne out by the findings of the INNFORM study on innovative forms of organizing for the twenty-first century. This study sought to 'map the contours of contemporary organizational innovation' (Whittington et al., 1999, p. 588) by examining nine key indicators of emergent change across the three organizational design dimensions of structures, processes and boundaries. The key indicators within each dimension were: delaying, decentralizing and project-based organizing (indicating change in structures); investment in information technology, horizontal and vertical communications, and new human resource practices (indicating change in processes); downscoping, outsourcing and strategic alliances (indicating change in boundaries). The study in particular noted the interdependencies between these three dimensions and found that unless an organization recognized these relationships and implemented complementary changes across the three organizational dimensions, it would experience negative performance results (Whittington et al., 1999). It is our view that the INNFORM construct provides a robust vehicle for demonstrating the utility of the duality paradigm to capture the subtle complexities of organizing form.

When the nine INNFORM indicators are considered along the 'design dualities' continuum, 18 possibilities result, representing poles in what the conventional

paradigm would depict as a stand-off dialectic between new and traditional forms of organizing. The 18 sub-indicators represent the operational alternatives associated with organising forms. For example, an organisational structure may be strongly layered to form a hierarchy or may be delayered with a weak hierarchy. The 18 sub-indicators are presented in Table 1.

Table 1. Organizing Form Dualities

<b>STRUCTURES</b>	
Delayering	Hierarchy
Decentralization	Centralization
Project-based organizing	Functional specialization
<b>PROCESSES</b>	
Horizontal networking	Hierarchical communications
Integrated human resources practices	Disaggregated human resources practices
High IT investment	Low IT investment
<b>BOUNDARIES</b>	
Downscoping	Diversification
Outsourcing	Insourcing
Strategic alliances	Individual enterprise

### Structures

The key indicators for change along the structural design dimension are delayering, decentralizing and project-based organizing (Pettigrew et al., 2003). Table 1 identifies the dualities implied by the three indicators within each of the three dimensions of the INNFORM construct. In terms of structures, there is first delayering and hierarchy; second, decentralization and centralization; and third, project-based organizing and functional specialization.

The predominant mantra for changing structures in today's competitive environment is to break down the 'us and them' divide, dissolve hierarchy and create a more collaborative, open and responsive workplace. Ireland and Hitt (1999), for example, referred to the remarkable 'breadth and depth' of the global economy's impact on workplace systems and structures. Structure along with its traditional trappings, has come to be viewed as a constraining and controlling force, emphasizing stability, bureaucracy, due process and routine. Dismantling structure is often touted as the key to unlocking organizational innovation and adaptability. That many of these endeavours to delayer, empower and decentralize have not lived up to expectations suggests that this uni-dimensional view of structure is simplistic, and even misguided, as it fails to recognize the subtle textures of structure and their relatedness to other aspects of organizational form. As Whittington and Melin noted 'structure is inextricably linked to action as both its medium and its outcome' (2003, p. 45).

This structure-action duality hints at the complex, dynamic nature of structuring as both an enabling and constraining force for change. If we accept that 'action is not simply fettered by structure, it positively relies on it' (Whittington and Melin, 2003, p. 45), the role of structure appears to be central, enduring and evolving, with action through structuring as the improvising medium. In other words, the presence of dualities should remind managers that the process of structuring is dynamic and full of contradictions, whereas structure in itself is static with inbuilt assumptions about the absence of dualities.

More recent empirical studies have challenged the prevailing view that in the context of a complex and uncertain environment, traditional organizational practices bound up in planning, organizing, coordinating and controlling have no place alongside new forms of organizing. For example, Palmer and Dunford's (2002) survey of new organizational practices in over 2000 firms operating in Australia found that the greater use of new organizational practices did not spell the demise of traditional practices such as formalization or centralization. In fact, they found that higher levels of formalization were associated with the introduction of new organizational practices. Moreover, the coordinating and direction-setting role of a corporate centre emerged as equally important and relevant for firms operating in a complex and uncertain environment.

Paradoxically, delayering—the devolution of authority and responsibility—has reinforced the importance of hierarchical lines of authority and accountability. Hodgson (2004), for example, considered the complex requirements of project management that have led to the ironic 'rediscovery of a very 19<sup>th</sup> century pre-occupation with comprehensive planning, linked to a belief in the necessity of tight managerial discipline' (2004, p. 86). He found that effective project management teams evolved a hybrid of complementary bureaucratic and postbureaucratic logics to achieve 'simultaneous loose-tight properties' (Hodgson, 2004, p. 98). Similarly, O'Reilly and Tushman (2004) stated that companies achieving 'breakthrough innovations' in hypercompetitive environments adopted an ambidextrous structure with explorative project teams working independently yet cooperatively alongside the traditional management hierarchy, able to draw on its resources, experience and planning expertise. The INNFORM study also suggested that 'companies adopt a dual approach, simultaneously investing in hierarchies and networks, creating a new balance between centralization and decentralization' (Ruigrok et al. 1999: 53).

## **Processes**

Underpinning the changes to structure, the INNFORM study reported significant changes to internal processes. These included horizontal and vertical communications, investment in information technology, and new human resources practices (Pettigrew et al., 2003). Table 1 shows the dualities derived from INNFORM's processes dimension. These include first, horizontal networking and hierarchical communication; second, high and low information technology; and third, integrated and disaggregated human resources practices, the former reflecting the rhetoric of empowerment, and the latter of control.

One of the key themes, noted earlier, in the new organizational forms literature concerns the increasing importance of the knowledge firm in the knowledge economy. Developing a 'knowledge-rich' organization demands a shift in focus from the hard, more tangible elements of work organizations (strategy, structure, systems) to the soft, intangible elements (skills, staff, leadership style, relationships, shared values) encapsulated in the processes dimension of organizational design. This



reinforces the need for an inclusive, bi-directional approach including both 'duality poles'.

Jackson (2000) argued that one of the principal and most costly errors made when considering organization design is to focus on structure rather than on the soft processes and relationships. He averred that if an organization is 'a collection of people working together to achieve a common purpose', then 'the role of organization design is to facilitate the relationships between people so that purpose can be achieved' (Jackson 2000, p. 44). This demands a relational, systemic approach to organization design so that the full spectrum of organizational skills, resources and capabilities are recognized, captured and exploited. The concept of networks has gained some prominence in these discussions.

We would argue that increasing an organization's responsiveness and flexibility is not simply confined to changing structure. According to Tsoukas and Chia, for example, 'organizations are sites of continuously changing human action, and *organization* is the making of form, the patterned unfolding of human action.... organization aims at stemming change but in the process of doing so it is generated by it' (2002, p. 577). Therefore, it is necessarily based on an integrated, systemic design approach that encompasses changes to hardware (structure and reward systems) and software (leadership, work practices, organizational culture and values). Underpinning this symbiotic relationship, *process* considerations, in particular communications and *people* processes, emerge as integral to effective structural and boundary changes because mutually reinforcing, complementary changes across the three design dimensions depend ultimately on the contribution and commitment organization members are prepared to make. This is corroborated by INNFORM study findings which reported significant, negative performance outcomes when change is only partial and changes to structure and boundary are not accompanied by changes in processes. Sanchez-Runde et al. (2003) pointed out that 'since it is people who get things done in the organization, the question of how individuals themselves are managed, through a given set of HRM practices, is of the utmost importance' (p. 258). Processes in effect serve as a conduit, linking and permeating the different elements of structures and boundaries.

The nature of dualities in processes is particularly transparent in information technology activities within organizations. The INNFORM study reported a fourfold increase in information technology investment between 1992 and 1996, with 82 per cent of companies reporting increased investment in information technology infrastructures that would help them improve and extend vertical and horizontal integration. It became increasingly clear, however, that the gains sought from investment in information technology hardware would not be fully realized unless undertaken in conjunction with appropriate 'software' investment in new human resource practices. Similarly, Jackson and Harris (2003) argued that the impact of e-business on business processes and structure is not just a technical matter, but 'involves significant social redesign' (p. 501). They attributed the spectacular rise and fall of many dot coms to their failure to grasp the importance of establishing clear and effective routines. Traditional disaggregated HR needs to exist in tension with new or integrated HR. Jackson and Harris subsequently cautioned against 'throwing the baby out with the bath water' and advised that 'significant aspects of the "old" business structure or process may well have enduring value in the e-business context' (p. 511).

The INNFORM study findings indicated that while horizontal communications doubled between 1992 and 1996, vertical communications trebled. The dramatic increase in vertical communications indicates that while companies are keen to

encourage the transfer and diffusion of knowledge across the organization, delayering and decentralization do not symbolize the demise of hierarchy. The challenge for organization leaders, therefore, is to recognize the complex overarching, 'multidisciplinary' role that processes play in the structures-processes-boundaries relationship, and ensure that changes to structures and boundaries complement, and are formed alongside, changes to organization processes.

### **Boundaries**

The key indicators for change along the boundaries dimension of INNFORM are downscoping, outsourcing and strategic alliances (Pettigrew et al., 2003). Based on the three elements within the boundaries dimensions, three dualities can be identified. First, downscoping and diversification; second, outsourcing and insourcing; and third, strategic alliances and individual enterprise.

Whittington et al. (1999) observed that while there has been a movement toward new boundaries, there are nuances which recommend caution. For example, outsourcing and alliances have increased, but downscoping has been subject to limited change only. While boundaries may show less scope for dualities, their existence has been noted in a range of industrial and empirical contexts. Adler noted (1999), for example, that the zeal with which many organizations have embarked on 'bureaucracy busting' through delayering and outsourcing has in many cases come back to haunt them as they discover too late that they have removed repositories of 'precious skills and experience' (p. 36) which were also very effective in 'diffusing lessons learned in one part of the organization to others' (p. 37). Outsourcing can strip an organization of valuable knowledge that impacts upon other dimensions of performance.

Adler (1999) pointed out that some degree of hierarchy, formalization and centralized knowledge repositories are essential in large and complex organizations not only 'to avoid chaos and ensure that employees are not continually reinventing the wheel', but also for 'efficiency, conformance quality and timeliness' (2002, p. 37). Accordingly, as Palmer and Dunford (2002) observed, questions about the importance of contextual and industrial factors are pivotal and should determine which traditional practices remain relevant. Instead of pursuing the latest fad, organizations need to examine the types of innovation they are pursuing and choose the most appropriate configuration that will support and enhance their prospects for success. This may or may not include delayering, downsizing, outsourcing, or some aspects of virtual forms of organizing. Increasingly, however, the route to success in a global economy appears to be through growth rather than downsizing and cost reductions and in finding ways to 'develop, exploit, and protect the intellectual capital' housed in the organization' (Ireland and Hitt, 1999). Again, the duality perspective is implicit; contingency factors are sovereign and boundary decisions should not subjugate the tensions between traditional and new approaches, given that these factors cannot be predicted. Boundaries focus attention, and in doing so can illuminate otherwise hidden solutions. Boundary-less environments, on the other hand, may make innovation more troublesome (Gibbert and Valikangas, 2004). This is surely the most startling boundary-related duality. The demand for innovation encourages boundary-lessness, but innovation also requires some of the focus delivered by boundaries, or else it may occur in an unnecessary or unimportant area. In practical terms, outsourcing may diminish boundaries and increase flexibility, but it may also relinquish the knowledge and concentration needed to drive performance.

With the label of 'heterarchies', Stark (2001) introduced another duality associated with boundaries. Interweaving a multiplicity of organizing principles, heterarchies represent a duality-consistent organizational form, not only because they have

flattened hierarchy, but also because they are the sites of competing and coexisting value systems. The greater interdependence of increasingly autonomous work teams results in a proliferation of performance criteria. Moreover, success in rugged fitness landscapes requires an extended organizational reflexivity that sustains rather than stifles complexity. Because resources are not fixed in one system of interpretation but can exist in several, 'heterarchies make assets of ambiguity' (p. 78), and illustrate the possibilities of duality-thinking.

The pivotal lesson from dualities is that resolution or reconciliation between two mutually-exclusive poles is no longer the end goal. Instead, the duality perspective encourages an acceptance of contradiction, and the need for unilateral choice or a see-saw balance between the two is eliminated in favour of simultaneity. The nature of dualities implies that a dichotomous, either/or mindset that pitches hierarchy against empowerment, centralization against decentralization and project-based organizing against functional independence is not only ineffective, but also a high-risk, zero-sum approach to restructuring organizations. In contrast, a bi-directional approach that recognizes and facilitates the relationships between the two structural poles serves 'to square the circle of innovation and control' (Hodgson 2004, p. 98) allowing an organization to develop a 'relational synthesis' between traditional process, planning and coordination requirements and the need for flexibility and responsiveness.

As Lewin et al. (1999) argued, those firms that are likely to survive periods of high uncertainty and velocity and evolve appropriate new forms are those that historically 'have developed and nurtured a balance of exploitation and exploration capabilities and the absorptive capacity for assimilating new internal and external knowledge necessary for supporting increasing rates of prospecting strategies' (Lewin et al., 1999, p. 540). An organization's ability to transfer and diffuse knowledge, skills and expertise regardless of boundaries, will depend ultimately on its ability to improvise and deploy key connections and relationships across the dualities continuum.

### ***Implications for Organizational Change***

The observation of dualities in organizations is not new (Pettigrew et al., 2003) and, as our interpretation has suggested, applying a dichotomous, either/or approach to resolving the dualities conundrum is overly simplistic, reflective of a paradigm in need of replacement. However, dualities are not concerned with 'resolving' paradox and integrating dilemmas. Nor do they seek to present alternatives or propose a compromise. Rather, dualities are concerned with the search for relational syntheses between 'duality poles', mediated through what Clegg et al. (2002) labelled improvisation. As a result, dualities should not be viewed as polar opposites, but as related though distinctive phenomena 'because, even if they are seen as paradoxical or contradictory, in fact they are complementary' (Sanchez-Runde and Pettigrew, 2003, p. 245). Dualities can therefore be seen as counter-intuitive tensions that exist in organizations. Evans and Doz observed that 'dualities should be viewed not as threats to consistency and coherence, but as opportunities for creative organization development, learning and renewal' (1992, p. 96). We also argue that the acceptance of paradox in organizing forms ensures that new forms of organizing are not regarded as innately superior to traditional forms of organizing; they both have a part to play in the warp and weft of organizational life. In this respect, an acceptance of dualities would remove any counter-intuitive impact the concomitant presence of new and old forms of organizing might create. A fundamental acceptance of mutual inclusivity requires a paradigmatic change, and this change in

turn has a profound influence on organizational change research and the interpretations it yields.

Palmer and Dunford's (2002) research findings indicated that there is a clear trend in the direction of new organizing practices, but there is also a lack of evidence of systemic transformation. This contradiction, they supposed, leads to an incompatibility position. Our premise is based on greater texture in the relationship than this supposition would suggest. Palmer and Dunford wrote, 'new forms are likely to involve a coexistence and integration of practices associated with traditional and new organizational practices' (p. 220). Further studies now need 'to focus on which traditional practices remain relevant, when and under what conditions' (p. 221). We would go further to predict that the tensions illuminated by dualities are universally relevant to organizational change research. While the importance of conditional variables may be unquestioned, there is sufficient evidence to speculate that dualities are normal organizing properties, constrained and loosened by the nuances of unpredictable change. If, as Tsoukas and Chia (2002) believe, organizations are sites of continuously changing human action, and *organization* is the making of form, the patterned unfolding of human action, then 'organization aims at stemming change but in the process of doing so it is generated by it' (p. 577).

Like Clegg et al. (2002) and Tsoukas and Chia (2002), we harbour the suspicion that the notion of improvisation is important in coming to terms with dualities. When Tsoukas and Chia argued that 'ongoing change and improvisation is a fundamental feature of all change programs' (p. 578), they were acknowledging that dualities are a function of human agency. In other words, we should not be surprised that dualities exist in organizations created by humans. After all, why should an organization be any less complex than its constituents?

In his discussion of the 'crisis' in strategy, Volberda (2004) argued that the field of strategic management has moved beyond classification. Rather than getting mired in the dilemma of differentiation versus integration, he called for a 'synthesis' approach. Likewise, we have argued that the debate on old versus new forms of organizing needs to move beyond the conventional prescriptions and frameworks that would have us believe the dilemmas and paradoxes surrounding issues of structuring and organizing can and should be resolved with simple, either/or choices. Synthesis, which does not demand universality (Volberda 2004), allows a both/and approach. Synthesis does not seek to eradicate or subdue paradox; on the contrary, it views the preservation-change duality, the relational tension between the conforming and enabling poles, as necessary and complementary components of the organizational design equation. From a research viewpoint a paradigm embracing dualities would reject accounts of design that failed to investigate the complexity of synthesis. Our argument is that it is no longer adequate to describe organizing forms in terms of linear change from one composition to another.

Volberda (1998) questioned when new higher order capabilities evolve in organizing that can be used to explore new opportunities effectively as well as to exploit opportunities of flexibility and adaptivity. The role of the environment in mitigating the benefits of 'edge of chaos' versus stability forms of organizing are also relevant. As complexity theory advocates have asked, when is there sufficient structure to maintain basic order, but not enough to impinge upon innovation? (Lichtenstein, 2000; MacIntosh and MacLean, 2001). The answer to this important question might, in part, be found in the development of modularities, where structures are based on minimal interdependence between modules and maximum independence within modules (Baldwin and Clark, 2000; Galunic, 2001). Modules, in this sense, are

duality-consistent organizing forms. In the same vein, Ethiraj and Levinthal's (2004) computational modelling revealed that design efforts are effective in traditional organizing forms but less so in non-traditional ones. Limerick and Cunnington described this new approach as a 'loosely coupled system', which simultaneously asserts both 'autonomous distinctiveness and interdependence', allowing for 'differentiation' and 'integration' between business units (1993, p. 38). The nature of these couplings that concomitantly assert a range of conforming and enabling dualities such as networks and hierarchies, integration and differentiation, autonomy and interdependence, highlight the intricate structure-processes-boundaries relationship as changes in one dimension must be balanced by complementary change in the others. Horizontal networking, for example, has implications not only for all three process indicators, but will also necessitate a kaleidoscope of changes across structures and boundaries. As Brown and Eisenhardt (1998) implied, amongst the best questions to be asking in organizational change research is how much is enough, but not too much?

Many organizations face duality pressures constantly, such as those exemplified by the efficiency-flexibility duality; two performance logics must be managed simultaneously without getting 'stuck in the middle' (Lowendahl and Revang, 2004, p. 50). Future research needs to investigate the axes between dualities, and the nature of the tensions that are exhibited. It is possible that being stuck in the middle is precisely where some organizations should be.

Despite calls to flatten hierarchies, downsize, outsource, decentralize, and form alliances and networks, we are yet to witness the demise of traditional forms of organizing. While organizations are exploring and experimenting with new work arrangements, these appear to be bolstering rather than eradicating existing work practices. For example, advances in information and communications technologies have not only played a significant part in challenging and reshaping the way in which organizational members work and interact, they have also, somewhat ironically, facilitated the development of more flexible, adaptive work practices that complement and support traditional, yet still relevant, work practices. Dualities reflect this logic where for organizational change research the shade of reality is grey rather than black or white.

Several versions of new forms of organizing have been proclaimed as alternative paradigms to traditional, bureaucratic forms. Cravens, Piercy and Shipp (1996) proposed that the network paradigm would have significant implications for organizational design. Kolodny et al. (1996) and Limerick and Cunnington (1993) made similar claims for flexible technologies. These authors and others in the late 1990s and early 2000s were correct in that new forms of organizing have had a significant impact on organizing forms and therefore organizational change. However, they were mistaken in claiming that versions of new forms of organizing are a new paradigm. In fact, new forms of organizing fit neatly within the mutual exclusivity in design choices perspective that has dominated organizational change. Dualities represent a perspective inherent within an alternative organizational change paradigm that views different organizing forms as complementary rather than contradictory.



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