Design Thinking and Organizational Development: twin concepts enabling a reintroduction of democratic values in organizational change

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Abstract

Design Thinking is a rather new concept for increasing innovation capabilities in organizations. Organizational Development is a concept from the 1950s aiming at modernizing organizations through participatory methods. As organizations struggle with constant change and to become more innovative we will compare and discuss design thinking and organizational development and explore what we can learn from these concepts that have many similar aspects. Design is argued to be moving into new territories, changing its focus towards the ideas that organizes a system or environment (Buchanan, 2001). At the same time there are clear resemblances to new organizational development not the least regarding participatory methods (Eneberg, 2012). In this paper we describe the ontological and epistemological development of organizational theory, change, and development with the aim to discuss the role of design thinking as an enabling concept in the revitalization of organizational development that includes a reintroduction of democratic values in organizational change.

KEYWORDS: organizational change, organizational development, ambiguity, enabling design

Introduction

There is a struggle to ensure that Organizational Development (OD) is not considered a management fad and a historical parenthesis. Organizational Development emerged as a

movement in the 1950s based on participatory methods and active involvement of employees of the organization. It was envisioned that OD would democratize life in organizations (Greiner and Cummings, 2005). This would be achieved by implementing changes through action and empowerment, which in turn would lead to economic return in the organizations applying it (Werkman, 2010; Marshak and Grant, 2008; Bradford and Burke, 2005). OD diminished in importance in the 1980s and 1990s when change management, which proposed change that was planned and led by top management, grew in popularity (Argyris, 2005). New knowledge was to be implemented in organizations rather than co-created. Today several researchers (see for instance Clegg, 2005; Bradford and Burke, 2005; Marshak and Grant, 2008) mean that a new OD, still based on its basic principles of democracy and empowerment, could provide a valuable concept for the need of today's companies.

Design thinking has become a popular concept in recent years not the least in business press (Carmel-Gilfilen and Portillo, 2010; Martin, 2010; Leavy, 2010; Ungaretti et al., 2009; Brown, 2008; Boland et al., 2008). One reason for the increased interest in design thinking may be that it is argued to be a powerful force for innovation (Verganti, 2009; Cooper and Press, 2001; Bruce and Bessant, 2002). As organizations struggle with constant change and a need to become more innovative it would be valuable to compare the two concepts and discuss whether both design thinking and organization development could support democratic values and an innovative development of companies facing new challenges.

Design is argued to move into territories focusing on the idea that organizes a system or environment (Buchanan, 2001) and has certain resemblances with organization development. At the same time, design thinking, just as organizational development is at risk to disappear as one among other management fads (Johansson and Woodilla, 2010). Design thinking is an ambiguous concept that can be used with different meanings and in different contexts. In this paper it is defined as a human cantered approach to problem solving that is erasing the distinction between thinking and action (Kimbell, 2011). The focus in this paper, which is based on a literature study, is on the characteristics of design thinking and how it can be used as an organizational "resource" in the context of organizational development. The purpose is to discuss theories and historical development of organizational change and development. An initial discussion is presented on design as an enabling concept and how this can be part of the revitalization of OD as a concept with aspirations to democratize organizations. The arguments presented in this paper are currently being explored in an empirical study.

Organization theories

Organization theories embrace different perspectives based on diverse epistemological and ontological assumptions. Hence, the phenomenon we call "organization" or "the process of organizing" is understood and explained in different ways. Hatch (2006) divides organizational theory into *modernist, symbolic interpretivist* and *post-modernist perspectives*. This categorization should,

of course, not be understood as an evolutionary process where different theories replace each other; instead, these perspectives coexist in different contexts and combinations.

Modernist organizational theories consider the organizational environment as something that exists outside the boundaries of the organization, providing it with input such as resources and absorbing outputs such as products (Hatch, 2006). Nonaka (2004) argues that this leads to a view of organizations as closed systems that process information and solves problems in a simple input-process-output sequence. Based on these assumptions, uncertainty is solved by increasing the amount of information about an objective reality that exists inside the organization but most importantly, outside the boundaries of the organization. Rittel and Webber (1973) argue that system analysts of the modernist era diagnostically tried to discover the true nature and hidden character of a problem and then eliminate the roots that cause the problem.

Nonaka (2004) claims that individuals in an organization – and thus organizations – are co-creators of not only the information that is used in problem solving but also the problems that are to be solved. Hence, the information is not out there to be found but the reality of a situation is the result of a negotiation among several perspectives of the participating actors. The symbolic interpretivist epistemology behind this assumption, in contrast to modernism, considers the environment as socially constructed (Hatch, 2006). According to a symbolic interpretivist environmental analysis and institutional theory, organizations adapt and conform both to the values in the internal group as well as the values in the external environment.

Weick (1995) on the other hand means that there are no organizations just organizing. With this claim, he questions the notion of a stable organization that is to be managed from top-down and argues that organizations are under constant change because organizational actors enact, co-create and recreate the organization. In the interpretivist view there is a distinction between "uncertainty" and "ambiguity". Uncertainty derives from a state of limited knowledge and can partly be solved by a search for more information. Ambiguity cannot be solved by collecting additional information but requires an understanding that multiple interpretations exist simultaneously (Ford and Ogilve, 1996:54).

In a post-modernist perspective, the grand narratives and myths of modernism, such as constant growth and the existence of universal truths are questioned. Through a deconstruction of the organizational reality that is co-created by participating organizational members, power aspects are revealed and in this way radical change is possible (Hatch, 2006).

Organizational change

Managing change is one of the core tasks of leaders. Organizational change, as a subfield to organizational theory, shifts attention from theories about stable organizations towards those of dynamic organizations with theories focused on practice and reflection through action (Hatch, 2006).

Two of the most prominent theories in the field of organizational change are Lewin's model for change through *unfreezing – movement – refreezing* and Weber's theory of *routinization of charisma* (in Hatch, 2006). Both theories have been of importance for more recent theories in the field. The theory of change as proposed by Lewin (1946) aims at balancing forces driving and restraining change. During the *unfreezing* phase, existing behavioral patterns of organizations are destabilized to overcome resistance to change. The *movement* phase influences the direction of change. The final *refreezing* phase institutionalizes new behavioral patterns. Hatch (2006) states that in Weber's theory of routinization of charisma, the leader has a prominent role in introducing new ideas. Leadership is linked to what could be referred to as almost supernatural powers that the average employee does not hold. The ideas that are introduced by the leader are connected to the power structures that exist in the organization through a negotiation about how to interpret and implement them. In this way cultural changes are routinized (ibid.). Weber and Lewin do not necessarily imply that new knowledge is out there to find in the search for a universal truth. At the same time, there is a risk with a positivistic perspective of perceiving individuals as passive receivers that are to be changed rather than as interpreters of new situations and co-creators of new knowledge.

In the 1950s new group-based methods of learning and change were introduced in a movement called "organizational development" (OD) (Greiner and Cummings, 2005). The movement was influenced by Levin's participative methods and by Maslow who argued for the potential of individuals to pursue self-actualization (ibid.). Classical OD has been criticized for its positivistic social science methodology and epistemology (Marshak and Grant, 2008). Rittel and Webber (1973:158) mean that the dominant idea during modernism was efficiency seen 'as conditions in which a specified task could be performed with low inputs of resources.' This idea has 'been guiding the concept of civil engineering, the scientific management movement, much of contemporary operations research; and it still pervades modern government and industry.' The notion in classical OD was that change is episodic and can be created and planned by collecting and applying valid, often quantitative data. At the same time OD introduced democratic aspects with the assumption that change cannot be successfully identified without the involvement of organizational actors on all levels. OD was very much based on the values and language of humanism and social psychology (Bradford and Burke, 2005).

In the 1980s and 1990s management consultants expanded their practices offering standardized business process reengineering services and OD partly lost importance as organizational change concept (Harvey, 2005). "Change management" is planned action led by managers who often use consultants as agents (Marshak, 2005) and view that new knowledge should be implemented through a controlled process. The values and language of change management are very much based on the language of business with the aim to increase efficiency (Bradford and Burke, 2005). From an OD perspective change management is incomplete in the sense that it is impossible to engineer change in a situation and environment characterized by complexity without involving organizational actors as active participants (Harvey, 2005).

Hatch (2006) uses a matrix to describe the relation between information, complexity and rate of change in an organization environment (see figure 1 below). According to the model there is a correspondence between the rate of change and amount of information needed. In a situation of high complexity, the model claims that organizations face an overload of information and in combination with a high rate of change, it is problematic to define what information is needed. One interpretation is that high complexity is connected to ambiguity rather than uncertainty (Ford and Ogilve, 1996), which in turn can imply that several interpretations of a situation are possible. This conclusion would suggest the need to have an interpretive perspective in solving complex situations.

Figure 1: Links between conditions of complexity and rate of change in the perceived environment and need for information (Hatch, 2006:79)

| | Rate of change | |
	Low	**High**
Complexity **Low**	Needed information is known and available	Constant need for new information
Complexity **High**	Information overload	Not known what information is needed

The revitalization of organizational development

Today several scholars call for a reinvention of organizational development and reintroducing humanistic values into organizational change (Clegg, 2005; Bradford and Burke, 2005; Marshak and Grant, 2008). As a field, OD is undergoing a change in its ontological view and the methodologies used (Bradford and Burke, 2005; Marshak and Grant, 2008; Ford and Ogilvie, 1996). The claim by for instance Bradford and Burke (2005) is that through OD opportunities for learning and development are created in the organization by pursuing collaboration rather than imposing change which means that those affected by the change process should be involved in designing and implementing it (Bradford and Burke, 2005).

Action based methods

Action based methods has always been an important part of OD. Ford and Ogilve (1996) claim that ambiguous environments require interpretation and trial-and-error enactment processes. They have an action-based perspective with the view that 'understanding does not lead to action, but rather action leads to understanding' (Ford and Ogilve, 1996:54). This notion is consistent with the claim by Weick (1995) that sensemaking always is preceded by action.

Interaction

In "new" OD, (inter)action and facilitation of a sensemaking process (Weick, 1995) are at the very centre of attention (Marshak and Grant, 2008; Werkman, 2010). Part of the change in OD is the acknowledgement that multiple realities can exist simultaneously among different organizational actors. New knowledge and change is co-created in inter(action) as organizational actors negotiate different perspectives on organizational reality. This perspective is in line with Dewey's (1929) view of the internal and external world as something that is not complete but created through the mediation of intentional operations. Ford and Ogilve (1996) argue that a systems-structural view has been the dominant paradigm underlying organizational analyses; instead, they call for an interpretive epistemology (see their comparison in Table 1 below).

Table 1. Organizational learning outcomes resulting from systems-structural and interpretivist epistemologies (Ford and Ogilve, 1996:59).

	System Structural View	Interpretive View
Action	Outcomes of routines sanctioned by system-structural assumptions.	Outcomes of creative actions sanctioned by interpretivist assumptions.
Knowledge acquisition	Attempts to reduce uncertainty produce internally directed performance that monitors routines undertaken by specialists.	Attempts to create meaning from ambiguous environments result in externally directed creative actions undertaken throughout the organization.
Information distribution	Rigorous analyses produced by specialists are distributed primarily within functional hierarchies.	Lessons from experience are distributed horizontally within and across the project or service teams as they attempt to develop creative associations.
Information interpretation	The sanctioned organizational frame guides linear and rule bound interpretations.	Multiple frames lead to recursive and informal interpretive processes that help produce creative insights.
Organizational memory	Lessons from experience reinforce sanctioned interpretations and current routines.	Lessons from experience produce diverse information and perspectives that can be utilized to support multiple interpretations and creative actions.

Rittel and Webber (1973) argue in their analysis of wicked problems of social policy, which also can be applied to OD, that:

> The systems-approach "of the first generation" is inadequate for dealing with wicked-problems. Approaches of the "second generation" should be based on a model of planning as an argumentative process in the course of which an image of the problem and of the solution emerges gradually among the participants (Rittel and Webber, 1973:162).

An open actor framework is necessary to understand all sorts of connections between stakeholders in value creation (Petrella, 2005). The actors in a value network impose their interpretive framework on the organization as they enact their interpretations on the organization. An interpretive perspective has an explicit focus on the different actors as active agents (Weick, 1995), and the patterns of sensemaking that take place on an individual level and on intra- and inter-organizational levels.

Creative action

As the organizational environment is under constant change, creative actions that facilitate development and learning are necessary to provide variation and to enact shifting aspects of the environment (Ford and Ogilve, 1996). Without creative actions experience only occurs from unexpected external events, which makes the organization reactive. Actions that include an ability to imagine multiple perspectives and interpretations of an ambiguous environment are highly valued. This is due to a need to increase the ability to quickly redirect efforts when feedback from actions indicates that a different interpretation is needed (ibid.).

> *We are in an interesting situation. We live in a world where organizations are struggling as never before to make change. (…) Meanwhile we have a discipline supposedly centred on the issue of how to make change, and we seem to have little influence. Something is wrong. Quinn (1996:4)*

This quote from Quinn, describing the development of organizations, might as well have been a quote from an industrial design consultancy today.

Enabling design

Buchanan (2001) argues that design thinking can be applied to different problems and that design itself is expanding its meaning. Some scholars claim that the primary role of designers is that of being a strategic resource of knowledge that rather proposes new ideas and stimuli than works with style and form (see for instance Delléra et al., 2008), and that the aesthetic perspective is no longer as obvious as it used to be (Ullmark, 2007). It is also argued that companies would gain from applying design thinking to management problems (Dunne and Martin, 2006; Boland et al., 2008; Ungaretti et al., 2009). This leads us to an interesting question regarding what is the basic epistemology that design thinking brings to the table? In a previous study design thinking was summarized as integrative, collaborative and experimental (Eneberg, 2011).

Integrative

Practice and thinking, two aspects of knowledge creation discussed by countless researchers. Dewey (1929) argues that knowledge is created through what he calls experimental thinking. Experimental thinking is based on interaction and on integrating practice and theory directed towards new knowledge and change. The relation between thinking and practice is discussed among others by Schön (1983). He argues that individuals understand a situation by trying to change it and that actual reflection takes place in action. A central premise in Scion's theory about the reflective practitioner is the concept of "tacit knowledge" introduced by Polyani (1966), who states that we as individuals know more than we can tell. Tacit knowledge becomes explicit through action in practice. The practitioner becomes aware of the variety of available frames that (s)he places on reality through action (Kinsella, 2007) and hence reflection can take place. What Dewey, Schön and Polyani do is to propose an embodied dimension on reflection and criticize

the Cartesian myth of a dualism between mind and body: The body, things and events belong to the visible external world while the mind is internal. This perspective leads to an assumption that intellectual operations always take place in our minds prior to action. The result of this can be seen in scientific management where labour is divided into hands and thought.

Designers are claimed to integrate hands with thought or as Buchanan (1995:6) expresses it, *'Designers, are exploring concrete integrations of knowledge that will combine theory with practice for new productive purposes.'* Intuition occurs when thinking with the hands (Boland et al., 2008). As action takes place, ideas can be shaped with the use of sketches, prototypes and other visual artefacts. Design education is in most cases taught in action, that is, by doing (Rylander; 2009, Dunne and Martin, 2006).

Collaborative

According to sensemaking theory, the individual forms the environment and the environment with its different stakeholders forms the individual. Individuals make sense of experiences through on-going inter- and intra-personal dialogues and enact their perspectives in the environment (Weick, 1995).

The concept of affordance, as proposed by Normann (2002), refers to the perceived properties of an artifact where the artifact acts as an intermediary between a sender and a receiver. Creating an environment that allows individuals to perform actions help different thought networks to merge and thus, new knowledge can emerge. The ability to facilitate an interaction between different stakeholders is a necessity to generate new solutions. Different, often contradictory perspectives are integrated during the design process such as limitations in production with the communication requirements from marketing and branding as well as the needs of the end user. Designers have the visualization skills that can promote a negotiation of perspectives among different stakeholders and actors in the organizational environment.

Experimental

Design is described as an abductive mode of thinking (Dunne and Martin, 2006; Ungaretti et al., 2009; Edeholt, 2004). This mode of thinking aims at finding possible explanations or hypotheses. Abduction is argued to be the logic of what might be or as Pierce expresses it (1905 in Dunne and Martin, 2006:518):

> "the process of forming an explanatory hypothesis. It is the only logical operation which introduces any new ideas."

Lawson (2006) argue that designers are experimental often using a thought style called "adventurous thinking". Adventurous thinking is characterized by putting elements together that normally are not related. Further on it is claimed that the designer is constantly switching between an open and inclusive creativity and a critical review of various solutions and matching patterns by relying on an intuitive ability (Ullmark, 2007).

The challenge for organizations is to create conditions for a creative environment, inter-action and meaning creation since organizations constantly struggle to become more innovative. The designer seems to have competencies that can enhance this process.

Discussion

The positivistic epistemology and methodology of classical OD is aimed at implementing objective knowledge often deriving from quantitative methods. It is based on positivistic social science, which has focused on episodic change inside a stable organization. At the same time, the OD movement introduced a democratic aspiration to involve organizational actors on all levels of the organization. The OD movement was more or less replaced with change management in the 1980s and 1990s. Change management was more focused on implementing change derived and steered from top management.

Neither design nor more recent directions in OD deal with finding an objective knowledge that is to be implemented in an organization. New OD regards change as an on-going process that takes place in complex organizational environments. Through a negotiation of different stakeholder perspectives, new knowledge is created. It is with an interpretative perspective on OD that design serves as an enabling concept can be of use in the revitalization of OD by reintroducing democratic values into organizational change.

Experimental thinking as proposed by Dewey integrates practice with theory, and hands with thoughts, thus an embodied dimension on reflection through action. With the use of visualization skills, the designer creates action not only to take advantage of the intuitive ability that occurs when thinking with the hands but also to make tacit knowledge explicit. As knowledge becomes explicit, interaction between actors in a value-creating network can take place.

Not only organizations but also whole value creating networks are under constant change and to talk about organizations is rather useless as it would be more relevant to talk about the process of organizing. Using the concept organizing rather than organization highlights the process of constant change and how knowledge is co-create in inter(action) between active agents. This process can rather be categorized by ambiguity than uncertainty and hence it is not enough to increase the amount of information. Instead of using uncertainty to characterize the situation of an organizing process, ambiguity is better as a term as it demands a higher level of interaction and a participative style of organizing. Design is claimed to be a planning activity that is dictated by commercial and political interests (Thackara, 1988). In this sense it is important for designers to uncover and understand power structures and what is acceptable to say, and by whom, to be able to succeed with their service. Design often resolves contradictions between different perspectives, shifting the focus from action to interaction. In highlighting relational aspects and different perspectives it is possible to dissolve the boundaries of the organization but also between different subgroups in the organization to let different "thought" networks meet. Organizational environments that are categorized as ambiguous call for an interpretive

perspective where the designer can be seen as one of several active agents facilitating an intra- and inter-personal dialogue and a negotiation process. Affordance created in this way is facilitating development and learning through the enabling design service. Collaboration and co-creation can thus take place rather than change being imposed.

To confront the wicked problems organizations are facing and the ever-increasing need to be innovative, there is a need for trial-and-error rather than finding the one and only solution. Designers are claimed to have an abductive mode of thinking, aimed at finding several alternative hypotheses or explanations. Creative action can be developed as experiences are distributed both intra- and inter-organizationally. When individuals, as active agents, enact their interpretation of the organizational environment, multiple frames can meet and several new alternative paths of a possible future can be generated.

Conclusions

Organizational environments are increasingly complex with rapid change resulting in a need to become more innovative. Complex organizational environments can be categorized by ambiguity rather than uncertainty and hence there is a need for an interpretive framework. This paper proposes that an enabling design service can contribute in creating the conditions for such an interpretive framework. The meaning of design is expanding and is applied today to what was traditionally viewed as management problems. The revitalization of organizational development and the reintroduction of democratic values in organizational change seem to benefit from the integrative, cooperative and experimental competencies held by designers.

Acknowledgements

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