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The contribution of design is often regarded as providing a relieving service that delivers aesthetic competence at the end of a product development process. Previous studies have shown that industrial design consultancies aspire to be a strategic resource in their client firms, and that the focus of design is becoming increasingly intangible. The claim is that the competencies of the designer can be used to enhance innovation and the strategic process in client firms. At the same time, studies indicate that industrial design consultancies have a problem getting commissioned and paid for the intangible parts of their service. This indicates a problem in communicating the contribution of enabling design services to client firms.

A literature study was conducted regarding the characteristics of design (thinking), its methods and processes. The purpose was to put these characteristics into the context of symbolic-interpretive influenced organizational development by comparing them with the properties that is argued to form the basis for sensemaking theory as described by Weick in 1995. The aim of the paper is to contribute to the understanding of enabling design service.

Keywords: Organizational development, Design, Sensemaking

Introduction

It is argued that the essence of design is making sense of things (Verganti, 2009; Krippendorff, 1989). This claim highlights the importance of the interaction between product and user. The sensemaking theory originates from Weick (1995) who in this way brought social construction into organizational theory (Hatch, 2006). Basically, sensemaking claims that individuals form an organization and an organization and its different stakeholders form the individual. Individuals make sense of experiences through on-going inter- and intrapersonal dialogues. It could also be argued that design has the potential to facilitate a sensemaking process through an enabling service, and that the artefact is the subject matter or mediator of the designer in his or her interaction with and inside client firms. Designers are used to working with a lack of predetermined outcomes and have integrative and visualization skills that promote the negotiation of perspectives among organizational actors and hence creates affordance in the social environment (Norman, 2002).

A service can be either that of relieving or enabling (Norman, 2001; Vargo and Lusch, 2008). A relieving service means that the supplying organization performs a task for the other party, which is the logic behind outsourcing. The value contribution of a relieving service is exemplified by an IDC performing some part of a product development process on behalf of the CF. An enabling service is to a higher degree relationship dependent and based on cooperation between the supplier and buyer. The competencies of the supplier are applied in the organization that purchases them, with the aim of making some kind of improvement or change in the buying organization. Designers who use their competencies to facilitate a sensemaking process in CFs could exemplify an enabling service (Eneberg, 2011). Buchanan (1995; 2001) describes an increasingly intangible focus of design. At the same time most industrial design consultancies still have a hard time getting commissioned and paid for intangible parts of their service offering. One reason could be a problem in communicating the contribution of their enabling design service.

In this conceptual paper, the results of a literature study regarding the characteristics of design thinking, and hence the competencies of the designer, will be compared with the properties that Weick (1995) argues form the basis for a sensemaking process. The aim of the paper is to explore the consistency of symbolic-interpretive influenced organizational development theory with the discourse of design thinking, two discourses with different epistemological origins that seem to have common denominators. The purpose of the paper is not to present a complete picture of design competencies but to be part of an on-going dialogue between design researchers and within the design industry about the enabling service contribution the industrial designer provides.

Design and the field of organizational development

According to Buchanan (1995), the search for a new integrative discipline that will complement arts and sciences is one of the central themes of intellectual and practical life in the 20th century. By drawing attention to the concept of technology, as defined by Dewey (1929), Buchanan highlights the similarities between design thinking and experimental thinking. By doing so, he emphasizes design thinking as integrative and universal in scope, not having a fixed subject matter and thus may be applied to different areas of human experience. Instead of using the word ‘design’, which is often understood to be an artifact, design thinking highlights the actual activity of solving problems with a design approach. Buchanan argues that design thinking can be applied to different kinds of problems and that design itself is expanding its meaning. It is also argued that

companies would gain from applying design thinking to management problems (Dunne and Martin, 2006; Boland, Collopy, Lyytinen, and Yoo, 2008 Ungaretti, Chomowicz, Canniffe, Johnson, Weiss, Dunn, and Cropper, 2009). Experimental thinking is signified by what Dewey calls 'direct activity', which he contrasts with 'thinking' as something cooped up within 'mind'. In this sense, 'design action' would be a more suitable term than 'design thinking'. The characteristics of design – thinking or action – and hence the competencies of the industrial designer can be summarized as integrative, collaborative and experimental (Eneberg, 2011). Design is integrative in that it integrates hands with thought and theory with practice. It is collaborative in that interaction between individuals is a necessity to solve the complex, open-ended problems they face. Finally, it is experimental in that its methods and processes aim at ingenuity and focus on how things ought to be rather than on the present state. The integrative and collaborative characteristics of design (thinking) have close connections to the concepts of affordance (Norman, 1988) and relations (Döös, 2007). Affordance in the sense of creating an environment that allows for an individual to perform actions and relatonics as a key concept for organizations to develop competencies and hence facilitate innovation. In the perspective of relatonics competencies in an organizational are constantly changing since they exist in relations between human beings. Individuals take their experiences and expertise with them as they enter and leave organizations (ibid.). According to Döös 'relatonics concerns the inter-related existence of ongoing relational processes that bear and develop competencies. An individual's understanding could be described as a thought network. Thought networks are 'cognitive structures, open to change through the questions the individual poses, and as a result of the actions involved'. Different thought networks merge in the relation and through interaction between individuals.

One field in organizational theory that has been the subject of an intense debate is the field of organizational development (OD). It has been criticized for its positivistic origin, relying on a methodology based on quantitative data in search of an objective truth in contrast to the subjective perception of organizational actors. Classical OD is argued to treat deviations from the objective truth as misperceptions that are to be corrected (Marshak and Grant, 2008). OD as a field is argued to be undergoing changes in regard to its ontological view and the methodologies used (Bradford and Warner Burke, 2005; Marshak and Grant, 2008; Ford and Ogilvie, 1996). Part of this change is the acknowledgement that multiple realities can exist simultaneously among different organizational actors. Nonaka (2004) goes on to argue that organizational theory has long been dominated by a paradigm that views organizations as closed systems that process information and solve problems in a simple input-process-output sequence. According to Nonaka, individuals in an organization and thereby organizations are co-creators of the problems that are to be solved and the information that is used in problem solving. The reality of a situation is the result of a negotiation among the participating actors. This perspective is in line with Dewey's (1929) view on the internal and external world as something that is not complete but created through the mediation of intentional operations. Action has always been an important part of OD. In the 'new' OD, (inter)action and the facilitation of a sensemaking process (Weick, 1995) are at the very center of attention (Marshak and Grant, 2008; Werkman, 2010).

Design and sensemaking

Sensemaking takes place inside individuals and through interaction between individuals or as Weick (1995) express it, 'Active agents construct sensible events. They structure the unknown.' Weick goes on to argue for seven properties that form the basis for sensemaking processes that are: 1) grounded in identity construction, 2) retrospective, 3) enactive of sensible environments, 4) social, 5) ongoing, 6) focused on and by extracted

cues, and finally 7) driven by plausibility rather than accuracy. In this section, the sensemaking properties are compared with the characteristics of design summarized as integrative, collaborative and experimental.

Grounded in identity construction

All humans have several identities, what Mead (1934) calls 'a parliament of selves'. Identities are created in interaction with other individuals. Within an organization, identities are partly constructed based on how the individual experiences the views others have of the organization (Weick, 1995). An organization that is perceived as creative enables the individuals to project a creative identity. Designers are mostly known for being creative, and collaboration with a designer has the potential to help the individuals inside an organization, but also end users, to project an identity of creativity. Further on, the collaborative characteristic of design can be exemplified by how the designer aims to integrate dissimilar, often contradictory perspectives from different stakeholders such as limitations in production, communication requirements from marketing and branding, and the needs of the end user. This offers a potential to expose members within an organization with different perspectives, and in this way improve the culture of the organization by creating a collective identity. Thus, the collaborative characteristics of design would both question the prevailing while enhancing institutionalization (Selznick, 1949) in client firms.

Retrospective

Humans understand their own actions after the actual action has taken place. Attention is always directed backwards in time and sensemaking is based on the memory of what has already happened. Hence, everything that affects the memory will influence our sensemaking process. By moving into a fictive future, it is possible to make sense about what has not yet taken place (Weick, 1995). A focus on what has already happened leads to a problem to create something new. Dunne and Martin (2006: 518) argue by citing Pierce that, 'The process of forming an explanatory hypothesis is the only logical operation which introduces any new ideas.' The experimental characteristic of design highlights the skill of the abductive mode of thinking (Dunne and Martin, 2006; Ungaretti et al., 2009; Edeholt, 2004). Several hypotheses are often developed, each working as an argument in a dialogue with different contexts (Boland et al., 2008). In this way, several futures are tested or as Simon (1996) expresses it, 'how things ought to be'.

Enactive of sensible environments

As individuals, we are often caught in a Cartesian anxiety and a mind-body dualism is created. We understand the world as stable and objective and hence we are only on a quest to understand an objective and complete reality existing outside ourselves (Weick, 1995). Another ontological perspective would be to understand the individual as co-creating the world at the same time as it creates us.

> *The inquirer's relation to this situation is transactional. He shapes the situation, but in conversation with it, so that his own models and appreciations are also shaped by the situation. (...) he is in the situation that he seeks to understand. (...) he understands the situation by trying to change it, and considers the resulting changes not as a defect of experimental method but as the essence of its success.* (Schön, 1983:150)

Organizational and cultural traditions have in many cases from Taylor onward led to dividing work into something performed by the mind or with the hands. As mentioned earlier, Buchanan (1995) claims that design is an integrative discipline. 'Designers are exploring concrete integrations of knowledge that will combine theory with practice for

new productive purposes.' One of the prerequisites of design thinking is that of joining hands, action and the concrete with abstract thought. Ideas are formed at the same time as interaction takes place through the use of sketches and prototypes (Stolterman, 2007). An important element of design thinking is that reflection takes place in action (Schön, 1983).

Social

The development of a common language and social interaction are vital components to maintain the network of inter-subjective agreements an organization consist of. Designers often use visualization tools as prototypes or sketches during the design process. Each model represents an alternative perspective to be tested against the problem (Boland et al., 2008). Sawhney and Prandelli (2004) claim that new knowledge is created when it iterates between being tacit and explicit, that is, between being individual and social. Explicit knowledge is, as Nonaka (2004) argues by referring to Polanyi, transferable in formal language, while tacit knowledge is difficult to formalize and communicate through words. With the help of visualization, the designer facilitates the iteration between explicit and tacit knowledge. The designer internalizes (Nonaka, 2004) explicit knowledge in a kind of dialogue with the object. Externalization of knowledge occurs when the designer facilitates an integration of different stakeholders in a process with the help of visualization skills. Boland (2008) argues that multiple models are argued to evoke emotional involvement from participants, which facilitates the process and leads to several possible alternative explanations of a problem.

Ongoing

Weick (1995) argues that sensemaking never starts. The reason it never starts is that pure duration never stops. Hence, sensemaking is an ongoing process but at the same time, the ongoing flow of action is punctuated when we focus on the past from a point beyond it. It is in these moments that meanings are crystallized in, for instance, an organization. Weick claims, by referring to Berscheid, that arousal is triggered by interruption of an ongoing activity. Arousal leads people to search for answers and make sense of the situation. Events such as product launches and strategic meetings can have the role of punctuating an ongoing flow in organizations. The collaborative nature of the enabling design service has the potential to punctuate an ongoing flow in client firms and in this way not only start but also facilitate a sensemaking process.

Focused on and by extracted cues

The process of sensemaking is often understood as the product of the process rather than the process itself. One reason is that sensemaking is instant, as we use extracted cues that come from familiar structures created out of earlier sensemaking. The context of the situation is of significance since it is in the context that it is determined what cues are to be extracted. The context also affects how we understand the situation. An event may have several meanings just as words may have several meanings depending on the context in which they are used (Weick, 1995). During a design process, the focus is on the whole rather than on details in order to gain an overall understanding of different contexts relevant to the solution of a problem. The designer searches for and matches patterns by relying on the brain's intuitive ability (Ullmark, 2007). It is a learning situation aimed at a coherent understanding of various possible solutions. Intuition occurs when thinking with the hands, that is, when integrating hands with thought (Boland et al., 2008). In a sense, one could say that technology and techniques, as von Wright (1986) describes the concepts, are integrated with each other and the distinction disappears.

Driven by plausibility rather than accuracy

Accuracy is not necessary in sensemaking. What is necessary is something that preserves plausibility, coherence, embodies past experience and resonates with other people (Weick, 1995).

> *What is necessary in sensemaking is a good story. (...) a good story, like a workable cause map, shows patterns that may already exist in the puzzle (...) patterns that could be created anew in the interest of more order and sense in the future.* (Weick, 1995:60-61)

Design is experimental in nature and designers are innovators who tend to be engaged in the 'fuzzy front phase' of various development and change activities in industry and society (Hargadon and Sutton, 1997). Innovators tend to be venturesome, use multiple information sources, and have a greater propensity to take risks (Ainamo, 2009). Designing is a divergent task, in most cases leading to several contextually dependent results rather than one correct answer; the designer is constantly switching between an open and inclusive creativity and a critical review (Ullmark, 2007). Past experience is embodied in sketches and prototypes and the physical object can be used in the creation of shared stories in client firms.

Conclusions

The aim of this paper was to explore the consistency of symbolic-interpretive influenced organizational development theories with the discourse of design thinking. The properties of sensemaking have been compared with the characteristics of design with the purpose to reveal similarities and differences and hence the contributions of enabling design service in organizational development (OD).

An enabling design service involves elements of learning and interaction to a greater extent than a relieving design service and thus would create a higher value since it generates new knowledge and competencies in the client firm. One could also argue that in contrast to relieving design services the full potential of design is utilized in an enabling design service. The most prominent characteristics of design and thus the competencies of designers could be summarized in three categories: integrative, collaborative and experimental (Eneberg, 2011).

OD in contrast to design has had a history of treating deviations from an objective truth. Design on the other hand has had a focus on integrating dissimilar often contradictory perspectives and contexts. Using a sensemaking perspective rather than problem solving perspective on OD moves focus away from the search of an objective truth towards the existence of multiple perspectives. This view stresses that problems and the information used in solving them are not something that exists outside an organization but is co-created by the individuals inside the organization and the value network in which the organization participate. The role of the design consultant would hence be to create affordance by creating and environment that allow the individual to perform actions and in this way facilitate the opportunity for different thought networks to merge and new competencies to be developed. The design consultant would in this context provide the client organization with a tool to enhance iteration between tacit and explicit knowledge integrating hands with thought by providing a common visual language, which could facilitate intra- and inter organizational interaction.

Design education is argued to train students to become experimental and use an abductive mode of thinking with several explanatory hypothesis of the future. This could be contrasted to management educations that often are characterized with an inductive

or deductive mode of thinking. Since sensemaking takes place retrospectively, i.e. after an action has occurred, organizations would gain by using an abductive mode of thinking, and hence the competencies of the design consultant, in the OD process. By doing so the ongoing flow of actions in the client organization is punctuated and conditions created to present several fictional futures and contexts to be "tested" and meanings crystalized among the participants.

There is an obvious resemblance between the ontological and epistemological perspectives of symbolic-interpretive influenced organizational development theories and the design thinking discourse. At the same time they are originating from dissimilar traditions and hence bring different methods and competencies to the table. This paper provides some examples of how the competencies of the designer could be used in an OD context and hopefully this paper will contribute to the ongoing dialogue about the contribution of enabling design service in client organizations.

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