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ORGANIZATIONAL SENSEMAKING THROUGH ENABLING DESIGN SERVICES

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ABSTRACT

It is argued that the focus of design is becoming increasingly intangible. At the same time as design consultants are expanding their offerings with new services aimed at enhancing innovation and the strategic process in client firms, studies indicate that industrial design consultancies have a problem getting commissioned and paid for the intangible parts of their service. One possible explanation is that design is regarded as providing a relieving service that delivers aesthetic competence at the end of a product development process. This indicates a problem in communicating the contribution of enabling design services to client firms.

The aim of this paper is to increase the understanding of enabling design services. This is done by comparing the characteristics of design thinking, its methods and processes with sensemaking theory as described by Weick (1995).

INTRODUCTION

This paper presents and positions organizational change theory influenced by a sensemaking perspective with the concept of design thinking, two perspectives with different epistemological origins that seem to have common denominators. The results of a literature study regarding the characteristics of design thinking, and hence the competencies of the designer (Eneberg, 2011), are compared with the properties that Weick (1995) argues form the basis for a sense-making process. The purpose is to clarify the role of the designer in organizational sensemaking and thus the contribution to organizational development in client firms. Sensemaking theory originates from Weick (1995) who in this way brought social construction into organizational theory (Hatch, 2006). Basically, sensemaking highlights how individuals and society create each other. The individual makes sense of experiences through an ongoing inter- and intrapersonal dialogue, which in turn creates the culture of, for instance, an organization. This paper does not present a complete picture of design competencies, but aims to be part of an ongoing dialogue among design researchers and within the design industry about the enabling service contribution the industrial designer provides.

According to Verganti (2009) the essence of design is making sense of things. However it can also be argued that the designer can facilitate the sensemaking process through an enabling service, and that the artifact mediates the designer's interactions with and inside client firms. Designers have integrative and visualization skills that promote the negotiation of perspectives among organizational actors

and hence create affordance in the social environment (Norman, 2002). A service can be either 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. A relieving service can be exemplified by an industrial design consultancy performing some part of a product development process on behalf of a client firm. An enabling service, on the other hand, is more relationship dependent and based on cooperation between the supplier and buyer. The competencies of the supplier are applied in the customer organization with the aim of making some kind of improvement or change. Designers who use their competencies to facilitate a sensemaking process in client firms demonstrate an enabling service (Eneberg, 2011). This could further be exemplified with the designer using their visualization skills to externalize tacit knowledge and hence enhance interaction in client firms.

THE CHANGING FIELD OF ORGANIZATIONAL DEVELOPMENT

One field in organizational theory that has been the subject of an intense debate, both in the community practicing it but also in the scientific community, is organizational development (OD) (Bradford and Burke, 2005; Marshak and Grant, 2008; Werkman, 2010). 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 an objective truth as misperceptions that are to be corrected (Marshak and Grant, 2008). OD as a field is argued to be undergoing a change of 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) argues that organizational theory has 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 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 participating actors. This perspective is in line with Dewey's (1929) understanding of 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 literature about “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).

THE EXPANDING SCOPE OF DESIGN

The concept of design thinking has become popular 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 boosted interest in design thinking may be that it is argued to be a potent force for innovation (Verganti, 2009; Cooper and Press, 2001; Bruce and Bessant, 2002). Several scholars argue that the role of industrial design is expanding from being a product development oriented practice towards also contributing as a strategic resource of knowledge proposing new ideas and stimuli in client firms (Dellera et al., 2008, Valtonen, 2007). The aesthetic perspective is no longer as apparent as it used to be (Ullmark, 2007). With the changing role of design there is a need to understand the characteristics of design or in other words what is typically “designerly” (Rylander, 2011; Cross, 2006)

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. He emphasizes design thinking as integrative and universal in scope, not having a fixed subject matter and thus it may be applied to different areas of human experience. In addition, Buchanan argues that design thinking can be applied to different kinds of problems and that the meaning of design itself is expanding. Dewey signifies experimental thinking with what he calls “direct activity”, which he contrasts with “thinking” as something cooped up within the “mind”. In this sense, design *action* would be a more suitable term than design *thinking*.

Through a literature study I found that the concepts *integrative, collaborative and experimental* summarize the competencies of the designer (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 how they are.

The integrative and collaborative characteristics of design are closely connected to the concepts of affordance (Norman, 2002) and what Döös (2007) calls “relatonics”; affordance in the sense of creating an environment that allows an individual to perform actions and relatonics as a key concept for organizations to develop competencies and hence facilitate innovation. From 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 when they enter and leave organizations (ibid.). According to Döös, “relatonics concerns the inter-related existence of ongoing relational processes that bear and develop competencies” (2007: 142). An individual’s understanding can 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” (Döös, 2007: 146). Different thought networks merge in the relation and through interaction between individuals as a sensemaking process take place. With the help of the integrative and cooperative characteristics of design this interaction could be enhanced.

DESIGN THAT FACILITATES SENSEMAKING

Sensemaking takes place inside individuals and through interaction between individuals. Weick claim that individuals are active agents that construct sensible events and he argues for seven properties, which are grouped into 4 headings in this section of the paper. The properties that form the basis for sensemaking processes are 1) social and 2) grounded in identity construction, 3) ongoing and 4) retrospective, 5) enactment and 6) focused on and by extracted cues, and finally, that sensemaking is 7) driven by plausibility rather than accuracy. In the section below, Weick’s sensemaking properties are compared with Eneberg’s (2011) characteristics of design summarized as collaborative, experimental and integrative.

Social and 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. The development of a common language and social interaction are vital components to maintain the network of inter-subjective agreements of which an organization consists. Within an organization, identities are partly constructed based on how the individual experiences how others view 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 individuals inside an organization, but also end users, to project an identity of creativity.

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 (ibid.) 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 (Eneberg, 2011). Boland et al. (2008) argue that multiple models evoke emotional involvement from participants, which facilitates the process and leads to several possible alternative explanations of a problem. 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 (ibid.). Visualization tools such as prototypes or sketches are often used during a design process. Several models are developed and each model represents an alternative perspective to be tested (Boland et al., 2008). This offers a potential to expose organizational actors to different perspectives. Thus, the collaborative characteristics of design (Eneberg, 2011) would question what is taken for granted in the client organization by introducing new perspectives at the same as it would enhance an institutionalization of new shared perspectives (Selznick, 1949).

Ongoing and retrospective

Weick (1995) argues that 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 to a search for answers and to make sense of the situation. Individuals understand actions after they have 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 a 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 the problem of creating something new. Dunne and Martin argue by citing Pierce that “The process of forming an explanatory hypothesis is the only logical operation which introduces any new ideas” (2006:518). The experimental characteristic of design (Eneberg, 2011) highlights the skill of an 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 or as Simon expresses it, “how things ought to be” can be tested (1996: 114).

Enactment and extracted cues

As individuals we are often caught in a Cartesian anxiety and thus a mind-body dualism is created. We understand the world as stable and objective and hence are only on a quest to understand an objective and complete reality that we believe exists outside of 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).

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 the context that determines 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 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). Thinking with the hands facilitates intuition, integrating hands with thought (Eneberg, 2011; Boland et al., 2008). As mentioned earlier, Buchanan claim that design is an integrative discipline: "Designers are exploring concrete integrations of knowledge that will combine theory with practice for new productive purposes" (1995: 4). Ideas are formed at the same time as interaction takes place through the use of sketches and prototypes (Stolterman, 2007) and as reflection takes place in action (Schön, 1983).

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 (Eneberg, 2011) and designers are innovators intend 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 and plausible explanations in client firms.

CONCLUSIONS

The seven properties of sensemaking have been compared with the three characteristics of design thinking to reveal similarities and differences and hence the contributions of an enabling design service. An enabling design service involves elements of learning and interaction to a greater extent than a relieving design service and thus would create a greater value since it generates new knowledge and competencies in the client firm. In contrast to relieving design services,

the full potential of design is utilized in an enabling design service.

OD in contrast to design has had a history of treating deviations from an objective truth. Using a sensemaking perspective of OD moves the focus away from the search for an objective truth towards the existence of multiple perspectives. This view stresses that problems and the information used to solve 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 participates.

Design on the other hand has had a focus on integrating dissimilar, often contradictory perspectives and contexts. The design consultant creates affordance when supporting an environment that allows the individual to perform actions and in this way facilitate the opportunity for different thought networks to merge and new competencies to be developed. In this context the design consultant would provide the client organization with a tool to enhance iteration between tacit and explicit knowledge, integrating hands with thought, and thus provide a common visual language that can 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 education that often is characterized by 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 the 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 organizational change theory influenced by sensemaking theory and the concept of design thinking. At the same time, they originate from dissimilar traditions and hence bring different methods and competencies to the table. In this paper some of the characteristics of design thinking have been discussed in a sensemaking context and hopefully this will contribute to the ongoing dialogue about the contribution of enabling design service in client organizations.

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