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END-USERS & EMOTIONAL VALUES IN INDUSTRIAL TEXTILE DESIGN

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TEXTILE DESIGN

Textile designers are like other industrial designers involved in the product development in various ways covering idea phase through prototype development to mass production.

One aim with the experiments conducted during the PhD project so far has been to investigate if exploratory approaches are appropriate for research with a broad focus on textile design. It is a broad focus in the sense that it is not only pieces of textile that are investigated but also the fact that the context is upholstery textiles for office chairs in various end-users daily workspace.

INTRODUCTION

Emotional values which are considered to be soft, individual, subjective, complex, and influenced by culture are hard to measure and quantify. When it comes to textile upholstery solutions this is a challenge for the designer in the textile industry.

Typically in textile industry the designer is the professional having extensive knowledge and competence concerning the aesthetic form giving of the fabric solution. The designer also has other core competencies and is involved in development processes, such as functional and technical design, marketing and project coordination. This actual research project is especially concerned about the aesthetic design competencies and emotional values.

Fabric solutions for the contract market must meet a range of technical specifications and demands such as abrasion resistance, pilling, flammability, and colour fastness to light and liquids. The fabrics ability to meet the technical specifications for certain markets is an essential selling point and a highly important sales parameter. In recent years the textile industry faces several challenges caused by technological development and outsourcing, which has made it possible for manufacturers to produce quality textiles with specific technical specifications at relatively low prices. Though technical specifications are still highly important and essential there is a tendency in the textile industry towards an increased focus on innovation and development of soft and emotional values concerning aesthetic, stories, experiences and emotions connected to the fabric solutions.

Since it is impossible to adapt soft and not measurable values to standards and routines known from the measurable technical specifications they are not operational in the same way. In project teams with various professions and stakeholders represented it is problematic that areas which call for an increased focus is not operational.

Also there is an increased focus on the end-users. Traditionally it has not been common to actively involve end-users in the design process in the textile industry. The textile manufacturer often has a function as supplier to other industries such as fashion and furniture and they were until recently considered to be the 'end-user'. With the challenges mentioned above the textile industry need to know more about the real end-users in order to make an emphasis on the design of the emotional values concerning the fabric solution.

RESEARCH APPROACH

It is proposed that end-users/other stakeholders, aesthetic design competencies, emotional values and the notion of fabric solutions instead of mere pieces of textile can be explored and developed through design experiments, exploratory approaches and dialogue.

Within design fields like system design, interaction design and product design various approaches from Participatory Design (Greenbaum & Kyng, 1991; Schuler & Mamak, 1993) have been used for several years and they both have experience in and a tradition for working with Participatory Design using various exploratory approaches.

Approaches that are appealing for the designer to work with have been selected for present PhD project.

Approaches as Design Games (Brandt & Messner, 2004; Brandt et al., 2008) and Make Tools (Sanders and Dandavate, 1999) are all based on co-creation and active involvement and contribution from participants using various tangible means, collaboration and experiments between researchers, end-users and designers.

Also Repertory Grid technique (Fransella et al., 2004), originally an interview technique in psychology but further developed for use in product evaluation (Baker, 1994) and for developing textile vocabularies (Holmlund, 2006; Moody et al., 2001) can prove to be useful in order to create a dialogue between textile designer and end-user. The repertory grid technique is a qualitative method of inquiry appropriate for product evaluation and it supports the user in verbalizing emotional and personal experiences (Bang, 2007).

Cultural Probes were originally introduced as an approach for designers to provoke inspirational responses from elderly people in diverse communities (Gaver et al., 1999). Recently Probes have been further developed in design research projects as tools for not mere inspiration but also for information, participation and dialogue (Mattelmäki, 2004).

QUESTIONS

It is assumed that the textile designer has an expert knowledge about aesthetic design parameters. How can she make this knowledge operational in order to involve other professions, stakeholders and end-users as active contributors in the design process concerning design of emotional values?

I am especially concerned about how the designers as part of their daily work can facilitate the involvement of end-users/other stakeholders in the design process. One challenge is that the design process is fragmented because the designers in textile industry often work on several projects simultaneously and busy because of deadlines in market.

Research in textile design is — at least in Denmark — a new research area and one aim with the PhD project is to actually contribute to this 'practice based expert knowledge' in written words in order to make it accessible for further research in the field of design research. Another aim is to make this knowledge operational by using exploratory approaches.

'PRACTICE BASED EXPERT KNOWLEDGE' – EMOTIONAL VALUES

The Danish researcher Niels Kahrstrom Andersen has in his research on systems theories which are built on Luhmann's theories stated that 'Second-order observation is aware that the world is not asking to be observed in any particular way. Second-order observers perceive the world as poly-contextual, as dependent on the distinction shaped by observation (Andersen, 2003, p.94)'. Knowing that it is impossible to account for every textile designers practice and knowledge concerning emotional values and aesthetic design parameters I have chosen some observation points from which I depart. This is an attempt to define and describe emotional values from a practice based textile design point of view supplemented by relevant literature to substantiate the arguments.

Experience of textiles is strongly connected to sensuous qualities, the way they look — the visual expression, and the way they are felt — the tactile sensation. But not only plays the actual piece of fabric a role in the experience of textiles. Also the context such as physical products, rooms or space containing or surrounding the fabric solutions plays a role in the experience. And finally the affective sensation, the fact that you can actually be touched by textiles and experience them sensually without touching them or being touched physically by them also has an impact on the experience of fabric solutions. In the following section I try to account for these observation points but I must admit that I have still some hard work to do here...



DESIGN GAMES



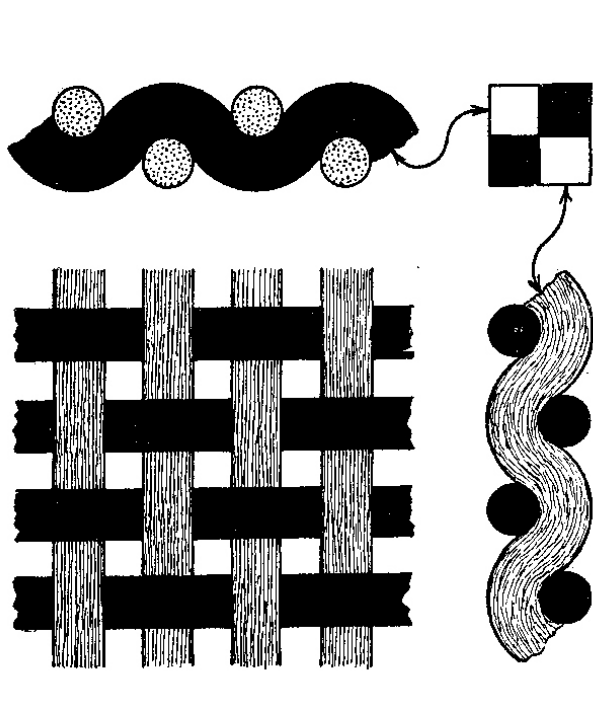
CULTURAL PROBES



EXPLORATORY APPROACHES



REPERTORY GRID

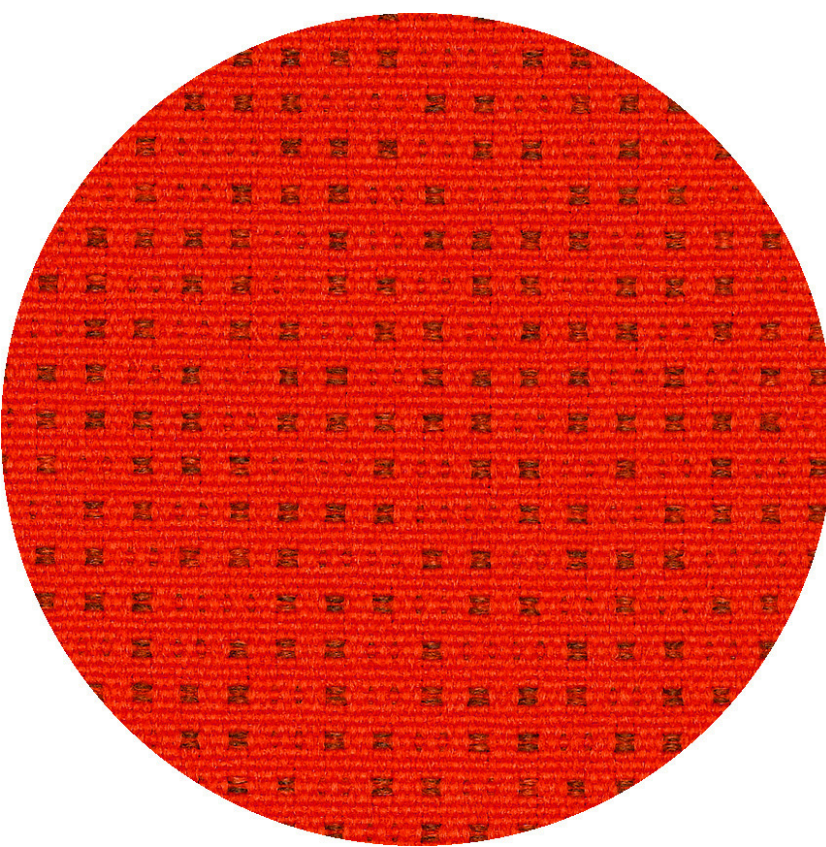


SURFACE APPEARANCE & INNER STRUCTURE

Construction techniques such as weaving, knitting and felting, fibre materials, construction of yarns, dyeing, and after treatments such as printing, embossing and embroidery, all together they have a strong impact on the surface appearance of an actual piece of fabric.

Anni Albers (1899-1994), a Bauhaus weaver and textile designer, has in her essay 'Tactile sensibility accounted for the correlation between surface appearance — which she calls 'matte' — and inner structure (Albers, 1965).

Knowledge of all these rather technical properties gives the textile designer access to the intentional design of the more aesthetic and sensuous qualities of the fabric: surface texture, grip, drape, ability and visual appearance. All these qualities have a strong impact on the experience of the fabric.



SPACE, PROXIMITY & DISTANCE

The distance to the fabric and also the form giving and orientation in space and place has a strong impact on the experience of textile solutions.

The Austrian art historian Alois Riegl (1858-1905) developed a theory of perception based on the observers position to the actual work of art: Close distance / detail (Mahnicht), normal distance (Normallicht) and long distance (Fernsicht). Also the character of the perception plays a role since it can be oriented towards an either haptic or optical view.

The close distance / detail describes the relatively short distance between object and eye, a distance where it is not possible to get a complete view of the object but only part of it. At a close distance even three-dimensional objects appears as surfaces, since it is not possible to watch the form giving shadows. According to Riegl the close distance / detail are linked to the haptic way of perception which covers tangibility and facility.

At a normal distance the form giving shadows are visible. At this distance the object can be seen as a whole together with the details. This distance is both haptic and optic.

On a longer distance the form giving shadows will disappear and leave only the most intense shadows as dark areas. On this distance the shadows appears as a coloured surface but not as form. From the long distance the sight is linked to the optic way of perception which means that the objects appear as two-dimensional surfaces in a context (Bek & Ørving, 1997).

Riegl's purpose was to analyze the last Roman art industry in an open-minded way. At the design school in Kolding (Denmark) I have used Alois Riegl's thoughts on perception when introducing first year students to weaving & colleague and I have developed a list of observation possibilities which makes the students able to orally describe textile properties, experiences and ideas for textile design. The list is inspired by the three sights and can be used bottom-up and top-down; to describe and analyze existing textile solutions and to account for design ideas covering as many parameters as possible. (Nissen & Bang, latest version 2008). The list enables the students to formulate in words both what and how they would like to design a fabric solution and also what they experience when analyzing existing fabric solutions.



AFFECTIVE TOUCH

Last but not least the affective touch has to be considered in textile design.

Mark Paterson introduces 'haptic aesthetics' in his book: The Senses of Touch (Paterson, 2007). From thinking in geometric terms using hands and eyes to actively touch by reaching out and measuring space, he is turning towards a more haptic language considering the affective and emotional influence of our perception and experience. The visual and the haptic intermingle and the point is not to replace the visual with the tactile but to explore the complexity in the aesthetic experience. Paterson states that from Riegl's art history to Deleuze and Guattari's philosophy the haptic has been formulated in terms as closeness and intimacy. Also he is referring to Jennifer Fisher, a Canadian researcher, who has argued that the haptic is not only to be seen as a (close) physical distance to the object but also as an affective touch (Paterson 2007).

