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TRIADS AS A MEANS FOR DIALOGUE ABOUT EMOTIONAL VALUES IN TEXTILE DESIGN

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ABSTRACT

In recent years the challenges for the textile industry have changed because of technological development and outsourcing. Present paper reports on a research project concerned with emotional values in textile design and how the designer can actively involve and empathise with end-users and other stakeholders in the design process. Exploratory approaches using the triadic difference are proposed as a means for dialogue about emotional values. The triadic difference and how it influences the dialogue are demonstrated through cases and research literature. Hence cases and research literature exemplify how working with the triadic difference enables various stakeholders to express personal experiences concerning emotional values.

Keywords: Exploratory approaches, triads, dialogue, textile design

1 INTRODUCTION

This paper is based on a 3-year research project between a design school in Denmark and a collaborating company from the textile industry working mainly with textiles for upholstery solutions and related services.

Standards and technical specifications, such as abrasion resistance, colour fastness to light and rubbing, flammability and pilling are obvious sales parameters together with price. Engineers and technicians are the professionals responsible for this area but for non-experts it is fairly easy to understand that if, for example, the abrasion resistance for a specific fabric is agreed to be 100.000 Martindale (which is a unit of measure) then it is a sales parameter if the fabric reaches >100.000. It is also easy to understand that if it doesn't reach the agreed Martindale then it is necessary to increase emphasis on that particular standard.

When it comes to emotional values, such as surface appearance, texture, pattern, colour, drape, hand, communication strategies and sales stories, there are no standards; and furthermore these parameters are often subjective, cultural and dependent on time, place and context. This area's professionals come from design, marketing and communication. Since there are no agreed standards for emotional values in textile manufacturing, it is complicated to communicate and handle them within project teams, including various professions, collaboration with customers (such as furniture manufacturers) and in user-driven innovation.

With a focus on exploring emotional values – and especially sensuous qualities – in textile design practice this 3-year research project is concerned with development of dialogue tools that enable: a) the textile designer to communicate her knowledge and b) various stakeholders (including end-users) to contribute to the textile design process. The present paper specifically looks into the so-called triadic difference and how it enables a dialogue about emotional values.

2 EXPLORATORY APPROACHES

What people say, think, do, use, know, feel or dream are different levels of experience that (on a sliding scale) are explicit, observable, tacit or latent. There are various ways to understand people's different levels of experience; and understanding is crucial in order to empathise with them (Sanders & Dandavate, 1999:88). Exploratory approaches are one way for the designer to empathise with various stakeholders and what they know, feel and dream. Exploratory approaches are here defined as approaches including some kind of making and usually they are based on ethnographic inspired fieldwork such as interviews and observations.

Until now three types of exploratory approaches have been explored in various ways and modifications: cultural probes (Gaver et al., 1999), design games (Brandt, 2006) and repertory grid technique (Kelly,

1955). Common to these approaches is the assumption that the participant (stakeholder) is an expert in his/her own life – but at the same time they acknowledge the skills of the professional, whether it is the psychologist, the designer or other. With a departure point in the participant's everyday life they are all based on procedures, rules, tasks and specific requisites that enable the participants to express what they feel, dream and know.

2.1 Triads

A triad is a grouping of three elements. American psychologist George Kelly introduced triads as a part of the repertory grid technique in the mid 1950es (Kelly, 1955). “Kelly devised the repertory grid technique as a method for exploring personal construct systems. It is an attempt to stand in others' shoes, to see the world as they see it, and to understand their situation and their concerns” (Fransella et al., 2004:6). The triadic difference is defined as an approach as follows: “Presenting three elements at a time and asking ‘How are two alike in some way, but different from the third?’” (Fransella et al., 2004:29). Triads are part of the procedure eliciting (personal) bipolar constructs for (repertory) grids. Thus an essential notion is that constructs elicited from triads are bipolar and that: “It is often the opposite pole of a personal construct that gives a clear meaning of that construct” (Fransella et al., 2004:7). An example drawn from tactile sensation could be the notion of soft which for example can be judged as different or opposed to either hard or coarse depending on the elements forming the triad. Depending on which opposite pole is elicited (hard or coarse) the notion of soft is clarified in the actual context.

3 EXAMPLES FROM THE LITERATURE

The following section presents two literature examples from textile design research describing triads used in variations of the repertory grid technique.

Moody et al describe a fabric-touch experiment (Moody et al., 2001). The aim with this research project is to contribute to the refining of texture simulation in haptic technology and nonverbal communication within a virtual environment. They use triads to elicit words through touch sensation based on 10 swatches of clothing fabric. Their respondents were female textile design students. They combined the 10 swatches in all possible triads and elicited words through the forming of bipolar constructs as described above.

In her PhD thesis Homlong is searching for ways to describe and evaluate textile design in teaching (Homlong, 2006). Her aim is to communicate distinctly about aesthetic qualities more than a vocabulary as an end in itself. She uses triads in qualitative interviews with the purpose to elicit descriptions and judgements through perception based on vision. Her research is based on 7 blue and white printed textile swatches striped in various ways. Her respondents were children, designers, consumers and teachers of textile handicrafts. The swatches were evaluated in all possible combinations of three in a predefined order. Via the triads the respondents had to choose one swatch, reject another and give reasons for their choice. The third swatch in the actual triad was used for comparison.

The examples above are concerned with eliciting lists of words followed by a factor analysis in order to label them in groups. All words are elicited by the respondents based on the elements in the triads in one-to-one sessions with the facilitator. All facilitators stresses that the words are elicited by the respondents without interference from the facilitator, and in that way the emphasis is on collecting words for analysis and vocabularies more than for dialogue. Nevertheless these examples from research within textile design give an impression of how triads can 'help' the respondents to express themselves on subjects where they are not professionals but are considered experts on subjective judgement.

4 DIALOGUES ABOUT EMOTIONAL VALUES IN TEXTILE DESIGN

The cases presented in the following section are concerned with the process of turning triads into constructs and how this enables a dialogue about emotional values and surface appearances in textile design. The triadic difference has been explored in combination with cultural probes, design games and in a design process.

4.1 Example 1: Cultural probes and triads

In this experiment a cultural probe were made for three end-users coming from different companies: an architect, a reception manager and a business manager, all of them working at their desk when they are not attending meetings or are out of house. After two days the cultural probes were collected for analysing.

In one of the tasks 7 pieces of fabric were provided in a black plastic bag. The participant was asked to sense the fabrics by touch and choose the one that she felt was similar to her office chair. After that she was told to choose two other fabrics by the sense of touch, one she was attracted to and one she disliked. This was supposed to be the triad defined by the questions and the choices made by the participant. In the next step she had to decide which two were similar in a particular way and thereby differed from the third. This formed the bipolar construct and to finish the task the participant had to rank all fabrics according to the self made bipolar construct by gluing them onto a scale that was provided with the probe.



Figure 1 Fabrics forming the triad, the office chair and scaling of fabrics according to the construct

Afterwards interviews were conducted with the reception manager and the business manager. During the interview with the business manager the triadic difference initiated a dialogue about how cool could be understood as unpleasant, like being cold and rejecting and as pleasant, like being refreshing and comfortable. Pointing at the fabric that she finds similar to her own chair she mentions the upholstery as being comfortable because of the friction that prevents her from sliding on it. Then she turns to the two other fabrics she had chosen for the triad and says: “and you don’t do that (slip, authors note) on this wool and it is refreshing and comfortable to touch. And I like that. Is this sufficient? (Author: yes, yes). And then this one if you want to know about this? (Author: yes, please). This is stiff and cold and – well the other one is refreshing and for me there is a distinction between refreshing and cold and I don’t like this (piece of fabric which is stiff and cold, authors note)” (translated from Danish to English by author). This transcription shows how she uses the triadic difference to explain her experience of fabric being cold or refreshing – which in Danish are almost similar words, and how she feels about it.

4.2 Example 2: Design process and triads

In this second experiment I was giving a week course in design process at a design school (Kolding School of Design in Denmark). The students were 2nd year textile design students and they were invited to explore the repertory grid technique as a tool for dialogue. During the week I also introduced the students to textiles as material, textiles as part of a product and the textile-product combination in a spatial context. The students were divided into 3 groups of 3-5 persons and their brief was to design a concept for the office, lounge or transport sector. They were not allowed to go into technical details since they had to keep focused on dialogue about emotional values using the repertory grid technique.

One group chose to work with the transport sector and after brainstorming they decided to focus on seatbelts. They were told to choose 7-12 different materials to begin with in order to practice with the repertory grid technique, and this group chose 12 random textiles from the school’s textile collection. They defined bipolar constructs based on randomly chosen triads. As they put it in the presentation they gave at the end of the course: “Discussing the materials in triads helped us understand each other and come to agreement, on what we thought” (From PowerPoint presentation). From the bipolar constructs they discovered various keywords and chose 3 relevant for the seatbelt discussion. They ranked the textiles, picked the 9 highest scoring and then invited fellow students to form triads and bipolar constructs with a focus on seatbelts. Through contribution from their fellow students they discovered new words which they googled for images to: “a) describe and illustrate what we knew, b) give new ideas for a seatbelt design solution, c) demonstrate in which industry areas there are seatbelts” (From PowerPoint presentation). The group continued like this during the week, taking in the input offered by lectures and supervision. On one occasion they tried to rank some other materials without making the triads. Their experience was that: (sic) “We found out that it was easier to scale the images if we made the triads first. Without the triads there was a lot of discussion to agree on a common dialogue. The triads would have helped us to discover these words earlier and saved a lot of time” (From PowerPoint presentation). In

their concluding remarks they once again emphasise how the repertory grid “generates wider and deeper knowledge of how to communicate design solutions” and “encourages idea and concept generation” (From PowerPoint presentation).



Figure 2 Sensing by touch, contribution by fellow students, forming triads and bipolar constructs

4.3 Example 3: Design game and triads

The third and final example is drawn from the collaborating company. I was introducing the idea of using design games in the design process by actually conducting a design game with two designers as participants. The design game was planned as a board game. The board was divided into four zones each representing a certain kind of pleasure (Jordan, 2008) and the requisites were thumbnail pictures showing a wide range of furniture upholstered with fabrics designed by the company. There were also a deck of cards, each one with a statement that originated from a meeting between me and one of the designers on a design idea we were exploring at that time. Playing the game each of us picked ten thumbnail pictures and then we flipped a card from the deck and took turns concretising the statement on the actual card. The rule was that we had to answer by using triads to define a bipolar construct. From our pile of ten we chose three relevant pictures – this was our triad. We then defined two of the pictures as similar opposed to the third – this formed the bipolar construct. To end our turn we placed each construct pole on the board in the zone of the pleasure that best expressed the content of the pole. In the end the participants expressed the experience as: 1: “This is perfect. It’s really interesting working like this.” 2: “Yes, it makes you think, it’s a success.” 1: “Yes, it really makes you think. What I think is so great is that this is based on values, nobody says something about functionality and how things are going to be designed, it’s all about values” (audio recording translated from Danish to English by author). Working in an industry that is strongly connected to standards and specifications the experience of working on a ‘value-based project’ in a very concrete and operational way was a positive and exciting experience for the participants.



Figure 3 Playing the game, requisites

5 CONCLUSION

The examples from the cases above are concerned with the elicited words and statements as a means for dialogue and explanation of experiences and thoughts more than making lists for factor analysis. In that way they differ from the literature examples. Literature and cases exemplify how working with the triadic difference enables the participants to express personal experiences and thoughts. What I have tried to demonstrate through the examples and cases is triads as a means to involve various stakeholders in the dialogue about emotional values in textile design.

5.1 Triads as a part of exploratory approaches

The three experiments are based on well described exploratory approaches modified and adjusted to the purpose within the research project. They illustrate how various stakeholders, end-users, designers and future designers benefit by using the triadic difference in order to express experiences and emotional values. Initially my aim was to investigate as many different approaches as possible during the research project in order to present a broad palette of suitable approaches but I find my self returning to the triadic difference over and over again exploring variations of this. Through various experiments – among them the cases presented in this paper, I have experienced the triads as highly operational and assisting in creating a sense of trust and confidence that enables the various participants to contribute to processes and projects.

5.2 A tool for dialogue

The three examples illustrate how the participants' ability to express their experiences of emotional values in textile design emerges through dialogue and the forming of triads and bipolar constructs. The dialogue will turn out in various ways depending on the context and the participants. As also stressed by the design students as well as professional designers triads are a means to an in-depth dialogue about emotional values. In the end-user example she is very confident in her judgement of cold/refreshing the bipolar construct elicited from the triad in the cultural probe task.

6 FURTHER WORK

In my conclusions so far I find the experiments with triads in various ways to be promising when it comes to the question of active involvement of different stakeholders. However the set-up, the context and facilitation are very important; and in future work my intention is to investigate and explore design games and emotional values in textile design in-depth.

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