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The Repertory Grid as a Tool for Dialog about Emotional Value of Textiles

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ABSTRACT *It is not rare that textile designers experience a need to explain or discuss decisions made during the design process. This article draws on the Fabric as Upholstery Workshop, which explored the Repertory Grid, an interview technique, as a tool for structuring a dialog about emotional value of applied textiles. Originally developed as a one-to-one interview technique, the article additionally introduces the Repertory Grid as a tool for dialog between groups of people. The discussion is based on three examples from the workshop, demonstrating ways in which the Repertory Grid encourages the participants to articulate and have a dialog about emotional aspects of textiles. It is exemplified how the procedure of a Repertory Grid can serve as a tool for dialog in the sense that it enables a group of participants to establish a common platform for dialog, achieve an in-depth dialog, and refine the dialog to concentrate on emotional aspects of the experience. In order to argue for the assumed potential of applying the rules and procedures of the Repertory Grid to the dialog about emotional value of applied textiles the statements and arguments made throughout the article is finally explored and connected to the traditional use of the Repertory Grid, the notion of reflection-in-action and the connection between surface texture and emotional value.*

KEYWORDS: applied textiles, emotional value, dialog tool

Introduction

It is not rare that textile designers experience a need to explain or discuss decisions made during the design process. This can be in interdisciplinary teams, in customer relations where a diversity of stakeholders are present, in a sales situation, or in the ideation process identifying user needs, etc.

In the textile profession's literature it is common agreement that the personal experience of textiles includes several aspects, among them: look, feel, use, memory, taste, style, and context (see for example DeLong *et al.* 2007; Fiore and Kimle 1997; Gale and Kaur 2002). Kate Fletcher expresses it in this way:

Fashion clothes are much more than the fibre and chemicals needed to make them. They are signs and symbols, expressions of culture, newness and tradition. They link us to time and space and deal with our emotional needs, manifesting us as social beings, as individuals. (Fletcher 2010)

In other words, the personal experience of emotional value of textiles and clothes is a multifaceted and complex issue to deal with for the user as well as the textile designer.

Accepting that emotional value of textiles is heavily influenced by the context and individual and personal (use) experiences it can be difficult to measure, organize, or systematize the knowledge about emotional value when designing and developing textiles. This article is based on a research project where the overall objective was to operationalize the term emotional value in relation to design of applied textiles by developing participatory procedures that the textile designer can apply to the design process (Bang 2010). The article draws specifically on the Fabric as Upholstery Workshop that took place in the initial stages of the project. Exploring the Repertory Grid as a tool for dialog about emotional value of applied textiles this workshop laid out the ground for a series of workshops and experiments that took place throughout the project. Thus, the purpose with the article is to demonstrate the suitability of the Repertory Grid as a tool for dialog about emotional value of textiles. Originally developed as a one-to-one interview technique, the article additionally introduces the Repertory Grid as a tool for dialog between groups of people.

The discussion is based on three examples from the workshop demonstrating ways in which the Repertory Grid encourages the participants to articulate and have a dialog about emotional aspects of textiles. It is exemplified how the procedure of a Repertory Grid can serve as a tool for dialog in the sense that it enables a group of participants to: (i) establish a common platform for dialog, (ii) achieve an in-depth dialog, and (iii) refine the dialog to concentrate on emotional aspects of the experience. Prior to the examples and

the discussion the following sections outline the background of the Repertory Grid and define it as a five-step procedure.

The Repertory Grid

The Personal Construct theory, which was developed by the American psychologist George Kelly in the 1950s, is the theory behind the Repertory Grid technique. The Personal Construct theory is a psychological theory of human cognition, which grew out of practice and clinical procedures (Kelly 1955). Fay Fransella, Richard Bell, and Don Bannister (2004) give an overview of the Personal Construct theory, the basis of which is that all human beings strive to make sense and give meaning to their lives by acting as a kind of scientist within a personal construct system. A personal construct system is the implicit theoretical framework each of us creates and constantly recreates by living, anticipating events, determining behavior, asking questions, evaluating outcomes, and effecting changes. People have expectations, they bet on them through certain behaviors, they take active risks, they live with the outcomes, and they change their minds or themselves. This can be compared to a scientific approach, where scientists develop hypotheses, test them, observe the results, and perhaps modify the theory (Fransella *et al.* 2004: 5–6). According to Fransella *et al.* (2004), Kelly defined a “construct” in several ways, but basically he believed in the bipolar nature of constructs. One definition of a construct, which clearly expresses the bipolar nature, is: “a way in which two or more things are alike and thereby different from a third or more things” (Fransella *et al.* 2004: 7).

The “Role Construct Repertory Test” is based on the Personal Construct theory (Kelly 1955: 152), and is today referred to as the Repertory Grid technique or simply the Repertory Grid (Fransella *et al.* 2004). Originally the Repertory Grid was a structured interview technique that allowed the client and the psychotherapist, through conversation, to explore the client’s construct system, i.e. the client’s view of the world. The word “repertory” refers to a repertoire, which can be the people (or things) that influence the client’s life. The word “grid” indicates that it is a systematic inquiry into the client’s personal constructs that can be analyzed. A central theme in the Repertory Grid procedure is the elicitation of the bipolar constructs and the subsequent assessing of a selection of relevant elements (people or “things”). The general procedure of using a Repertory Grid is explained in the next section.

The Repertory Grid Procedure

The Repertory Grid is characterized by specific rules and procedures, which will be introduced in this section. Since there are numerous variations in terms of design and analysis of a Repertory Grid not all rules and procedures are applied to every grid, and they are usually adjusted to match the specific context and situation

(Fransella *et al.* 2004; Shaw and McKnight 1981). In the following the design, process, and analysis of a Repertory Grid will be described as a five step-procedure on the basis of Fransella *et al.* (2004) and Shaw and McKnight (1981):

- Step 1: Application—Defining a Purpose
- Step 2: Repertoire—Selection of Elements
- Step 3: Inquiry—Exploring the Elements
- Step 4: Grid—Assessing the Elements
- Step 5: Analysis—Concluding the Study

Step 1: Application—Defining a Purpose

The Repertory Grid is usually applied in order to achieve a specific goal. Defining a purpose or objective might seem an obvious step, but nevertheless it is essential, since it influences the planning of the remaining steps of the procedure. The purpose can be a specifically identified problem or a challenge; it can be curiosity, a wish to learn or explore, and it can even be an attempt to point towards future design.

Step 2: Repertoire—Selection of Elements

The second step of a Repertory Grid is concerned with the “repertoire,” i.e. choosing a selection of appropriate elements for exploration. The selection of elements represents the purpose, i.e. in this

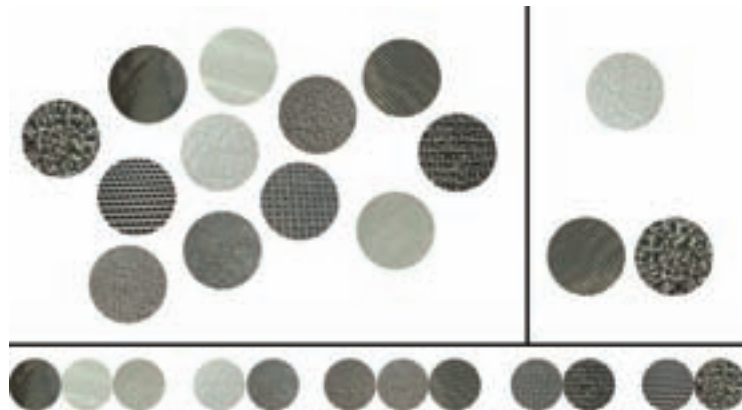


Figure 1

The second step of a Repertory Grid is concerned with the “repertoire,” i.e. choosing a selection of appropriate elements for exploration (top left). In the third step of a Repertory Grid the elements are explored and evaluated three at a time asking: why are two alike and thereby different from the third? The figure indicates that two elements are experienced as “hard” as opposed to the third element, which is experienced as “soft” (top right). In the fourth step of a Repertory Grid the elements are assessed according to the elicited construct “hard” versus “soft” (bottom).

case it can consist of a range of products, a material collection, or the like. Figure 1 (upper part to the left) illustrates a selection of elements that might be explored.

Step 3: Inquiry—Exploring the Elements

In the third step of the Repertory Grid the elements are explored and evaluated. Usually the elements are explored three at a time using the triadic difference to explore why two elements are alike but different from the third. This procedure results in bipolar constructs, which can be visualized as two poles on a scale. One pole describes the similarity between two elements and the other pole expresses why a third element is different from the other two. No matter what the purpose is, it is important to notice that the difference is not necessarily expressed as antonyms such as “hard” versus “soft.” It can also be expressed in a more subtle way as two sides of the same experience such as “hard” versus “smooth.”

Step 4: Grid—Assessing the Elements

In the fourth step of a Repertory Grid the elements are assessed according to the elicited constructs. This can be in the form of rating or ranking of the elements according to a scale, which is defined by the poles in the bipolar constructs. Then the elements’ relationship to each other and to the poles is often expressed as numbers in a grid matrix.

Step 5: Analysis—Concluding the Study

The fifth and final step of the Repertory Grid is the analysis. Similar to the other steps the analysis also depends on the purpose. The analyses can exemplify and discuss the process itself in order to understand and explore the purpose. An analysis as part of a workshop can allow the participants to communicate a configuration of the workshop material as a result of the process. When the rating or ranking are expressed as numbers in a grid matrix a manual or a computerized factor analysis is often conducted (Baber 1996). Shaw and McKnight (1981) contend that the mere process of completing a Repertory Grid for decision-making (eliciting the constructs and the subsequent assessment of the elements) may produce a result or a conclusion.

The Repertory Grid in Textile Design Research

A Repertory Grid is always designed and planned to suit the current situation. This means that there are multiple examples of how to design, use, and analyze a Repertory Grid (see e.g. Chapter 8 in Fransella *et al.* 2004 but also Baber 1996; Bang 2010; Homlong 2006; Moody *et al.* 2001; Shaw and McKnight 1981). The Repertory Grid has been adapted to many areas within psychology, but also to fields other than psychology (Fransella *et al.* 2004).

Previously in the field of textile design research the Repertory Grid has been used to explore fabric perception (Moody *et al.* 2001) and judgment of aesthetic qualities (Homlong 2006). In Moody *et al.*'s study a British multidisciplinary group of researchers, from the fields of fashion and textiles, engineering, and psychology explored how sensory evaluation (touch and vision) of garment fabric can be expressed verbally (Moody *et al.* 2001). The purpose of applying the Repertory Grid to the study was to qualitatively record subjective responses to the fabric in order to concretize factors underlying fabric perception. The Swedish teacher and artisan Siri Homlong (2006) explored communication and perception of aesthetic qualities related to a series of striped patterns printed on fabric. Her Repertory Grid study focused on visual perception of the patterns recording as many descriptions and judgments of aesthetic qualities as possible.

Both studies applied variations of the Repertory Grid, modified and adjusted according to the situation, to collect data about sensory perception of garment fabric and printed textiles, respectively. Both studies analyzed and categorized the data in order to develop approaches to addressing emotional aspects of textile design (and teaching).

The objective of the Fabric as Upholstery Workshop was entirely different, since the purpose was to develop rules and procedures of the one-to-one interview technique the Repertory Grid into tools for dialog that can be used among groups of stakeholders in design processes (including designers, other professions, users, etc.). The two studies mentioned above were focused on analyzing and interpreting the results of a Repertory Grid, whereas the examples from the Fabric as Upholstery Workshop demonstrate the Repertory Grid as a tool for dialog.

The Fabric as Upholstery Workshop

The Fabric as Upholstery Workshop served as the first workshop in a series of workshops and experiments conducted within the frame of a research project running from 2007 to 2010 (Bang 2010). The overall objective of the project was to operationalize the term *emotional value* in relation to design of applied textiles by developing participatory procedures that the textile designer can apply to the design process. The series of workshops and experiments that took place during the research project were conducted in an iterative process. Thus, each workshop and/or experiment had a specific purpose in itself and at the same time each new workshop and/or experiment continuously drew on experiences made in the previous experiments (see Bang 2010 for further details).

The participants in the Fabric as Upholstery Workshop were two experienced textile designers. When the workshop took place both designers were employees in the design unit at the same company in the Danish textile industry. The company is a manufacturer of

upholstery textiles and other products related to the textiles. The workshop took place in the home studio of one designer. The time frame was set to two and a half hours, which included introduction, exercises, and evaluation. The workshop was video recorded and selected passages were transcribed and translated into English. Still images from the video are used to illustrate the exercises in the workshop. The company and the designers subsequently agreed that the data, images, and results from the workshop could be interpreted and used for knowledge dissemination in research and teaching.

The overall purpose with the Fabric as Upholstery Workshop was to contribute to the knowledge generation about emotional value of applied textiles but the specific purpose was narrower and focused on single aspects of the overall purpose. Thus, the Fabric as Upholstery Workshop particularly explored whether sensory perception of the provided material structured by the procedures and rules of the Repertory Grid can support the participants' ability to articulate and discuss emotional value of applied textiles in order to establish a common platform for further dialog and knowledge generation of emotional value.

The Repertory Grid Applied to the Fabric as Upholstery Workshop

The Repertory Grid was applied to the Fabric as Upholstery Workshop in five steps, as follows:

- Step 1—Application: The purpose was to explore emotional value of upholstery through sensory perception of textiles and flexible materials.
- Step 2—Repertoire: The selection of elements was a series of twelve textiles and flexible materials with different characteristics.
- Step 3—Inquiry: Two groups of three elements were explored using the triadic difference as a (mandatory) rule for eliciting bipolar constructs.
- Step 4—Grid: The complete selection of elements was assessed according to scales, which was defined by the bipolar constructs.
- Step 5—Analysis: The processes and the dialogs that elicited the bipolar constructs and the subsequently assessment of the elements were analyzed and interpreted.

The selection of elements consisted of twelve pieces of flexible materials: six pieces of furniture fabric and six pieces of plastic, foam, and metal mesh (see Figure 2). The pieces of material were placed in black (opaque) plastic bags numbered 1–12, each one measuring 30 × 30 cm. In order to keep the main focus on the tactile perception the colors were “neutral” in the sense that the surfaces were plain and kept in black, white, or gray colors.

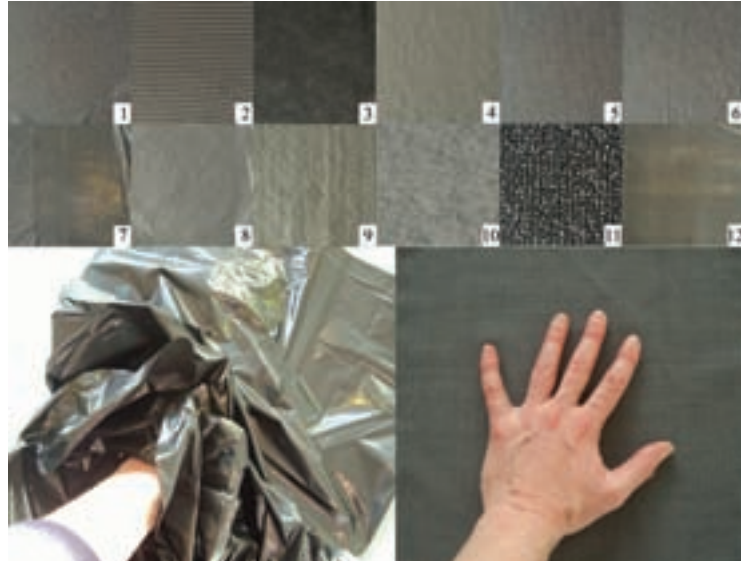


Figure 2

The selection of elements in the Fabric as Upholstery Workshop consisted of twelve flexible materials: six pieces of furniture fabric (numbers 1–6) and six pieces of plastic, foam, and metal mesh (numbers 7–12). The textile designers were told to explore the materials by the sense of touch alone using a flat hand and fingertips, imagining the samples as upholstered, i.e. as applied textiles. In the first round the materials stayed in the plastic bags. In the second round the materials were taken out of the bags.

The textile designers were told to explore the materials by the sense of touch using a flat hand and fingertips as if they were upholstered, i.e. as applied textiles. Two rounds of exploration were conducted. The first round was based on evaluating three randomly chosen (unknown) materials exclusively by the sense of touch. In the second round the elements were taken out of the bags, combining tactile and visual perception. The textile designers were instructed to agree on a bipolar construct using the triadic difference to evaluate the three materials. It was up to the participants to agree upon which words would be appropriate to define the experience.

When each of the bipolar constructs was elicited all the elements were assessed according to a scale. The construct poles defined the scale. One pole of the construct was valued 1 and the other pole was valued 5. The assessment was conducted between the two textile designers; they had to reach an agreement through dialog about each of the twelve elements.

The workshop was terminated evaluating the results and a more general reflection about using the Repertory Grid as a tool for dialog about emotional value of applied textiles. The examples in the following section focus on the dialog and how it developed during the Repertory Grid process.

Dialog Examples

The first example describes the two textile designers' use of the triadic difference as a (mandatory) rule for dialog when they elicited the first bipolar construct. The second example reveals the crisis they experienced when the bipolar construct was seen as insufficient during the subsequent assessment of the materials. The final example demonstrates how the textile designers drew on experiences from the first round when they assessed the materials according to the second bipolar construct.

Example 1: Different Ways of Defining “Softness”—Establishing a Common Platform for Dialog

The first example is drawn from the first round of the workshop. In this example the textile designers used the triadic difference to elicit the bipolar construct “hard” versus “soft.” A short transcription exemplifies the dialog that took place during the elicitation of the first bipolar construct showing how the textile designers tried out various statements for different combinations of the selected elements.

The three elements chosen for the first evaluation were a microfiber furniture fabric (#3), interlay wadding (#10), and metal mesh (#12) (Figure 3). The textile designers were not acquainted with the character of the materials beforehand since all the elements stayed in the black (opaque) plastic bags in this round. They were only able to feel them, and therefore they conducted the sensory evaluation as if they were blindfolded.

As also shown in Figure 3 (top) the textile designers kept their hands in the plastic bags during the dialog. The following transcription



Figure 3

The textile designers were not acquainted with the materials in the first part of the workshop. They conducted the sensory evaluation as if they were blindfolded, and they kept their hands in the plastic bags during the dialog. The first bipolar construct was “soft” versus “hard.” The microfiber and the interlay wadding were defined as “soft” (left) and therefore the metal mesh was defined as “hard” (right).

is an example of the structure of the dialog during the process of eliciting the bipolar construct:

A: I think they [microfiber and interlay wadding] are similar because they are flexible, and I think they are similar because they are soft, and I think they are similar because they are man-made fibers.

B: I think 10 [interlay wadding] and 12 [metal mesh] is similar because they are extremely stiff, man-made fibers, because both have a knurled texture as opposed to this [microfiber], which is soft and in that way differs [from the other two].

The short transcription exemplifies the different combinations of the materials the textile designers explored in order to make a clear statement about the experience. Using the triadic difference to structure the dialog about the three elements the textile designers took different points of view exploring the similarities and the differences between the materials. During the dialog multiple adjectives were considered for the bipolar construct, e.g. flexible, man-made, material structure, simple, surface texture, adherent, stiff, and knurled. The dialog continued along the same lines during the entire elicitation process.

Finally the textile designers agreed on a definition of the bipolar construct as “soft” versus “hard.” They experienced the microfiber and the interlay wadding as having a similarity, which they defined as “soft.” The metal mesh, on the other hand, was experienced as different from the microfiber and the interlay wadding and was defined as “hard.”

This example stems from the beginning of the workshop and the textile designers were not acquainted with the twelve elements since these were hidden in opaque plastic bags. The textile designers were instructed to elicit a bipolar construct, acting as if they were blindfolded. As the transcription shows the dialog developed from the examination of the elements by the sense of touch. The textile designers used the three elements and the triadic difference to agree on a bipolar construct. The construct “hard” versus “soft” may seem banal but in this case it was based on a thorough examination of the three elements and was the result of an agreement. Thus, it can be argued that by going through the process of agreeing on a construct the textile designers established a platform for dialog in the remainder of the workshop.

Example 2: Exploring “Hardness”—Achieving an In-Depth Dialog

The second example also stems from the first round of the workshop. It is taken from the fourth step of the Repertory Grid procedure, where the textile designers were told to assess the complete

selection of twelve elements according to the bipolar construct “hard” versus “soft.” In this example the textile designers experienced a crisis that forced them to conduct an in-depth dialog about “hardness” in order to reach an agreement.

Having agreed on the “hard” versus “soft” construct the textile designers began the assessment process by evaluating the three materials that initially formed the triad. Since the elements were still in the bags they continued to act as if they were blindfolded. They quickly agreed that the microfiber and the interlay wadding, which formed the construct pole “soft,” were soft in different ways. Therefore they assessed the two “soft” materials differently: microfiber was assessed as “1” (the softest) and the interlay wadding “3” (less soft) on a scale of 1–5. They assessed the metal mesh as “5” (the hardest).

The textile designers used the full scale of “hard” versus “soft” in the assessment of the triad elements. In the process of assessing the remaining nine elements—while they were still in the plastic bags—the textile designers experienced the materials as soft or hard in different ways. Coincidentally the first of the remaining materials turned out to be a doormat with a heavy plastic pile. The following transcription gives an idea of the challenges the designers faced when trying to assess the doormat according to the “hard” versus “soft” scale defined by the triad elements:

B: Oh no! The assessment is already insufficient, I think. We have to give it “5.”

A: But it’s hard in another way. In a way it’s also soft. This one [door mat]—you can sink your hand into it. You couldn’t do that with the other one [metal mesh]. [. . .] The other one [metal mesh] was hard as a plate but in a way it wasn’t hard to touch. [. . .] This one [door mat] is hard in a different way. It’s flexible and hard. The other one is “hard-hard.”

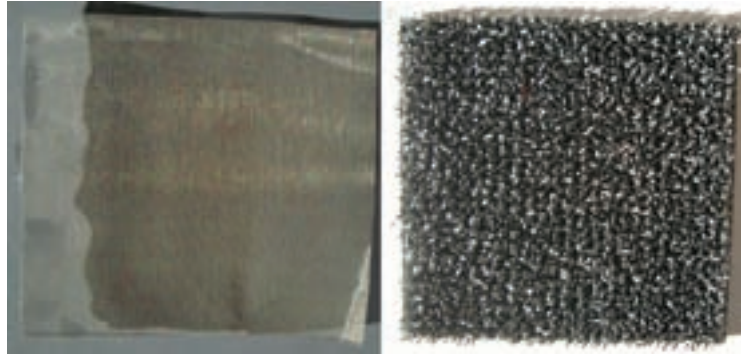
B: But it’s also—if we say that “hard-hard” is “5,” then this one is also a little soft.

A: That makes it “4.”

B: Yes. That’s it.

Experiencing the doormat by the sense of touch the textile designers realized that the metal mesh represented one type of hardness while the doormat with the heavy pile was hard in a different way (see Figure 4). Since all the elements were still in the plastic bags they did not know what to expect. They assessed the triad elements in relation to each other using the full scale, and subsequently they were faced with this doormat; all their efforts suddenly seemed insufficient.

In this part of the workshop the textile designers experienced a crisis, since a totally unexpected type of material was included in

**Figure 4**

In the process of assessing the elements according to the bipolar construct “hard” versus “soft” the textile designers were forced to explore the concept of “hardness.” The metal mesh, which defined the pole “hard” in the bipolar construct, was hard in a different way than a doormat with a heavy plastic pile.

the selection of the elements. This forced them to elaborate on the understanding of the hard–soft construct. They conducted an in-depth investigation of the elements and learned that there are different types of hardness depending on the definition. Furthermore, they succeeded in reaching an agreement on how to judge the two types of hardness. The assessment of the elements continued along this line with new challenges of how to assess the elements according to the scale “hard” versus “soft.”

I use this example to exemplify the textile designers’ use of the assessment process to refine and elaborate on the common understanding of the elements. In this case it was a question of refining the articulation about experiencing an element as hard. Thus, it was the rules and procedures of the Repertory Grid in general and particularly the procedure of assessing the selection of elements according to the bipolar construct that forced the textile designers to continue their evaluation in-depth until they reached an agreement.

Example 3: From Soft to Body-Friendly—Refining the Dialog to Concentrate on Emotional Aspects of the Experience

At the end of the first round the designers were very frustrated about the “hard” versus “soft” construct, which they experienced as insufficient to cover the sensory experience of the twelve elements. They experienced that their efforts have led to an unfair and not useful evaluation of the elements. The third and final example shows that the textile designers let this experience influence the process of eliciting the second bipolar construct.

In the second round of evaluation the twelve elements were taken out of the plastic bags. As for the first round the textile designers were told to continue the evaluation with flat hand and fingertips

experiencing the elements as upholstered. The most striking differences between the rounds were that in the second round the participants are already familiar with the elements by the sense of touch; they have agreed on assessing the elements on a “hard” versus “soft” scale, and finally they can now see the elements. Furthermore, the experience from the first round of making an, in their view, insufficient bipolar construct was still fresh in their minds. Therefore, the designers were determined to agree on a bipolar construct that could provide a fair assessment of the elements according to the purpose.

Microfiber, thin foam, and metal mesh formed the triad due to the random choice. As for the first round a lot of adjectives came up during the dialog, e.g. soft, closed, hard, rough, coarse, resistance in surface, hard as a plate, uncomplicated, smooth, unpleasant, ambiguous, non-resistant, obliging, authentic, feel-good, superficial, like a suction cup, and changing character. After a while the textile designers agreed to define the bipolar construct as “body-friendly” versus “body-unfriendly,” as shown in Figure 5. The microfiber was experienced as “body-friendly,” and the thin foam and the metal mesh were experienced as “body-unfriendly.”

The textile designers were much more aware of assessing the elements as if they were applied textiles in the second round compared to the first round. In the second round they included professional knowledge about upholstery as well as the knowledge about the selection of the elements gained from the first round. This meant that the sensory evaluation of the elements was clearly influenced by the specific context, the procedure, the actual experience, professional



Figure 5

In the second round of the Fabric as Upholstery Workshop the textile designers were familiar with the elements by the sense of touch; they have agreed on assessing the elements on a “hard” versus “soft” scale, and they can now see the elements. The second bipolar construct was “body-friendly” versus “body-unfriendly.” A microfiber was experienced as body-friendly (left), as opposed to thin foam and a metal mesh, which were experienced as body-unfriendly (right).

The materials were assessed as if they were applied textiles.

expertise, and everyday experience. The following transcription from the assessment process is an example of how the construct “body-friendly” versus “body-unfriendly” influenced the evaluation of a plastic-like material. The element, which is discussed, is a thin white plastic, slightly textured (#8):

A: Why don't we like texture?

B: We like texture but—

A: You can't have a softer and nicer texture like this one.

B: No, but it's a little sticky.

A: If it was upholstered—it's a little thin.

B: The resistance is very nice. But we can't give it a “5” [= the most body-friendly]. Feel this [microfiber, #3]. You can wrap yourself in this. You can't wrap yourself in that [plastic material, #8].

A: That's because you know it's plastic.

B: Yes.

In the transcription the textile designers agree that knowing that the material is made of plastic causes a more negative assessment than if it was a proper furniture fabric with the same surface texture. Therefore the thin white plastic, which was experienced as soft and nice, was rated “4,” which is less body-friendly than “5.” The textile designers admitted that it was harder to give the plastic material a non-prejudiced evaluation unlike the evaluation of the furniture fabric. They know that there can be some disadvantages of using plastic as upholstery, and they reflect on these disadvantages, for example it can be sticky to sit on.

Eliciting the second bipolar construct the designers move from defining the experience as a tactile experience “hard” versus “soft,” into a definition that draws on experiences and emotional aspects: “body-friendly” versus “body-unfriendly.” In the following assessment of the selection of elements they used the definition of the bipolar construct to discuss emotional value of the remaining textiles. Thus, the initial dialog in the first round, which was about surfaces, is refined in the second round into a dialog concentrating on emotional aspects of the textile experience. In this case the rules and procedures of the Repertory Grid encouraged the textile designers to elaborate on the initial tactile sensation in a way that turned it into a reflection about emotional value.

The Repertory Grid as a Tool for Dialog

As discussed and exemplified in the previous section using the procedure of the Repertory Grid as a tool for dialog enabled the participants in the Fabric as Upholstery Workshop, which was centered on dialog about emotional value of textiles to: (i) establish a

common platform for dialog, (ii) achieve an in-depth dialog, and (iii) refine the dialog to concentrate on emotional aspects of the experience. The Fabric as Upholstery Workshop was not conducted with sufficient scientific rigor to generalize and further prove these statements. The number of participants was low, they were from the same company, and they did not represent the variety of stakeholders that normally are involved in the design and development of textiles.

In order to argue for the assumed potential of applying the rules and procedures of the Repertory Grid to the dialog about emotional value of applied textiles this section explores and connects the statements and arguments made throughout the article to: (a) the traditional use of the Repertory Grid, (b) the notion of reflection-in-action as described by Donald Schön (1983), and (c) the connection between surface structure and emotional value of textiles as expressed by the textile profession.

A Common Platform for Dialog: The Traditional Use of the Repertory Grid

The use of the Repertory Grid as a procedure for conducting the Fabric as Upholstery Workshop is comparable to but not similar to the traditional use of the Repertory Grid. In the traditional use of the Repertory Grid the elicitation of the personal constructs and the subsequent assessment of the elements according to the constructs are conducted as a conversation between the psychotherapist and the client. In the Fabric as Upholstery Workshop it differs in the sense that the constructs are elicited as an agreement between the participants. Therefore the bipolar constructs are a result of the dialog about each participant's experience and represent an agreement made in the situation here and now. In the Fabric as Upholstery Workshop the triadic difference encouraged the textile designers to articulate the sensory evaluation in order to agree on a common understanding. This common—and maybe temporary—understanding served as a common platform for further dialog and knowledge generation between the workshop participants. Using the Repertory Grid the participants in the workshop were encouraged to compare and assess a selection of elements according to a specific purpose. The second example where the concept of “hardness” was explored exemplified that it is possible to make up a provisional vocabulary that suits the situation, e.g. the notion of “hard-hard.” The vocabulary was provisional in the sense that it is not likely that for instance the “hard-hard” definition of a fabric surface will be included in a standardized and formalized dictionary of fabric surface. However, in this specific situation “hard-hard” was a way to express an experience, and it made perfect sense to the textile designers as they generated new knowledge for the further exploration of the selection of elements.

Toward an In-Depth Dialog: Reflection-in-Action

The dialog that occurs between the textile designers during the workshop can be compared to Donald Schön's (1983) notion of reflection-in-action. For example, the textile designers met an unexpected challenge in the form of a material with a heavy plastic pile that did not fit into the bipolar construct "hard" versus "soft." Using Schön's terminology it can be argued that this encouraged them to conduct an on-the-spot experiment, exploring the "hardness" of the materials, and that this enabled them to reframe the understanding of "hard" in order to be able to assess the material according to the bipolar construct. Another example of reflection-in-action is the agreement on the construct "body-friendly" versus "body-unfriendly." In this case the textile designers combined the on-the-spot experiment (sensory evaluation of three elements) with their existing repertoire of professional knowledge about upholstery fabric, experiences from the first round, and the context that demanded an evaluation of the elements as if they were used as upholstery. In order to reach an agreement the Repertory Grid procedure forced the participants to develop an in-depth dialog about the experience of the elements.

Refining the Dialog: Handling the Complexity of Emotional Value

There are several examples in the textile professions own literature and research where it is emphasized how the evaluation of textile attributes often are turned into an experience of emotional aspects. Already in the 1940s the Bauhaus weaver Anni Albers writes about "additional quality," "aesthetic pleasure," and "happy sensations" in connection with the process of designing for mass production (Albers 2000: 18–19). Thus, it is not hot news that textile designers of today express a keen interest in the soft and immeasurable emotional value of textiles. More recently and connected to the use of the Repertory Grid Moody *et al.* (2001) have argued that the elicited adjectives can be divided into two groups referring to either the surface texture or to "emotion/cognitive/mood" associations. Similarly Homlong (2006) reports that pattern evaluations can have an either descriptive or a judging character. Related to these studies Fiore and Kimle (1997), in an American textbook about the understanding of aesthetics in textile and fashion design, also suggest that perceiving formal qualities of textiles lead to the experience of expressive and symbolic qualities. In this article it is explained how the character of the bipolar constructs elicited in the Fabric as Upholstery Workshop changes between the two rounds in a way that can be compared to the findings reported by Moody *et al.* and Homlong, since the bipolar construct in the first round, "hard" versus "soft," is comparable to texture (Moody *et al.* 2001) or description (Homlong 2006), and in the second round the bipolar construct, "body-friendly" versus "body-unfriendly," is comparable to an association (Moody *et al.* 2001) or a judgment (Homlong 2006).

Concluding Remarks

Throughout this article the rules and procedures of the Repertory Grid have been explored as a way to structure and systematize a dialog in a way that allowed two experienced textile designers to articulate emotional value of applied textiles.

For the textile design profession in general the findings from the Fabric as Upholstery Workshop indicate how the Repertory Grid can be used as a tool to articulate and create a platform for dialog about emotional value of applied textiles with a variety of stakeholders and in different stages of the design process.

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