

Fashion Activism through Participatory Design

Anja-Lisa Hirscher, Kirsi Niinimäki

Aalto University, School of Arts, Design and Architecture, Design Department, Helsinki, Finland

anja.hirscher@aalto.fi, kirsi.niinimaki@aalto.fi

Abstract

This study investigates the activism in the field of clothing design and fashion through selected findings from a case study exploring the possibilities to activate consumers in the field of fashion. The main research question: 'Does participatory design process and consumer's own activity open opportunities to behavioural change?' will be elaborated. Does the 'do-it-yourself' aspect and own achievement change consumers attitude towards fashion and clothing? Is it possible to create person-product attachment through 'do-it-yourself' process?

An experimental participatory fashion workshop which was held in Helsinki during the summer of 2012 will build the base for this case study. The workshop participants were working with the half-way design approach. We are starting from the question of how to express and fulfil consumer needs for personal representation and identification, the goal of the workshop was to raise awareness, motivate and enable a change in consumer behaviour towards a skilful making and understanding of the products. Personal interviews and questionnaires during this workshop build the source for exploring the main question, whether participation within the design process can change the consumer behaviour. Furthermore, a follow up questionnaire will evaluate the users' appreciation of the created product, questioning whether the personal engagement and identification with the product will result in a closer emotional person-product attachment and thus supports a longer lifespan of the product.

The paper concludes with a discussion on the workshop results and the opportunities to encourage sustainable fashion consumption through fashion activism.

KEYWORDS: Fashion activism, Participatory design, Sustainable consumption, Person-product attachment

Background

In the field of fashion and clothing, the idea of longer-lasting products is challenging, as planned and aesthetic obsolescence, encouraged through fast changing fashion cycles, is chased forward by the business in a scary matter (Burns, 2010). Between 30 to 50 trend-driven fashion seasons are put through by the fast-fashion business, resulting in very high resource depletion (Siegle, 2012). This business-strategy requires low prices per item, which is provoking a rather poor product quality; some pieces might not even survive the first laundry. Consumers then purchase several similar items that have very little personal value to them. This results in many tons of landfill waste every year. (Fletcher & Grose, 2012)

Within this case study, we will explore what creates valuable and meaningful piece for a consumer. Do half-way products offer the potential to create value and a person-product bond? Through an experimental research, that offers Half-way clothing to be customised within the setting of a participatory workshop, we will be evaluating the opportunities for fashion activism, participatory design strategies, as well as the possibility to create sentimental product value and personal attachment for the user.

If we compare Half-way clothing with user driven product-customisation or redesign, we can assume that through the way they are designed, they will enable even less skilled users to get involved in the making process. Thus, personal experiences, memory and emotions will be captured within the garment. The workshop directs toward a positive product outcome, because advices are provided by the presence of skilled designers and participants. Half-way products are about enabling the opportunity to “shape and influence the nature of the narrative experience by the very nature of interaction that occurs between two parties...” (Chapman, 2005, p.128). This will let the user become an active influential factor in the products story and not just a recipient of the designers given meaning.

Most of the research accomplished, has been analysing the person-product attachment within already owned products and the life-cycle of classic pieces. In the field of fashion and clothing very little research was done on half-way garments and the opportunities to create a valuable person-product attachment with the do-it-yourself approach. Kate Fletcher and Mathilda Tham have carried out research on the person-product relationship with clothing. By user-diaries they accumulated information over a long period of time about the use phases of clothing. (Fletcher & Tham, 2004) Later research about the use phase and ethical purchasing decisions of young citizens, mainly female, living in Finland was conducted by Kirsi Niinimäki (2010). In the Netherlands, Ruth Mugge completed a survey in 2007 and included

it in her 2010 doctoral dissertation about product-attachment and collected data from Dutch students, whether personalisations of bicycles, would facilitate an emotional bonding. An exploratory study by Wendy Moody and others has been analysing the relationships between the try on clothing, personal preference, personality, mood influence and emotion to get a better understanding of the psychological profile of the fashion consumers. Within their quantitative research study, they explored through their female pro-bands the influence of mood and personality on the choice of clothing. (Moody & Kinderman & Sinha, 2010)

All of these projects are yet to include participatory workshops or Half-way clothing to provide an easy first involvement of the user. This thesis driven research will investigate whether the personal involvement help to facilitate a closer person-product attachment and raise awareness about the consumers own purchasing behaviour. With this, we contribute to the research done in the field of product value and the impact of participatory design in clothing and fashion.

Design Activism

If we look ahead in sustainable design, this implies that we have to discover the new ideas to support sustainable-system and business strategies. This will redefine the designer's role. Designers, who challenge the current practices with design thinking to improve the environment and society, are referred to Design Activists. Design Activism was defined by one of its pioneers, Alastair Fuad-Luke: "Design activism is 'design thinking, imagination and practice applied knowingly unknowingly to create a counter-narrative aimed at generating and balancing positive social, institutional, environmental and/or economic change' " (Fuad-Luke, 2009, 27).

Within the family of Design Activism several design movement were born, Slow Design, Co-Design, Metadesign, Universal Design, Critical Design, Participatory Design and several others. Alastair Fuad-Luke writes in his book 'Design Activism: Beautiful Strangeness for a Sustainable World', that a Design Activist is a "non-aligned social broker and catalyst; a facilitator; an author; a creator; a co-author; and a happenner (someone who makes things happen)" (Fuad-Luke, 2009, under 'Preface' xxi). Those Designers become facilitators and enablers, who are working for an active exchange with the final user of the products. User-involvement is important to support sustainable production systems. By creating a tighter relation between product-producer and end-user the production cycles will slow down. Local production and highly valued product-person relationship offer key opportunities to slower consumption cycle. (Cooper, 2005) Slow Fashion, inspired by the Slow food movement of Carlo Petrini, claims that "One way to initiate slow fashion is to develop personal style" (Gwilt & Rissanen, 2011, p.153). Finding an independent personal style freeing the user from

the fast pace fashion cycles, is part of the foundation towards slowing down the fashion industry. “Slow fashion requires a changed infrastructure and a reduced throughput of goods.” (Fletcher & Grose, 2012, p.128) Slow fashion is closer to local resources, small-scale production and traditional techniques. The ideology promotes the uniqueness through traditional manufacture and defends mass-production. Supporting local business will nurture the idea of belonging to a place, through which identity and emotions will be bonded to the garment. Every item is then 'writing' its own story along the production process. This will create a new kind of relationship between product, maker and user. (Fletcher & Grose, 2012)

Fashion Activism

Fashion Activism is in the same way a political activity and participatory approach to empower the consumer to be independent from the fashion industry. The expression Fashion-Hacking is the idea of hacking something existing by freeing or modifying it from its original shape, giving it a new meaning (Fletcher & Grose, 2012). Fashion-Hacking for instance, has been practiced by Martin Margiela, Otto von Busch and Giana Pilar González. Margiela offered a customisable dress pattern via download (Margiela, 2004). Otto von Busch with his workshops and sewing cook-books shows examples on how to redefine fashion and offer the consumer new choices by enabling them with skills and knowledge. This creates the opportunity for the consumer to be more independent from what is dictated by the fashion industry. (von Busch, 2007) Similar to Giana Pilar González, who is reinterpreting the fashion codes of brands like Chanel and Yves Saint Laurent, with her project Hacking-Couture. In her workshops, she provides the participants with materials and identifiable patterns from various brands that can be hacked, opened up, therefor democratised for the public. (Modabot, 2007)

Design in its active or activist form, is expressed by motivating and enabling the user with a better product understanding. Activism through making together, socialising and sharing knowledge on a design founded base, seems to become a future trend. This may allow a future shift in the fashion industry. How can we as Designers support the users to become active makers? We need to discover key enablers to get them involved. Easily reachable entry level and reducing the fear of mistakes is assumed to be a key factor. Garments that are planned for co-designing, allow easy customisation so they can be changed over time, and as its best, they reveal their life-story by altering their beauty. For example, Half-way items, which are intentionally unfinished – leave a space for the enduser to customise and finalise to make it their own. Through the Half-way design approach, the consumer will be invited to participate and customise the product or clothing to their own needs and styles. The designer creates a piece in such a way that offers the opportunity to make changes within the original design. (Fuad-Luke, 2009) The consumer becomes an active participant, in contrast to ready-to-wear garments, which prohibit user involvement and limits them to be a passive recipient. In a

research paper on emotional bonding through product personalisation Mugge points out, that toolkits which are made by companies, offer a “satisfactory balance between the products self-expressive value and the complexity of the personalisation process” (Mugge et al. 2005, p. 474). Major manufacturers like Adidas and Nokia with their mass-customisation strategies won’t be able to offer, compared to Half-way items, as much freedom in participation and creativity. (Niinimäki 2010; Mugge & Schoormans & Schifferstein, 2009)

Consumer, Product and it’s Value

In this context we need to differentiate the consumers need for fashion and clothing. Fashion is a tool for self-expression, individuality and personal style. Kate Fletcher states that “Fashion at its creative best is one of the most powerful and direct expressions of personal aspiration, individuality and belonging” (Fletcher & Grose 2012, p. 138). Clothing full fills a need where its function is to provide us with warmth and protection. With fashion we do not only satisfy our needs against the elements, we also express our style and project the image by which we want the society to perceive us. For this reasons fashion can work as a synergetic satisfier, which was defined by Manfred Max-Neef. “Synergetic Satisfiers are those that by the way they satisfy a given need, stimulate and contribute to the simultaneous satisfaction of other needs” (Max-Neef, 1991, p.33). As its best, fashion design is able to satisfy personal and social needs (Fletcher & Grose, 2012).

Half-way products allow the chance to be a synergetic satisfier, by leaving space for personal involvement. They encourage mental and physical engagement with the product and enable personal style customisation. They can satisfy the need for individuality, self-expression, creative expression, participation and offer the opportunity to develop new skills. These will support the personal development of the owner, allowing a closer interaction thus creating a tighter and more valuable bond with the piece. (Fletcher & Grose, 2012) By finding and applying someones personal style to a garment, it will increase the meaning and value beyond the seasonal fashion moment. They embodied a person’s way to accomplish the piece. These garments with a stronger bond support the idea of a longer-lasting product to person relationship. (Fletcher & Grose, 2012) This stronger product relationship will increase its value and in the best case get the user to take better care of it. The items may be redesigned and time will be invested to reinvent them. Ruth Mugge and other authors discovered similar results related to emotional bonding with personalised products (Mugge et al. 2009). Slowing the consumption cycle, the product replacement will be postponed and the input of new resources can be decreased (Cooper, 2005).

Purpose of the study

Creating emotional relationships between product and user, has to be considered by the Designers already during the design process. Designers have to reserve the space for emotional bonding and memory with the products. Especially, creating emotional bonding through memories is a challenge for the designers, as beyond the purchasing act, they do not have much influence how people interact with their products (Fletcher & Grose, 2012). Creating value and meaningfulness to the product owner, is a key task for sustainable design. For this reasons, we want to explore if participatory design process and consumer's own activity allows behavioural change.

In a case study about customising city bikes, R.Mugge demonstrates that consumer participation and interaction can create a stronger person-product attachment. The study shows that if consumer's personal input intertwines the memory with the product, this can create a deeper emotional connection. This should stimulate a higher value and emotionally stronger person- product attachment. The products become irreplaceable for the owner. (Mugge & Schoormans & Schifferstein, 2005) Therefore, we will explore with an experimental workshop wether it is possible to create person-product attachment through 'do-it-yourself' process?

This product attachment would imply that the participants of the workshop will value their items more, as they relate it with their own effort during the making process and the positive feeling when the result is achieved. Does the consumer's own activities open opportunities to behavioural changes? Does the 'do-it-yourself' aspect and personal achievement change consumers attitude towards fashion and clothing?

To create meaningful person-product relationship designers need to understand what do consumers expect and need from fashion and clothing. In a products life-cycle, the designers can and cannot influence certain stages of the consumer behaviour. Prior to the purchasing act, we can question what created the need to constantly consume more, and how to replace it. (Textiles Environment Design, 2012) For reducing the desire for new products, consumer's values and attitudes need to be understood. Based on this knowledge, person-product attachment can be encouraged. (Cooper, 2005) How and at what point consumers attitudes and values can be tackled? How to design valuable products for another person? Those questions require a deeper understanding of the divers and personal reasons for consumer purchase, use and disposal behaviour. Through the literature review we came across several theories, classifying the consumer's behaviour. For example in 'Motivating Sustainable Consumption', Tim Jackson is summarising several theories and models. Among them, the Theory of Planned Behaviour, and The Theory of Reasoned Action, by Ajzen and Fishbein, which state that other peoples attitude will influence the individuals behaviour. However, those models nearly leave out the area of moral, emotion and habit, which strongly influence

consumer's behaviour. This is of great importance when considering that habit can change behaviour before an attitude change has occurred. (Jackson, 2005) On these grounds, fashion in its role as a cultural and social medium, can be a good agent to transform consumer behaviour. If consumers start to reconsider one aspect of their lifestyle, they are more likely to become aware about other sectors too.

How to design something of value?

How many products can we really value and attach to? Tim Cooper speaks in his paper 'Slower Consumption' about the uncertain number of products consumers can create a closer affection. During the 'Eternally Yours Congress' they laid out the comparison to human relationships -stating that human beings are only able to create a deep emotional bonding to a certain amount of other human beings. (Cooper, 2005) Can we really compare human to human relationship with human to product? In the current throwaway culture, it is hard to make people care for their objects, and so prohibit the fast replacement through an update. The behaviour towards products depends on one's personality, and capability to start a progress of valuing what one owns. Though it is difficult to draw a comparison line between a person's behaviour with human and product relationships.

Emotions play a key role in this discussion. An exploratory study on emotions and mood when trying on clothing was conducted by Wendy Moody and others in 2010. She claims that clothing attributes can both influence positive and negative emotions, especially during the trying on and wearing phase (Moody et al. 2010). These emotions will build the base for a successful and longer-lasting person-product relationship. Enabling the people with making-skills to adjust and built a relationship to the products we have, was already discussed by Ezio Manzini. In his working paper from 2006, he is discussing the concept of gaining well-being by consuming less. In his argumentation a social learning process has to occur, which includes a system shift from a product based well-being towards enabling solutions to satisfy our needs. (Manzini, 2006) We need to create value towards the things we already own and gain skills to evolve and change the things so they will alter with us.

Within this case-study we intend to compare if consumers will value self-made or personalised products more than purchased items. One goal is the consumers creation of a piece, on which we follow-up the person-product relationship. This may help to distinguish design-opportunities to create pieces that will become valueabel. Value created through emotions, especially positive experiences in general, can enrich a person's life and well-being (Mugge et al. 2009). As most important, emotional bonding and attachment can best be created in the use- or making phase of a product (Mugge et al. 2009). On that account, the workshop should encourage the participants to get involved in the co-design process and

create their own piece of clothing. A positive atmosphere within the workshop should be ensured. The atmosphere and emotion during the making-process will be beneficial to create a positive and memorable experience. The owner connects this experience to the product, and the piece will function as a storybook, and thus have a meaning beyond pure functionality. (Fletcher & Grose, 2012)

Research

At this point we tie those arguments to the idea of the Half-way product. Based on the literature review we hypothesise that active co-design of the user will facilitate a longer and more meaningful person-product attachment, which will in the best case result in a longer product lifespan. We will research in a small scale setting; whether creative user-participation will stimulate a stronger emotional bonding and a more valued relationship to the product. And we assume that this participation may change the consumer behaviour towards a more caring person-product relationship.

Methodology

The data consists of interviews, questionnaires and own observations during the participatory clothing design workshop at a recycling fare in Helsinki, in May 2012. The workshop named Make{able}, focused mainly on female participants in the age group of 25 to 35. From all the participants at the workshop, nine pro-bands in the mentioned target group filled out the prepared questionnaires. This case-study can only show an exemplary outcome. The results will be evaluated as a qualitative study.

Product and Questionnaire

For the participants several Half-way clothing pieces were provided. More precisely, tunics (Figure 1-3) made from recycled materials – were prepared to offer different stages of production. The garments were designed based on a Matrix (Figure 4) which was measuring the user involvement, from fully designed by the designer towards the level of skills needed. This Matrix was used in two ways, first for the designer; to elaborate the different options how to design a Half-way garment. Secondly, the Matrix was used in the workshop, for the participants to evaluate their skills, and to decide which level of difficulty they would be able to accomplish (Figure 5). The tunics were marked with the corresponding number in the matrix. (Figure 6) Thereby, success and improvement of the user for further projects can be evaluated.

The pieces offered an easy entry step, even for sewing beginners. Over that, a tunic is a flexible-fit garment, which will forgive small mistakes or a change in size, which makes it also suitable for multiple fit and clothes sharing. During the workshops, designers were at side to be asked for ideas or help with the practicalities of sewing.

After the workshop, participants were asked to fill out a questionnaire and a value{able} label (Figure 7) which was sewn into the garment. The label provides place for the maker and the time used to finalise the piece. The four-part questionnaire included these sections: general experience-level, their perception of the fashion industry and their relationship towards their clothing, to evaluate their current understanding of the system. In addition, two sections about their former experience during the workshop, and working with the Half-way garment. Finally, they had to provide an expected value for their self-assembled tunic. This question will be compared to a follow-up survey. The questionnaire had free form and multiple choice answer allowing suggestions among various items.

For the hypothesis verification, the follow-up was sent by e-mail 2 months later to the participants. Seven out of nine participants responded to the follow-up questionnaire. The follow-up included ten questions, to collect information on the perceived value and emotional attachment toward the half-way garment in comparison to a purchased product. Some of the questions examined the way participants felt after the workshop, to evaluate their enjoyment of the making process and if they linked their positive feeling toward the achieved piece. Of great interest were the experienced emotions about gaining new skills. As well as if they have felt any restrictions or discouraging factors. Finally, the participants were asked if they felt their consumption habits had changed by their involvement in the making of the garment.



Figure 1. Ready Tunic after the workshop.



Figure 2: Making together during the workshop.



Figure 3. Workshop space at the Recycling Fare in Helsinki May 2012.

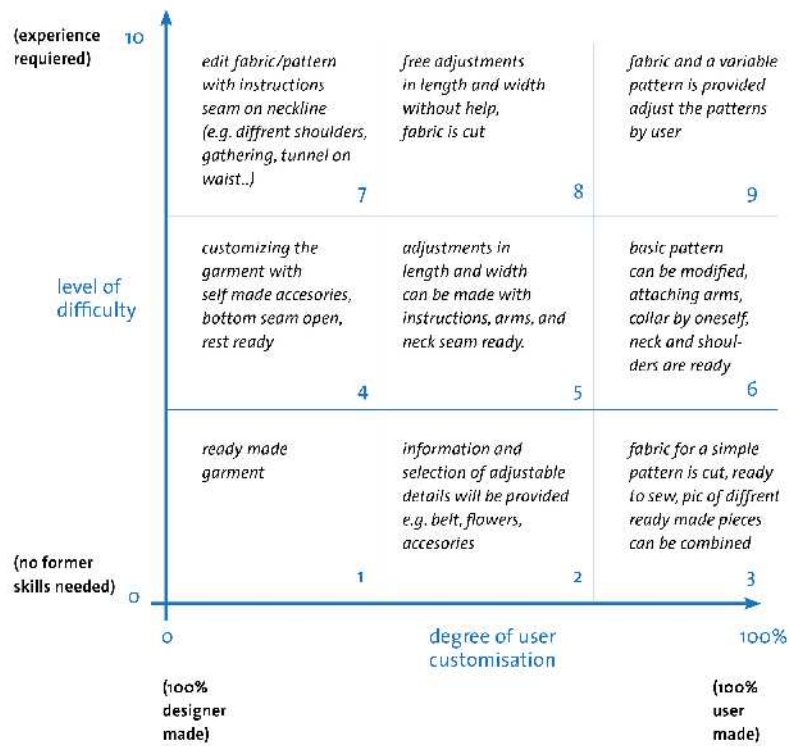


Figure 4. Matrix to define level of involvement.

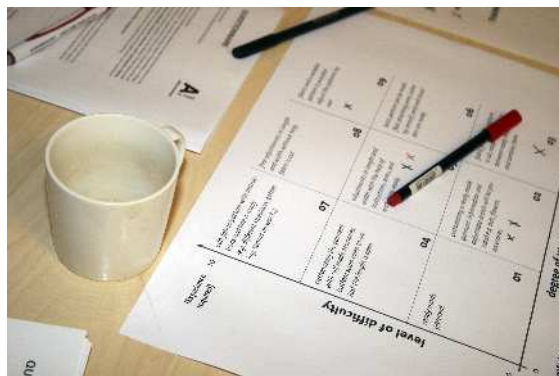


Figure 5. Matrix at the workshop.



Figure 6. Half-way Tunic with Number according to the Matrix.



Figure 7. Signing the value{able} label.

Results

The previous knowledge and the perception towards fashion and clothing varied a lot among the participants. There were two very skilled regular sewers who started from scratch, reworking old garments to a new tunic using the provided tools and patterns for ideation. Though, the majority, seven people, were fare visitors, who had sewn the last time in primary school. The participation group was divers, from very fashion aware consumers who enjoy shopping weekly, to participants who already purchase rarely, and if, than mostly second-hand clothing. As expected, the consumers who were less concerned on the current fashion trends, and stated that they would shop less than twice a month, seemed to value their products more. Through conversations with the people the issue was risen that the majority was interested in making things for themselves, but had the feeling of not being able to start working, creating and designing. This leads to the assumption that the interest of making is already rising, but the majority has already lost the skills and energy to start. With the concept of Half-way clothing and products, designers have the chance to ease this critical entry step. Quoting one of the participants: “Now I dare to start, sewing patterns look so difficult.” Accordingly, the concept of the half-way products was very much appreciated by all the participants. All nine participants agreed that they appreciated the fact that it was half-ready as it made it easier to accomplish something within a shorter time, but still have the chance to make it according to one’s own preferences. Participant: “It was easier than I thought, good instructions made it really fun!” The design and sewing steps of the Tunic were prepared to be very easy, even for the beginners. It was a very critical point to consider the opportunity for participants to work

independently, and not frustrate them with too difficult tasks, or too much designer influence. Even though, it was important to offer different challenges for the variety of participants.

One of the main goals of the workshop was to create a positive atmosphere and feeling of happiness and satisfaction of the making process. Thereby those positive emotions can be captured as memory within the garments. Nine out of nine participants agreed to gain a feeling of happiness and satisfaction during the making process or after seeing their results. It made them proud to be able to achieve something wearable by themselves. Also, everybody stated in the follow-up questionnaire that they wore the piece either a few times or regularly. This positive feedback can be seen as a first positive indicator towards reaching one of the workshop purposes. Especially the fill out labels at the end, got a great response, as they captured the makers effort that was put into the garment. In this setting, all was produced locally in Helsinki, which was clarified in the small fill-out labels which were attached in the garments. Person-product attachment lives and benefits mostly from a strong link created to a memorable moment shared with that piece. For this reason, the chance to fill in the name of the maker as well as the time it took them to accomplish the piece, will hopefully keep the memory awake as long as possible.

The intention was to study whether making result in a closer person-product attachment, and if it changes the personal value of the item? This question can of course be best and most accurately answered within a longer term study. This research has so far collected the data of nine workshop participants and can therefore only be seen as estimation towards future possibilities.

However, after the workshop all nine participants had a 'high' or 'very high' expected value towards the made garment. The mentioned reasons were mostly that they accomplished the piece themselves and through that gave it a unique touch. Even though, the participants had a very divers perception towards the fashion industry and its influence on them, all seemed to enjoy creating something unique, which enters a memory on the making process. Over that, nearly everyone mentioned to have one or more favourite pieces in their wardrobe which makes them feel especially pretty and self-confident or it is a really comfortable piece. In average, most people answered that they attach to this garment, as it reminds on a place or a person. Hence, if this idea of a 'story' can be linked to a garment, the making aspect of the user will have an impact as well. One of the participants stated: “The cloth (Tunic) has more value in my eyes, because I was also making it. It has a story now.”

The results of the first follow-up questionnaire were in general positive. Even though, the expected value level of 'very high' got mostly re-evaluated to be 'high'. In general it caught attention that people who valued their clothes high in general, tend to value the self-assembled item in a high position too.

The feedback about the learning and making process was very positive, even after two months' time, the majority of participants were eager to use their skills for other sewing projects. Most participants agreed that they would be interested in joining another workshop, as it helps to find motivation in this sounding. Over that the good atmosphere of making together was mentioned several times. In general, the workshop setting seems to offer opportunities which otherwise restrict the single user to start sewing and creation by themselves. Sewing machines, patterns, material and advice can all be found in one space. For this reason co-sewing spaces like Nadelwald in Berlin (www.nadelwald.me) or the SweatShop Paris (<http://sweatshopparis.com/>) offer a great opportunity for beginners or occasional sewers.

Limitations

Creating emotional bonding towards an item needs time and use of the product. Based on the literature review, we can assume that a close person-product attachment evolves over a longer period of time, and can therefore not be fully measured within this case-study. The same applies to precise evaluation of a behavioural change among the participants. Even though, this study allows approximate estimation about the success and possibilities of the Half-way clothing. Over that the number of participants was very small, which let us only estimate the possibilities for future research. This future research could investigate a larger number of participants over a longer period of time. As well as following up their further approaches to use the newly gained skills.

Discussion

This study expresses that there are possibilities for designers to help the consumer create an emotional and valuable bond with their clothing. We proved that designing with an aim to value creation can lead to products for which the owner has a stronger emotional attachment. The product will remind them of a story and the production work. On the long term, the evolving relationship towards the garment cannot be surveyed within this study, but it can be estimated by the participants themselves. As stated above, the value towards the self-made garments differed regarding the person's perception towards fashion and their existing wardrobe. How the owner interacts with their clothes and what they symbolise to them is highly personal. As a result, the understanding of value depends on the personality as much as it depends on attitude and behaviour. Is it possible to change behaviour through created value, or does the attitude need to change first? For a sustainable behavioural change, the importance

lies in understanding and awareness. Both designers and consumers are addressed. Whether we can plan and design for value is still debatable, as it depends on many personal and psychological factors. In this respect, we can see the option of challenging designers to define and test through trial and error the opportunities that develop throughout a product-lifecycle. Growing product value should become main criteria for design success. It should be a goal and in the designer's responsibility to evaluate the product's meaning to their owners.

If products represent one's personality, then they can achieve a level of special value, as they are part of the owner's self-expression. Alternatives to the ready-to-wear garments offer possibilities to change attitude towards fashion and clothing by offering the user the possibility to define their personal style. Relating to the answers of the workshop participants, the majority responded that they started to think more carefully about purchasing new items, as well as starting to redesign old garments. A future dimension could be, for example, Half-way products in a sewing kit. The Half-way sewing-kit would provide the consumer with a product that needs consumer interaction before the first use. There could be different stages of difficulty, depending on the consumer's prior skills. However, every piece can be adjusted to measure and personal style.

In general, it can be expected that the appreciation towards clothing can be enhanced through user-involvement in the making process. This assumption was also reflected within the follow-up research. The case-study showed that 'making' can be a key-factor to create higher value and attachment towards clothing. Half-way products offer the chance for self-expression, as well as provide an easy base to start, which may prohibit production failure, especially within the setting of a participatory workshop. The gained skills and understanding of the product will help to take good care and redesign the product if desired.

We can summarise, that for supporting an open and sustainable design approach, Half-way products, as well as participatory design workshops offer an interesting opportunity for further research. Half-way products cannot become a new way of mass-produced fast fashion, but they can function as tools, used also in participatory workshops, to encourage the user towards a sustainable behaviour. In the best case scenario, the products can attain a higher level of value in the owner's wardrobe, and help them develop an independent and personal style – a starting point towards behavioural change.

REFERENCES

- Burns, B. (2010). 'Re-evaluating Obsolescence and Planning for it.' in Cooper, T. (ed.) *Longer Lasting Products: Alternatives to the Throwaway Society*, UK: MPG Books Group, pp. 39-61
- Chapman, J. (2005). *Emotionally Durable Design – Objects, Experiences & Empathy*, London: Earthscan
- Cooper, T. (2005). 'Slower Consumption - Reflections on Product Life Spans and the “Throwaway Society”', *Journal of Industrial Ecology*, vol. 9, no. 1-2, pp. 51-67
- Fletcher, K. (2008). *Sustainable Fashion and Textiles: Design Journeys*, London: Earthscan
- Fletcher, K. & Grose, L. (2012). *Fashion & Sustainability – Design for Change*, London: Laurence King Publishing
- Fletcher, K. , Tham, M. (2004). 'Lifetimes', Retrieved 08 01, 2012, from *Lifetimes Project* <http://www.katefletcher.com/lifetimes/>
- Fuad-Luke, A. (2009). *Design Activism - Beautiful strangeness for a sustainable world*, London: Earthscan
- Gwilt, A. & Rissanen, T. (2011). *Shaping sustainable fashion - changing the way we make and use clothes*, London: Earthscan
- Jackson, T. (2005). 'Life Better by Consuming Less?', *Journal of Industrial Ecology*, vol. 9, no. 1-2, pp. 19-35
- Jackson, T. (2005). 'Motivating Sustainable Consumption - a review of evidence on consumer behaviour and behavioural change', *Centre for Environmental Strategy*, Surrey
- Manzini, E. (2006). *Design, ethics and sustainability. Guidelines for a transition phase*, Working paper: Cumulus Conference: Nantes, pp.9-15
- Max-Neef, M. (1991). *Human Scale Development – Conception, Application and further reflections*, New York: The Apex Press
- Margiela, M.M. (2004). 'Design-Download', Retrieved 09 03, 2012 from *SHOWstudio* http://showstudio.com/project/design_download_martin_margiela
- Moody W., Kinderman P., Sinha P. (2010). 'An exploratory study: Relationships between trying on clothing, mood, emotion, personality and clothing preference', *Journal of Fashion Marketing and Management*, vol. 14 Iss: 1 pp. 161 - 179

- Modabot (2007). 'Hacking Couture – die Entschlüsselung der Marke', Retrieved 08 23, 2012 from *Modabot*, <http://www.modabot.de/hacking-couture-die-entschluesselung-der-marke>
- Mugge, R. (2007). *Product attachment*, PhD thesis, Delft University of Technology, Netherlands
- Mugge R., Schoormans J.P.L. and Schifferstein H.N.J. (2005). 'Design Strategies to Postpone Consumers' Product Replacement: The value of a strong person-product relationship', *The Design Journal*, vol. 8, no. 2, pp. 38-48
- Mugge R., Schoormans J.P.L. and Schifferstein H.N.J. (2009). 'Emotional bonding with personalised products', *Journal of Engineering Design*, vol. 20, no. 5, pp. 467-476
- Mugge R., Schoormans J.P.L. and Schifferstein H.N.J. (2010). "Product attachment and satisfaction: understanding consumers' post-purchase behavior", *Journal of Consumer Marketing*, Vol. 27 Iss: 3 pp. 271 – 282
- Niinimäki, K. (2010) 'Product attachments and longevity in sustainable design strategies', in *Lens - Learning Network on Sustainability*, Helsinki: Aalto University
- Niinimäki, K. & Koskinen, I. (2011). 'I love this Dress, it makes me feel beautiful! Empathic knowledge in Sustainable Design', *The Design Journal*, vol. 14, issue 2, pp. 165-186
- Siegle, L. 2012, 'H&M the new home of ethical fashion?', Retrieved 04 07, 2012 from *The Guardian*, Available at: <http://www.guardian.co.uk/business/2012/apr/07/hennes-mauritz-h-and-m>
- TEDs 10, Retrieved at 09 01, 2012 from *Textiles Environment Design*, <http://www.tedresearch.net/teds-ten-aims/>
- van Abel, B., Klaassen, R., Evers, L. & Troxler, P. (2011). *Open Design Now*, Retrieved 04 15, 2012 from *Open Design Now*, <http://opendesignnow.org/>
- von Busch, O. (2008). *Fashion-able, Hactivism and engaged Fashion Design*, PhD Thesis, School of Design and Crafts (HDK), Gothenburg.

Images

All images are copyright by the authors.

