

## Designing for User Empowerment

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This research paper is based on the PhD study of the author which has been undertaken in the years 2015-2019.

### Abstract

As natural resources are becoming scarcer, the call for alternative business models and consumption patterns becomes more urgent. This affects the traditional fashion system in a way where isolated solutions cannot solve the environmental challenges alone. In this paper, I discuss the potential of involving user insights in the design process as a strategy for democratisation of fashion. The discussion is raised on the basis of experimental and practice-based research project of how designers can engage with users to gain insights on material and aesthetic experience in relation to use, and further employ these insights as inspiration for design development. This perspective suggests to consider the use phase as a part of the design process with an aim to encourage user empowerment as part of the sustainable transition that the fashion industry faces. The explorations presented in this paper, focusses on the role of the textile designer in the progression towards another fashion system.

In a traditional design process, prototyping is one of the designer's tools to make ideas more tangible for further study and development. In this paper I pursue a similar approach, with an aim to unfold the textile designers' disciplinary skills of working with aesthetic experiences of materials (comprising perception of colours, structures, surface etc.) as a means for involving user perspectives in the design process. The aim of this approach is to explore ways in which to design for user empowerment and a democratisation of fashion.

The underlying basis for this methodology is built on design practice. In that connection, a design concept has been developed – a concept for the design of knitted jumpers that serves as a framework for examining an open design process. The development of digital knitting technology opens up for new manufacturing methods that may result in zero-waste production in which only essential resources are used. In addition, the technological development offers the potential to combine production on-demand with a user-involved design approach. At the same time this methodology examines ways in which the textile designer can employ strategies in practice that may support active use, and hereby a more sustainable use phase. In relation to

this, perspectives of user preferences are therefore considered to give valuable insights to design development.

The data presented in this paper is generated within design experiments build in two steps. The first design experiment, seek insight into users' needs and preferences in terms of knitwear. The purpose of the second design experiment is to apply the collected knowledge as inspiration for the development of the concept of knitted jumpers.

The first design experiment explores how knitted prototypes (textile samples and jumpers) can illuminate insights of use of knitwear by employing a Wardrobe Method in combination with a variation of the Repertory Grid interview technique. The design experiment is concerned with the participants' material experiences such as how a knitted material feels towards the skin, as well as how the visual expression of a jumper matches personal needs and preferences. In this way, the tangible artefacts help to explore the users' visual and haptic needs and preferences through their material experiences, as they support the user in verbalising personal use experiences. These aesthetic experiences of textiles and clothes do not only involve the visual impression, but also the tactile and kinetic quality of the garment. They are considered central to the satisfaction of use, even though these close experiences of everyday wear of textiles and garments often are taken for granted and not spoken of. The approach in the design experiment aims to illuminate these insights that otherwise can be considered as tacit knowledge.

The second design experiment explore how the designer can activate these user insights as a part of the inspirational source for design development. This design experiment gives an example of how user insights can be integrated in practice. In the design concept constructed for the purpose of this research project, the individual preferences of the users are used as a guideline for developing the design parameters of the diverse expression of the jumpers.

The two design experiments indicate that designers can advantageously increase awareness of developing variations of jumpers to suit different aesthetic preferences and body shapes. It also indicates that designers and companies should be aware of the potential of user dialogue, and how this knowledge can be translated into a sustainable business models while fostering a user empowering approach to use of garments. The explorations presented in this paper aims to contribute to the discussion about how theoretical perspectives on change of the fashion system can be translated into practice.

## **References**

- Bang, A. L. (2010). Emotional value of applied textiles: dialogue-oriented and participatory approaches to textile design. Design School Kolding.
- Bang, A. L. (2013). "The Repertory Grid as a Tool for Dialog about Emotional Value of Textiles". Journal of

Textile Design Research and Practice, Vol. 1(no 1), 9–26.

Crane, D. (2000). Fashion and its social agendas: Class, gender, and identity in clothing. University of Chicago Press.

Durrani, M., Ravnløkke, L., & Niinimäki, K. (2016). “Shared Emotional Values” in Sustainable Clothing Design Approaches. In R. Earley & K. Goldsworthy (Eds.), Circular Transitions Conference Proceedings (pp. 81–91).

Eckert, C. (1997). Intelligent Support for Knitwear Design. The Open University.

Eckert, C., & Stacey, M. (2003). “Sources of inspiration in industrial practice - The case of knitwear design”. Journal of Design Research, 3(1). <https://doi.org/doi:10.1504/JDR.2003.009826>

Fiore, A. M., & Kimle, P. A. (1997). *Understanding aesthetics for the merchandising and design professional*. Fairchild Publications.

Flamborough Marine. (2017). <http://www.flamboroughmarine.co.uk>

Fletcher, K. (2016). Craft of use: post-growth fashion. Routledge, Taylor & Francis Group.

Fletcher, K., & Grose, L. (2012). Fashion & Sustainability: Design for Change. Laurence King.

Fletcher, K., & Klepp, I. G. (2017). Opening up the Wardrobe: A Methods Book. Novus.

Fletcher, K., & Tham, M. (2019). Earth Logic Fashion Action Research Plan. The J J Charitable Trust. <https://earthlogic.info/wp-content/uploads/2019/12/Earth-Logic-eversion.pdf>

Flyvbjerg, B. (2011). “Five Misunderstandings About Case-Study Research”. In P. Atkinson & S. Delamont (Eds.), SAGE Qualitative Research Methods (pp. 220–245). <https://doi.org/10.4135/9780857028211>

Fransella, F., Bell, R., & Bannister, D. (2004). A Manual for Repertory Grid Technique (2nd ed.). John Wiley & Sons.

Jedinak, M. (2017). Your body shape. <http://www.michaelajedinak.com/your-body-shape.html>

Kelly, G. A. (1955). The Psychology of Personal Constructs. NY: Routledge.

Klepp, I. G., & Laitala, K. (2015). “Consumption Studies: the force of the ordinary”. In K. Fletcher & M. Tham (Eds.), Routledge handbook of sustainability and fashion (pp. 121–130). Routledge.

Laitala, K., Boks, C., & Klepp, I. G. (2015). “Making Clothing Last: A Design Approach for Reducing the Environmental Impacts”. International Journal of Design, 9(2), 93–107.

Laitala, K., Klepp, I. G., & Hauge, B. (2011). “Materialised Ideals Sizes and Beauty”. Culture Unbound: Journal of Current Cultural Research, 3(1), 19–41. <https://doi.org/10.3384/cu.2000.1525.11319>

Laitala, K., Klepp, I. G., & Henry, B. (2018). “Does Use Matter? Comparison of Environmental Impacts of Clothing Based on Fiber Type”. 10(2524). <https://doi.org/10.3390/su10072524>

Meadows, D. H. (1997). “Places to Intervene in a System”. Whole Earth, Winter.

Niinimäki, K. (2011). From Disposable to Sustainable: The complex interplay between design and consumption of textiles and clothing. Aalto University, School of Art and Design.

Niinimäki, K. (2013). “A Renaissance in Material Appreciation: Case Study in Zero Waste Fashion”. Journal of

- Textile Design Research and Practice, 1(1), 77–92. <https://doi.org/10.2752/175183513X13772670831191>
- Pine, B. J. (1999). Mass customization: the new frontier in business competition. Harvard Business School Press.
- Ravnløkke, L. (2019). Design af strikbluser til lang levetid: Strikkede prototyper som redskab for brugerdiallog i designprocessen [Design of Knitted Jumpers for Longevity: Knitted Prototypes as a Tool for User Dialogue in the Design Process] [Dissertation series]. Design School Kolding.
- Ravnløkke, L., & Bang, A. L. (2016). “The body stocking: Design aesthetics and functionality as a means for sustainable fashion and textiles”. *Celebration & Contemplation*, 378–386.
- Redström, J. (2017). Making design theory. The MIT Press.
- Revsbæk, L., & Tanggaard, L. (2015). “Analyzing in the Present”. *Qualitative Inquiry*, 21(4), 376–387. <https://doi.org/10.1177/1077800414562896>
- Schön, D. A. (1991). The reflective practitioner: how professionals think in action (11th ed.). Avebury Ashgate.
- Tham, M. (2016). “Creative Resilience Thinking in Textiles and Fashion”. In J. Jefferies, D. Wood Conroy, & H. Clark (Eds.), *The handbook of textile culture* (pp. 225–240). Bloomsbury Academic, an imprint of Bloomsbury Publishing Plc.
- Tham, M. (2020). Earth Logic workshop for Higher Education.

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