NORM-CRITIQUE IN PRACTICE: HAPTIC AND TACTILE DESIGN METHODS IN THE NOTION OF CARE

HANNA AF EKSTRÖM
HDK, ACADEMY OF DESIGN AND CRAFT,
GOTHENBURG UNIVERSITY
HANNA.AF.EKSTROM@HDK.GU.SE

CRISTINE SUNDBOM
USIFY
CRISTINE.SUNDBOM@USIFY.SE

ABSTRACT

We invite participants to this workshop with the purpose to explore participatory processes based on tactile and haptic methods within the framework of norm-critical methodology.
The workshop is based on cases from the project 'Tink - Idea development for available and inclusive open stormwater solutions`. Innovation-driven projects in urban planning are often based on technical aspects and deviate from social values. Through a norm-critical methodology, we argue that technical innovation needs to include social values based on intersectional analysis. Firstly, in the project Tink, that means that we work together across disciplines and focus areas, in an interdisciplinary environment with disability activists, researchers, practitioners, and municipal officials. Secondly, we state that norm-critical methodology includes design processes based on inclusive methods in the notion of care, engagement and social inclusion. In a workshop environment, this means creating settings for people with different experiences and abilities.

INTRODUCTION

We are all influenced by our own experiences and personal belief systems. Therefore no research can be or is neutral (Harding, 2016). This also includes the role of a designer, who carries their own pre-understandings, social norms, presumptions, and fixed ideas when designing for the user's needs. This power imbalance between the designer and the user needs to be addressed and made visible.

Social norms work as invisible rules that function as approval or disapproval of specific acts, appearance or agendas in our society. To follow the norms is to pass, by being appreciated by your appearance, beliefs or thoughts. Breaking social norms, on the other hand, is often followed by disapproval, discrimination, marginalization or even social exclusion. Further, social norms are governed by power structures, positions and hierarchies where normalcy is rewarded with different privileges. One way of understanding privileges is the reproduction of able-bodiedness. In design, sites, objects and services are many times designed for users that fit into the norm of normalcy, which can be referred to the concept of the normate-template (Hamraie, 2017).

Objects, spaces and technologies are connected to norms, and some can intentionally or unintentionally, lead to restriction or social exclusion. Design is often based on what Akrich calls *I-methodology* - when the designer reproduce norms related to imagined users/actors based on the designer's own representations, experiences, and values (Akrich, 1996). Empathic tools are typically used with the aim to develop a deeper understanding of the user's needs to avoid social exclusion. However, empathic tools have its limitations when it comes to give a full understanding of the end-user's experiences and needs. The term empathic horizon (McDonagh-Philp & Denton, 1999) describes the difficulty of acquainting with another person's feelings that go beyond the intersectional group that the designer belongs to. In other words, it can be challenging to use empathy as a

tool to understand users with another gender, background, class, sexuality, ethnicity, functionality or age.

NORM-CRITIQUE

Norm-critique originates from the pedagogical field in Sweden and is a theory of unfolding how social norms can reproduce discriminating structures. Norm-critique has a theoretical foundation in feminist theory (Butler, 1993) queer theory (Bryson & De Castell, 1993), intersectional analyses (Crenshaw, 1990), critical and anti-oppressive pedagogics (Freire, 2000) (Kumashiro, 2002). The theory started as a counter-reaction to tolerance pedagogy which was the prevailing method within the school system to discuss diversity with the purpose to increase the tolerance level about the minorities or deviant groups among the majority. An example of tolerance methodology is how the history of people of color only is addressed as a single occurrence, like black history month, where the overall history teaching is outspokenly based on the history of white people.

Supporters of norm-critical pedagogy argue that perspectives on minority or deviant groups should always be included in the education, and not as an occurrence. Norm-critique states that othering minority groups will result in pointing out these groups to be different from the norm, and subsequently reproducing existing power structures (Foucault, 1978).

In a design context, one example of tolerance pedagogics is when in there are special courses at design schools that focus assistive design technology – design for improving accessibility for people with disabilities. Such courses are excellent because they help raise design student's awareness of disability. However, the focus on the impaired body or mind in need for assistive tools to function in the society is in line with the medical model of disability, where the notion of social exclusion such as ableism is not acknowledged (Campbell, 2009). Also, the perspective of disability identity and an inclusive design approach (Heylighen & Bianchin, 2013) is only taken into account in one course, and not applied to the overall design education.

NORM-CRITICAL DESIGN

In Sweden, norm-critique is used as a design tool to question normative structures that reproduces social inequality. One example is the Androchair, which was created to discuss how women feel exposed during gynaecological examinations (Ehrnberger et al., 2017). Norm-critical Design, like the Androchair, have many similarities with critical design or discursive design (Bardzell & Bardzell, 2013), focused on discussion or criticism, not on creating efficient outcomes.

Norm-creative design is grounded in norm-critical analysis, but with the purpose of creating design solutions. An example of norm-creative design in urban development is the ´Rose Red Carpet,´ a space for social activities designed specifically for young girls, because girls were underrepresented in the public environment in the area (Björnson, 2013). Another example is the site ´The Playa´, in the area Frihamnen, an unused harbour area under development in Gothenburg Sweden. At the site the the architect group MYCKET created an inclusive bathing environment by collaborating with different marginalized groups in the design process. The purpose of the project was not to create a finished site, rather a platform for interaction where the users of the The Playa continued to shape the area also after the end of project (Alves, et al., 2014).

THE PROJECT TINK

The innovation-driven Swedish project ´Tink – Idea development for accessible and inclusive open stormwater solutions´, is a new project funded by the Swedish governmental innovation authority Vinnova (RISE Research Institutes, 2018). Open-stormwater solutions are built systems for locally utilizing rainwater, specially from heavy rains.

In many innovation-driven projects technology often comes before social or inclusive factors (Jensen et al., 2012), and in the pre-study of Tink it was found that there is both a lack of knowledge, and lack of strategies in Swedish municipalities about how to build socially inclusive stormwater solutions. It was clear that little or no consideration was given to accessibility aspects. In the best case, current legislation is taken into account, which of course should be the minimum requirement for all urban constructions, but more often open stormwater solutions are treated as a purely technical system where aspects regarding social inclusion through an intersectional perspective were completely neglected.

In one of the cases in the pre-study we inspected rainbeds and other stormwater solutions in the new urban area Norra Djurgårdsstaden in Stockholm. At the site, opportunities with open stormwater solutions were actively taken care of for the benefit of social and health-related sustainability values. At the same time, other solutions were lacking for increased accessibility such as backrests on benches, contrast markings, and railings for people with visual impairment. Also, walking paths that were placed over the rainbeds were too narrow for wheelchair users, or for a parent holding a child in hand walking side-by-side.

It was also clear in the pre-study that there are no good examples and inspirational materials adapted for Swedish conditions, including requirements, and guidelines. Many municipalities use inspirational materials for open stormwater management with recurring examples from Portland, USA, or Singapore. These examples have shortcomings in relation to requirements in the Swedish Planning and Building Act's regulations regarding accessibility. The

consequence of un-reflected solutions, despite good intentions, is that exclusive and discriminatory norms are reproduced into built urban environments. Related to the general risks described in the introduction, there is a risk that architectural visualizations or inaccessible inspiration material regarding stormwater solutions reinforce discriminating norms, such as ableism that increase social exclusion (Visual Arena, 2016).

To create innovative and sustainable stormwater solutions in urban spaces, multi-disciplinary innovation processes are needed. These processes need the incorporation of social, ecological, and economical sustainable challenges. The Tink project aims to contribute to the development of new knowledge and increased innovation capacity of how to build socially accessible and inclusive stormwater solutions based on a norm-critical methodology. The methodology includes an intersectional perspective regarding social inclusion.

Social exclusion intersects on many levels; people can be marginalized not only by their ability but also because of their skin color or gender (Crenshaw, 1989). In order to fully understand intersection analysis from many different perspectives, it is not possible to unfold this knowledge from a single person. Hence, intersectional analysis can only be understood in a shared analysis between people of specific research areas who have different experiences and knowledge of social exclusion to (Krekula et al., 2005). Therefore, project Tink work together in an interdisciplinary environment with both academics, practitioners and activists. With knowledge from various disciplines such as gender studies, critical disability studies, biodiversity, accessibility, children perspective and technical expertise regarding stormwaters, we share our viewpoints of how we can create social, ecological and technological solutions.

The goal with Tink is to develop a new inspiration material for socially inclusive stormwater solutions adapted to Swedish conditions, also regarding building materials and the choice of plants suitable for rainbeds in the Swedish climate.

ABOUT THE WORKSHOP

This workshop will build on the voices and experiences of the participants. The purpose of the workshop is to broaden the understanding of how we in design practice can use a norm-critical methodology with methods that are based on flexibility, empathy, and care within the framework of participatory design.

We acknowledge that all participants have different knowledges, understandings, and capabilities. For the project Tink, inclusive design tools are based on the notion that human interaction can work in different ways. In a workshop context, this means that we take in information and communicate in various ways. We do not only understand information through our hearing and vision, and we do not only communicate with our mouths or our hands, we also include other senses and haptics. To understand aesthetics but also social inclusion by haptic and tactile interaction to stimulate us for increased embodied experience (Akner-Koler & Ranjbar, 2016). Therefore, subjective experiences through our bodily senses is a central tool for understanding our environment and situations.

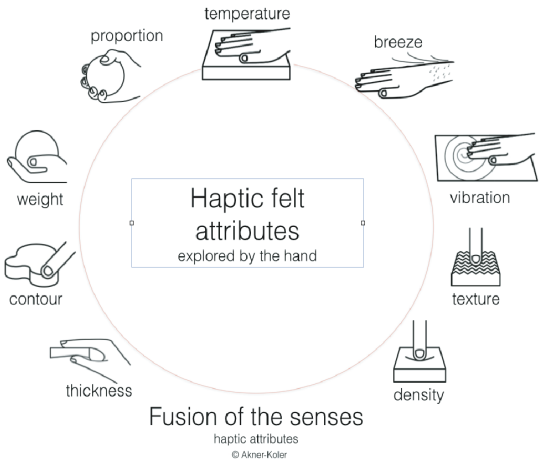

Figure 1. The Fusion of the Sense – haptic attributes explored by hand. Model, by Cheryl Akner Koler.

In the workshop, we will present methods of working with the workshop material, such as interpreting architectural visualizations, sketches with our hands, arms, legs, ears, and mouths. We suggest these haptic and tactile methods because, in our practice of setting up a workshop environment, we have participants with different abilities who interpret information with different senses.

By using haptic and tactic workshop material through a lens of norm-critique, we also aim to push the barriers of how participatory projects within the realm of city planning often use sketches, visualizations or architectural models to communicate a vision. We argue that non-designers who often participate in city development project do not always have the experience or pre-understanding of reading this kind of material. This can lead to the participants having difficulty expressing their wishes and thoughts in a participatory process. By providing alternative ways to understand a workshop material, by haptic and other sense-based aesthetic experiences and visual interpretation, does not only make the workshop experience more accessible for participants who are not used to interpret architectural sketches, it also provides a better accessibility for people with visual impairments and cognitive disabilities, and, it also stretches the interpretation in general by questioning the visual and hearing norm.

WORKSHOP OUTLINE

The proposed workshop is who hours long and can fit a maximum of twenty participants.

Introduction: By using our senses, we will explore physical materials in the form of architectural sketches from the project ´Tink - Idea development for accessible and inclusive open stormwater solutions in an urban context.

Phase 1. Workshop introduction (20 min): The workshop begins with a presentation of the project Tink and its norm-critical methodology followed by a sense-based exercise developed by the authors for this specific workshop. The exercise aims to create a safe space for open reflections and to connect the participants in ways that go beyond social titles, citizenship and backgrounds.

1b. An (Aesth)etic Understanding of the existing architectural sketches (20 min): The participants are divided into groups. Each group will be presented a case within the project Tink with the purpose of creating an understanding for each individual case through a haptic / tactile / perspective.

10 min break

Phase 2. Sense-based norm critical/creative ideation 40 min: Using physical materials to sketch. Using other senses than eye-sight helps creative thinking. The next phase is to start ideating by using the aesthetic qualities to inspire what expression social inclusive stormwater solution in an urban context should have by evoking our senses.

By starting ideating solutions from our senses such as hearing and tactile/haptic attributes; such as smell, taste, and density the participants are asked to use their senses as a metaphor for creating inclusive solutions to the cases.

2b. Share and Tell (20 min): Presenting the creative process and ideas, and the design concepts focusing on social inclusion. Sharing thoughts and ideas with each other.

Outro (20 min): Finishing by doing a feminist round method, where all participants get equal time to share their experience or thoughts about the workshop and how insight can be fed into a larger design research community.

Expected outcomes: The workshop will be documented by note taking, filming and photography, where the material and insights will be used to inspire and drive the project for new innovative/norm-creative directions.

In the workshop setting we expect to get new outcomes and knowledge on how we can develop our methodical approach as well as getting more input on how the projects material outcome can be translated or reframed to meet the expectations of the project target group.

REFERENCES

Akner-Koler, C. & Ranjbar, P. (2016) Integrating Sensitizing Labs in an Educational Design Process for Haptic Interaction. *FORMakademisk - forskningstidsskrift for design og designdidaktikk*, 9 (2). Available from: <https://journals.hioa.no/index.php/formakademisk/article/view/1269> [Accessed 11 February 2019].

Akrich, M. (1996) User Representations: Practices, Methods and Sociology. In: A. Rip, T. Misa, & J. Schot eds. *Managing Technology in Society: The Approach of Constructive Technology Assessment*. Pinter, pp.167–184. Available from: <http://www.amazon.ca/exec/obidos/redirect?tag=citeulike09-20&path=ASIN/1855673398> [Accessed 11 February 2019].

Alves, M., Bonnevier, K. & Kristiansson, T. (2014) THE PLAYA - www.mycket.org [Internet]. Available from: <https://www.mycket.org/THE-PLAYA> [Accessed 11 February 2019].

Bardzell, J. & Bardzell, S. (2013) What is critical about critical design? In: *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*. ACM, pp.3297–3306. Available from: <http://dl.acm.org/citation.cfm?id=2466451> [Accessed 30 December 2016].

Björnson, M. (2013) Rosens röda matta : stadsplanering på tjejers vilkor. In: *Plan*. Plan.

Bryson, M. & De Castell, S. (1993) Queer pedagogy : praxis makes im/perfect: [1]. *Canadian Journal of Education; Toronto*, 18 (3), pp.285–305.

Butler, J. (1993) *Bodies that matter: on the discursive limits of 'sex'*. New York, Routledge.

Campbell, F.K. (2009) *Contours of ableism [Elektronisk resurs] : The production of disability and abledness*. Basingstoke, Palgrave Macmillan. Available from: <http://dx.doi.org/10.1057/9780230245181> [Accessed 25 February 2017].

Crenshaw, K. (1989) Demarginalizing the Intersection of Race and Sex: A Black Feminist Critique of Antidiscrimination Doctrine, Feminist Theory and Antiracist Politics [Internet]. Available from: <https://philpapers.org> [Accessed 26 February 2017].

Crenshaw, K. (1990) Mapping the Margins: Intersectionality, Identity Politics, and Violence against Women of Color. *Stanford Law Review*, 43, pp.1241–1300.

Ehrnberger, K., Räsänen, M., Börjesson, E., Hertz, A.-C. & Sundbom, C. (2017) The Androchair: Performing Gynaecology through the Practice of Gender Critical Design. *The Design Journal*, pp.1–18.

Foucault, M. (1978) *The history of sexuality*. 1st American ed. New York, Pantheon Books.

Freire, P. (2000) *Pedagogy of the oppressed*. 30th anniversary ed. New York, Continuum.

Hamraie, A. (2017) *Building access : universal design*

and the politics of disability.

Harding, S. (2016) Précis of Objectivity and diversity: another logic of scientific research. *Philosophical Studies*. Available from: <http://link.springer.com/10.1007/s11098-016-0835-8> [Accessed 4 April 2017].

Heylighen, A. & Bianchin, M. (2013) How does inclusive design relate to good design? Designing as a deliberative enterprise. *Design Studies*, 34 (1), pp.93–110.

Jensen, J.O., Jørgensen, M.S., Elle, M. & Lauridsen, E.H. (2012) Has social sustainability left the building? The recent conceptualization of "sustainability" in Danish buildings. *Sustainability: Science, Practice and Policy*, 8 (1), pp.94–105.

Krekula, C., Närvänen, A.-L. & Näsman, E. (2005) Ålder i intersektionell analys. *Tidskrift för genusvetenskap*, (2–3), p.sid–81.

Kumashiro, K.K. (2002) *Troubling education: queer activism and antioppressive pedagogy*. New York, RoutledgeFalmer.

McDonagh-Philp, D. & Denton, H. (1999) Using Focus Groups to Support the Designer in the Evaluation of Existing Products: A Case Study. *The Design Journal*, 2 (2), pp.20–31.

RISE Research Institute (2018) Idea development for accessible and inclusive open storm water solutions | Vinnova [Internet]. Available from: <https://www.vinnova.se/en/p/idea-development-for-accessible-and-inclusive-open-storm-water-solutions/> [Accessed 11 February 2019].

Visual Arena (2016) Norm-creative Visualization in Urban Development | Vinnova [Internet]. Available from: <https://www.vinnova.se/en/p/norm-creative-visualization-in-urban-development/> [Accessed 11 February 2019].