

Master's thesis

NTNU
Norwegian University of Science and Technology
Faculty of Architecture and Design
Department of Design

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Rethinking Gender in Design

Master's thesis in Industrial Design Engineering

Supervisor: Casper Boks

Co-supervisor: June Kyong Trondsen

June 2021



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Science and Technology

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Rethinking *Gender* in **Design**



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A master's thesis by May Helen Lillegård

Institute of Design

Norwegian University of Science and Technology, NTNU

June 2021

Main supervisor: Casper Boks

Co-supervisor: June Kyong Trondsen

Preface

This report communicates the process of my master's thesis at the Department of Design, NTNU, May 2021. This project derives from the project I did in the previous semester concerning gender bias in design. The concept of gender is a big part of our identity and concerns all of us. For this reason, I was baffled when I discovered the lack of focus on gender diversity in my research before this project.

Compared to most master's theses at the Department of Design, this stands out as more theory-oriented and relatively less practical. The choice of a more theoretical focus has multiple reasons. The lack of existing research in design triggered me to investigate the interplay between gendered systems in society and design practice. To accumulate knowledge of quality, I found theoretical input most important. Exploration through practical and experimental methodologies helped in understanding how to introduce gender diversity in design practice.

I want to thank all the incredible people who have helped me throughout this period. A lot of motivation came from professional support and not to mention the interest and importance people expressed. Firstly, I would like to thank my supervisors, Casper and June, who have helped me academically with insightful discussions, and personally with kind words when things were challenging.

I am thankful to experts who have shared their knowledge and experience in interviews and discussions related to my thesis: Esben Esther Pirelli Benestad, France Rose Hartline, Stine Kühle-Hansen, Ingvill Hoffart, Trine Rogg Korsvik, and Sara Tellefsen.

I also want to thank the wonderful people at Kompetansesenter for kjønn og seksualitet and Skeiv Ungdom, who do an incredible job creating safe spaces for gender diversity.

The same goes for all the input from the Norwegian design community and people, students, and schools who have participated in questionnaires, interviews, focus groups, workshops and valuable discussions throughout the process.

Huge thanks to classmates and friends who have given me their time to discuss, participate in activities, and support me mentally. Thanks to Kamilla, Rannveig, Caroline, Idun, Tonje, Karen, Amalie, Håvard, and Ivar. I also want to thank my colleagues at Strise for motivational “breaks” and company. Especially thanks to uxMarit.

I am beyond grateful for all the support and feedback people have given me. It has been valuable for me to exchange my thoughts when working alone on this complex and intricate topic. It has been wonderful experiencing all the engagement and interest, although most of the time behind the laptop screen.

May Helen Lillegård

Abstract

The thesis discusses the influence of the binary gender system on the interplay between society, design, and people, and what is needed in the field to design for gender diversity.

Background

Besides the growth in debate and research on gender diversity in the past decade, the binary gender model is still hardwired in society. Gender is a phenomenon building on social constructions, including norms, behaviours, and roles, as well as interpersonal interactions and relationships. As design shapes our environment, which in turn shapes our behaviour and attitude, this supposes a relation between design and established gendered values and conceptions. This leads to questioning the role of design in perpetuating stigma and restrictive gender norms in society. Furthermore, how can design contribute to creating acceptance and affiliation for a broader spectrum of genders, beyond the binary?

Goal

This project has aimed to understand the relationship between design practice and the binary gender system. Based on this, I wanted to address how design can contribute to an inclusive society for different perceptions of gender by developing recommendations on how to work with gender in design. By generating knowledge in an arena with little existing research in design practice, the goal is to contribute to inclusive design. The posed research question was “What is the value of gender roles and norms in design, and what are the effects?”

Process

The insight phase started broadly. To retrieve insights on the status quo in society and existing solutions in design practice, literature reviews and desktop research were conducted. Clustering and analysing the insights steered the thesis in a more specific direction. Moreover, to concretize and narrow the scope, a case study on fashion stores was found valuable in this context. Interviews with people, organizations, and experts in different fields were done to understand different viewpoints on the case. Because the gender topic is intricate, exploratory focus groups were conducted. The insights from these methods resulted in recommendations for working with gender in design. Finally, these results were tested and evaluated with Retail Design students at Høyskolen Kristiania.

Result

By examining how society and design practice are influenced by the binary gender system, the final result from this project is a proposed guide for rethinking gender in design. The guide aims to inspire and provide information on how to design for a gender-inclusive future. The guide includes common attitudes and behaviours in society, common design pitfalls, and recommended design techniques and principles when working with gender in design. To make the knowledge from this research accessible for all designers who design for an inclusive future, the guide is easily distributable and adaptive to various contexts and purposes. Gender is a big part of our identity. Paying attention to the gendered forces and challenges in society is an important contribution to inclusive design.

Sammendrag

Denne oppgaven diskuterer innflytelsen av det binære kjønns-systemet på samspillet mellom samfunn, design og mennesker, og hva som trengs i feltet for å designe for kjønns mangfold.

Bakgrunn

Til tross for økt debatt og forskning på kjønns mangfold det siste tiåret, er den binære kjønnsmodellen fremdeles fremtredende i samfunnet. Kjønn som fenomen bygger på sosiale konstruksjoner som normer, atferd og roller, samt mellommenneskelige interaksjoner og relasjoner. Design former miljøet vårt, som igjen former atferd og holdning. Dette tyder på en sammenheng mellom design og etablerte kjønnsverdier og -forestillinger. Følgende kan man sette spørsmålstegn ved rollen til design i å opprettholde stigma og restriktive kjønnsnormer i samfunnet. Hvordan kan design bidra til å skape aksept og tilhørighet for et bredere spekter av kjønn, utover det binære?

Mål

Prosjektet har som mål å forstå forholdet mellom designpraksis og det binære kjønns systemet. Basert på dette ønsket jeg å ta for meg hvordan design kan bidra til et inkluderende samfunn for forskjellige oppfatninger av kjønn. I og med at tematikken er kompleks, var det grunnleggende å konkretisere anbefalinger til hvordan man kan jobbe med kjønn i design. Ved å generere kunnskap på en arena med lite eksisterende forskning innen designpraksis, er målet å bidra til inkluderende design. Forsknings spørsmålet som ble jobbet mot å besvare var "Hva er verdien av kjønnsroller og -normer i design, og hva er effekten?"

Prosess

Innsiktsfasen startet bredt. For å få innblikk i dagens situasjon i samfunnet og i eksisterende løsninger innen designpraksis, ble litteraturanalyse og bred desktop research utført. Gruppering og analyse av innsikten styrte oppgaven i en mer spesifikk retning. For å konkretisere og begrense omfanget, ble det utført en casestudie på klesbutikker. Dette ble ansett som verdifullt i denne sammenhengen. Intervjuer med mennesker, organisasjoner og eksperter fra forskjellige felt bidro til forståelse av ulike synspunkter på tematikken. Fordi kjønnsstemaet er intrikat ble det gjennomført utforskende fokusgrupper. Innsikten fra prosessen resulterte i anbefalinger for hvordan designere kan jobbe med kjønn. Mot slutten ble resultatene testet og evaluert med Retail Design-studenter fra Høyskolen Kristiania.

Resultat

Resultatet fra prosjektet er en guide med forslag til hvordan å jobbe med kjønn i design. Hensikten med denne er å inspirere og formidle informasjon om hvordan man kan designe for en kjønnsinkluderende fremtid. Guideen inkluderer generelle holdninger og atferder i samfunnet, vanlige fallgruver i design, samt anbefalte designteknikker og prinsipper for å arbeide med kjønn i design. For å gjøre kunnskapen fra forskningen tilgjengelig for alle som designer for en inkluderende fremtid, er guideen enkel å distribuere og å tilpasse til ulike sammenhenger og formål. Kjønn er en stor del av vår identitet. Å være oppmerksom på kjønnsmessige krefter og -utfordringer i samfunnet er et viktig bidrag til inkluderende design.

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Master's Thesis for May Helen Lillegård

Rethinking Gender in Design

Despite the progress towards a more equal future, evident and underlying expressions of stereotypical gender roles are still present in a significant amount of today's products, services, and solutions. This can lead to negative consequences for people who do not identify with these roles. As design manifests values and norms in society, it is important for designers to be aware of how and when their solutions can lead to exclusion, reproduction of inequality, and restriction in opportunities and rights.

This thesis builds on work done by May Helen Lillegård, autumn 2020. The work explored the present design education and how to facilitate critical thinking of traditional gender roles in design and design education. The work resulted in a concept for a workshop program targeted at design students, intending to raise awareness of the challenge of gender bias when designing.

By analysing existing cases and own experiments, this thesis will explore the value of gender in design and the influence on quality, demand, function and expression of a solution. The thesis concerns the following questions: What is the value of gender roles and norms in design, and what are the effects? When is a solution experienced as excluding and stigmatizing, and how can we utilize this insight to rethink gender in design? Further, the thesis will address how design can contribute to an inclusive society for different perceptions of gender and gender roles. The thesis will start broadly, but based on incoming insights, it may be relevant to delve into one or more contexts to achieve sufficiently specific recommendations.

The thesis should include:

- literature review and interviews with designers and other professional
- experiments with different case studies
- analysis of insights and identification of challenge
- formulations of recommendations to improve awareness of gender diversity in design practice

The project is executed in accordance with "Retningslinjer for masteroppgaver i Industriell design".

Course supervisor (from ID): Casper Boks

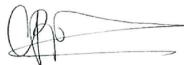
Co-supervisor: June Kyong Trondsen

Starting date: 08.01.21

Due date: 04.06.21

Trondheim, NTNU, 07.01.21

Casper Boks
Course supervisor



Ole Andreas Alsos
Head of Department

How to Read

This report presents the process resulting in a proposal for design practice with attention to gender diversity. Firstly, the results are presented. Followingly, the thesis presents the reasoning towards these results, divided into five chapters. Including an overview of the project, each chapter represents a focus area corresponding to the results:



0 Overview

Firstly an overview of the project is presented. This includes the topic, the project goal, research question, and contribution to design practice, namely inclusive design. The results from this research are presented as a guide for rethinking gender in design. My motivation for the topic is also presented. Lastly, an overview of the process and executed methods are presented.



1 The gender challenge

The thesis starts broad, investigating the gender challenge in society. This chapter presents the theoretical foundation for the project. Definitions of relevant terms related to and associated with gender are discussed. Followingly, knowledge and information on the history of gender and the binary gender system are presented. Two main societal challenges were uncovered and discussed as possible directions for the project. The chapter concludes with reasoning for the chosen direction, namely the influence of the binary gender system on society and design practice.



2 Gender identity in a binary world

The next chapter addresses the influence of the binary gender system on our behaviours and attitudes. First, the chapter addresses how people grow up to gendered beings, influenced by our designed environment. Fashion stores were found to be great representatives of the contemporary gender narrative in society. Therefore, a case study on fashion stores and retail design was conducted, revealing the influence of the binary gender system on designers and design practice.



3 Deconstructing

This chapter investigates the influence of the binary gender system on current design practice. The insights from focus groups and participatory observation of a lecture in Retail Design revealed common pitfalls in design practice, thus an opportunity for improvement.



4 Reconstructing

Building on and binding the findings from the previous chapters, this chapter proposes a new way of working with gender in design. Looking into the interplay between society, designers and people, the responsibility of designers in the gender challenge is highlighted. The chapter introduces ways to work and points of importance to rethink gender in design. The findings were tested and evaluated in a workshop with retail design students.



5 Rethinking Gender in Design

The final chapter concludes the findings and insights and presents the result of the project. The result is a proposal for a new design practice accounting for gender diversity. This includes categorization of the main insights from previous chapters in general attitudes and behaviour towards gender diversity in society, common design pitfalls, techniques and principles to become aware of and inspired to work with gender in design. The result is proposed as a guide, contributing to inclusive design. Additionally, the process and result are discussed, and recommendations for future research, proposed.

Each chapter ends with a reflection where the respective material is discussed and main insights relevant for design practice are presented.

For those in a hurry...

... for final result of the project (*Rethinking Gender in Design: the guide*), go to page 27

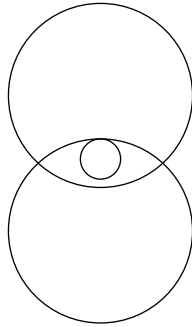
... go to page 100 for main insights on the influence of gender structures in society

... go to page 148 to read the insights on how the binary gender system affect our attitudes and behaviours

... go to page 180 to read insights on the relation between gender structures and current design practice

... go to page 236 to read insights on how to work with gender in design

... for concluding thoughts and results, go to chapter 5



Glossary

Sex

See Defining “gender” in chapter 1 The Gender Challenge for a more extensive definition.

Categories defined by biological and physiological attributes, such as external and internal genitals, gonads, genes, chromosomes and hormones (Bufdir, 2020). Common categories are female, male, intersex and trans.

Gender

See Defining “gender” in chapter 1 The Gender Challenge for a more extensive definition.

Categorisation based on socially constructed characteristics, including norms, behaviours and roles, as well as interpersonal interactions and relationships (WHO, 2019).

Gender binary

A system that categorises people into one of two genders: female or male. The binary gender model is based on the biological and reproductive understanding of gender (sex).

Gender-fluid model

An understanding of gender not being fixed as e.g. the categories of women and men.

Gender diversity

Acknowledging the diversity of bodily and gendered identities beyond the binary (Bufdir, 2020), and within the binary.

Gender identity

The personal conception of one's own gender or genders (Ghosh, 2020).

Cis-gender

People who identify with the gender assigned at birth (Bufdir, 2020).

Transgender

People who do not identify with the gender assigned at birth (Bufdir, 2020).

Genderqueer

People who have a gender identity or expression which do not conform to the norms and values of the binary gender system (Bufdir, 2020).

Heteronormativity

Expectations and assumptions of heterosexuality and cis-gendering until disproved. This is connected to the binary gender model (Bufdir, 2020).

Norms (informal)

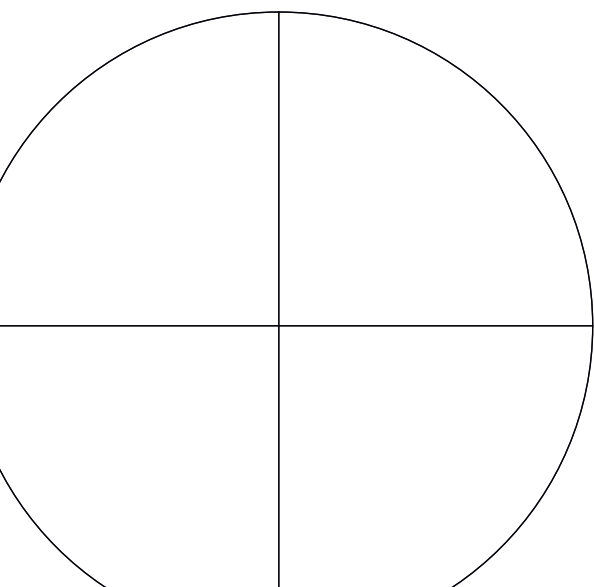
Informal norms are unwritten contextual and situational rules of expected behaviours and attitudes. Breaking these can lead to various sanctions (Tjora, 2018).

Stigma

Societal norms and values resulting in a common feeling of disapproval towards certain topics, situations, or people (Cambridge Dictionary, 2021).



Chapter 0
Overview



In this section, an overview of the project is presented. This includes the topic, the project goal, research question, and contribution to design practice, namely inclusive design. The results from this research are presented as a proposal of a guide for rethinking gender in design. My motivation for the topic is also included. Lastly, an overview of the process and executed methods are presented.

Autumn 2020 I conducted a project examining the interplay between gender roles and design. The project included a comprehensive literature review and desktop research, as well as the use of practical methods such as workshops and interviews with various experts. An important insight was how design perpetuates heteronormative, traditional and oppressive gender roles. The major reason found was the lack of awareness in the field, specifically in design education. This resulted in the development of a workshop targeted at design students, aiming to raise awareness of the challenge. After the project, the question of how to work with gender in design remained.

The goal of this thesis is to examine how to account for gender diversity in design practice. Leaning on literature review, desktop research, and various activities including experts and people, it seeks to understand how the interplay between the binary gender system in society and design thinking contributes to creating social stigmas and gendered restrictions. Specifically, the study addresses the following research question:



How are people, society and design practice influenced by the binary gender system, and how can we utilize this knowledge to design for a more gender-inclusive future?

The research question is comprised of sub-questions, targeting different aspects and focus areas of the gender challenge:

- * How is society influenced by the concept of gender? (chapter 1)
- * What does gender mean to people and how do we relate to the binary gender model? (chapter 2)
- * How does the current design practice incorporate gender? (chapter 3)
- * How should designers handle gender challenges in practice? (chapter 4)

This thesis highlights the challenges of the binary gender system. The purpose is to understand and discuss how designers best can learn about the complexity of gender in the field and how this knowledge can be utilized in future work. Because of the complexity of the challenge, a case study on fashion stores and retail design was conducted. Eventually, the findings were generalized to target designers who focus on inclusive design solutions. By creating awareness of the gender challenge and own biases related to the binary gender system, the goal is to enable designers to create meaningful solutions for gender diversity, thus contributing to inclusive design.

The report starts by presenting the result of the project. The result is a proposal to a guide on how to work with gender in design. The main report describes the process towards these insights and justifies the value of introducing gender in design.

After investigating the interplay between the binary gender system and design practice, the result of this project is a proposal to a guide on working with gender in design. As an approach to my research question, *Rethinking Gender in Design: the guide* is designed to provide open access tools and information on how to design for a gender-inclusive future. It focuses on communicating relevant information and content on gender for design practice. This includes guidelines on how to become aware of our own gender bias and how to work with gender in design. The following represent the main result from the research, including

- * general behaviour and attitude towards gender diversity in our population (see chapter 2 for process),
- * common pitfalls in design practice (see chapter 3 for process), and
- * applicable techniques and principles (see chapter 4 for process)

Gender is a concept concerning everyone. Therefore, *Rethinking Gender in Design: the guide* is designed to target all designers, educators, students, professionals, and anyone interested in learning more about the interplay between gender and design. The result is hereby my contribution to inclusive design.

The guide

Rethinking *Gender* in Design

Rethinking Gender in Design: the guide is designed to provide open access tools and information on how to design for a gender-inclusive future. It focuses on communicating relevant information and content on gender for design practice. This includes guidelines on how to become aware of our own gender bias and how to work with gender in design. The manual includes

- * general behaviour and attitude towards gender
- * diversity in our population,
- * common pitfalls in design practice, and applicable principles and techniques

Gender is a concept concerning everyone. Therefore, *Rethinking Gender in Design: the guide* is mainly designed to target all designers, but also educators, students, professionals, and anyone interested in learning more about the interplay between gender and design.



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People

In every design project, it is important to account for the people who come in contact with the solution. Given the scope of design practice, it can be hard to know who will come in touch or be influenced by our solutions. When working towards a gender-inclusive society, it can therefore be valuable to account for the various attitudes and behaviours in society. Understanding how people receive and perceive our solutions can provide knowledge on how to approach the design challenge and create acceptance of gender diversity.

Common attitudes

Designers influence people with our decisions, be it people within our target group and others who interact directly or indirectly with our design. The following are just a fraction of the diversity in attitudes in our society. The purpose of presenting these is to illustrate how people's attitudes towards gender diversity can differ. This can be used to understand how people will receive a design introduced to society.

Common behaviour

The social forces of the binary gender system can influence our behaviour unconsciously. Because of this, it can be of value for designers to understand how people relate to this. What is the core need for people concerning gender? The following presents some important aspects of people's behaviours concerning gender diversity and identity.



Common attitudes

Not bothered by gender

Usual gender identity

Cis-man

Relation to gender norms

Thinks there is too much focus on gender

Gender identity-related challenges

Does not experience any specific challenges with their gender identity

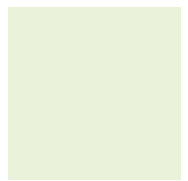
Thoughts on gender diversity

Have not considered the challenges others with other gender identities experience

Attitude

Bystander (idealist)

“Just chill, let people be who they want to be, as long as it does not hurt anyone”



One or the other

Usual gender identity

Binary, cis-gendered

Relation to gender norms

Conforms to most gender norms in society

Gender identity-related challenges

Finds some representations of gender challenging and restrictive

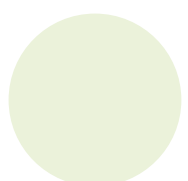
Thoughts on gender diversity

People should do what they want, but the division of man and woman is important

Attitude

Binary is biology - biology is the truth

“You are born either as a man or a woman. How you define yourself is up to you”



Common attitudes

The activist

Usual gender identity

All genders

Relation to gender norms

Plays with gender expression

Gender identity-related challenges

Discrimination, stereotyping, stigma

Thoughts on gender diversity

Should be taught in school and informed about in society

Attitude

Normalize fluid gender model

“You are born either as a man or a woman. How you define yourself is up to you”

The reflective herd

Usual gender identity

Binary cis-gendered

Relation to gender norms

Conforms to norms gender norms, but some can be restrictive and discriminating

Gender identity-related challenges

Stereotypes and expectations

Thoughts on gender diversity

All genders should be included, but is not actively conscious of their own gender biases

Attitude

Moral driven - equality and equity for all

“We have to respect and accept each other, regardless of our gender identity”



Common behaviour

Behaviour influence attitude

We like to think of ourselves as open-minded. However, the binary gender system has led to habitual thinking for many. For this reason, we are often not protected by our general attitude in our specific behaviour. In other words, we are prone to resort to and express a norm conforming attitude when we experience the behaviour of others as unexpected based on our gendered assumptions.



We are influenced by our environment. When the only stimuli we receive on gender is heteronormative and binary, we consciously and subconsciously believe that this is the truth. Thus, we are prone to think of nonconforming behaviour as abnormal and notable.

Environment influence assumptions



Standing out within the accepted

Conforming to the gender norms gives a sense of belonging. However, some affiliations are false because the stigma in the society of crossing these norms may lead to embarrassment and other negative consequences for many. Conforming to the norms is simply easier for many.



Our personal experiences depend on a lot of various factors. Though some people are in the same gender group, it does not automatically mean they possess the same values and preferences. When this is not accounted for, such as in the binary gender model, people might displace their identity to "fit in".

Similar people can experience things differently



Common behaviour

*Different people
can experience
things similarly*

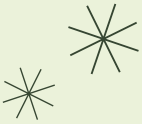
Though the binary and heteronormative gender values fit some, and probably the majority of people, we have to be cautious in relying too much on the gender boxes. Reducing experiences to only apply for one target group, can exclude many and lead to negative consequences if not accounted for.



Because of the lack of diverse representation of gender in society, a lot of us are not aware of the beautiful complexity of gender variations. Further,

this makes it hard for people to accept and to feel accepted if we do not conform to the norms of society.

*People need to
feel represented
to feel accepted*



*Comprehending
the complexity
and providing
options*

The binary gender model has served a purpose in understanding the complexity of humans. However, we see now how restrictive these categorizations are in reality, both in trying to understand ourselves in society and in perceiving others. There is a need for more options for people to choose from when exploring and finding ourselves.



Designers should aim to have a positive impact on all people who encounter our work. We have to design for acceptance of gender diversity, such that everyone is seen and feel a sense of affiliation to society.



Pitfalls

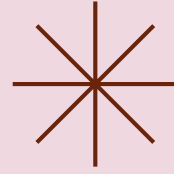
Designers are a part of society, thus prone to rely on the values and norms of the heteronormative and binary gender system. When this is not accounted for, we continue perpetuating restrictive norms leading to stigma, exclusion, and discrimination of many.

When working with complex and wicked challenges such as the gender challenge, it can be valuable to be aware of common pitfalls. Usually, when designers account for gender challenges, it tends to concern the binary. Hence, accounting for genders beyond the binary can be hard to comprehend. Moreover, we often focus on doing “right”, and less on not doing “wrong”. The pitfalls are thus presented to make designers aware of what to avoid in the design processes.



Generalizing and stereotyping

In the process of gathering insights, analyzing and narrowing down to something comprehensible, designers are prone to generalize and, in the worst case, stereotyping people. Consider who is inside and outside of the categories you define for your project, and why. Is the solution at risk of discriminating against people who are already marginalized in society? How can we combat this?

*Not asking why*

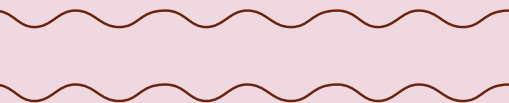
Designers are experts in pinpointing challenges, examining people's behaviour and finding needs. However, asking why these are the challenges; why this is the behaviour; why these are the needs, are sometimes ignored or overlooked. Lack of awareness about the influence of the binary gender system on people can be the reason why norms and values are reproduced in design.

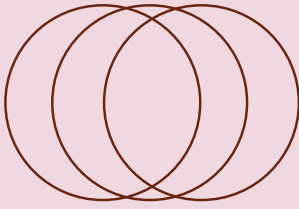
The "special" case

When those of us who do not conform to the gender norms are considered, they are often regarded as a special "topic" or "edge case" that only comes up when it is specifically relevant to the storyline. If every case of gender nonconformity is presented as special, heteronormativity continues to be regarded as the norm.

Disclaiming the responsibility

When we design for the majority, we design for the heteronormative gender norms. When designers claim to follow social trends, we disclaim our responsibility as influencers. The responsibility of bending the norms is therefore transferred onto individuals.





Ignoring the problem

Excluding the concept of gender from the design project removes the importance of being aware of social issues rooted in the heteronormative and binary gender system. If we ignore gender challenges, we are prone to overlook and disregard important needs, thus reproducing the same values which lead to the oppression of many.

The binary default

Defaulting to the binary masculine men and feminine women is not a rare case and is easily justified with how our culture defines gender. However, doing so not only reduces the diversity of gender as a concept but also reduces the diversity within the binary genders.

Not seeing does not mean it does not exist

Though the binary genders represent the majority today, it does not mean variations can not exist. Relying on the heteronormative values and norms excludes those of us who are restricted by these, thus not being able to fully and genuinely express ourselves to the world.



Techniques

When working with intricate challenges, such as gender, it can be convenient to get a pointer on how to approach it. Get inspired by these twelve techniques to become aware of gender biases when working with gender in design.

The techniques aims to convert knowledge from “People”, “Pitfalls”, and “Principles” to practice. Moreover, it should be used to trigger initerest and inspiration.



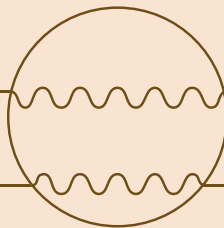
Discover

Uncover your biases

Do a quick design based on the design project you are doing. By doing a quick design exercise, we are forced to act on our intuition. Reflecting upon the outcomes in retrospect can reveal our unconscious biases towards the topic and people inside and outside the categories we define for our project. Becoming aware of these biases help us become more in control of our decisions while reducing the risk of the impact on the actual project, thus society.

Write down your insights on your own biases. Throughout the real project, remind yourself of this. Pay extra attention to those biases which might be exclusionary or discriminating, especially against oppressed and marginalized groups. At the end of the real project, look back to the reflections you did. What has changed? Why did you learn? What can you bring to the next project?

Tip: To retrieve more value from this technique, the results can be tested by or discussed with others, preferably a variety of people.

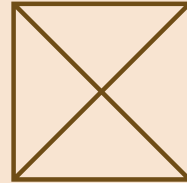


Discover

Test your boundaries

Empathizing with those of us who are restricted by gender norms on an individual and personal level, is important in understanding the challenges and problems these norms oppose. When do you feel restricted by the gender norms of society?

Use clothes, makeup or the like in your surroundings to create an expression you would be ashamed to wear in public. What is the most embarrassing outfit or makeup you could imagine wearing? Play with style, makeup, femininity/masculinity, norms and so on. Try to uncover why you would feel ashamed. What can you as a designer do to make this experience less stigmatizing and negative?



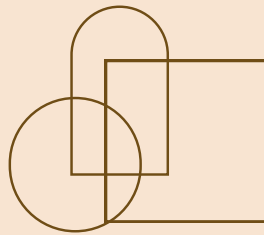
Triangulate

Since the binary gender norms are hardwired in society, affecting behaviour and attitudes, it is important not only to include a diversity of people in our process but also analyzing the data with societal systems. Triangulating between various methods is especially important when paying attention to the influence of social systems and norms on the behaviour and attitude of participants. Collect quantitative and qualitative data. Compare what has been observed with what has been said. Compare the insights from this with a holistic view of social systems.

Discover

Prime yourself with diversity

Get inspired by diversity. Create a moodboard or collage which represents gender diversity and expression. Look into different gender-inclusive organizations, norm challenging movements and expressions. Do an image search on artefacts, sculptures, colours, and words you get inspired by. What does the collage express in the end?



Go on a context safari

The city centre is rich in content on how society depicts gender. After retaining a bit of knowledge on the gender challenge, take a stroll through the city centre with a critical eye. How is gender depicted? By becoming familiar with the status quo and the current discourse on gender in the environment you are designing for, it is possible to know what to avoid and what to change.

Discover



Collect data without being present

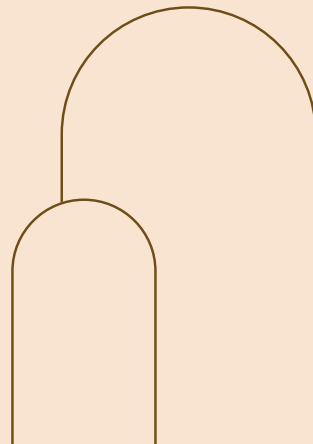
The huge influence of gender norms on society and people, might be hard for people to answer honestly. Additionally, because the norms are hardwired in society, many are not reflected upon the topic. Their behaviour and attitude in general and towards the topic might be very much influenced by binary expectations. This makes it important for designers to understand the collected data in a bigger context. How might the answers be influenced by norms, expectations, stigma?

Because of this, it can be valuable to collect the data anonymously and over some time to enable the participants to reflect upon the topic. Diary studies are an example of data collection without being present, whilst propelling reflection over time.

Research generations

Do a desktop research on the targeted generation of your brand. What were the gender norms when they grew up? How can your brand and solution help create acceptance of and affiliation for those of us who do not conform to gender norms? When doing this, it is important to keep in mind that people from the same generation might not hold the same values and attitudes. However, it can provide an understanding of the circumstances they grew up in.

Also, do a short research on the future target generation for the brand. Examining trends of various generations can provide insights into what might be needed and accepted in the future.

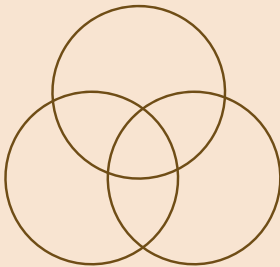


Define

Think about the approach to the challenge

How can your design increase acceptance of gender diversity, while creating affiliation? The approach to the challenge can influence the final solution and how you communicate your message. Choose an approach to the gender challenge you find valuable for your project.

- * Activism vs advocacy
- * Highlighting the problem vs natural/invisible integration
- * Promoting the goal (optimistic) vs confronting status quo (pessimistic)
- * Provocative vs inclusive



Find the common ground

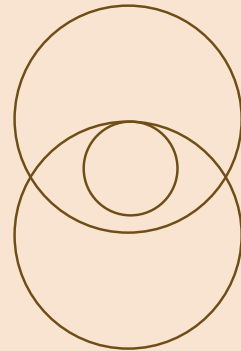
Challenge your perception of gender. Create two seemingly opposite personas and try to find their common features in your project. Similar people can experience things differently and different people can experience things similarly. Finding the common ground of people inside and outside the categories you define for your project can help in understanding the diversity in people, how to meet the needs of people with different perspectives, whilst reducing the risk of harming people who are outside of the target group.

Discover

Normalize

non-heteronormative personas

Stereotyping is a common pitfall when working with personas - especially when it comes to gender. Create a non-heteronormative or gender non-conforming persona which challenges the status quo on gender norms and expectations in society. Use this persona in your project to reduce the risk of stigmatizing or discriminating against those of us who do not conform to gender norms. How do you want this persona to experience your solution? How can your project help normalize gender diversity?



Create a utopian or dystopian future

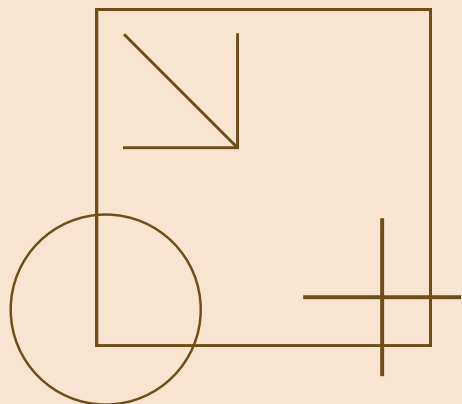
Creating a utopian or dystopian future can help us design for what is desired and understand what we have to avoid. How would a gender-free society be? How would a society filled with gendered taboos and stigmas be? Reflect upon how such societies would influence the attitude and behaviour of people. What is needed to achieve the utopian scenario? Or prevent the dystopian scenario?

Develop

Analyse artefacts

Look into some of the following factors of the products of your brand and reflect upon how it relates to the gender norms.

- * How does the context influence the object in relation to gendered aspects of it?
- * What are the associated norms of gendered interactions with the product?
- * What is the function of the product? Is it gender-dependent?
- * How does aesthetics relate to gender norms?
- * How does surroundings outside (priming) influence the perception of the product?
- * What are the relations between masculine, neutral and feminine attributes?
- * What does the size of the product signalize?
- * How does the space influence the perception of the product?
 - Rhythm, colour, lightning, atmosphere, music, focal points, layout (zones, departments), beauty, forms and shapes, semiotics, categories





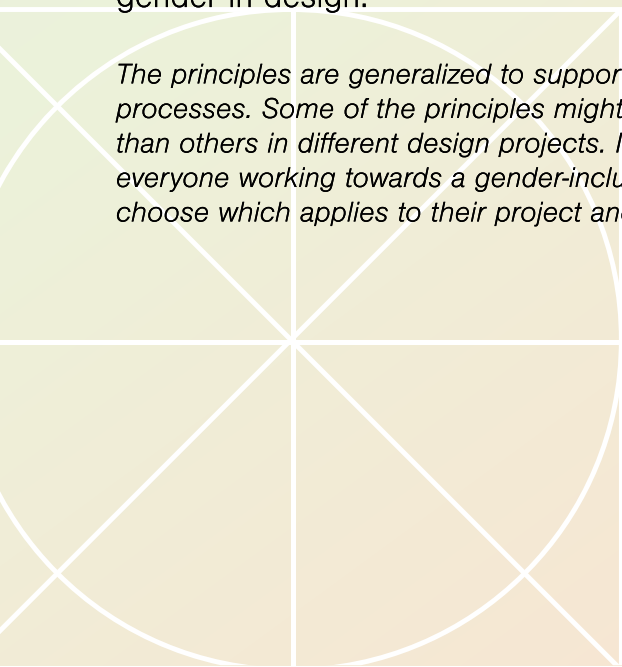
Principles

Including and empathizing with a diversity of people in the design process is an important element for good design. Understanding people, their behaviour and attitude, also includes understanding how they are influenced by social systems, norms, and values. However, this is often missed by designers because we too are influenced by the same systems.

Gender norms are hardwired in society and often overlooked due to a lack of awareness of our biases. Because designers have the privilege of influencing society with our design decisions, we are also responsible for accounting for the impact it has on social structures and systems.

The gender norms in society today are not only restrictive, but they also exclude the wonderful variety in and of gender. When norms and systems in society result in discrimination and exclusion, designers must be open to challenge these. Here are nine principles for working with and rethinking gender in design.

The principles are generalized to support a variety of design processes. Some of the principles might fit better or less than others in different design projects. It is up to each and everyone working towards a gender-inclusive future to choose which applies to their project and not.



01

Know your own gender bias

Prejudice is human - that's how we survive in this complex world. However, when prejudices become exclusionary and discriminating, we need to take a step back and look into the actual consequences of it. The first step in becoming a more open-minded designer is in becoming aware of our own gender bias and how we are affected by the binary gender model in society.

02

Know your privilege

Designers are privileged. We are in the front seat, if not steering the wheel, of influencing people and society. Because of this, we need to be aware of the impact we can make with our decisions. We must make sure we combat our biases, and design for necessary and desired changes, with a positive impact. We need to make the best of our privilege to design for an inclusive future.

03

Diversity promote inspiration: expose yourself to it

We are inspired and influenced by our surroundings. Because of the lack of representation of gender diversity in society, it is important for designers to actively expose ourselves to it. Acknowledgement of gender diversity encourages norm challenging and progressive ideas, which can accelerate the progress towards a more gender-inclusive society.

04

Think of who is inside and outside of the categories

Because of the binary gender system, we are prone to unconsciously put people in boxes of heteronormativity. This can lead to solutions that are punishing us when we break gender norms. Identifying people who are inside and outside of the categories we design for can enable aspects of the design that are important to combat biases, discrimination, and systematic oppression.



05

**Ask
why**

In the activity of involving people in the design process, we need to understand how their behaviour, attitudes, and experiences are influenced by the binary gender system. Though many might express to identify with the current gender norms, they are still restricting us in what is socially acceptable and not. Asking "why" can reveal the social structures which are worth criticising.

06

**Create acceptance.
Strive for affiliation.**

Society depicts gender as binary, making it difficult for people to imagine other options of expression, identity, and behaviour. When a gender-biased design is introduced to society, we continue to perpetuate the restrictive values and expectations of people, based on their gender. We have to start exposing people to gender diversity, not only for those of us who do not identify with the binary but also to create acceptance of it.

07

**Make it
relatable**

People need to see themselves in what is represented in society. Though a lot of famous icons have challenged the heteronormative, we also need the masculine mannequin in a dress, a diversity in sizes of crop-tops, sparkle on the male models, muscles on the female models, trans models, non-binary models, agender models, diversity. We need to normalize the relatable to avoid negative attention to those of us who just want to express ourselves.

08

**Pay attention to
semiotics**

Our language, behaviour, attitude, and surroundings communicate the binary worldview. Paying attention to how a design is communicated through language, product language, representation, and context is important in creating affiliation and acceptance for gender diversity. People need to be provided with opportunities, rather than restrictions.



09

Challenge your client and society

Designers often have to consider the demands of a client. We want what is known because what is known is efficient. But what is commonly known about gender in society is also exclusive, discriminating, and damaging. We have a responsibility as designers. Even asking your client "what about the non-binary people?" or presenting a transgendered persona can be enough to start the progress towards a more gender-inclusive society.



Motivation

Equality, diversity, and openness have, for as long as I remember, been topics triggering my interest. After studying design for almost five years, I have developed a strong belief in design being the field where I can express and develop myself and my values, and further, facilitate for others to do the same. With this in mind, it was, without doubt, I wanted my masters' thesis to revolve around increasing acceptance of diversity.

My initial motivation when diving into the topic of gender in design was to understand the influence of design on gender norms and challenges. During my education, I have learnt how design shapes our environment, and influences behaviours and attitudes. For this reason, we need to become aware of the consequences of what we put into the world. However, gender is an extremely intricate and compound concept, concerning everyone. For this reason, designers and the design practice are also influenced by the gender conceptions in society.

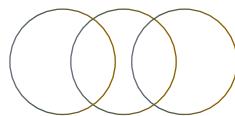
Autumn 2020 I conducted a project examining the interplay between gender roles and design. It was found that the lack of awareness of gender challenges in design contributes to perpetuating social stigmas and restrictive gender norms. Working with gender beyond the binary was also found to be neglected in design. My goal for this project was therefore to conceptualize the gender challenge to support and inspire designers aiming for inclusiveness and initiate future research.

This project focuses on the interplay between the binary gender system in society and design practice, mainly because...

...the binary gender model concept is a social construct and phenomena, affecting everybody,

...awareness of the effects of the interplay between design, people and society in the context of the gender system is important, and

...a gender diverse system is seldom noticed by designers, working to build a more inclusive society.

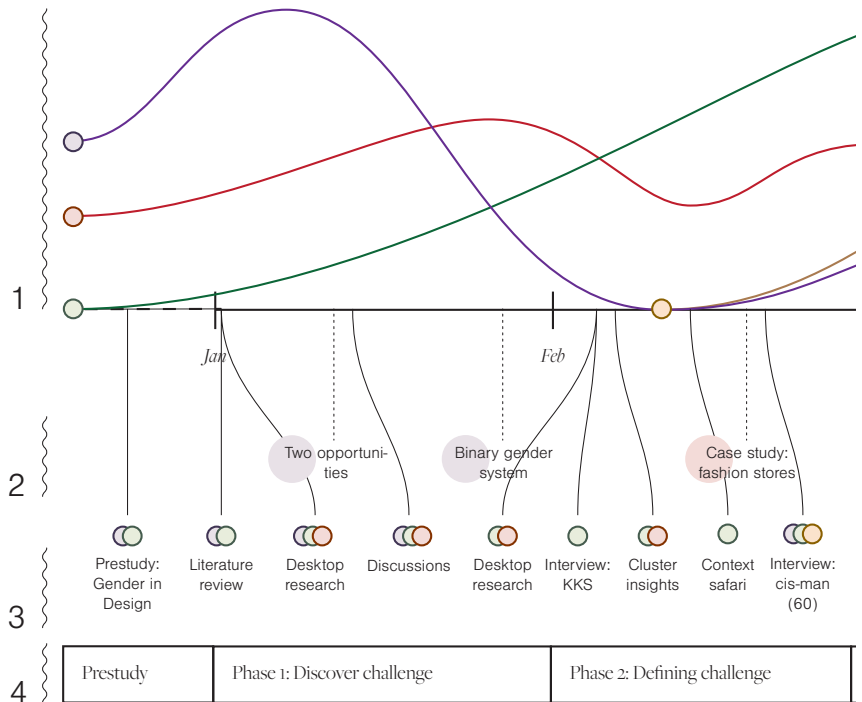


Disclaimer: I want to highlight that this project represents a part of me and my opinions. I have put my values into the work with my best intentions.

Process

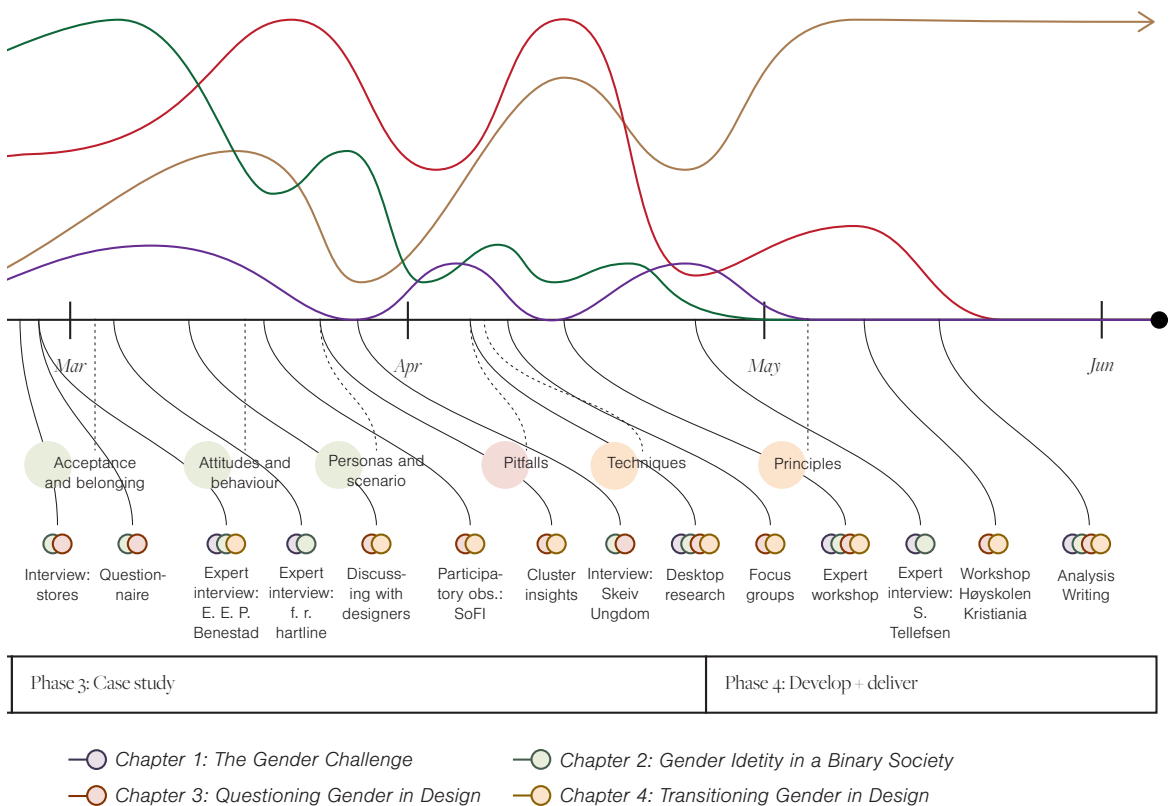
I started the process broad by diving into the gender challenge (see chapter 1). After gaining an overview of the challenges related to gender in society, the project converged towards the impact of the binary gender model, specifically (see chapter 2). The design opportunities and needs were explored with a case study on fashion stores and retail design. The exploration provided insights on how designers work with gender today

Fig 1 - Overview of process. Colours relate to chapter colours. (1) Height of the lines indicate gained insight and knowledge in each chapter-topic. (3) Each method is labelled with colours to communicate which chapter-topic it provided insight in. (2) Presented main decisions are cloured to communicate chapter-topic relevance. These had an impact on the following process. (1) Phases in project are indicated.



1. Amount of new insights at the time in each chapter topic, 2. Main insights/decisions influencing following process, 3. Methods, 4. Phase

(see chapter 3) and how we can rethink gender in design (see chapter 4). Finally, the results were categorized into common attitudes and behaviour towards gender diversity, common pitfalls for designers, recommended techniques to uncover biases and raise awareness, and principles for working with gender in design (see chapter 5). Fig 1 shows an overview of the process.



Methods

The project conducted prior to this examined the interplay between gender roles and design. The goal was to raise awareness of gender bias in design practice for design students. The project included a comprehensive literature review and desktop research, as well as the use of practical methods such as workshops and interviews with various experts. An important insight was how design perpetuates heteronormative, traditional and oppressive gender roles, because of a lack of awareness of gender bias. This resulted in the development of a workshop targeted at design students, aiming to raise awareness of the challenge. Insights and takeaways from the research were used as a starting point for this research.

To access different levels of knowledge on the topic in context, various methods were utilized throughout the process, steered by current needs and limitations. The methods used included desktop research, literature review, observation, a questionnaire, structured and unstructured interviews, focus groups, and workshops. The following pages show an overview of methods conducted throughout the project (Table 1). For further elaboration of the executions, results, analysis, and reflection, see the respective chapters. People, organizations, and experts participating in interviews, focus groups, and workshops were given information and consent form prior to the activity (Appendix A). All data was stored on a local server of NTNU.

Rethinking *Gender* in Design

Method	Why	How	Comment	When	Chapter
Discussing with peers and designers	Finding inspiration and motivation. This was also relevant in understanding the challenges from different perspectives.	Unstructured and relaxed discussions of the topic with peers, friends and designers when the topic came up and asking for input using social media, such as Slack and Facebook.	Restrictions due to COVID-19 limited amount of people to have a natural discussion with	Phase 1: Exploring the challenge Phase 2: Defining the challenge	1 The Gender Challenge 2 Gender Identity in a Binary Society
Context safari	To observe how gender is depicted and represented in society, specifically fashion stores.	Went to the city centre of Trondheim, taking pictures of various stores and depictions of gender. The images were categorized and analyzed in Miro.	COVID-19 hindered me in the number of shops and length of stay	Phase 2: Defining the challenge	2 Gender Identity in a Binary Society
Questionnaire	Gathering qualitative and quantitative data on how people, designers and society relates to gender	Created a questionnaire using Google Forms and distributed it on Facebook. The data were analyzed using Excel and Miro.	Easier to target people online since we are used to it due to COVID-19. On the other hand, people might be tired of online activities.	Phase 2: Defining the challenge Phase 3: Case study	1 The Gender Challenge 2 Gender Identity in a Binary Society
Interviews	Structured interviews when information from specific viewpoints was needed and to understand the challenges in society.	Created an interview template (Appendix B) that was used during the interviews. Reached out to people and various experts in sexology, medicine, biology, gender studies, design and organizations, fashion stores and design schools relevant to the topic and case study. The interviews were transcribed and analysed.	People are used to online communication, thus perhaps more willing to participate. Easier to schedule, because travel time was saved.	Phase 1: Exploring the challenge Phase 2: Defining the challenge Phase 3: Case study	2 Gender Identity in a Binary Society 3 Questioning Gender in Design 4 Transitioning Gender in Design

Method	Why	How	Comment	When	Chapter
Participatory observation	Retrieve more insights in the Retail Design study, what they learn, how they work, and how they account for gender challenges.	Was invited to participate in an online lecture at the School of Fashion Industry (SoFI), where two hours were dedicated to the students and teacher discussing questions I made in advance to the lecture.	I was able to join the lecture in Oslo online from Trondheim, as it was already online due to COVID-19. Would maybe not be an option otherwise. ●	Phase 3: Case study	3 Questioning Gender in Design
Experiments (see focus groups below)	Experimenting with how designers are influenced by the binary gender system and understand how to work with gender in design.	Experiments were created online using p5, Google Forms and SurveyKing.	Did not receive the desired amount of answers. Probably because of the amount of work it demanded from participants. ●	3 Phase 3: Case study	3 Questioning Gender in Design 5 Rethinking Gender in Design
Focus groups	Had to translate the experiments above to focus groups due to a lack of respondents.	Gave the participants a rapid design task to understand the influence of priming and the use of traditional design methods, focusing on personas. The focus groups were arranged online using Teams and Miro.	Easier to schedule time with different participants in an online arrangement. Participants could also choose a comfortable space to be in when participating ●	Phase 3: Case study	3 Questioning Gender in Design 4 Transitioning Gender in Design
Expert workshop	Gather experts from various fields to discuss the topic, understand similarities, differences and how design should relate to the challenge.	Contacted various experts in the fields of gender research, sexology and design, resulting in one representative from each field. Used Miro as a prop for presenting findings and points of discussion. The results were used as a template for an additional interview with a medical student. ●	Easier to schedule time between participants in different cities. A lot of unnecessary time spent on teaching participants new online tools they are not used to. ●	Phase 3: Case study	4 Transitioning Gender in Design

Rethinking *Gender* in Design

Method	Why	How	Comment	When	Chapter
Clustering	To synthesize the collected data (Hanington & Martin, 2012, p. 112) and find patterns. Finally, the results were analysed to understand how to work with gender in design.	Using digital post-its in Miro after every activity. As patterns emerged, additional literature was reviewed and activities conducted to fill gaps where more information was needed.	Used my knowledge in Miro. Convenient to have all insights in one place. Easy to change and recluster.	Phase 1: Exploring the challenge Phase 2: Defining the challenge Phase 3: Case study Phase 4: Develop + deliver	1 The Gender Challenge 2 Gender Identity in a Binary Society 3 Questioning Gender in Design 4 Transitioning Gender in Design
Personas and scenario	To sum up different values, attitudes and behaviour towards gender diversity to be able to understand how to create acceptance and affiliation for gender diversity for different people.	The data and insights from the questionnaire, interviews and desktop research were used to create personas and scenarios in the context of retail design.	Was not able to experience this in context due to COVID-19 restrictions	Phase 3: Case study	2 Gender Identity in a Binary Society
Testing and evaluation	Test and evaluate the value and effect of the findings from the project.	A one-day online workshop with 15 retail design students at Høyskolen Kristiania using Zoom and Miro. The results from the workshop were presented to five people in my circumference for feedback.	Was able to do the workshop online from Trondheim for a study in Oslo. Would maybe not be the case if it was not for circumstances due to COVID-19. However, was not able to talk to students during their discussions	Phase 4: Develop + deliver	4 Transitioning Gender in Design 5 Rethinking Gender in Design

Because of the circumstances due to COVID-19, most of the information and knowledge retrieval was arranged online. The physical distance made some desired methods impossible but forced me to be creative with the chosen methods. This was considered valuable, as it lowered the threshold to contact people all over the country, rather than being restricted by the need for physical attendance. Additionally, the time I would have spent on travelling went to other progressive activities. On the other hand, it was noted that it is easier to decline a participation request online, than face to face. Because of this, some of the methods had to be redesigned to gather participants. Some of the activities included therefore fewer participants than desired, but more than the results before the changes. Overall, the analysis of data from the various methods led to valuable and applicable insights on how to work with gender in design.

Sources

Literature review

To retrieve information on the topic, literature reviews were conducted throughout the process but mostly focussed in Phase 1. The research included academic papers and diverse literature in the fields of history, psychology, biology and design. The academic search engines Google Scholar, Oria, and the TU Delft online library were utilized to find academic literature, such as journals, books, and scientific research reports. Relevant literature on the topic was found by searching for the keywords “design”, “taboo”, “sex”, “gender*”, “norm*”, “binary”, and “identity”, separately and in different compositions. As the concept of gender is dynamic, it was considered necessary to contemplate this both in a modern and a historical context. Received and recommended literature from people I was in touch with, in conjunction with the project, were also reviewed.

The search was limited to English and Norwegian literature, mostly from the past 30 years, and the majority concerning Western societies, specifically Norway. Because previous research on gender diversity in design is limited, literature was reviewed with respect to the circumstances at the time and in light of recent shifts in research. The literature was chosen based on the relevance to the topic and to highlight different and opposing aspects of the gender discussion.

Desktop research

To obtain a more comprehensive understanding of the topic in a contemporary context, diverse non-academic literature, such as documentaries, chronicles, blogs, Ted Talks, news articles and design trends of everyday products and services were reviewed and analysed. The material included first-hand experiences of people and their challenges with the concept of gender and identity. This was mainly used for sensitization, empathizing, mapping of recent tendencies and the current discourse on gender.

Participants

Throughout the project, I have been in contact with a lot of interesting and wonderful people, who have motivated and inspired me. Their contributions to the research have given me a lot of valuable insights from different perspectives.

Organizations

Gender and identity are highly personal topics. It can be hard to find participants who wish to speak about the challenges with the binary gender system. For this reason, I found it helpful speaking to various organizations and initiatives that have experience and insights on the challenges many meet. KKS and Skeiv Ungdom are two of these. They have helped me in understanding societal and personal challenges deriving from the binary gender model.

People

Because gender affects everyone in various ways, it was important to include a diversity of people. The questionnaire was a great method for gathering input from various identities. Contacting different LGBTQIA+ communities on Reddit and Discord helped me get in touch with those of us who do not conform to the gender norms. The questionnaire was also sent to people in my circumference, using social media.

In addition to this, I also interviewed a 60-year old cis-man to understand the topic from the perspective of an older generation. Though many heteronormative cis-men are benefiting (more than others) from the binary gender system, these norms are also restrictive for them. However, this is seldom focussed on. Having a one-hour interview helped in understanding how the values and beliefs in the binary gender system play out in real life.

Experts

There are a lot of experts in various other fields working with gender challenges. In my research, I have had the honour of speaking to a lot of experienced and educated people, who have taught me a lot. Experts in medicine, sexology, gender research, design, and history participated both in individual interviews and workshops. Retrieving insights on how gender is handled in various fields enabled me to understand the design opportunity.

Stores

Since I conducted a case study on fashion stores, speaking to different stores in the city centre helped in understanding how the stores reflect upon the topic and how they depict gender. However, because of restrictions due to COVID-19, I was only able to speak with a small sample of stores. In this regard, I spoke to Livid and Carlings.

Retail Design schools

Design education is important in setting the foundation for and in inspiring young designers in their career path. For this reason, it was valuable to be able to speak with two Retail Design schools in Oslo, namely School of Fashion industry (SoFI) and Høyskolen Kristiania. Speaking to both teachers and students provided insights on how the current design education relates to the gender topic.

The activities were distributed throughout the process and scheduled when specific information or more expert knowledge was needed. This included, amongst others, discussion about gender identity and affiliation in society, the binary gender model versus gender diversity, and future scenarios. Having the opportunity to work independently and speak with experts in various fields, peers, and supervisors was necessary and enriching to understand the form, content, and purpose of what is needed in design while driving the project towards the final result.

Chapter 1

The Gender Challenge

How is society influenced by the concept of gender?

The thesis starts broad, investigating the gender challenge in society. This chapter presents the theoretical foundation for the project. Definitions of relevant terms related to and associated with gender are discussed. Followingly, knowledge and information on the history of gender and the binary gender system are presented. Two main societal challenges were uncovered and discussed as possible directions for the project. The chapter concludes with reasoning for the chosen direction, namely the influence of the binary gender system on society and design practice.

"One is not born, but becomes a woman"

(Beauvoir, p. 301, 1960/2010)

What does it mean to be a woman? Or a man? Is it defined by our physical attributes, genitals or gonads? Or how we dress, our tone of voice, the occupation or interests? The designed environment is filled with products, services, messages and spaces expressing and manifesting the gender-related presumptions and expectations in society. As consumers, we are subconsciously accepting images, ideas and ideals manifesting the social values and norms associated with the binary, heteronormative genders, man and woman. This concept is described as "gender roles" and normally represents two antipodes: the masculine male and the feminine female (Bem, 1974, p. 1). In other words, men are presumed to appear and behave masculine, whereas the opposing, feminine characteristics, are associated with women (Knoll et al., p. 867, 2011). Consequently, behaviour associated with one gender is considered inappropriate for the other (Bem, 1993, p. 125), thus contributing to the development of taboos and stigmas of contradicting behaviour. Moreover, the binary gender concept excludes variations and diverse human tendencies.

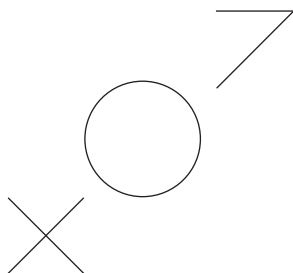
There is a distinction between the terms "sex" and "gender" in literature. Sex refers to the biological factors separating male and female, whereas gender is more often used when speaking of sociological and psychological factors (Terraza et al., 2020, p. 16). However, the latter is exposed to confusion with sex, as it is a constantly evolving term, defined by name, sexuality, external and internal genitalia, chromosomes and genes (Slagstad, 2018).

Defining “sex”

The biological term sex categorizes people by their physical attributes and mechanisms (Terraza et al., 2020, p. 16). Grounding in the reproductive functions, where male and female are considered the two main categories (“Sex,” 2020), this is often referred to as the “binary gender system”. However, modern research argues for a new way of conceptualizing sexes, namely as a spectrum.

Amongst others, Slagstad (2018) describes gender as a spectrum, with male and female as extremes. The spectrum model includes non-binary sexes and genderqueers, such as intersex and transgender, and induces sex and gender studies. The umbrella term “intersex” refers to people born with noncorresponding chromosomes and sexual anatomy (James, 2015) to the polarized concept of male and female (Terraza et al., 2020, p. 16). This challenges the common biological categorization of two sexes, thus the growth of research and debate on how to handle such cases. Moreover, research on sex and gender in biology and medicine is also precipitated by people who do not identify with the gender they were assigned at birth, medically described as gender dysphoria (commonly known as “transgender”) (Clemens et al., 2017, p. 2). A study in Germany provides evidence on how the brains of people with gender dysphoria differ from the brains of males and females (Clemens et al., 2017, p. 2).

On the contrary, critiques of the spectrum theory argue how the number of such cases is not influential enough to have an impact on the theory of binary genders (Masvie, 2020). Hence, intersex, transsexuals and other gender variations are from a biological perspective considered “deviations” of the main sexes, male and female (Gundersen, 2020).



Defining “gender”

Speaking of gender in a social context, more ambiguous factors are accounted for. Originating from the biological understanding, gender refers to social roles, meaning characteristics or attributes associated with and expected from a particular sex (“Gender,” 2011; Terraza et al., 2020, p. 16). Bem (1974) explains how the gender structure is a set of polarized characteristics, being either masculine or feminine (p. 155), strongly associated with being male or female, respectively (Knoll et al., 2011, p. 869).

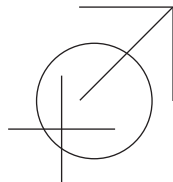
This system, where the biological separations of the sexes have been brought onto social processes, creates a structure of social relations (Connell & Pearse, 2009, p. 11) on a symbolic, structural and individual level (Ehrnberger et al., 2012, p. 87). Knoll et al. (2011) argue how such associations contribute to creating stereotypes, lacking sensitivity in reflecting variety in the behaviour of and towards genders (p. 867).

Furthermore, Butler (2011) argues for a more fluid gender theory, with the existence of many possible categories of gendered and sexual practices, besides the binary definitions (p. xxxiv). In other words, gender identity depends on, amongst others, age, ethnicity, sexual orientation/identity, social status and/or (dis)ability (Council of Europe, n.d.). Nevertheless, the reviewed literature reveals that the perception of two main, opposing genders, being imposed with distinct gender roles, are deeply integrated into most Western societies.

The sex/gender-relation

Literature on the theme in biology revealed some contradictions in the concepts and definitions of sex and gender. As the majority of the scientific research considered sex to be more complex than the strict, binary categories of men and women, others argued against this in their criticism of a society based on information dissemination of knowledge on the variety of genders and sexes. In other words, recent tendencies in Western societies show an increased focus on acknowledging and researching gender and sex fluidity. The criticism of the gender spectrum leans on arguments of how only a small number of people “deviate” from what defines woman and man biologically. Further, the critics question whether the increase in the numbers of treatments on transsexualism stems from the “deconstruction of man and woman” (Gundersen, 2020). Although it might take some time before this controversy settles, we still need to discuss how this affects the design practice; How should designers deal with the relations and differences between gender and sex, and how they are handled in biological and societal contexts? Do we want to design a society for the two, binary stereotypes, or is the future including all kinds of gender identities? If the latter, what needs to change?

Gender is a fundamental part of a person's identity (Bufdir, 2020). "Gender is culturally constructed: hence, gender is neither the causal result of sex nor as seemingly fixed as sex" (Butler, 2011, p.6). However, the dualistic presumptions about sex are implicitly preserved through the binary gender system (Butler, 2011, p. 10). Consequently, gender mimics the binary construction of sex through norms, beliefs and conventions. When society puts up these dichotomous norms on how we should behave, based on our sex assigned at birth, we are restricted, and variations and diversity within human beings are ignored and oppressed. Sophia the robot illustrates gender as a social construct. The robot was created by Hanson Robotics and activated in 2016. Sophia is commonly referred to as "she", and holds characteristics associated with women. Although the robot does not have any biological sex, society regards Sophia as a female, based on these characteristics.



Evolution of gender roles

Either speaking of the biological sex or the social gender, we are consciously and subconsciously imposing different sex and gender roles onto people. Stereotypical gender roles are collections of norms and attributes based on the heteronormative, binary genders. These beliefs are stated to distinguish women from men (Ashmore & Del Boca, 1981, p. 16) and are often influencing our thoughts, feelings, and behaviour (Heiberg & Benestad, 2020).

In a study of gender roles in a historical context, Hansen et al. (2015) suggest the Neolithic Revolution is a major factor in the formation of modern gender roles (p. 366). This revolution marks the transition from a hunter-gatherer society to an agricultural society. Further, their research presents how the societal contribution was more equally distributed amongst the sexes in the hunter-gatherer society (p. 367). This claim is supported by a study on female hunters from 2020, where the researchers state that “30 and 50 percent of big game hunters could have been biologically female” (Wei-Haas, 2021).

As the agricultural society demanded more workforce, women were more often pregnant than their hunter-gatherer ancestors,

leaving them with less time to take part in activities other than child-rearing (Diamond, 1987, p. 66). Simultaneously, men provided for the family and society, resulting in the growth of patriarchal values in society (Hansen et al., 2015, p. 368), initiating the development of the Separate Spheres Ideology (SSI) in the 19th century.

The SSI manifested an empirical separation of the sexes, where women belonged to the private sphere and men dominated the public sphere. Women were considered weak, and men vile. Consequently, allowing women to the public space was regarded as a perilous act (99% Invisible, 2020). Women were relegated to the world of domesticity, away from the world of work, which belonged to men. This dualistic and divided categorization of gender, both psychologically and physiologically, resulted in the “emergence of a set of polarized value systems and ways of relating to the world” (Schroeder, 1997, p. 357).

Since then, machines have surpassed the human workforce and the rise of feminism has progressively desegregated the sexes in society. With increased research and knowledge on sex and gender in the past 30 years, acceptance of variety and diversity has increased (Knoll et al., 2011, p. 867). Nonetheless, present gender roles and norms of Western societies are bearing the mark of being shaped by the former segregation patterns (Hansen et al., 2015, p. 368).



Candace Owens ✓
@RealCandaceO



There is no society that can survive without strong men. The East knows this. In the west, the steady feminization of our men at the same time that Marxism is being taught to our children is not a coincidence. It is an outright attack.

Bring back manly men.

[Oversett tweeten](#)

Vogue Magazine ✓ @voguemagazine · 13. nov. 2020

"There's so much joy to be had in playing with clothes. I've never thought too much about what it means—it just becomes this extended part of creating something.": Read our full December cover story starring @Harry_Styles here: vogue.cm/Pdns6GQ



8:16 p.m. · 14. nov. 2020 · Twitter for iPhone

Illustration - Tweet illustrating the tensions in the gender discussion. Source: (Owens, 2020)

As established values in society, the mindset of gender roles is criticized by many scientists and advocates in different fields. Bem (1993) explained how expectations, behaviour, beliefs, thoughts, and preconceptions are affected by the concept of masculine men and feminine women. Additionally, Bem (1993) argues that behaviour that is not “assigned” to the biological sex is considered problematic or taboo (p. 125). Moreover, some state it promotes the idea of masculinity and male being the standard, while femininity and female are subordinates, whose purpose is to fulfil male heterosexual desires (Beauvoir, 1960/2010; Ehrnberger et al., 2012, p. 89; Parsmo & Guzmán, 2019). Consequently, being a man with feminine traits is regarded as more controversial than a woman with masculine traits (Adler et al., 1992, p. 174).

Other societies and cultures

The binary gender model is not universal. “The third gender” is a term used for people who do not fit the Western idea of a binary gender model and has been acknowledged and celebrated in a lot of First Nations around the world. Though a lot of the doctrine was lost with the colonization of many countries (Express Web Desk, 2017), many societies and cultures still practice a more fluid gender model today.

Hijras

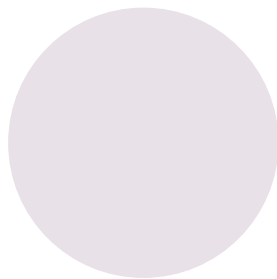
The term “third gender” has been used to describe hijras of South Asian countries, such as India, Bangladesh and Pakistan. Hijras mainly describe people who are assigned male at birth and express their identity in a conventional feminine manner. Some, but not all, intersex people and transgender women are also identifying with the term hijra (Goel, 2019).

Sistergirls and brotherboys

Many trans and gender diverse people in some Aboriginal and Torres Strait Islander communities identify with the terms “sistergirls” and “brotherboys”. Today, sistergirls and brotherboys face a lot of challenges, due to the indoctrination of the binary gender model during the colonization (Moon, 2020).

Native Americans

The colonization of America forced the indigenous people to acculturate to a European culture with a binary gender model. Before this, Native Americans embraced gender fluidity. Gender diversity was considered “normal”, and those who adopted gender-fluid roles were often considered gifted (Express Web Desk, 2017).



The presented examples are just a fraction of the gender diverse acknowledgement in the world. However, Western societies “tend to think that [it] is something specific to that culture rather than reflecting a broader tendency of humans” (f. r. hartline, personal communication, March 3, 2021).

Gendered design

By gendered design, I mean the act of designing for a specific gender in mind, consciously and unconsciously influenced by binary gender values. This often results in solutions perpetuating and reproducing stereotypical gender roles (see Fig 2) and expectations, such as the dichotomy of “hard” and “soft” for men and women respectively, in line with the gender values from SSI.

Gender depends on and is formed by many variables in society, where design plays a huge role. Design practice has a long history of mirroring gender roles and patriarchal values in society. For instance, when we test crash cars, male dummies are used as the standard, ignoring the implications and challenges of more than half of the population (C. C. Perez, 2020).

The binary segregation is especially evident in the history of fashion design, where gender roles were made literal and obvious through the clothing and laws in the 19th and 18th century (The Guardian, 2020). Wearing garments intended for the “opposite” sex resulted in punishment. This can be compared with the mental strain from social punishment today.

Moreover, Schroeder (1997) explains how also “seemingly gender-neutral items, such as briefcases, telephones,

handguns, and mutual funds, have masculine and feminine traits associated with them through marketing campaigns designed to appeal to and reinforce sexual stereotypes” (p. 357). As design interacts with gender identities, design contributes to influencing gender values, expectations and behaviour in society. This has, and still is reflecting and shaping a strict sex-role division (Schroeder, 1997).

Grady (1981) argues for how one “should avoid single sex designs unless they are justifiable on scientific grounds” (p. 634). Inclusion and exclusion of gender in design must be justifiable, such that possible sex-stereotyped biases are detected and corrected.



Fig 2 - Overview of feminine and masculine product language respectively in shower gel bottles.

Simultaneously, design is incomplete if it does not include gender (Brandes, 2008). In other words, if we are not aware of and do not consider the inequalities and discrimination stereotypical design lead to, it is impossible to avoid. Designing with good intentions is not enough when the outcomes have negative consequences for people, stakeholders and society as a whole.

A lot has happened in Western societies in conjunction with gender since the publication of *Men are from Mars, Women are from Venus* by John Gray in 1992. With more research on gender in various fields, such as medicine, biology, social anthropology, language studies, psychology, to name a few, we are gradually understanding its complexity. Alongside research, voices of non-binary gendered are risen, promoting a more fluid gender model. As people are making a stand and choosing gender as a part of their identity, design needs to respond to these shifts. The question is how.

Social impact

The danger with gendering

The gender roles and values in our society today are social forces based on the binary gender model. Regardless of our gender, we struggle to establish our identity (Heilman et al., 2017, p 20). However, when we are not able to meet these expectations and norms, we are punished by society.

According to the gender strain theory, contemporary gender roles and values lead to health-damaging consequences, more so for men than women (Pleck, 1995, p. 12). In their study on the relation of Mexican, American and British men with gender norms, Heilman et al. (2017) found how many young men find affiliation in what they define as “the Man Box”. The Man Box describes how men should be, and what many strive to accomplish, in line with the values from the SSI, including toughness, aggression, and heterosexuality. Conforming to these expectations provides many young men with “a sense of security and safety” (Heilman et al., 2017, p. 60), although it can result in negative consequences for themselves and others around them.

“The majority of men who adhere to the rules of the Man Box are more likely to put their health and well-being at risk, [...] to have used violence against other young men [...], and to have sexually harassed women.”
(Heilman et al., 2017, p. 60)

The gender norms also influence women negatively. The feminine norms often tend to promote unattainable beauty standards, leading to eating disorders (Heise et al., 2019, p. 2442-2445). Contrastingly to the masculine norms, women are also expected to smoke, drink, and express their sexuality less than men (Heise et al., 2019, p. 2445). Moreover, as the masculine man is regarded as the standard in our society, challenges concerning many women (and others who do not conform to the masculine ideal) are often not considered in the design process. When Apple launched their first version of their Health app, they forgot about half the population by not considering the menstrual cycle (S. Perez, 2015). And, as mentioned, car design is putting lives at risk by using crash-test dummies based on the “average” male (C. C. Perez, 2020).

As we develop into gendered beings, we are influenced by heteronormative and binary expectations. These expectations are perpetuated and communicated through how we design our environment. When design relies on gender stereotypes, we continue to promote sex-typed discrimination and structure pathways to poor health (Heise et al., 2019, p. 2440).

Influence on people

A questionnaire was made to understand how people relate to the heteronormative gender norms and expectations in our society (Appendix C). To retrieve as much diverse input from as many as possible, the questionnaire was distributed via Facebook to friends, acquaintances and various online communities, available for two weeks. The questionnaire was communicated in Norwegian to target Norwegian-speaking people. This resulted in 47 anonymous participants, in the age range from 20 to 71 years, including cis-gendered, transgendered, and non-binary people. Though a larger number of respondents would have strengthened the outcome, 47 was considered valuable. Variety in (gender) identities and generations provided the study with a broad indication of what people thought, as well as triggering possible directions. Additionally, the questionnaire included many qualitative questions, providing me with deeper insights into peoples reasoning. Analysis of the answers from this questionnaire (see Appendix D) were used to map current attitudes towards gender diversity and how people relate to their own gender identity in a binary society.

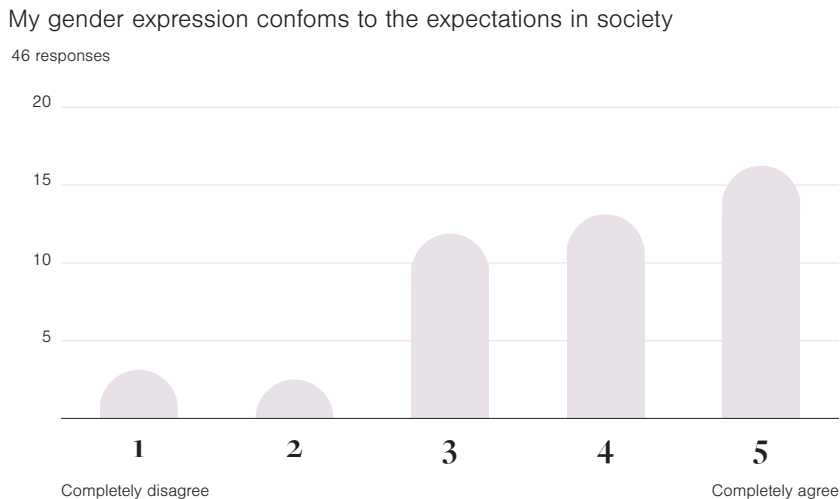


Fig 3 - Results from questionnaire

The results indicated a general behaviour of conforming to gender norms (see Fig 3). However, in light of the binary gender system, one could ask if the answers are influenced by the binary gender values. Because the gender norms are expressed on a systematic level, these behaviours and attitudes might have been internalised. The consequence of this is a universal and unconscious belief of the contemporary gender norms to be “correct”. Further, this would lead to social punishment of those of us who do not conform to the norms, making it difficult for us to see it as an option.

I feel restricted by the gender-related expectations in society

46 responses

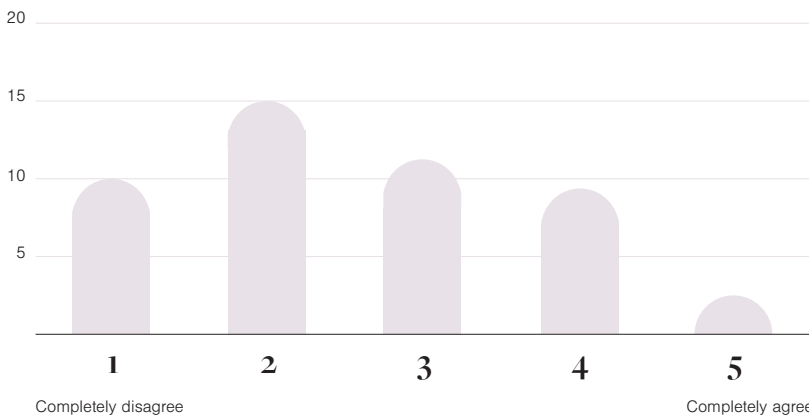


Fig 4 - Results from questionnaire

Though the majority of the participants relate and respond to the gender norms, the results indicated a general feeling of being restricted by them as well (see Fig 4).

“There are certain things which are not as accepted to do, as it can be perceived as more masculine, thus something men should do”

(cis-woman, age 20-29, answer from questionnaire)

“A challenge is that others can look down on you if you show your feminine side as a man. You can be perceived as weak and less ‘tough’”

(man, age 20-29, answer from questionnaire)

“Through life, I have felt insecure because I have experienced that my words or actions, which in my eyes are similar to what a male classmate or colleague have said or done, have been received negatively, while what the boy/man said/did, did not get the same reaction”

(cis-woman, age 20-29, answer from questionnaire)

Attitudes and behaviour which do not align with the gender norms are not socially accepted in society today. The practice of gendered design contributes to perpetuating the values ascribed to the binary genders. Additionally, because of the heteronormative binary representation of genders, variations of the binary and gender are not acknowledged, leading to stigma, discrimination, and negative impact on health.

“Unfortunately, we live in a society where trans-people are often regarded as less worth than cis-people. I have experienced not being taken seriously by health personnel, and having things screamed at me.”

(trans-woman, age 20-29, answer from questionnaire)

Why is it still present?

The system justification theory describes the generation of ideological dissonance. The theory explains that this dissonance results from the combination of present visible inequalities and a belief in a fair world. To reduce this dissonance, we have a psychological motive to justify socio-political systems (Gilovich, 2019, p. 232-233), such as the binary gender system. Instead of confronting and protesting against the inequalities deriving from the gender norms, it is easier to accept by interpreting them as desirable, fair, and legitimate.

Interestingly, remarkable proofs of the theory are to be found in studies of compensating gender stereotypes. These studies describe a common belief of how those of us who are less privileged in society still benefit from several compensating factors. This applies to for instance to the inequalities of women, which is justified with how “women are nicer, warmer and more social than men”. However, studies show that this “gender difference” is not true (Connell & Pearse, 2009, p. 42-43). These stereotypes provide ideological support to the status quo, leading to acceptance of contemporary gender norms (Gilovich, 2019, p. 233).

Moreover, as mentioned, some of us find affiliation in gender norms and values. When we meet the expectations of society, we feel a sense of accomplishment. Combined with the fear of social punishment if the expectations are not met, or even “worse”, transgressed, can force us to continue conforming to them.

Current discourse

Today, we recognize a shift in Western European societies, from the binary gender model towards a more inclusive and diverse understanding of the concept of gender. Boundaries are being pushed as feminists are demanding equality, the voice of the queer are rising, and medical practice allows sex change. Simultaneously, the ideas and ideals of the masculine man and the feminine woman are still deeply integrated into society and our mindset.

After researching literature, watching documentaries, and reading posts on social media, I was left with a lot of insights. To find a direction, comprehensive clustering and categorization of the findings were done (Appendix E). This led to a lot of questions which were further clustered (Appendix F). Two possible directions for this project were found. The gender-related challenges can be approached from two main problem-causing viewpoints; (1) A white man's world and (2) The binary society.

I account both of these directions as valuable and important for design. Nonetheless, for this project, it is most valuable to focus on one. The question is which one needs the most attention now? To be able to choose a direction, I investigated current discourse in society and design.

View 1: a white man's world

Gender equality. Looking into how design can create equality between the genders.

Challenge: how gender inequalities are manifested and outplayed in society, being affected by patriarchal values and misogyny.

This approach targets the inequalities in society which are based on the white man being regarded as the standard and "normal". Specifically, it focuses on equality between men and women, diving into the consequences of the patriarchy. It addresses how (traditional) gender roles steer our expectations, relations, perceptions, preconceptions, and interpretations of and behaviour towards ourselves and others. Additionally, it tries to cover the influence of design on interpersonal relations and interactions.

View 2: gender binary world

Gender diversity. Looking into how design can create acceptance of gender diversity.

Challenge: how the binary gender system in society, which leads to oppressing gender roles, unrealistic gender ideals, and incorrect gender stereotypes, limits people in exploring and expressing their own identity.

This agenda focuses on how design relies on heteronormative gender stereotypes. Specifically targeting stereotypes that explicitly or implicitly, consciously or unconsciously are based on binary gender values. This approach mainly targets stigma and inequalities related to behaviour and experiences which do not fit the binary gender expectations, for all genders. In other words, it points out the limitations and stigmatizations the binary gender system leads to in exploring and expressing our gender identities.

Existing research and solutions

As we grow up, we learn about social norms and values through our environment, parents, and peers. Being a part of the environment, design makes a significant factor in shaping our behaviour and values. Accordingly, the design of products, systems and practice affects the gender values and norms in society by reinforcing or challenging them.

We see an increasing tendency to focus on solutions paying attention to gender in design. Throughout the project, solutions targeting gender issues were found and noted. Important contributions to society are organizations and rewards such as Unstereotype Alliance, The Other Box, iphiGenia, and Glass Lion which are also shedding light on gender challenges. Fashion brands such as Byredo, Origami Customs, and Guccis' new Gucci MX concept are recent contributions to gender diversity. However, these are exclusive brands, targeting those of us with economic stability. Simultaneously, the rest of us are left with commercial brands such as H&M and Carlings who are still very much representing the binary.

Some recent visual designers are also paying attention to the recent shifts in gender expressions lately. Here we can see a difference in how designers approach the challenge. While many focus on gender inclusion through androgyny, such as Cabeza Patata others highlight the challenges more critically, such as Kate Moross and Kruttika.

The Ordinary, a brand selling skincare products, have the same approach to the gender challenge as Cabeza Patata. In

contrast, The Ordinary strips their products down to neutrality, rather than playing with a diversity of expressions. Though this can be a safe solution, it has the pitfall of becoming identity-less and monotonous.

There are also brands focusing on breaking with the gender norms and roles, targeting the binary genders. Estrid is an upcoming brand selling razors for women. The brand focuses on autonomy and the idea that shaving should be a personal choice for women. War Paint promotes and sells makeup targeted at men to “break the stigma that makeup is solely for women” (Warpaint, n.d.). Likewise, the Aurosa concept advertises beer for “all those non-conforming females who refuse to follow the crowd [and challenges the] status quo [by bringing] a new approach to the traditionally masculine industry” (Aurosa, n.d.). Though these brands claim to challenge contemporary gender norms, they are also conforming to the binary conceptions of feminine women and masculine men.

Conclusively, there is a commercial focus on challenging current gender norms in society. However, the majority of the existing solutions on the market target people who are financially privileged, thus capable of challenging norms. Cheaper products are prone to convert towards neutrality, lacking in expression and identity. Moreover, there is an evident tendency for many brands to conform to gender norms while proclaiming to challenge them. The presented visual designers are examples of approaches to the gender challenge which

both challenge the norms while retaining expression and identity. Nevertheless, the presented examples are single solutions to the problem. How can we generalize this knowledge and make it accessible for designers to work with gender challenges?

Methodologies and toolkits

In the design practice, several methodologies and approaches are focusing on inclusion and equality. Universal design, inclusive design, and design for all are just a few examples. Additionally, the development of strategies and methodologies specifically paying attention to gender inequality and inclusion is increasing. To illustrate the current progress in the relation between gender and design, five such methodologies were investigated in the project before this research (see Table 2). This includes gender-blind design, gender mainstreaming, gender-neutral design, gender in design, and international gender design network (iDGN). Additionally, three existing toolkits with the same focus are presented.

There are existing products, tools and methodologies in the field of design that challenge the heteronormative mindset, as seen in Table 2. However, few of these account for gender fluidity and mainly focus on equality between the binary genders. The design approaches mentioned lack

Table 2 - Existing methodologies and toolkits with a focus on gender challenges.

1 The Gender Challenge / Current Discourse

Methodology	Goal	Gender model	Gap
Gender-blind design	Disregarding gender as a factor in human interactions (EIGE, n.d.)	binary	Do not recognize biological differences between females and males
Gender mainstreaming	Accounting for women's and men's interests and concerns (Council of Europe, n.d.)	binary	Does not explicitly account for gender fluidity. No clear design guidelines or tools to create awareness
Gender-neutral design	Avoiding gender stereotyping and association (Magalhães, 2020)	binary	Do not account for extreme feminine and masculine characteristics
iGDN	An international initiative dedicated to putting Gender and Design on the agenda (iGDN, n.d.)	not defined	No tangible solutions to create awareness in the design process
Gender in design	Integrating gender in design by providing toolkits with comprehensive methods (Stanford University, n.d.)	fluid	Missing a tangible tool that efficiently creates awareness of gender bias in the design process
Inclusive design: Mixing	A methodology used to create the all-inclusive public restroom concept, Stalled! (Stalled!, n.d.-a)	fluid	No direct guidelines or tools to utilize the findings in future projects
Toolkit			
Method kit for equal places/ gender equality	Based on gender mainstreaming. Cards to discuss and improve equality within organizations (MethodKit, 2020)	binary	Focus on equality between (binary) genders and is not explicitly targeting designers
Gender equity toolkit	Used when designing for gender equality (male and female) in the workplace (Acaroglu, 2016)	binary	Only considers leadership and companies
Gender in design toolkit	Address the difference between sex, gender and intersectionality. A collection of critical questions, case studies and design methods.	fluid	No tangible solution/tool to use for designers
Gender and Security Toolkit	For people working with and for others who have been deprived of liberty by integrating a gender perspective (DCAF et al., 2019)	fluid	Do not concern everyday products and services used in Western societies.

references to tools or guidelines on how to become aware of gender bias when designing. Additionally, the tools accounted for do not explicitly target designers. Moreover, despite the existence of inclusive design approaches and toolkits, designers tend to rely on stereotypes of men and women (Rommes, 2006, p. 1). The interpretation of the findings suggests a lack of design interventions on how to work with gender in design. Designers need to become informed of how their practice is influenced by heteronormative and binary gender values and economic forces, such that awareness of possible biases is raised and consequences of these can be controlled. When we understand how the binary gender system influences our practice and our impact on society, existing tools and methodologies can be utilized in a controlled manner.

Other fields

To understand the status quo of the progress in solutions and mindsets challenging the binary gender system, additional research mapping the progress in other domains was also done, prior to this project. The top five suggestions when typing “gender inclusive” in Google were looked into. This included gender-inclusive classroom, recruitment, language, swimwear and architecture.

Gender-inclusive classrooms

Genderinclusiveclassrooms.com was one of the top results when searching for “gender inclusive classroom”. This website focuses on making sexuality and gender topics in the



education of children, “equipping educators with the tools they need to foster safe, welcoming gender-inclusive classrooms” (Butler & Slattery, n.d.).

Gender-inclusive recruitment

Gender-inclusive recruitment focuses on minimizing the risk of gender bias against applicants by removing any information identifying their gender. The Victorian Government developed a concept named Recruit Smarter, focusing on addressing unconscious biases at the recruitment stage, building on the values in diversity (Victorian Government, 2019). Likewise, the UK Civil Service did similarly in their Name Blind Recruitment concept, paying attention to merit rather than the background, race and gender of the candidates (Manzoni, 2015).

Gender-inclusive language

Language plays a huge role in how we express ourselves and perceive the environment. The UN definition of gender-inclusive language is speaking and writing in a way that does not preserve gender stereotypes. One important strategy the United Nations addresses is not to make gender visible in communication if it is not relevant (United Nations, n.d.).



Gender-inclusive swimwear

Designing clothing that is close to the body might be a challenge as biological perceptions of what defines a man and a woman influence the form. For instance, there is a general convention allowing men to be topless, while the same for women is sexualised or considered indecent. Companies like



Outplay and Syrup try to break these differences, designing swimwear that is targeted at all genders and regardless of disability. However, when trying to design something for all genders it is easy to fall into the trap of neutrality, to the point of being expressionless. This is especially evident in the former company.

Gender-inclusive architecture

Buildings define the environment and influence how we live, move, and behave in society. The World Bank found that cities work better for men than for women, as they have been planned and designed to reflect the traditional gender roles (Terraza et al., 2020). Based on this, they created a handbook intending to «illuminate the relationships between gender inequality, the built environment, and urban planning and design» (p.7) by including the voices of women and gender minorities.

This reveals how the research on the topic of gender is evident in other fields. We have a better understanding of the consequences of gender division in modern society, thus being more able to act upon them. Some attempts on design approaches and tools with a focus on gender and inclusion are presented, though it was limited and not largely proclaimed. However, the question might not be whether there is a lack in development, but a lack in the pace of development in the field of design. How can we learn from other fields and make the knowledge more available for designers?

Without deviation from the norm, progress is not possible.

Frank Zappa

Reviewing both scientific and non-scientific literature gave a holistic understanding of the challenge of gender roles in design in a historical and contemporary context. When compared to the progress in other fields, the field of design seems to lack the same progression. Designers need to understand the influence of the binary gender system on our practice, and tools on how to work with gender diversity in design. This way, designers can become in control of the implications and consequences of their work.



Which needs more attention?

Equality between men and women has been a hot topic in Nordic countries over the past few decades. As a result of the feminist movement and other societal values and drifts, the Nordic countries have the highest scores in the Gender Inequality Index 2020 and the Global Gender Gap Index 2021. This indicates a shift towards a more equal society. Alongside this evolution, tools and frameworks helping in maintaining the drift, have been created, both directly and indirectly connected to design. The next step is for society as a whole to embrace the existing research and tools, and to realize their intended effect in our work.

However, after researching literature, watching documentaries, and reading posts on social media, a lack of sufficient existing focus on the current rising movement on gender diversity was found. The relevant questions deriving from the insights were further categorized by challenges of the binary gender system, namely “stigma”, “belonging”, “acceptance”, “discrimination”, “stereotypes”, “insecurities”, “health”, and “gender bias” (Appendix G). A With societal forces inducing research in the fields of medicine and biology, we have a more complex and comprehensive understanding of what gender is. Gender fluidity and diversity have entered the debate of gender equality. It is time to visit the concept of gender diversity in the context of design and evaluate the value of gender in design.

For this master's thesis, I have therefore chosen to focus on the influence of the binary gender system in society and design practice. It has come to my understanding that we are in a state and time where genders beyond the binary need to be accounted for and acknowledged. For design, this means rethinking and redefining what gender in design means.



1 The Gender Challenge

Main insights

How is society influenced by the concept of gender?

The binary gender model is hardwired in our society. It is common to think of sex and gender as dualistic concepts, consisting of woman and man (Bufdir, 2020). The binary gender system deriving from this includes norms guiding our behaviour and expectations of others, influenced by beliefs, culture and other societal factors.

The binary gender system influence and creates restrictive and oppressive norms, behaviours, attitudes and expectations

Despite the growing focus on gender research over the past 30 years, there is little research explaining how gender theories apply in the field of design. The results from the literature review and analysis of existing products on the market provide evidence on how the gender system is partly being shaped and reinforced by the interplay between design and stereotypical and traditional gender perceptions. Besides, the analysis of non-academic literature reveals a lack of focus on gender diversity and inclusion in contemporary design practice.

Lack of awareness and focus on the interplay between the binary gender system and design result in solutions perpetuating heteronormative norms and values

The most interesting literature and discussions were found in non-scientific sources, such as chronicles, documentaries, social media and podcasts. These gave insight into experiences and feelings towards the generalization and stereotyping of gender and the influence of the binary gender system. Assembling scientific and non-scientific literature gave an understanding of how the situation is today in Western societies and the scope and progress of research in biology and medicine over the past 30 years. Comparing this with design practice and thinking, revealed the lack of research and progress in this field.

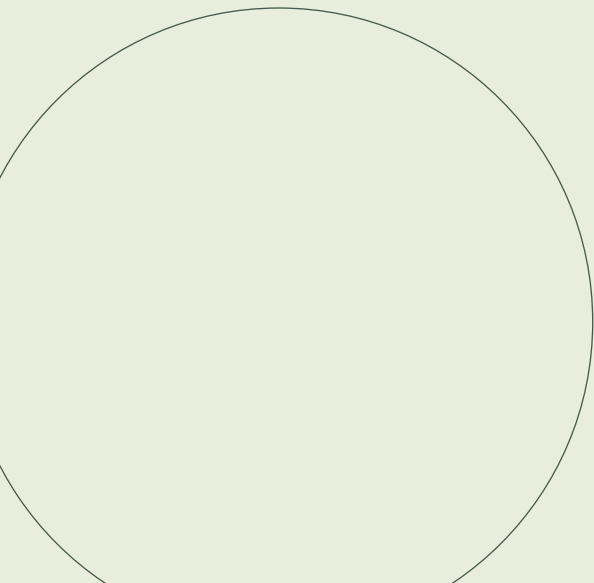
There is a lack of research and solutions on how to work with gender challenges beyond the binary in design

Knowing the current discourse on gender diversity, I found it interesting to investigate how the binary gender system is experienced by individuals. The next chapter addresses the influence of the binary gender system on our behaviours and attitudes.

Chapter 2

Gender Identity in a Binary Society

What does gender mean to people and how do we relate to the binary gender model?



This chapter addresses how people grow up to gendered beings, influenced by our designed environment. Fashion stores were found to be great representatives of the contemporary gender narrative in society. Therefore, a case study on fashion stores and retail design was conducted, revealing the influence of the binary gender system on designers and design practice.

Be yourself; everyone else is already taken.

Oscar Wilde

Humans are amazingly complex animals, and we are still learning. As we increasingly move towards a more individualistic society, we are expected to find our own, unique identity. But in our journey of finding and expressing our true self, we are restricted by gender roles, norms, biases, and stigma in society. These restrictions are evident in products, systems, language, technology, and design, amongst others. If awareness and knowledge of the gendered implications in society are not raised, we continue to reproduce these restrictive norms by unconsciously letting our design be affected by the same restrictions. In turn, we continue feeding the society with manifestations of the heteronormative, binary gender system, stereotypical gender perceptions and gender roles. This can have considerable consequences - many of which are not accounted for or predicted.

Further, these told and taught ideas and ideals of gender and gender roles are passed onto our children (Bem, 1993). What is the role of design in this process? How is design affected by the stereotypical gender roles and how is design substantiating such values in society?

Martin et al. (1990) describe how the perception of gender roles develops in a series of four stages while growing up. The taught behaviour towards others, ourselves and products are reinforced by the environment we design and continue into adolescence and adult life (Witt, 1997).

Table 3 - Amount of top 100 costumes for children at Amazon targeted at girls, boys or both/neither.

Targeted at	Type of costumes	Number
Girls (explicitly)	Princess dresses, nurse	46
Boys (explicitly)	Superheroes, police officer, firefighter	28
Neutral	Superheroes, scientists, misc.	26
Total		100

The first stage concerns what children up to the age of four learn about the direct association between artefacts and the sexes, such as “cars belong to boys” and “dolls belong to girls” (Martin et al., 1990, p. 1901). This behaviour is a clear consequence of how the separation principle is expressed through product language and design (Ehrnberger et al., 2012, p. 88). To test this statement, a quick search in best-sold kids’ costumes at Amazon was executed prior to this project (see Table 3). This revealed how girls are more often represented with pink products and toys related to motherhood and household, whereas boys are given artefacts encouraging exploration and challenges (Rommès et al., 2011, p. 189), as seen in Fig 6. This distinction is also evident

in products targeted at adult women and men.

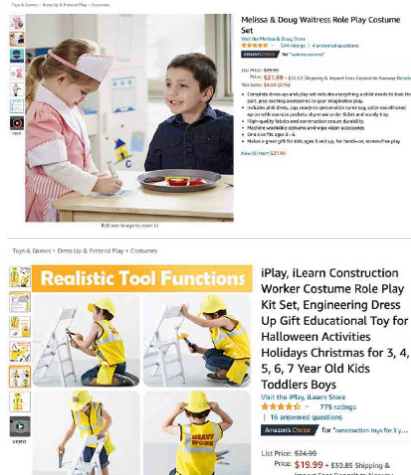


Fig 6 - Examples of typical costumes targeted at girls (top) and at boys (bottom). Images are screenshots of Amazon.

In the second stage, children in the age of four to six start understanding the associations relevant to their own sex (Martin et al., 1990, p. 1901). Products targeted at girls promote the expectation of girls to be beautiful, quiet, and caring, whereas toys targeted at boys

create assumptions of boys being tough, smart, and logical (see Fig 6). This correlates with gender-related products in general, where products for helpfulness and performance are associated with female and male characteristics respectively (Ehrnberger et al., 2012 p. 91).

Around the age of eight, children move to the third stage, where associations relevant to the opposite sex are taught (Martin et al., 1990, p. 1901). The gender stereotypes children are being exposed to, teach them how to behave, treat, and what to expect from others, based on assumptions about gender (Witt, 1997).

Despite the changes in gender roles the past 30 years, traces of the gender system are to be found in design (Rommès, 2006, p. 1), where women and men are being perceived and depicted in stereotypical gender roles to promote products and services (Knoll et al., 2011, p. 867). Eisend et al. (2014) point out how this reinforcement of stereotypical values in society through designed products and services can lead to negative consequences (p. 256). Sexism is reproduced through the values and practices of capitalism (Sculos, 2017, p. 7), where women are portrayed as sex objects (Chan et al., 2012, p. 356) and issues concerning men are oppressed (Veissière, 2018, p. 276).

However, the introductory quote of the pioneer feminist Simone de Beauvoir in Chapter 1, challenges this dominating and sometimes subconscious mentality of stereotypical, gendered

expectations. Stating that one is not born, but rather becomes a woman, implies how gender identity is influenced by social and psychological factors. Witt (1997), amongst others, states that parents who defy traditional gender roles are more likely to foster children with higher self-esteem and to make choices that are not restricted by their gender (p. 256). Nevertheless, as Table 3 reveals, gendered marketing is evident, making it more difficult for parents to intuitively raise their children with an egalitarian attitude towards gender roles.

A talk with KKS

How is it growing up in a binary society with another gender identity? Because issues and challenges related to gender and identity are personal and vulnerable information, I contacted Kompetansesenter for kjønn og seksualitet (KKS) by mail, to retrieve more insights. Initiated by Trondheim Kommune, KKS launched in January 2021 and specializes in gender issues and offers support for youths. A semi-structured interview was arranged online using Teams.

KKS explained how the increasing cases of youths being confused about their position in society, especially related to gender identity, initiated their formation. Interestingly, they expressed how a lot more people are insecure about their gender than they thought. The people who come for support are often very focused on defining themselves by gendered categories. Further, KKS explained how the confusion mainly occurs with how society is based on binary genders. Their approach to these youths is to visualize the diversity of gender by drawing a line with “girl” and “boy” as extremes and let the youths place themselves on the line. This way of conceptualizing gender makes many feel calmer and more accepting of their own gender identity.



The binary society

The binary gender system reigning in society today highlights and exaggerates sex/gender differences. In fact, according to Connell and Pearse (2009) “‘sex/gender difference’ is one of the most researched topics in psychology” (p. 42). Further, they explain how conclusions of ‘no difference’ between (binary) sexes/genders are widely disbelieved. Although we have evidence revealing, amongst others, that girls are not more social, do not have lower self-esteem, or are more suggestible than boys, the ‘master narrative’ is that men and women are naturally different (p. 43). Because of the strong dichotomous mindset in European culture, it is common to “look for” the differences in sex/gender research.

Could this mean that the expectations and norms in society affect us to the extent that we, as gendered beings, exaggerate the “truth” about sex/gender differences, resulting in a self-fulfilling prophecy? If true, how is design influenced by this? Because designers are part of the binary gender system, we are prone to contribute to the “master narrative”. When gender-biased solutions are introduced to society, we “confirm” the heteronormative gender stereotypes by communicating the differences. Behaviours and expressions which are not in line with the heteronormative and cis-gendered are thus stigmatised.

A prominent example of how design and binary gender roles are intertwined is the sex-segregated toilet. Grounding in the SSI, toilets remained separated as they became and remained required by law (99% Invisible, 2020). The sex segregation of restrooms communicates a universal need for privacy between the sexes. This need for privacy roots in the perception of the “vulnerable” women being spared for the public space, dominated by the “vile” men (99% Invisible, 2020). Moreover, the gendered segregation, based on the binary genders, leaves people with another gender identity uncertain of where to go (99% Invisible, 2020).

However, the tendency to reproduce stereotypical values have led to a growth in criticism of the lack of sensitivity to depict variety and diversity in genders (Knoll et al., 2011, p. 867). Stalled! (n.d.-b), a public restroom concept, aims to “register the complex, fluid and intersectional nature of race, class and gender in a way that meets the goals of social equity, diversity and inclusion”. The criticism is also evident in product design, where for instance the exclusive fashion brand Gucci, launched a dress for men in their Fall Winter 2020 collection. They intended to disrupt “the toxic stereotypes that [mould] masculine gender identity” (Guccio Gucci S.p.A, 2020).

Expert interview: Esben Esther Pirelli Benestad

To better understand the social forces on personal belonging and affiliation in society, I contacted sexologist and doctor Esben Esther Pirelli Benestad for an interview. In addition to helping a lot of people in their gender journey, Esben Esther has been active in the media, doing an incredible job in imparting knowledge on gender diversity to society.

Binary or “Sick”

Esben Esther explains how the binary gender model is an antique from the 18th century. “Now we see that gender is much more fluid, also biologically”, they explained. However, gender diversity is not yet acknowledged in society. Consequently, this leads to pathologizing people who do not fit our binary worldview. “Our culture still considers gender as one of two, or sick,” referring to the history and practice of transgendered people. Until 2019, gender incongruence

was considered a mental disorder (BBC News, 2019). Though it is not considered an illness anymore, trans people are not acknowledged on the same level as the binary genders by society. Esben Esther explains how society is still forcing trans-people into binary gender boxes, as “you should somehow look like a real man or woman”.

“We can’t do without social constructions. But when they become too narrow, we have to break them”

(E. E. P. Benestad, personal interview, Feb 26, 2021)

“We may be forced to believe that we are something that does not fully harmonize with what we actually are”

(E. E. P. Benestad, personal interview, Feb 26, 2021).

Few recognizable images

“Gender is first and foremost an inner sensation for which we find words in the world around us”, Esben Esther says. However, “the cultural mirror creates few images we can recognize ourselves in”, they continue. When we compare ourselves to what we see in society, we compare ourselves to the values of the binary gender system. The consequence of this, Esben Esther explains,

is that when we can not relate to those images, the social constructions limit us in possibilities of what is recognizable. The binary depiction of gender in society is relatable for some, but not all.

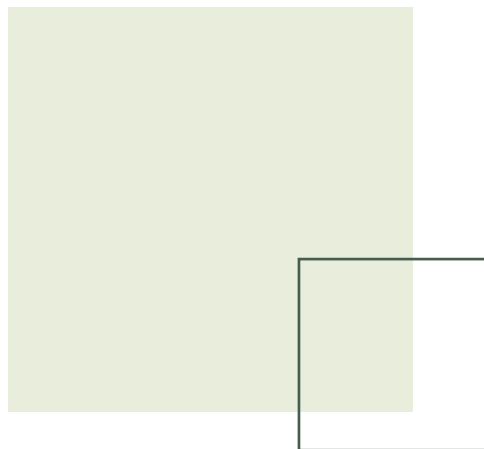
As long as gender diversity is not represented and normalized in society, we can not achieve acceptance and acknowledgement of gender nonconformity.

The gender boxes

The binary gender model leads to problematic situations when we are not able to place someone in one or the other “gender box”. This is prominent in intersex cases. Until 2000, gender research in Norway was based on a theory proposed by psychologist John Money in the 1950s. He argued that “gender identity was largely mutable early in life” (BBC News, 2019). In other words, the manner children were nurtured, often based on binary gender roles, determined their gender identity. The treatment of intersex was primarily driven by the psychological concerns, explained by a possible occurrence of inconvenience with the mix in sex categories, associated with the binary gender model (Intersex Society of North America, n.d.). Later, cases of intersex treatments disproved this theory.

In 1993, biologist A. Fausto-Sterling published articles proving the existence of intersex, inducing the research and acceptance of sex and gender beyond the binary. After 2000, research also became better in Norway, Sara Tellefsen explains (personal interview, April 22, 2021). Today, people born intersex are being medically examined to understand which gender the mind resembles and which is the easiest to achieve with surgery (Benestad & Grasmo, 2020). After the consultation, providers of the child should be confident in whether the child should be brought up as a girl or a boy (Benestad & Grasmo, 2020).

However, besides the cases where physical health is in danger, why are we resorting to medical treatment and surgery to “correct” intersex? Intersex is still regarded as “wrong, rather than highly capable people who are a bit unusual” Esben Esther explains. This is closely associated with the presence of the binary gender model in society. Both psychologically and physiologically, as the intersex case proves, we are pushed into a heteronormative binary model that entails an incredible number of physical and mental challenges.



Interview: cis-man (60)

According to Heise et al. (2019), “gender norms sustain a hierarchy of power and privilege that typically favours that which is considered male or masculine over that which is female or feminine” (p. 2440). For this reason, I contacted a cis-man to understand their perspective on and relation to the binary gender system. The interviewee, who I will refer to as cis-man (60), accepted to answer some questions regarding their experience and thoughts on gender norms.

Gender norms are more than norms

“You are affected by being a gender from the moment you were born. You know you’re a man and should have blue clothes and cars and that’s always been the case, I think”. For cis-man (60), gender identity is an identification of who you are. He explains that gender norms and values are formed by different preferences between men and women, rather than the opposite. “I think men want

to be masculine and focus on such things and be influenced by it - it’s like a club, you are influenced by it,” he says.

Fear of sameness

Cis-man (60) acknowledges the progress towards a more gender-equal society. “The gender role pattern has become more equal in recent years. I think this development is for the better”. However, he also highlighted how men and women are fundamentally different, both

physically and mentally. Further, he explained it would be “strange if the distinction between men and women was erased”. When speaking of a future acknowledging gender diversity, cis-man (60) expresses a worry about everyone becoming similar. “I think it is nice to have a difference, but it must not result in someone being inferior. There must be mutual respect and equal opportunities for all genders,” he states.

Acknowledging the gender challenges

Cis-man (60) tells a story about a colleague of his who does not conform to gender norms. “I think it spices

up life that people express themselves the way they want,” he says. “It is often colourful and resourceful people who are good to talk to,” he continues. Cis-man (60) express admiration as well as acknowledging the struggle for people who go against the gender norms of society. “You have to be very strong-minded to do so”, he states. “Had everyone been equal, it would have been a boring society”.

Context safari

To understand how gender is depicted in our society, I took a trip to Midtbyen in Trondheim to observe. Before going to the city centre, I assumed what to expect. In my past visits to the city centre, I never thought of the binary separation of clothes and other artefacts. However, this time I visited the city centre with another mindset. I wrote down what to be observant about and where to go. I also kept in mind to search for things that were not categorized by the binary genders.

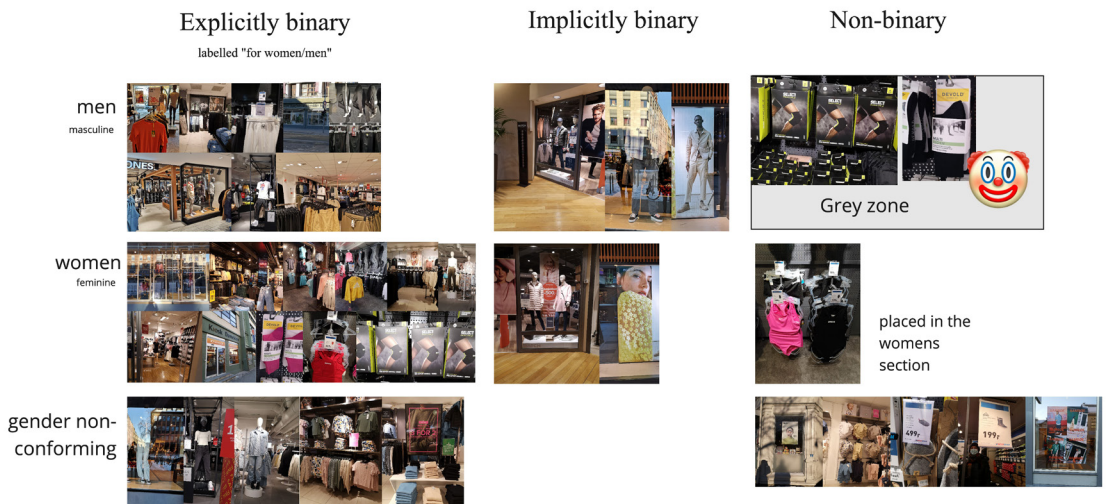
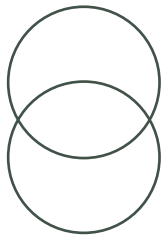


Fig 7 - Categorization of pictures of gendered artefacts and occurrences in the city centre of Trondheim.

During the approximately two hours spent in the city centre, I took pictures of situations and contexts I found interesting related to gender. This included shopping windows, layout and artefacts in different stores. The images were categorized in a matrix (see Fig 7) and analyzed. Though this is only a very small sample of what is represented in the city centre, it provides a clue on how public space is influenced by the binary gender system. I ended up with a brief perception of how society communicates gender norms and expectations.

The initial impression after the visit was the immense amount of sex-typed products. As seen from Fig 7, the majority of the findings were either depicted by feminine women or masculine men, separately. The “grey zone” in Fig 7 refer to products either labelled unisex or without mentioning gender. However, these products were not only exclusively portrayed by norm-conforming men, but they also had an - often pink - alternative labelled “for women” (e.g. Devold Wool socks in Fig 8). This is in line with the common practice of regarding the heteronormative, masculine man as the standard. The “female” alternative of the same product, is often made smaller and coloured pink. Ehrnberger et al. (2012) argue that this is based on the principle of hierarchy, where male products “are valued higher than female products [because men are perceived] as the norm and women as the exception” (p. 89).



The findings from the context safari indicate the masculine man or feminine woman to be the “normal” in society. Almost without exception, the fashion stores only portrayed

the heteronormative binary genders. In stores where they had both clothes targeted at the binary genders, the separation was made clear with semiotics, in line with the heteronormative values. The only “exception” was masculine clothing in the section or store targeted at women. This supports the claim of masculinity being the standard and desired. Because of this, it is more accepted for women to express masculinity, than men expressing femininity. This was evident in how clothes targeted at men were restricted to dark and monotone tones and practicality. Society’s depictions of gender conform with existing research.



Fig 8 - Devold Wool socks. Black socks with no label, while pink socks labelled “women’s”.

Prior to the context safari, I had some expectations of society being influenced by the binary gender system. However, approaching the city centre with more awareness of the challenges made me realize how much it is influencing our surroundings, especially in the context of fashion stores.

Throughout my process, I found the context safari to be a good method in understanding how the gender challenge unfolds in society today. By putting the observations in a matrix, enabled me to understand the current status and how society unconsciously forms our perception of what gender is and should be.

Case study: Fashion Stores

A lot of the public spaces in society are designed for the gender binary model. The context safari indicated significant evidence of these stores which sell domestic artefacts such as fashion, skin- and healthcare products. For this reason, I chose to proceed with a case study on fashion stores and retail design.

Fashion stores were considered valuable to investigate because they

- * depict gender norms, values and expectations of society directly,
- * influence customers as well as people who pass by, and
- * clothing is a huge factor in how we express our gender identity

Interviewing stores

After deciding on a case study on fashion stores, I took a trip to the city centre in Trondheim to talk to people working in some of the clothing stores. Beforehand, I wrote down questions concerning how the stores relate to gender when they present clothing and artefacts (Appendix H). The answers were noted by hand. In the end, I was able to speak to Livid and Carlings. Livid is a smaller, more local store while Carlings is a part of a bigger concern.

Livid

Livid is a Japanese- and Scandinavian-inspired clothing concept with a focus on material, tactility, tones and colours and minimalism. The store located in Olav Tryggvasons Gate in Trondheim, has two floors: handcrafted and new clothes on the ground floor and second-hand and vintage in the basement.

The layout in the store has the purpose of immersing the customers. “It should feel freeing,” they explain. The employees are in charge of the categorization of the clothes. On the first floor, clothes are mainly categorized between men and women. “We wish to appeal to gender,” they explain. “We assume women like something and men something else,” they continue. Livid reason for their decision in it being more efficient, and that “it would be messy if the clothes were combined”. However, later in the discussion, they tell me how the employees have experienced interest from women in jeans targeted at men.

In contrast to the first floor, the vintage clothes in the basement are categorized by style and type of garment, rather than gender. To this, they have a completely different attitude. Occasionally, customers ask the employees which gender a specific garment is meant for. To this, the employees usually counter with “try it on and see if you like it!” To me, this tells that clothes do not have a gender. However, this is very inconsistent with the reasoning of the gender segregation in the department above.

Carlings

Carlings is a Scandinavian clothing chain of the Warner group. They sell urban streetwear and jeans. I visited their store at Trondheim Torg, which also was included in my context safari. What I noticed then was the continuous marks of masculinity, both in the men’s and women’s sections. This confirms the claims of masculinity being the standard and socially acceptable for all (read: both) genders. I wanted to hear what Carlings had to say about this.

“Everyone should feel good,” Carlings proclaimed. Their main goal is to have something for everyone. Because they are members of the Warner concern, they have a dedicated department for purchasing and deciding which clothes are sold. Primarily, the store is divided between men and women. They consider themselves to depict gender in a good way, as they “sell clothes across the binary genders”. However, as observed in the context of safari, they have signs guiding customers to the “girls” section (see Fig 9).



Fig 9 - Sign pointing to the “girls” section inside Carlings in Trondheim.

Nonetheless, they “often use male clothing on female mannequins,” to which they receive positive responses. Customers often give feedback expressing gratitude for being motivated to think differently about clothes.

After visiting different stores and talking to two of them, I am left with an impression of the clothing industry to be more suited for women than men and primarily for the binary genders. Additionally, more women than men buy clothes targeted at “the opposite” gender, supporting the claim of masculinity being the standard and desired.

Though most of the clothing stores divide their clothes by the binary genders, we glimpse a small progression towards gender diversity and nonconformity. However, the attitude and presence of gendered clothing express the constructed division between the genders. It communicates the gender-related expectations of society to customers and people who pass by. This is, as explained in chapter 1, very restrictive, both for people who do identify with the heteronormative and those who do not. How we organize and depict gender in public space communicates what is acceptable gender behaviour and not.

Interview: Skeiv Ungdom

Skeiv Ungdom is a voluntary organization working to create safe spaces and a community for those of us who do not feel affiliated with the binary gender system in society. I contacted Skeiv Ungdom to hear more about their work and to understand how they create this space.

To make people feel included, they arrange activities and gatherings for people to meet others with similar experiences regarding gender and sexuality which does not fit the heteronormative and binary worldview. “As a community [gender-related challenges are] easier to tackle,” they explain. “Many feel the pressure to squeeze into a box, which can be uncomfortable when it does not fit who we “really are”. Skeiv Ungdom explains how “affiliation is about finding like-minded people”. But it is also about meeting understanding and confirmation from others.

“Guess [genderqueers] are not well represented since that definition is not something I am very familiar with.”

(answer from questionnaire)

Belonging

The gender norms in society are guiding people to behave in a way that is accepted and expected from others. Conforming to these norms gives a sense of belonging (Heilman et al., 2017, p. 61). As France (personal communication, March 3, 2021) pointed out, gender is an important factor for identification. This makes it “important to be a part” of the social system, Esben Esther (personal interview, Feb 26, 2021) contributes. Stine Kühle-Hansen (personal communication, May 26, 2021) says “affiliation builds some of the most important human values: community, acceptance, safety, and tenderness”. In this process of finding belongingness in society, we are prone to “‘dress up’ a little,” Esben Esther (personal interview, Feb 26, 2021) continues.

“I want to wear men’s clothes and not a dress”

(Cis-man (60), personal interview Feb 21, 2021)

Not only do we express our affiliation through outer expression, but we also “‘dress’ with body language and words to be recognized as the one (gender group) we feel ‘related to’,” Stine Kühle-Hansen (expert workshop, April 16, 2021) deliberates.

“Positive belonging is to be perceived by others as you perceive yourself, and when what is perceived is given a positive value”

(E. E. P. Benestad, personal interview, Feb 26, 2021)

However, “some of these affiliations are false because you give away something you know more deeply about yourself and that you can not tell about,” Esben Esther (personal interview, Feb 26, 2021) continues. Though we see an emergence of people identifying beyond the binary, the heteronormative gender norms seem to hold restrictions for many still. Because of the strong connection between belongingness and gender, many suppress feelings and personality traits to fit the norms.

The strict gender categories lead to stigma of deviant behaviour. Crossing the norms can trigger and provoke damaging reactions in society. We are exposed to reactions from “subtle rejection to contemptuous condemnation from society” (S. Kühle-Hansen, personal communication, May 26, 2021). In discussions with friends and people throughout the project, many, especially cis-men, have expressed the shame they experience when they notice they have walked into the “womens” section in a store.

“It is an experience of missing the target of my gender”

(cis-man)

The fear of “missing” our gender threatens the affiliation we want to have and be associated with. Being rejected is “one of the worst and most shameful things a person can experience” (S. Kühle-Hansen, personal communication, May 26, 2021). To be rejected because we have, do or are something different than the binary model, “threatens the most basic in humans - to belong,” (S. Kühle-Hansen, personal communication, May 26, 2021).

Personas and scenaio

To understand the challenges people meet related to gender identity in the context of fashion stores, personas and scenarios were made. These are based on desktop research and answers from the questionnaire and interviews. The following represent “extremes” to cover as much of the spectrum as possible. This functioned as a great way to empathize with people with different gender journeys. Additionally, mapping the various challenges in a matrix (see Table 4, p. 132) helped to realize how heteronormative depictions of gender affect us. However, I have to highlight that this does not reflect the complete and nuanced picture of experiences in reality.

Scenario:

Going to the city centre alone after work to buy a pair of pants.

Personas



Binary

Identity: cis-gender

Expression: gender conforming

Thinks it is nice to have stores divided by gender.

“Makes it easy to find clothes that i like and most likely will fit”

Embarrassing to be in the other section, feels illegal



Drag

Identity: cis-gender, drag

Expression: gender conforming, cross-dressing

Hard to find the right clothes that also fit when doing drag.

“I know where to find clothes for drag, but they are normally not in my size. I have to tailor them to my size”



Non-binary

Identity: non-binary

Expression: gender non-conforming

Feels discriminated against when clothes are divided by the binary genders

“My style combines clothes from both sections, but I am often misunderstood as ‘the other’ gender and people either give me the look or refer me to the other section”

Stores

Explicitly binary

The store has a clear distinction between “women’s” and “men’s” section. Besides signage, the binary separation is also evident through use of colour, models, and aesthetics, which are based on and perpetuates the heteronormative, binary norms of gender. This is typical for chain stores like Cubus.



Implicitly binary

Though these stores build on a binary gender model, the distinction between ‘women’s’ and ‘men’s’ section is not too clear. The overarching vibe of the shop is evident in all clothes, where e.g. the same sweater could be found ‘for women’ and ‘for men’ but in different fits. However, this is more often a more masculine style. Carlings and Urban are examples of such stores.



Fluid

In these stores, clothes are not categorized by gender, but rather by type of clothing, style, and/or size. There are no signage or guides explicitly (or implicitly) telling the customer which gender the garment is intended for. Often, vintage shops are dividing their clothes in this manner.



Scenario:

Going to the city centre alone after work to buy a pair of pants.

Table 4 - Matrix of personas and stores presented above. Green = positive, yellow = in between, red = negative. This is by no means representative for people who identify with the terms, but can indicate various challenges of gendered spaces.

	Explicitly binary store	Implicitly binary store	Fluid store
Binary	Efficient - Knows where to go to find clothes that fit Has a lot to choose from Does not bother them Prefers the clothes in the section appealing to their gender identity Identify with the depiction of their gender Everything is facilitated for Knows where to go to find clothes they like	Has a lot to choose from	Has a lot to choose from Inspiring Explores more
	Does never explore the other section	More open to mixing 'gendered' clothing if the store does (on e.g. mannequins)	Less restrictive More 'it's a style' mentality More options Following the trend
	Can be restrictive Very idealised image of the genders Needs to have a reason to be in the other section (buying a gift...) Expectations	Embarrassed when finding out they are in the 'other' section Confusing	Does not know if the pants are for men or women Confusing Can be hard to find clothes that fit Thinks it's too much focus on gender identity

2 Gender Identity in a Binary Society / Personas and scenaio

	Explicitly binary store	Implicitly binary store	Fluid store
Drag	Knows where to go to find clothes they like	Better layout than binary but less varied garments Clothes tend to be unisex (more masculine) and less expressive	Easy to find the style Has a lot to choose from Inspiring More open
		Less stigmatizing	
	Clothes for drag often do not fit properly Is misunderstood when shopping in 'the other' section if not in drag Not represented Scared to be stared at	Hard to find very feminine clothes Hard to find very feminine clothes	
Non-binary		Better layout than binary but less varied garments Clothes tend to be unisex (more masculine) and less expressive	Easy to find the style Has a lot to choose from Inspiring Accepted More free to explore More sense of affiliation
			More 'they accept me' mentality
	Discriminating Lack in affiliation Stigma Embarassing Not represented Not encouraged Scared to be stared at	Hard to find very feminine clothes Not represented Mostly encouraged one way (masculinity) Scared to be stared at	

Expert interview: france rose hartline

I contacted france rose hartline for an interview to better understand the social impact of fashion stores. france was a researcher at NTNU with a PhD in Gender Studies. The interview was done via mail, where france sent me a document of his thoughts on the topic.

The binary default

france explains how “people are only recently becoming exposed to trans issues enough to appreciate the struggle faced by trans people, but in Western culture (including Norway) they tend to still rely on the binary even when thinking about trans people”. Because of the binary gender system in society, we are prone to default to binary and cisgender thinking. “If a person crosses gender boundaries in some ways, such as clothing, but not in all ways, such as self-

identification and body, then it can be confusing to people who have only just gotten used to the idea that trans means changing fully from man to woman or vice versa,” he continues. Because the binary and cisgender is the default status of gender, people who do not conform to these norms and values are “treated as a special topic that only comes up when it is specifically relevant to the storyline,” he states.

Predictability as a block

People like things to be predictable and categorizable.

We “are most comfortable when [we] know what to expect of people,” france says. He continues explaining how we tend to feel fear when we encounter someone different. “Some would argue that this is a natural phenomenon that cannot be changed, because avoiding what we don’t understand is what keeps us alive as a species”, he says. Nonetheless, france points out that it is more complex than this. “I think it is also because we (in the West especially, if not specifically) are taught as we grow up to suppress the curiosity we have as children and to be suspicious of people who are different from us,” he suggests. This is especially true for gender, as our society has for a long time relied on binary stereotypes. “We are conditioned to this idea [of having only two possibilities] not only through what is said to us by parents,

friends, teachers, etc., but also what we witness again and again in the world around us. The binary of male/female is everywhere, performed through behaviour, desire, sexuality, and self-identification,” france expounds. In line with the worldview of cis-man (60), france describes how this repeated exposure of the binary male/female teaches us “to accept it as a natural given that cannot be changed”.

Moreover, we tend to conform to the gender norms in how we dress to make others happy. This way, we are “keeping ourselves safe and comfortable,” because society is prone to punishing us when we break gender norms. “It takes a great deal of courage to challenge people by dressing in the other gender’s clothes, especially when one is a boy dressing in girl’s clothes,” france continues.

Gendered clothing

“Fashion has increasingly become a marker of identity, especially over the last few decades with the neoliberal turn in Norway and the rise of hyper-individualism,” france deciphers. To clarify, we have come to rely on clothing “to give us a sense of identity and to make us feel like empowered individuals. We invest in our identity constructions. And, since gender is already so strongly a part of cultural values and how we see people, it was inevitable that fashion would also reflect this. We are investing in our gender identity when we buy clothes, and when we invest in our gender identity, we are investing in stability, happiness, and respect. For nearly everyone, this is done by following the rules; for others, this requires breaking the rules”.

Further, france explains how we “participate in the gender role we were taught to value and uphold [to make] our lives as easy or fulfilling as possible [by keeping] other people from treating us poorly because we broke the rules”. However, france points out how we tend to “forget that we are copying gender through fashion and buying into a system that divides us”. Though this is not a negative in itself, “it does help naturalise the gender differences and make it hard when someone wants to cross the lines,” france argues.

The privilege of breaking norms

As noticed in the desktop research on gender focussed solutions (Chapter 1, Current discourse), most of the norm challenging brands target people with socio-economic stability. france explains how

“it is easier for people with more socio-economic stability to be accepting of or even proactive in gender diversity ... [as] they have more of a ‘leg’ to stand on and can afford to take a risk by being open to something that is generally punished by society”. The Gucci MX is an example of a brand that challenges gender norms but is still only available for people with sufficient income. This privilege is often overlooked in criticism of people who express transphobia. Challenging gender norms is “not about being ‘better’ people with more compassion for humanity; it’s often about being privileged in a particular way that allows one to challenge the status quo without having their lives turned upside down” france explains. Because gender depends on and is influenced by both personal

and interpersonal interaction, we have to learn where the transphobic attitude comes from and help people with those attitudes in becoming less afraid. “It’s the only way to help both those who are struggling with this change in gendered culture and those who are crossing gender boundaries in their own life journeys,” france proclaims.

The future of gender

“As gender identity becomes more regarded as fluid and unstable, it will become increasingly acceptable to dress in gender non-normative ways,” france explains. Fashion and gender are intertwined. “There is a kind of cyclical effect: fashion becomes less tied to bodily sex, and bodily sex becomes less tied to fashion. This results in gender breaking down because it is understood

as being tied to bodily sex (the cisgender person as default), and one's bodily sex is understood as being indicated through, among other things, one's clothing choices". He believes fashion can help break down the gender binary and the fashion-bodily sex cycle by depicting people in unconventional gendered clothing. "Then we are challenging the essence of gender and therefore making it less natural for boys to only appear masculine" and girls to only appear feminine.

Influence of the environment

In his series *Ways of Seeing* from 1972, John Berger explains how our environment and surroundings influence us.

“In our urban world, ... we are surrounded by images of an alternative way of life. We may remember or forget these images, but briefly we take them in.”

(BBC [tw19751], 2012)

In society today, gender is depicted as one or the other, masculine men or feminine women. Society, almost without exception, depicts gender as the binary: separated restrooms for men and women; separated departments of clothes targeted at men or women; images of masculine men or feminine women. When this is the only stimuli we receive on gender, it communicates to us that this is what society expects from us and others. When some of us then do not conform to the expectations in a binary environment, we are perceived as abnormal and notable.

Clothing stores are great examples of how traditional gender norms, values, and expectations are manifested in society. Clothes themselves have no gender. However, the way we depict and represent the garments as belonging to one or the other, as being feminine or masculine, provides an understanding of this being the “correct answer”.

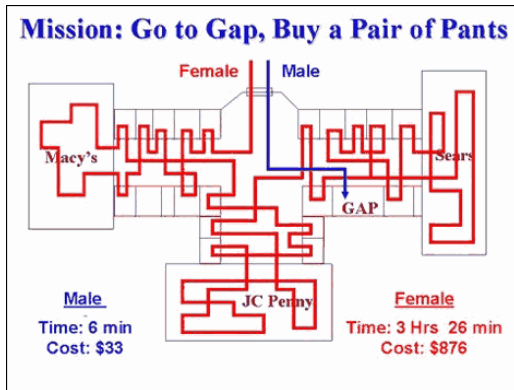


Fig 10 - This image was presented in a lecture for retail students as a simplified illustration on shopping patterns and behaviour for men and women. Source: Go to Gap, Buy a Pair of Pants, n.d.

Moreover, observing clothing stores in society reveals a larger representation of clothing targeted at women. This gives the impression and expectation of all women “loving” shopping and fashion.

“As I understand it, there is a lot more to the women’s department. Often men go straight in, find what they need and go out again. I do not have much patience in [clothing stores]. Women can try all day. Many. Many more than men.”

(Cis-man (60), personal interview, Feb 21, 2021)

Though this assumption might fit many women, it does not fit all. The generalization of women enjoying shopping and people who enjoy shopping are women creates a stigma when this is not true. The pitfall is when designers practice design with this mindset (see Fig 10), reproducing traditional gender expectations and stigmatizing deviating behaviour. How we design the environment influences the mental model of gender in society and what is socially acceptable and not.

Acceptance

Group affiliation is important for humans, but with the binary model society builds on, other gender identities than the heteronormative men and women lacks representation.

“It is usually the classic gender role pattern that is reflected in the public space.”

(answer from questionnaire)

Because of the lack of diverse representation of gender in society, a lot of us are not aware of the beautiful complexity of gender variations. Further, this makes it hard for people to accept and to feel accepted for this.

Common attitudes

The results from the questionnaire on the statement “gender identity to me means...” reveals a lot of different attitudes (see Fig 11). The answers were clustered into six categories: “less relevant”, “interoception”, “stigma and restrictions”, “acceptance”, and “belongingness”. Most of the answers reflected an awareness of gender as an individual perception of oneself. Moreover, some acknowledged the challenges the binary gender system leads to for those of us who do not conform to the norms. Interestingly, the people who expressed indifference towards gender identity identified as “men” or “cis-men”. One can assume that these answers communicate absence of reflection upon gender issues amongst those who

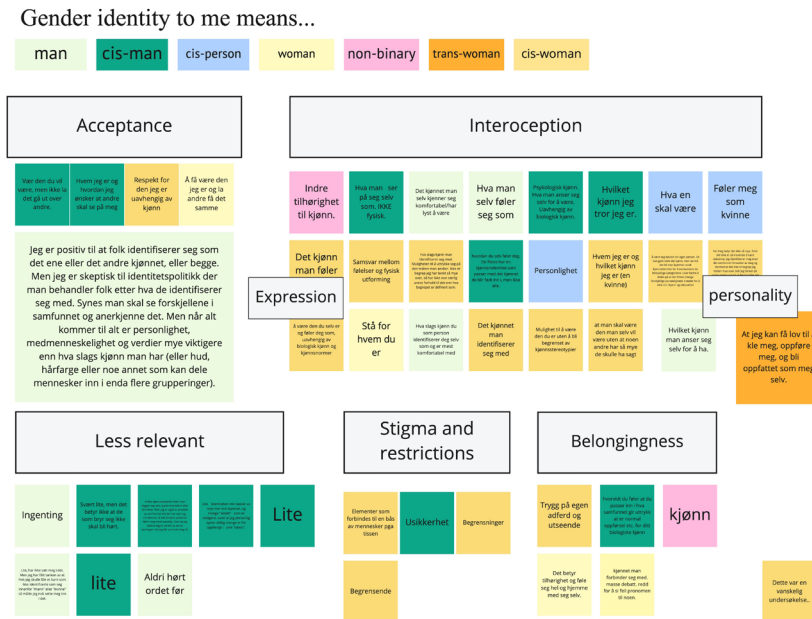


Fig 11 - Clustering and categorizing answers from questionnaire.

benefit from the binary gender system. A reason for this might be that since society is designed with the heteronormative man as the standard, there is a lack of substance for many to reflect upon.

Though a lot of people express open-mindedness towards gender diversity, it is important to have in mind that attitude does not always correlate with behaviour. It is easier for humans to justify their actions in retrospect, since attitude is easier to change than behaviour (Gilovich et al., 2019, p. 214). As designers, we are therefore responsible for normalizing gender diversity and creating environments where people can behave in line with the general and inclusive attitude.

Habitual behaviour

In a lot of design projects, designers need to understand the behaviour and needs of the people we are designing for. However, behaviour and attitude might not always correlate.

“Decades of research on the topic [effect of attitudes on behaviour and vice versa] have shown that the influence of attitudes on behaviour is a bit weaker than most people suspect, and the influence of behaviour in attitudes is much stronger than most suspect.”

(Gilovich et al., 2019, p. 206)

Throughout this project, I have had the pleasure of speaking to and discussing with a lot of people about the topic, and I have noticed how the binary model and system have led to habitual thinking for many. When talking about gender diversity, most of the people expressed open-mindedness and acceptance towards those of us who challenge gender norms.

“In my opinion, it spices up life when people express themselves the way they want. ... Had everyone been the same, it would have been a boring society.”

(Cis-man (60), personal interview Feb 21, 2021)

However, as Gilovich et al. (2019) presents, the influence of attitude on behaviour is weaker than expected. The quote of cis-man (60) above, which was a common attitude for many of the participants and people I have had the honour of speaking to throughout this project, express a general attitude rather

than a specific one. What happens then when we see and experience people in everyday life who do not conform to gender norms? Stine Kühle-Hansen (expert workshop, April 16, 2021) described how habitual thinking, influenced by the binary system, is expressed through facial expressions and words. For these specific situations we are therefore not protected by our general attitude in our specific behaviour, and thus prone to resort to and express a norm conforming attitude. When people are met with rolling eyes and laughter, we do not dare to bend the norms, Stine (expert workshop, April 16, 2021) explains.

Target group

“Even though I look at myself as a woman, my view of myself as a woman may be different from someone else’s view of herself as a woman.”

(Dina, focus group 1a, April 7, 2021)

Delimiting the design scope by defining a target group is a common practice in design. However, it is problematic when this affects the oppressed and underrepresented in society. For instance, how does it feel to try clothes in the women’s department of a clothing store for trans-women compared to cis-women? Or for those of us in general who do not fit the sizes of the preferred garment? Though it might be a small number of the end-users, it is worth accounting for and be aware of towards a more gender-inclusive society. Though it is a small gesture, it can mean a lot for those who systematically are excluded in society.

TV2 Denmark made in 2017 an advertisement highlighting the tendency of putting people into boxes, distancing ourselves from others. The stunt revealed how much we have in common, across the social boxes we place people in. Even though personas and defining a target group in a design project are useful, we have to be cautious in relying too much on these predefined boxes. Reducing experiences to only apply to one target group, can exclude a lot of people. The danger is when this is not controlled.



Fig 12 - Tampax' tweet including all people who bleed, regardless of gender. Source: Tampax US [@Tampax], 2020)

Tampax is another example of acknowledging the diversity of their customers (see Fig 12). In 2020, Tampax tweeted:

“Fact: Not all women have periods. Also a fact: Not all people with periods are women.”

(Tampax US [@Tampax], 2020)

This public statement, criticizing the current dichotomous view of biological processes shows an acceptance of the diversity in gender identities. Because we are targeting various identities, it is important to include a diversity of people, such that stigma and preconceptions are reduced.

Human complexity

Gender is a complex concept. It affects and is affected by many aspects and parts of life; socialization, survival, behaviour, attitude, expectations, etc. Grasping all of this can be difficult. Grouping it into two, strict categories have served a purpose in understanding the complexity of humans. However, we see now how restrictive these categorizations are in reality, both in trying to understand ourselves in society and in perceiving others. There is a need for more options for people to choose from when finding and defining themselves. As Sara Tellefsen (personal interview, April 22, 2021) mentioned, we need to increase the room for various expressions and behaviour of people, regardless of their gender identity or gender assigned at birth. In the context of clothing stores, this could mean categorizing clothes differently than by gender. Livid is a great example of a case where clothes categorized by type of garment have increased customers' options. Additionally, Carlings have received positive feedback from customers when dressing the female mannequins in clothing targeted at men. We can see a small development in gender liberation. It is the small gestures that matter.

“There will be a little more to keep track of, but not so much. ... Many people are afraid as if those who are open to several sexes want to take the sex from someone. We just think it's nice to have more options in the ‘supermarket’ of genders.”

(E. E. P. Benestad, personal interview, Feb 26, 2021)

2 Gender Identity in a Binary Society

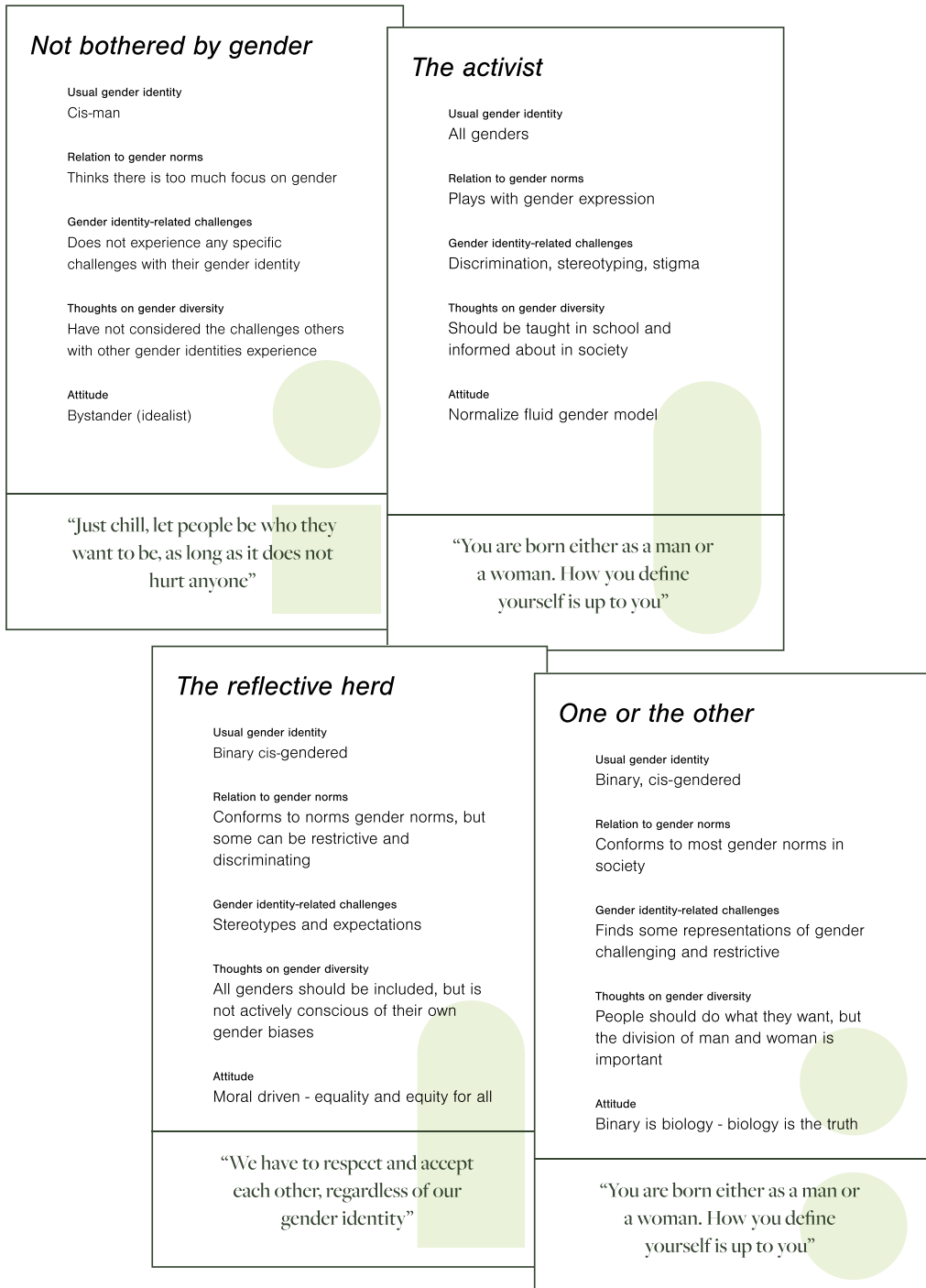
Main insights

What does gender mean to people and how do we relate to the binary gender model?

Gender is perceived differently by different people. Some refer to the binary separation, while others address the diversity and challenges. Gender identity is less relevant for some (mainly men and cis-men), and for others it means an inner feeling, belonging and acceptance of who we are. A few associate gender identity with stigma and social restrictions, indicating an acknowledgement of the gender challenge.

Input from people throughout the project on the gender challenges was noted. Combined with answers from the questionnaire (see Appedix D), the insights were eventually clustered into different attitudes towards the gender challenge. The following represents a simplified version of common attitudes towards gender diversity.

2 Gender Identity in a Binary Society / Main insights



We like to think of ourselves as open-minded. However, we are not always protected by open-minded attitudes in situational behaviours. In many situations, especially nonconforming occurrences, we are prone to resort to behaviour in line with the norms.

The influence of attitudes on behaviour is weaker than the opposite.

Moreover, previous research has shown how much the environment influences our behaviour. For this reason, our expectations and assumptions of “correct” gendered behaviour are also formed by how we design our surroundings. We have to create space for people to acknowledge gender diversity and for those of us who bend the restrictive norms to fully express ourselves, without the damaging mental strain.

Our environment influence assumptions and expectations of gendered behaviour

“I am not quite like everyone else. I do not wear a uniform to stand out, but I would not want to be mainstream either. But I have not done anything special to stand out as a man.”

(Cis-man (60), personal interview, Feb 21, 2021)

If a behaviour or action within the norms is regarded as cool or positive, it is easier for people to strive for this or apply such attributes or characteristics to themselves. However,

if something in society is regarded as negative or norm challenging, people find it difficult to even regard this as an option for them.

People like to stand out from the crowd and feel like an individual - as long as it is within the norms.

Though many might be fine with this, it can cause harm to people who want to defy the norms. Many conform to the norms because not doing so is not an option. As long as it is not socially accepted, it is hard for people to break free from the norms.

People need to feel represented to feel accepted

Grouping people by gender is common, and in many cases useful. However, the generalization does not account for everyone. The habit of dividing people into two genders excludes a lot of people who for instance do not identify with the gender they were assigned at birth.

Different people can experience things similarly

Moreover, when we assume a group of people holds the same values, interests, preferences and so on, we ignore the fact that there is variety within the gendered boxes.

Similar people can experience things differently

The insights from interviews, desktop research and literature review, as well as occurring research questions were clustered to find common challenges the binary gender system leads to. The main insight from this was the understanding of the connection between society and gender challenges. The stigma in society regarding deviations from the heteronormative leads to discrimination and exclusion of those of us who do break the gender norms. In turn, this can result in a negative impact on physical and mental health and lack of affiliation due to lack of acceptance in society.

Humans are complex animals. We need more gender options to choose from

Knowing the influence of the binary gender system on the attitudes and behaviours of people can be relevant in design to understand how to approach the gender challenge. However, before recommending possible changes in the design practice, it is important to understand how designers are influenced by the binary gender system. The next chapter will inspect the current relation between gender and design practice.

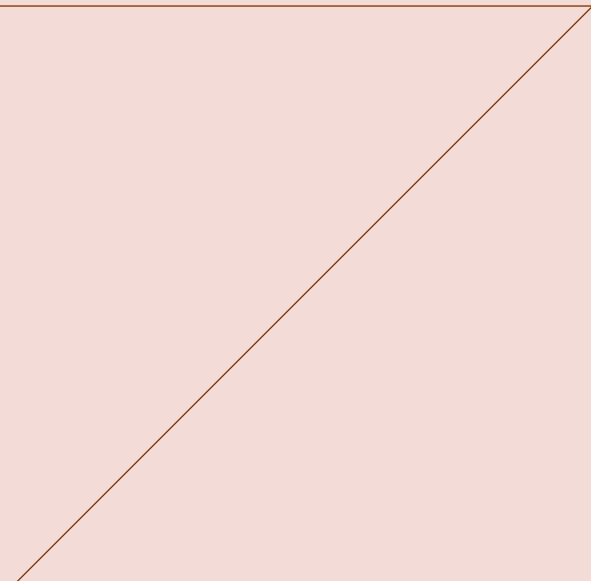
2 Gender Identity in a Binary Society / Main insights



Chapter 3

Questioning Gender in Design

How does the current design
practice incorporate gender?



This chapter investigates the influence of the binary gender system on current design practice. The insights from focus groups and participatory observation of a lecture in Retail Design revealed common pitfalls in design practice, thus an opportunity for improvement.

Questioning

verb /'kwestʃənɪŋ/

A period where a person explores their own sexual and/or gender identity, reflecting on such things as upbringing, expectations from others, and inner landscape. The person may not be certain if s/he is gay, lesbian, bisexual, or trans and may be trying to figure out how to identify themselves.

(Queer Events, n.d.)

From the early traces of gender segregation until today, gender roles have developed and shaped our perception of what it means to be a man or a woman, exclusively. Preliminary traces of gender roles ground in the Neolithic Revolution, where the need for more workforce led to women being occupied with pregnancies and domestic work, while men handled public affairs (Hansen et al., 2015, p. 366). Further, this developed and translated into separated gender roles, evident through our preconceptions, expectations, and expressions, shaping and being shaped by the products, space and the vision we design. Nevertheless, after the Industrial Revolution, human labour has increasingly been replaced by machines and systems (Chui et al., 2016, p. 2). This raises the question of whether modern society is gaining from maintaining a binary gender system with associated gender values. Additionally, how are recent cultural and scientific shifts in assumptions of gender handled in the field of design?



Gender bias

Designers are influenced by the surroundings, and as members of a society building on the binary gender system, designers are prone to produce solutions perpetuating the heteronormative values such a system holds. Many people identify with these values, but for some, these manifestations are perceived and experienced as excluding, discriminating, and restrictive.

Communication is a significant part of a designer's job. The complexity of the gender challenge is especially evident through iconography and fashion design. For instance, most commonly, restrooms are communicated through pictograms, visualising either a human wearing trousers or a human wearing a dress. As an established universal understanding, these icons represent men's and women's restrooms respectively. What about people who do not identify with the icon resembling their gender? Or people who do not identify with either? Moreover, what is the value of distinguishing restrooms based on clothes? However, finding gender-neutral depictions which are not associated with traditional perceptions of gender might be difficult, thus making it complicated for icon designers to make this right. Additionally, as mentioned, the dress "for men" by Gucci had the intention of criticizing gender stereotypes, but still categorized as a dress for men. Can we accept this as a step towards an inclusive society, or do we need more radical interventions?

The traditional gender roles are being maintained by materialism and capitalism, guiding design products, services and thinking. Examples of how gender bias is evident in design have been presented above and in previous chapters, exposing how design thinking habitually exploits the concept of masculine men and feminine women. When put into society, such artefacts and systems communicate how one should behave and what to expect, based on their gender. Consequently, many are left out or restricted in opportunities and choices.

Some attempts on design approaches and tools with a focus on gender and inclusion were also found, though it was limited and not largely proclaimed. Nevertheless, the question might not be whether there is a lack of tools, but a lack of ideas to make the right tools. City centres with shopping areas and other public activities are still influenced by the binary gender model. Fashion, skincare, and other stores profiting from selling domestic goods commonly divide between men and women, both visually and physically. This leaves the following question:

How can we include gender diversity in how we design public space, such that it creates a sense of belongingness for genderqueer people while propelling acceptance of gender diversity in society?

Because gender in design is a relatively new focus, especially considering the speculative approach to the binary gender system, there are a lot of different aspects to consider. What is relevant to know about the current practice to rethink gender in design?

“There has been a lot of focus on the other perspectives [of intersectionality] in design practice. Gender is probably the aspect many have a rather unvarnished relationship with. And that gender has thus not been taken up as much”

(I. Hoffart, expert workshop, April 16, 2021)

Design practice

“Nothing that has been designed – products, symbols, services – is ever gender-neutral, whether we like it, or notice it, or not. Because of this, just as much attention must be devoted to this area as to analysis of materials, resources, aesthetics and so on.”

Uta Brandes (Pochont, 2013)

In design practise, we have different terms related to the gendering of solutions. When a specific gender is targeted, it is often communicated through semiotics or product language. Sometimes, designs are also targeting a specific gender/sex by explicitly saying “FOR...”. We also speak about gender mainstreaming, gender-less or gender-more, androgynous, gender-neutral, and gender blind approaches in design. However, I would argue, we are prone to resort to expressionless outcomes, which often do not account for the gender challenges. To better understand how designers work and relate to gender when designing, two experimental focus groups were conducted.

Experimental focus groups

Because of the lack of existing research on how to work with gender in design, I had to resort to creative and exploratory methods. Two experimental focus groups were developed and executed, referred to as focus group 1 (F1) and focus group 2 (F2). The goal of the focus groups was to gain an understanding of if and how designers and design processes are influenced by the binary gender system. The insights were planned to provide knowledge on how to work with gender in design. See Appendix I for setup (including iterative changes).

In both experiments, the participants were given a rapid design task with different prerequisites. The design task was to design a bag, because a bag

- * can have multiple functions and purposes,
- * can be gender-neutral or extremely gender-targeted,
and
- * is a wearable garment, but not as body-fitting as other garments

The experiments were developed to understand

1. how the mental model/bias of designers influence the products they design (F1+F2),
2. how our environment (context, products, categories) affects the perception of gender of people who are exposed to this design (F1)
3. the effect of a new gender model besides the heteronormative binary genders on designers and design practice (F2)

The following experiments will represent each of the points described above. The outcomes from the focus groups had the purpose of complimenting each other and provide better insights into the effect of using traditional design methods with the gender challenge, rather than function as absolute answers.

The goal of the experiments was to

1. understand how designers can work differently with gender in design, and
2. learn how people, specifically designers, relate to new depictions of gender in design

A research question was formulated:

How does a non-heteronormative binary depiction of gender influence how designers think of gender and their process when designing?

How does gender bias in design affect our values and norms concerning gender in society?

How are gender values and norms manifested in design and the design process?



Fig 13 - Collage priming group A in focus group 1. Image sources on p. 278 .

Focus group 1: Priming

The first focus group concerned the impact of priming on designers in a design project. The subgoal was to understand how the representation and depictions of gender in society influence designers and design processes. The purpose is to understand the effect of priming on the design processes.

To avoid influencing the participants beforehand, the information communicated was kept short, without revealing too much information, but enough for them to know what they signed up to. Participants, consisting of designers and design students, were randomly divided into two different groups, five in group A and four in group B. Two different collages were made for each of the groups, of which the participants had to individually reflect

Finally, the groups had to reflect upon and discuss some questions related to gender in design. See Appendix J for results.

Results Group A

Primed with gender diversity

Target group 1: breastfeeding

mothers

Problem: breastfeeding in public is stigmatized

Design: the design should remove the stigma and make the mother proud to breastfeed in public

Target group 2: people who do not want a bag in the store

Problem: heavy goods

Design: the design should be waterproof and be environmentally friendly

In both of the designs, the group focused on the individual expressing themselves and feeling proud when using the design. Their conversation revolved around social and environmental issues.

Results Group B

Primed with heteronormativity

Target group 1: mothers

Problem: heavy carrying a child, keeping track of all needs for the child and the mess

Design: resulting in various designs with a focus on practicality, efficiency, and hygiene

Target group 2: doctors

Problem: hygiene and a lot of tools

Design: the dark blue design is practical and robust

In both of the designs, the group focused on practicality and efficiency more than personal expression. Because the group split in half to work in pairs on each of the designs, there was less of a collective discussion.

Both groups chose a gender-specific target group, namely mothers. However, none of the participants had ever experienced being mothers. Both groups referred to the respective collages they received before the design task during their discussion. This experiment indicates that designers are affected by what they see before starting a design process.

Focus group 2: Personas

The second focus group was made to test how assumptions on heteronormative gender norms and values influence the design process and outcome. Additionally, I wanted to understand the effect on the process and outcome when norm-conforming and binary gender values are disproved. How do designers relate to this? The purpose was to reveal the consequences of various approaches and insights in how traditional and common design techniques function with the gender challenge.

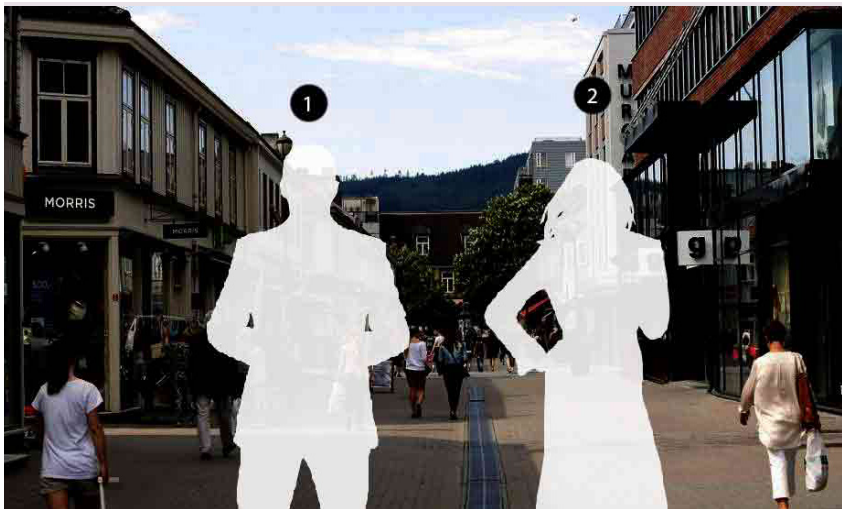


Fig 15 - Illustration of personas presented in focus group 2.



Persona 1

Style: practical, formal
Hobby: food and wine
Work: engineer

Uses he/him pronouns. Prefer skirt and high-heels at work.

When buying skirts and high-heels to himself, he often get asked if it is for his wife.



Persona 2

Style: eccentric
Hobby: art and fashion
Likes: yoga in the park

Uses they/them pronouns. Identifies as non-binary and gender fluid, ie. sometimes they express femininity, other times masculinity or a combination.

Because of their feminine physique, they are often guided to the womens section in clothing stores

Fig 16 - Illustration of new information on personas in focus group 2. Source: Bryan, 2020; RODNAE Productions, 2020.

To test this, the participants were given a case for a new fashion store concept. Their task was to design a bag based on two given personas (see Fig 15). First, revealed information on the personas was limited to “style”, “hobby”, “work”, and “likes”. After ten minutes of discussion and designing, the participants were given additional information (see Fig 16). The new information revealed two gender-nonconforming identities.

The three participants knew a bit about the topic of the project before the focus group. This could have influenced their mindset when approaching the task. Though the focus group did not result in a concrete design, the discussions the participants had provided interesting insights into how they work and how they would have approached such a challenge.

Results focus group 2

This focus group did not result in concrete outcomes. The participants discussed throughout the whole session, which might have led to them forgetting the time. However, the discussions were rich and led to insight in how they would have approached the given challenge.

An interesting observation was the initial assumption of Persona 1 and Persona 2 being a male and a female respectively. When new information was presented about the personas, the participants did state that it would not influence their discussed design. However, would this mindset catch the gender challenges of the personas? Moreover, one of the participants initiated to find the common ground between the personas, despite the difference. I consider this to be a positive mindset to bring to design practice when designing for gender diversity.

The results from the focus group were analysed to understand where current design practice lacks awareness of gender bias influenced by the binary gender system.

Insights from focus groups

Defining a target group

In both group A and group B of focus group 1, where the participants defined a user group themselves to design a bag for, they both chose “breastfeeding mothers” as their target group. Although they had limited time on hand, this indicates how designers easily, and without questioning, default into the binary. After reflecting upon questions related to the gendered implications of their design, one of the participants mentioned the lack of knowledge on how it is to be trans and breastfeed.

Though the heteronormative, binary genders represent the majority today, it does not mean variations within the binary and of gender as a whole does not exist. In focus group 2 the participants had to design a bag based on two personas, illustrated by silhouettes and some additional information on their interests. Though the genders of the personas were not revealed in the first task, the participants referred to the personas as he and she until one of them warned “we should be careful in calling them ‘he’ and ‘she’, even though they are drawn ‘like that’” (Jakob, focus group 2, April 15, 2021).

Finding pain points

One of the participants explained how they do not consider gender when working. “Gender noise to the design process” (Lynn, focus group 1a, April 7, 2021). Though this was well-meant, which might apply for many cases, it removes the importance of being aware of and considering the challenges

and issues which are rooted in gender constructions. Though the intention might be to treat everyone as equal, the system which we are designing for and influenced by does not. If we ignore gender challenges we are prone to overlook and “disregard needs someone has” (Jo, focus group 1a, April 7, 2021), and thus reproduce the same values which lead to the oppression of some.

Relying on personal experiences

When designers who have participated throughout the study have discussed gender non-conforming people, some have expressed a lack of experience of gender non-conforming people in society.

“But it is not often we meet people like Persona 1. I have never met a person like that”

(Millie, focus group 2, April 15, 2021)

Relying on our own experiences and evidence in the world is a common practice in design. However, when it comes to gender, we have to think twice. We have to start questioning the current gender system and our tendency to unconsciously rely on heteronormative norms when we design. If we can design for opportunities rather than reproducing restrictions, we might one day see men in skirts and high heels at our workplace.

The reason for giving the participants open design tasks and little time to finish was intentional to reveal these biases. As mentioned, as members of a heteronormative and binary society, it is understandable that we default to dichotomous thinking. However, because we have the privilege of influencing society with our designs, we are also responsible for our decisions. For this reason, it is inherently important that designers are aware of the biases we are prone to absorb.

Design education

Lecture in Retail Design at SoFI

As my case study concerned fashion stores, I was curious to retrieve a better understanding of the current retail design education. I contacted the School of Fashion Industry (SoFI) in Oslo. They invited me to join a lecture on the topic “target group”, including a session where students and the lecturer answered my questions. The questions (Appendix K) were sent to the school before the lecture. Starting at 9 am, the session lasted until noon, where approximately two of those hours were dedicated to answering my questions.

Gender patterns

In the discussion with the Retail Design study at SoFI, they mentioned the importance of identifying the shopping patterns of men and women. Fig 10 (p. 140) was presented, illustrating an exaggeration of shopping patterns for women and men. Additionally, it was mentioned that “women think just as much about shopping as men do about sex”. Although this may have been sarcastically insinuated, it represents the current gender narrative.

Further, it was stated that “women are more interested in quality and identifying with the product. ... Men are more practical. ... [Men] want it fast, easy and cheap”. This statement was grounded in the general belief of the gender role distribution in the hunter-gatherer society: Women were

gatherers and men were hunters. Nevertheless, as mentioned earlier, this common belief is disproved in a study from 2020, revealing new evidence on females standing for 30-50% of the hunting (Wei-Haas, 2021).

In contrast, SoFI also taught students about the influence of our surroundings on our behaviour. They refer to the experiment of Maslow and Mintz from 1956, where the initial effects of different aesthetically pleasing environments upon the perception of well-being and energy in a set of portraits. SoFI talk about how rhythm, colour, focal points, and layout influence our experience, mood, perception, and behaviour. Simultaneously, they mention the importance of designing for gender differences, referring to the heteronormative and binary genders exclusively.

Nevertheless, could there be truth in these statements? In fact, women stand for about 70-80% of consumer purchasing (Nelson, 2019; C. C. Perez, 2019, p. 40). They spend more than three times more than men on unpaid labour, worldwide (C. C. Perez, 2019, p. 40), such as shopping. When designers rely on these gendered behaviour patterns, we continue to target women by depicting the heteronormative, feminine woman in domestic environments. Thus, reinforcing the gendered behaviours and expectations.

“As I understand it, there is a lot more effort put in the women’s department. Often men go straight in, find what they need and go out again. I do not have much patience in stores. Women can try (on clothes) all day. Many. Many more than men.”

(Cis-man (60), personal interview, Feb 21, 2021)

Profit as a goal

Profit is a major and important factor in many fields of design, especially retail design. When discussing the retail design study at SoFI, they expressed the importance of relating to the client. The process is therefore very much reliant on the demands of society. france (personal communication, March 3, 2021) explains how the gendering of kids’ clothing was introduced in Norway in the late 1990s. “It’s a mix of capitalism – gendering consumer goods sells a lot more of them – and perpetuated ideas around what it means to be a man or woman,” he says. As the majority of us stay true to the heteronormative gender norms in society, this is therefore what we design for. This demands the oppressed to confronting society before the design practice can change. Although we know how much influence and impact space and design, in general, have on people and society. Thus, the problem becomes even bigger when designers, who are responsible for designing a society for all its inhabitants, denies the existence of everyone except the binary and transfers the responsibility of bending the norms onto individuals.

Design thinking

“Design today is very user-oriented. One largely uses methodology involving different types of users to empathize with the end-users of the service or product. But there is still a tendency, ... in the user-involvement, to think of strict categories and boxes.”

(I. Hoffart, expert workshop, April 16, 2021)

As designers, we are taught how to categorize people into user groups, based on attributes important to the design challenge. This is similar to how humans in general categorize things in the world to comprehend the complexity of it. Consequently, stereotypes emerge.

When trying to understand something, or more relevant in this case, someone, stereotypes are in fact important evolutionary tools, enabling us to fill in the gaps where information is missing (Acaroglu, 2018). According to cognitive-developmental theory and gender-schema theory, it is assumed that such behaviour is taught in childhood, where children develop gender identity by analyzing the social world around them and creating an understanding of their belonging (Martin & Ruble, 2004, p. 67). However, the habit of homogenizing people in predefined boxes can create stigma.

In their study on personas as a methodology in design, Turner and Turner (2011) state that “designs inscribe cultural values and notions of ideal users” (p. 30). When this is combined with gender being an explicit and implicit element in the

design process, without being considered enough, complex gender identities are exposed to being generalized to “design specifications that are in accordance with cultural symbols of masculinity or femininity” (Oudshoorn & Pinch, 2003, p. 195).

This raises the question of whether it is possible to avoid stereotypes leading to stigma and exclusion? And if so, how does it give value to the result of a design process? Gender is a social and cultural construct dependent on many variables. According to Butler (2011), “gender intersects with racial, class, ethnic, sexual, and regional modalities of discursively constituted identities” (p. 6). The challenge is then when we generalize this complex phenomenon into a set of strict rules. Stereotyping often comes in the form of biases, meaning unconscious preconceptions of how a specific user group behaves based on gender.

Defining a target group is a common practice in many - if not all - design projects. In the process of gathering insights, analyzing and narrowing down to something comprehensible, designers are in the danger of generalizing, and worst case, stereotyping, people. Though, as mentioned earlier, stereotyping, archotyping, and generalising in the form of personas are valuable tools in grasping the complexity of human behaviour. However, I would like to give this bit extra attention, as it can lead to exclusion, discrimination, and degrading a lot of people. This is especially important to take into account when it comes to gender - in a more inclusive term than the binary -, which is lacking in consideration and thought in design practice.

This pitfall does not only concern the target group but also other groups of people which are generalized to not fit the design solution.

“We have to think bigger when we are looking for a target group because there are so many more target groups within a target group” (Dina, focus group 1a, April 7, 2021)

In this case, it is important to be aware that groups of people can be diverse, and people within those groups are also individuals and diverse, prone to experiencing the same situation differently. The main point is not to erase the helpful technique of generalizing but to consider why, and why some are excluded. What are the reasons other groups of people are not included? Is our solution prone to discriminate against or oppress people who are already marginalized in society? How can we combat this?

Furthermore, experiences can vary from person to person within a target group. Some groups have been generalized and stereotyped to the extent that one might feel they know the implications and challenges that group experience. For instance “breastfeeding mothers”. Both group A and B in focus group 1 chose this as their target group when designing a bag. However, none of the participants had experienced being a mother. Though many of their assumptions might be very much valid and account for many breastfeeding mothers, it is still an indication of the danger in jumping to conclusions about a group. As one of the participants expressed: “I have never breastfed so I don’t really know how they feel” (Dina, focus

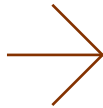
group 1a, April 7, 2021).

Unstereotype Alliance (2018) frames this as a challenge by highlighting the ignorance of this mindset.

“We can’t talk about the problems of all women as if women were a single group – instead, black women face different challenges than white women, lesbian women, or disabled women. And they in turn face different challenges than do straight women or women without disabilities”

(Unstereotype Alliance, 2018, p. 3)

As mentioned, humans are complex beings with complex gender identities. In the current intersectional conversation in Western societies, “We have to think about people’s whole, lived experiences at the intersection of many countervailing and complex forces” (Unstereotype Alliance, 2018, p. 3). How can we enable designers in challenging, rather than reinforce, the stereotypes that can leave people feeling excluded, unrepresented, and invisible?



3 Questioning Gender in Design

Main insights

How does the current design practice incorporate gender?

The heteronormative and binary is today representing the majority of people. However, we see a trend towards a more queer and exploratory future, concerning gender and identity. So, what does this mean for design?

As herd animals, people always seek affiliation and acceptance. Focusing on how we can create a feeling of belonging in public space seems to be a natural place to start in the conversation of gender diversity at this point. Through promoting diversity in our everyday surroundings, people are being exposed to a more gender-inclusive model. As people receive this information actively and/or passively, gender diversity should be normalized, thus leading to more acceptance of it in society and increased affiliation for more of us. For this to happen, designers need to become informed of how our practice is influenced by traditional values and economic forces, such that awareness of possible biases are raised and consequences of these can be controlled.

Inclusive design accounts for intersectionality. However, when it comes to gender it mostly concerns the binary. Defaulting to the binary masculine men and feminine women is not a rare case and is easily justified with how our culture defines gender. However, doing this not only reduces the diversity of gender as a concept but also reduces the diversity of the binary and major genders.

“The default status of gender is still cisgender and binary”

(f. r. hartline, personal communication, March 3, 2021)

Designers tend to generalize and rely on heteronormative stereotypes.

Though gender is “by and large represented as one or the other” (E. E. P. Benestad, personal interview, Feb 26, 2021), it does not mean deviations of the norm do not exist. Stine Kühle-Hansen (expert workshop, April 16, 2021) explained how the heteronormative values and norms lead to many devastating stories for people who are restricted by these and thus not being able to fully express themselves as their true self to the world.

Lack of representation of nonconformity leads to perpetuating heteronormativity when designers rely on our own experiences

When those of us who do not conform to the gender norms are considered, they are often regarded as a “special ‘topic’ that only comes up when it is specifically relevant to the storyline” (f. r. hartline, personal communication, March 3, 2021). While we want to show the diversity of gender, it is also important to be aware of how this is communicated to people. If every case of gender nonconformity is presented as “special”, heteronormativity keeps being regarded as the norm. The Gucci dress for men is an example of where such special cases might be problematic yet intricate. Though they criticized gender stereotypes and highlighted the stigma of men wearing dresses, it was still categorized as a dress “for” men. Can we accept this as a step towards an inclusive society, or do we need more radical interventions?

**Deviations of the norm are often regarded as “special cases”,
thus seldom accounted for**

Ignoring a problem until it goes away is shown to be a common mistake in many fields of research on gender, including design. In the process of defining the challenge we want to solve, excluding gender from the equation can lead to ignorance of the challenges the binary and heteronormative gender system brings for many.

Ignoring gender means ignoring the gender problem

Designers are experts in pinpointing challenges, examining people's behaviour and finding needs. However, we often tend to ignore the question of why these are the challenges; why this is the behaviour; why these are the needs.

“I usually jump straight to the problem right away and maybe very often skip the information behind. ... I might not reflect upon why.”


(Harry, focus group 2, April 15, 2021)

The heritage from SSI is still evident in society: men are associated with public affairs, such as economy and politics, while women are associated with domesticity. Society reflects these gendered expectations by depicting heteronormative, feminine women, more often than men, in domestic environments. By targeting women, we are told by society that women should be in charge of the domestic sphere. This reinforces the gendered expectations, thus gendered behaviour patterns. Though many people might relate to these gender patterns, it does not apply to all. The danger when we design for this is the lack of critical thinking.

Lack in asking why and critically thinking of gendered behaviour ignores the underlying systemic problems

The importance of intersectionality has become a hot topic in design in recent years. Understanding the systematic discrimination on gender, race, and class is a huge step in the right direction in utilizing the privilege and responsibility

of designers when influencing society with solutions and concepts. However, the focus on gender has mainly considered the imbalance between the binary, men and women. Though this is of importance, targeting the binary gender model as the problem, lacks. The consequence of the lack of tools, guidelines and awareness of the challenges rooting in the binary system can leave designers bewildered, claiming to the known and binary.



Disclaiming the responsibility is an easy but dangerous pitfall in design practice

Essentially, gender in design should express something more than the binary, in my opinion. Designers need to think outside the binary boxes. Designing for the binary leads to awkwardness, insecurities and stigma. When it goes to the extent that people are systematically excluded, discriminated against and oppressed, we, as a society, have a problem.

Design should criticise the status quo, tackle the hard things, and open up new opportunities for people, rather than continuing reproducing the values of a repressing system, such as the binary gender system. The question is how.

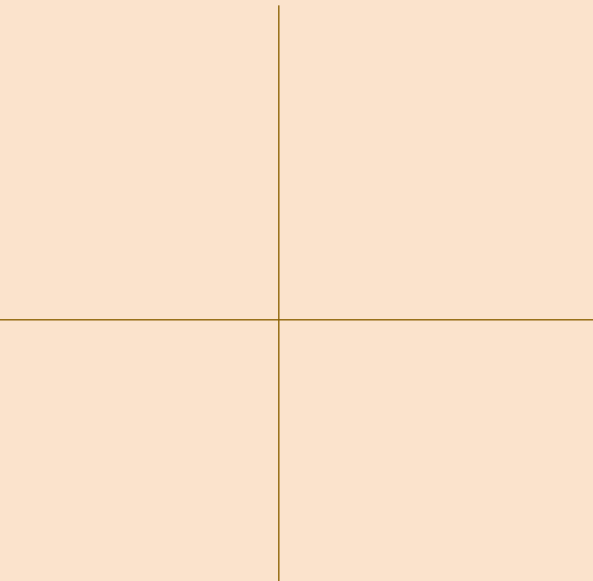
Now that we know a bit more of the interplay between design practice and the binary gender system, we know where we need to improve. The next chapter discusses how to introduce gender diversity in design practice.



Chapter 4

Transitioning Gender in Design

How should designers handle
gender challenges in practice?



Building on and binding the findings from the previous chapters, this chapter proposes a new way of working with gender in design. Looking into the interplay between society, designers and people, the responsibility of designers in the gender challenge is highlighted. The chapter introduces ways to work and points of importance to rethink gender in design. Findings were tested and evaluated in a workshop with retail design students.

Transitioning

verb /træn'zɪʃənɪŋ/

When someone goes through a process of transitioning from one gender to the next. This process is unique to everyone and only the individual can decide what the process looks like.

(Queer Events, n.d.)

Contemporary design practice lacks sufficient tools and guidelines on how to think outside the binary boxes. For designers to challenge the same gender system we are influenced by, this chapter presents various techniques and recommendations on rethinking gender in design. By integrating gender diversity in design practice, society becomes more exposed to it, thus more accepting of a more diverse gender model.

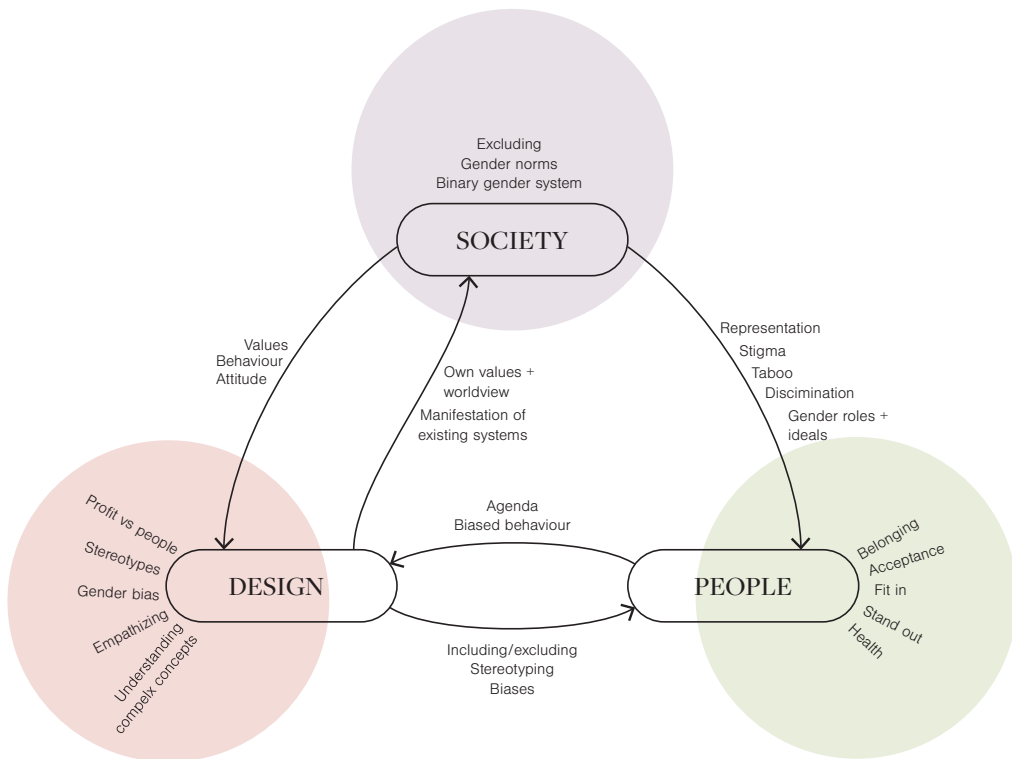


Fig 17 - Model showing the causes and effects between society, people, and design. The model is based on insights from this research to comprehend the data.

Society, people, and design

Society has an enormous influence on people. When designers introduce society to our solutions, we are indirectly influencing people with our decisions. For this reason, we are responsible for paying attention to biases we are prone to possess. If we can understand how forces in society affect our mindset and approach, we can become in control of our decisions.

A holistic overview of the relations and interplay between society, people and design is illustrated in Fig 17. After clustering the insights from literature review, desktop research, interviews, the questionnaire, and focus groups, the model was made to find the links between causes and effects of various forces in society related to gender. The model indicates the role of design in the gender challenge. This can be used to understand what needs to change design practice to influence contemporary gender norms.

The following hypothesis describes how design has an important role in the change towards a more gender-inclusive society.

Recognizing GENDER CHALLENGES related to the binary gender system → less GENDER BIAS in DESIGN → less STEREOTYPED design → increased BELONGING to society → increased ACCEPTANCE of gender diversity → less STIGMA in society → less DISCRIMINATION → better MENTAL HEALTH and reduced INSECURITY

This reveals a natural starting point, namely acknowledging and recognizing gender challenges in design practice. To do this, designers need to become aware of and understand the complexity of gender. To retrieve insights on how, I invited different experts to a workshop, discussing the future of gender in design.

Expert Workshop: gender narrative

After the various methods conducted throughout the research, I became curious about how designers should relate to the gender perceptions of various fields. For this reason, I invited EGGG-designer Ingvill Hoffart, sexologist Stine Kühle-Hansen, and historian and gender researcher Trine Rogg Korsvik to an online workshop. The purpose of the workshop was to reflect and discuss gender narratives with experts from different fields, as well as finding similarities and differences in their approach to the gender challenge.

For the workshop, I prepared materials for discussion in Miro (see Appendix L for setup). This was mainly based on some of the previous data and findings from the research, in addition to some questions to initiate discussion. My main goal was to initiate a discussion between the experts, which it did. The results are therefore based on verbal communication, rather than written material in Miro. Though we did not completely follow the plan, we had a valuable and interesting discussion.

After the workshop, I felt the need for more input on the gender challenge from a biological perspective. After a bit of desktop research, I came across an article by medicine and research student Sara Tellefsen from the University of Oslo. In the article, she writes about the importance of keeping the binary gender model, but opening up and acknowledging the diversity within

the binary genders. I contacted her and she agreed to do an interview. The interview was centred around similar materials as in the workshop, including some additional results from the workshop (see Appendix M).

The diverse concept of gender

An interesting remark from the workshop was the diversity in perceptions of the experts in different fields.

“In my eyes, gender identities are flexible stories we develop ... throughout life in interaction with our environments.”

(S. Kühle-Hansen, expert workshop, April 16, 2021)

“Then we completely disagree. ... Personally, I believe that we, in our core, are humans, and not gender.”

(T. R. Korsvik, expert workshop, April 16, 2021)

In contrast to Stine above and Esben Esther, who described gender identity as an inner feeling, Trine understands gender as outer constructions forming humans. She explains how “gender is a structure ... where cultural [gender] norms are forced onto us”. For instance, the statement of bicycles being designed based on gender differences “is of course just a cultural prejudice,” she states.

Sara, on the other hand, argues for the binary gender model from a biological perspective. “In biological sciences, the binary gender model is the basis. It is like a reality”, she

says. However, she acknowledges the social influence of the binary gender system Trine describes. Though with a more dichotomous mindset, she explains how “there is a lot that is socially constructed and a lot that can be erased. But it is also perhaps a pitfall to state that there is no difference”. Though “it is not often that the biological sex needs to take place in society,” it is important to account for when it does, Sara continues.

Evolution of the gender narrative

Trine explains how gender identity is a relatively new concept.

“I would say that in many ways it has become more gendered during my lifetime. When I grew up, there was much less difference between girls’ and boys’ clothes than today. It was not the division of colours of pink and blue at all. Today, on the contrary, even skirts are gendered!”

(T. R. Korsvik, expert workshop, April 16, 2021)

While Stine expresses an inner peace for larger gender diversity in society today, Trine perceives society to be more gendered. She argues her claims of this so-called “backlash” as a response to the progress towards more equality, starting in the 90s.

“When women appear more in ... positions of power, you get a kind of backlash: that ‘yes you are a girl and should walk around looking like a princess’.”

(T. R. Korsvik, expert workshop, April 16, 2021)

Furthermore, Trine mentions pop culture in the 80s, with icons such as David Bowie and Prince. At this time, it was common for male musicians to play with femininity. Trine describes this as a paradox, as we tend to believe we are moving towards more diversity. However, the latter “is not true”, she argues. These trends “go back and forth,” she reasons. Today we see conflicting trends: “on one hand, there is more gender freedom, but at the same time it is more rigid and a larger focus on what is masculine and what is feminine,” Trine continues. Sara supports this claim by describing these events as waves through time.

“The feminine and masculine is something you can easily liberate from the biological. Simultaneously, it is also a binary phenomenon that has always existed. ... The binary ‘energy’ with masculine and feminine will probably stay, while the definition of what is masculine and feminine will change.”

(S. Tellefsen, personal interview, April 22, 2021)

Further, Sara connects the binary to human nature: “we have two brain halves complimenting each other; in Asia, we have yin and yang; in design, we talk about chic and shabby. I think humans like the binary contrast”.

The future of gender

When talking about the future narrative of gender, Stine refers to the younger generation:

“I am so thankful for having young, healthy brains. There is full gender creativity [amongst the youth]. We see it coming.”

(S. Kühle-Hansen, expert workshop, April 16, 2021)

Stine continues talking about “windows of inspiration” and a larger spectre of gender diversity, where young people can find affiliation. “The younger generation [is an inspiration,] foreshadowing what is going to happen [in the future]”, Ingwill adds.

In contrast, Sara argues for the binary gender model, while expanding our understanding of the variations within the binary:

“By maintaining the binary model as a framework for our understanding of gender, while acknowledging the range of variation within both gender categories, one will be able to embrace the rich diversity of individuals that exist in society”

(S. Tellefsen, personal interview, April 22, 2021)

Trine and Sara illustrated the contemporary, rigid gender roles by the current narrative of boys. Today, the notion is “that boys who wear dresses are trans, instead of thinking that boys can also have a desire to wear a dress”, Tine says. Sara considers

it to be a pity that these boys are constantly told to “reflect upon what gender they actually are”. She wants a society where “a boy who has feminine features and wears nail polish ... can still be a boy”.

On the other side, Sara does not want to erase the binary gender model. She refers to people who have grounded their transition in the binary gender model. Eliminating the binary would thus be equal to erasing their reason for transitioning. “If we say that there are no two sexes, then there may be others who do not feel heard or understood,” Sara explains.

I would like to contradict this statement with a quote from the interview with Esben Esther:

“There is no one to decide over someone’s gender. Be it cis-gendered, transgendered, or intersex. There should only be more [genders] to choose from and you should decide for yourself what they are.”

(E. E. P. Benestad, personal interview, Feb 26, 2021)

Although, Sara makes me aware of the confusion which might occur if we have “too many options” to choose from. “I want there to be diversity and [acceptance] for it - that there are many types of boys and many types of girls,” Sara concludes.

The future of gender is perceived differently in different fields. Nonetheless, the bottom line is the acknowledgement of diversity. All the representatives from sexology, medicine, and

history agreed on the importance of a future where people can express themselves, without the restrictions of the current gender norms and roles.

Importance of gender in design

The diverse concept of gender can be hard to grasp, but what does it mean for design?

Trine argues that “as a designer, [when] you create [solutions with a focus on inclusion], gender is one of many perspectives that are relevant to investigate”. Additionally, she pays attention to the importance of intersectional perspectives. Ingvill responded by clarifying how design practice has been focusing on the other perspectives. “It is probably ‘gender’ many have a rather unvarnished relationship with, resulting in gender not being highlighted as much,” she explains.

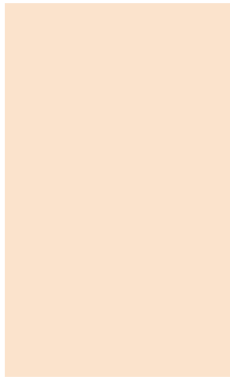
Further, Ingvill stresses the responsibility of designers in this challenge:

“It is not just a question of how design can contribute. It is also what responsibility we have as designers when creating inclusive public services ... and products that will affect society. I think many designers are not aware of their responsibilities ... when it comes to avoiding gender stereotypes.”

(I. Hoffart, expert workshop, April 16, 2021)

Design is highly user-oriented. Designers make use of established methodologies to involve different types of users. Empathizing with those who will actually use the service or product in the end, is important for the result to be successful. “But,” Ingvill points out, “there is still a tendency ... in the user involvement, to resort to strict categories”. She proposes that we should involve different types of people in the design process to understand their perspectives. “Preferably someone who challenges your own perspectives,” she adds.

Stine informs about her own experiences with gender challenges as a sexologist. Throughout her practice as a sexologist, she has witnessed a lot of devastating stories. She tells about how many are afraid of expressing themselves fully, in fear of judgement. When it comes to user involvement in design, people might resort to a normative attitude to spare themselves the “enormous mental strain” Stine talks about. For design, it is, as Ingvill says, “about awareness [and] knowledge. It is about who the designers include and what methods they use to include other perspectives in the design process”. Because gender-nonconforming attitude and behaviour is stigmatized in society, it is important that designers “provide and realize the options,” Stine says.



The discussion on gender diversity is complex and divided. However, by normalizing gender diversity, we can achieve acceptance in society. This means rethinking how we design the public space with respect to gender.

Influence on society: qualifying the options

Representation

Society depicts gender as binary, making it difficult for people to imagine the options of expression, identity, and behaviour. When a gender-biased design is introduced to society, we continue to reproduce the restrictive values and expectations of people based on their gender. We have to start exposing people to gender diversity, not only for those of us who do not feel an affiliation with the binary but also to create a societal acceptance of this.

“With repeated exposure, we learn to accept it as a natural given that cannot be changed”

(f. r. hartline, personal communication, March 3, 2021)

Inspiration

We are inspired by what we see around us. As members of a binary system, designers are prone to create gender-biased solutions. Because of the lack of exposure and representation of non-conforming depictions of gender and gender diversity in society, it is important for designers to actively expose ourselves to it.

“I want there to be more opportunities and that those opportunities are qualified. And if we are to complicate them we must see them. Or hear them. Or touch them. Or know them. That is the only way this can change.”

(E. E. P. Benestad, personal interview, Feb 26, 2021)

Results from focus group 1 indicated that when designers are primed with images representing diversity and norm challenging actions, they are more likely to focus on the same throughout their process. Additionally, the group focused on norm challenging design and the user feeling proud, compared to the group exposed to a heteronormative representation of gender. New and diverse impressions induce creativeness and solutions which challenge the restrictive norms of society.

“We must make space for marginalized voices to be heard in the profession. Diversity leads to better outcomes and solutions. Diversity leads to better design”

(Monteiro, 2019, p.23)



Do it for the people: Acceptance and belonging

“When you decide who you’re designing for, you’re making an implicit statement about who you’re not designing for. For years we referred to people who weren’t crucial to our products’ success as ‘edge cases’. We were marginalizing people. And we were making a decision that there were people in the world whose problems weren’t worth solving. ... These are the trans people who get caught on the edges of ‘real names’ projects. ... They are not edge cases. They are human beings, and we owe them our best work.”

(Monteiro, 2019, p. 22)

As mentioned in Chapter 1, there are critiques of the spectrum theory and gender diversity. The critics in the field of biology argue for how the number of such cases is not influential enough to have an impact on the theory of binary genders (Masvie, 2020). Hence, gender variations are considered “deviations” of the main sexes, male and female. This is similar to the “edge cases” in design. Designers are influencing and affecting people. When designing social interventions, we have to consider the challenges of those of us who systematically are excluded.

Target group

Defining a target group is a common practice in design to delimit the design scope and make it comprehensible. But sometimes we are too focused on this to acknowledge all the people who are influenced by our decisions. When we put a design into society, we are not only affecting the people who fit our target group, we also affect everyone who comes in touch with the solution: those who are unconsciously excluded from the target group; those who have the need, but are not accounted for; those who are systematically and repetitively forgotten. Behaviour and need do not necessarily only apply to one target group.

For this reason, it is important to reflect upon the relation between the people included in the process and the people who come in contact with the final solution. Do they share similar experiences? Does the solution express an understanding of the experience of people with different gender stories? Who writes the literature we are reading? Who gives us feedback on our work? Does the solution feed a social system that oppresses marginalized groups?

“Design and design systems can ... reaffirm and fix an exclusive and selective system.”

(iGDN [international Gender Design Network e. V.], 2020)

Gender boxes

Because “the default status of gender is still cisgender and binary” (f. r. hartline, personal communication, March 3, 2021) we are prone to unconsciously put people in boxes of heteronormativity and create solutions that are “punishing us when we break gender norms” (f. r. hartline, personal communication, March 3, 2021). Identifying people who are inside and outside of the categories we design for can enable aspects of the design that are important to combat biases, discrimination, and systematic oppression.

Skeiv Ungdom talked about how many experiences a “need to force themselves into a box” in society. This can be uncomfortable “if you do not feel you fit” (Skeiv Ungdom, personal interview, March 19, 2021). This results in many feelings being excluded in a lot of settings. Stine Kühle-Hansen (expert workshop, April 16, 2021) explained how the enormous mental strain this leads to, as many are met with “rolling eyes and mocking laughter”.

Expectations

Humans are dependent on affiliation. We need to feel connected to groups, a society. We need to feel accepted. However, in our heteronormative society, many long to express themselves with what is valuable for them, Stine (expert workshop, April 16, 2021) explains.

“I have yet to see a male mannequin in a dress. I think it ... would have given a good signal to young and old. Signalizing that it is also a possible option.”

(S. Kühle-Hansen, expert workshop, April 16, 2021)

However, male figures in dresses have existed. Artists and musicians, especially from the pop culture in the 80's such as Annie Lennox, David Bowie, Prince, and Grace Jones, have challenged the heteronormative gender norms. Trine (expert workshop, April 16, 2021) explains this as a paradox when we see how the gender norms persist until today. Men in dresses are still stigmatized, clothing stores are still mainly divided by the binary genders, we are still confused if we can not identify the gender of a person by their looks. We still have a problem regarding gender norms, expectations, assumptions, and design.

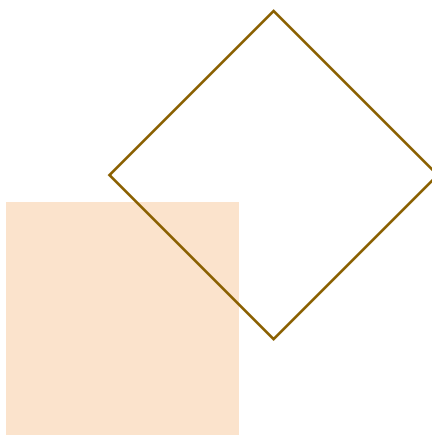
“There are many pop artists who have special clothes. But they are artists and artists are screwed together in a slightly different way than ‘normal’ people.”

(Cis-man (60), personal interview Feb 21, 2021)

Though many celebrities have crossed many gender norms, they have the privilege of socio-economic stability. Their actions do not support those of us who are surrounded by the binary in everyday life and are expected to behave in line with the norms, rather than expressing creativity and individuality. We have another attitude towards these icons than towards our neighbours. When the icon challenges gender norms, it is

creative. When the neighbour bends the norms, it is a whole different attitude. We react with facial expressions, whispers, eye rolls.

People need to see themselves in what is represented in society. We need to see the masculine mannequin in a dress, a diversity in sizes of crop-tops, sparkle on the male models, muscles on the female models, trans models, non-binary models, agender models, diversity. We need to normalize the relatable to avoid negative attention to those of us who just want to express ourselves.



Designing: Awareness of the challenge

Holistic overview

Because the binary gender norms are hardwired in society, affecting behaviour and attitudes, it is important not only to include a diversity of people in our process but also analyzing the data with societal systems. Triangulating between various methods is thus especially important when paying attention to investigating the influence of social systems and norms on the behaviour and attitude of participants. Collect quantitative and qualitative data. Compare what has been observed with what has been said. Compare the insights from this with a holistic view of social systems.

Today, the binary gender model is greatly integrated into design education. Design students learn about gender-segregated behaviour, preferences, and needs. And yes, mostly accounting for the binary and heteronormative. Retail design students learn about how women enjoy shopping, while men perceive it as a task. We learn about how women do more shopping than men. We learn how women prefer the feminine, and men the masculine. Though the numbers and statistics confirm this, we have to ask why this is. Women do most of the shopping because the values of the heteronormative gender system expect men to work and women to take care of the domestic work. Though it is not as evident in our society today, we still see fragments of it emerging and affecting how

we design society and in how we perceive, act, and behave around people, depending on what gender we perceive them to be. In design processes, we often ask how: how is the situation today? How was it before? How should it be in the future? When we continue to design by the superficial observations of behavioural patterns, we continue to design for the restrictive and binary gender roles. To get to the chore and reveal the larger, systematic problem we need to ask why.

Response biases

When collecting qualitative data, designers are taught to be aware of response biases influencing the answers of participants (Furnham, 1986). However, how important is it for the study that the participants answer honestly? Ask “what is important to find?” How can the less honest answers provide valuable information to the research? Comparing the attitudes and behaviour to the norms in society may reveal this greater value and provide an understanding of systematic challenges which needs to be considered in the design process.

Because of the huge influence of gender norms on society and people, the stigma it produces, and so on, it might be hard for people to answer honestly. Additionally, because the norms are so hardwired in society, many are not reflected upon the topic. Their behaviour and attitude in general and towards the topic might be very much influenced by binary expectations. This makes it important for designers to understand the collected data in a bigger context. How might the answers be influenced by norms, expectations, stigma?

Gender norms guide behaviour and attitude, creating stigma and taboo for deviating behaviour and attitude. People are prone to conform to the norms of society. Though it might fit some, it is still restrictive, especially for those of us who do not identify with the gender model. If we overlook this aspect when designing, we continue to manifest and reproduce the binary and heteronormative gender system.

In the activity of involving people in the design process to empathize and understand their experiences, we need to understand how their behaviour, attitudes, and experiences are influenced by the binary gender system. Though a lot of cis-men might express a lack of desire to wear a dress, the social norms of clothing conventions are still restrictive for the men who want. Asking why in such cases where some feel they are not allowed to wear a piece of fabric that is designed in a certain way can reveal social structures which are worth criticising.

The approach

How we approach the challenge will affect how people who encounter our design receive and perceive the message. Find where we and society stand in the discussion. How can our design increase acceptance of gender diversity, while creating affiliation? Is there a need for provocation and education, or more subtle signs, obvious for some? What is it about: adding to the existing, changing the existing, or separating the spaces? Where do we stand and what can our design project change?

Though it is hard, a first step is to confront our own biases. We like to think of ourselves as open-minded and unbiased, though it is rarely true. Prejudice is human - that's how we survive in this complex world. However, when prejudices become exclusive and discriminate against unconscious biases, we need to take a step back and look into the actual consequences of it. Who are we designing for? Who do we imagine using our design? Who do we include in our process? How might we be influenced by the binary gender norms?

Ignoring our prejudice hoping it goes away must not be an option. The first step in becoming a more open-minded designer and steering away from gender stereotypes is in becoming aware of our mind and how it is affected by the binary gender model in society.

The focus groups conducted in this research were great in uncovering our own biases. By doing a quick design exercise, we are forced to act on our intuition. Reflecting upon the outcomes in retrospect can reveal our unconscious biases towards the topic and people inside and outside the categories we define for our project. Becoming aware of these biases help us become more in control of our decisions while reducing the risk of the impact on the actual project, thus society.

Additionally, it is an idea to test our boundaries when it comes to gender norms. When do we feel restricted by the gender norms of society? Empathizing with those of us who are restricted by the norms on an individual and personal level is

important in understanding the challenges and problems such norms oppose.

Generations

...we are a reflection of the time we grow up in...

(SoFI, lecture on target group, March 9, 2021)

Our attitudes and behaviour are influenced by the norms and conventions in the time we grew up. When working with gender norms and roles, which changes over time, it can be relevant to understand how the conventions were and changed over the period our target group grew up in. This can help in understanding how to meet the generation with understanding, while also induce acceptance of a more diverse gender model. This is not only relevant for the defined target group, but also when creating overall acceptance, knowledge and understanding of gender diversity in society. How can our design welcome and create affiliation for those of us who are not represented today?

It is important to be aware of possible biases here as well. People from the same generation do not necessarily hold the same values. However, this can provide an understanding of the context and circumstances people grew up in.

Imagining a future

It is a common practice for designers to work with hypotheses of the future to create sustainable solutions. Examining trends of various generations can provide insights into what might be needed and accepted in this future. What are the trends amongst the youth? How can designers stimulate knowledge on gender diversity, both for those of us who do not identify with the binary, as well as for the parents who grew up with the binary?

Speaking of future hypotheses, creating a utopian or dystopian future can help us design for what is desired and what we have to avoid. How would a gender-free society be? How would a society filled with gendered taboos and stigmas be? Reflecting upon how such societies would influence the attitude and behaviour of people could be valuable. What is needed to get to the utopian society? Or prevent the dystopian scenario? Stereotyping is a common pitfall when working with personas - especially when it comes to gender. Though stereotypes and personas are tools to comprehend the complexity of humans and the target group, it might be valuable to create a non-heteronormative persona. This can help in raising awareness of the impact our design can have on people who do not conform to heteronormative gender roles, as well as those who do because they see no other options. These personas can be used to normalize non-heteronormativity in general in the design process, as well as reducing the risk of our solution being stigmatizing or discriminating against those of us who do not conform to gender norms.

Similarities in diversity

Another way is to challenge our perception of gender by creating two seemingly opposite personas and try to find their common features in our project. In the second focus group conducted in this project, this was one of the comments of the participants when being given the task to choose a target group based on two personas. Instead of choosing one of the two, they discussed whether the solution could fit both.

“I can imagine persona 1 and persona 2 having some things in common. ... Maybe they can meet halfway [with our solution]”

(Harry, focus group 2, April 15, 2021)

This activity can provide insights into the diversity of the target group. Similar people can experience things differently and different people can experience things similarly. Finding the common ground between people inside and outside the categories we define for our project can help in understanding the diversity in people, how to meet the needs of people with different perspectives while reducing the risk of harming people who are outside of the target group.

Binary communication

Our language, behaviour, attitude, and surroundings communicate the binary worldview. Until 2019, transgender was medically categorized as a disorder (BBC News, 2019). Though it is removed, it is still not normalized socially. The debate on trans-women being allowed in the women’s bathroom is an ongoing discussion.

People born intersex are still not recognized or taught about in education. They are considered a deviation and many go through a forced operation. Though research on intersex and the relation between bodily sex and psychological gender has improved over the past 20 years - what does this tell society?

“One of the prices we as a culture pay is that we must make sick what does not fit into our binary worldview”

(E. E. P. Benestad, personal interview, Feb 26, 2021)

The binary values are not just said in words, it is also signaled through how we represent things. It is not necessarily the product or design in itself that is stigmatizing, but the labelling, the categorizing, the “FOR (gender)”, or the lack thereof for a design based on the heteronormative man. People need to be provided with opportunities on gender, rather than restrictions.

How a design is communicated and marketed in society is influenced by who we involve in the process. Were there any masculine women, or women at all, included in the design of the “Bic pen for women”? The binary gender model influences how we depict and perceive the gender it targets. This again enforces the binary gender system, thus the barrier for individuals to challenge the gender norms (Skeiv Ungdom, personal interview, March 19, 2021).

Paying attention to how a design is communicated through language, product language, representation and context is thus important in creating affiliation and acceptance for gender diversity.

“It is much nicer to be ‘unusual’ or ‘phenomenon’ than to be ‘wrong’”

(E. E. P. Benestad, personal interview, Feb 26, 2021)

Gendered implications of artefacts

To integrate gender issues more thoroughly into the design process, Uta Brandes (2008) suggests that we “consider the artefacts and contexts of everyday culture with regards to their gendered implications”. This means, amongst others, research and to account for “private and public space; domestic worlds; the culture of objects; symbol and sign systems; ... clothing as “second skin”; body design (control, identification, branding)” (Brandes, 2008).

Throughout this project, significant factors which influence and might influence our perception of gender and the gendered artefacts were found. To enable the application of the results from this study on a broader aspect of design, this was not tested as it focuses on product design. However, I find it valuable to present these factors as inspiration in what to consider when designing products.

Context

What is the context around the object? How does the context influence the object in relation to gendered aspects of it?

Interaction

What are the associated norms of gendered interactions with the product?

Function

What is the job of the product? Is it gender-dependent? Could the product be used by people with the same needs but with different gender identity?

Aesthetics

How does aesthetics relate to gender norms? Are they manifesting criticising the traditional? How would this change if the product language changed?

Priming

How does priming influence the perception of the product?

Attributes

Does the product solve a functional or personal need? What is the kind of message the object communicates?

Size

What happens with the relation to gender norms if the size changes? A common practice the past decade has been to shrink it and pink it to create a female version. What does this communicate to society?

Space

Space influences our perception of things. Can we use this knowledge in changing the gender of things? Here are some variables to play with to affect the perception of a product: rhythm, colour, lighting, atmosphere, music, focal points, layout (zones, departments), beauty, forms and shapes, semiotics, and categories.

Working with a client (society)

Often, designers have to consider the demands of a client. Challenging the gender norms while designing for commerce and profit can seem to complicate and confuse. We want what is known because what is known is efficient. But what is commonly known about gender in society is also exclusive, discriminating, and damaging to many. We have a responsibility as designers. Even asking our client “what about the genderqueers?”, categorizing the clothes unrelated to gender, or presenting a transgendered persona, can sometimes be enough to start the progress towards a more gender-inclusive society.

Designers are privileged. We are in the front seat, if not steering the wheel, of influencing people and society. Because of this, we need to be aware of the impact we can make with our decisions. After understanding our own biases, we must act upon them. We must make sure people are not negatively affected, excluded, discriminated against, and not heard because they do not fit the norms. We must make sure we combat those biases, and design for necessary and desired changes, with a positive impact. It is not a lack of focus on doing good, but a lack of focus on not hurting. We need to make the best of our privilege in designing for the better.

Workshop with Høyskolen Kristiania

Towards the end of the project, I was invited to do a workshop for the Retail Design study at Høyskolen Kristiania. Prior to this, I analyzed all data and compared insights. Categorizing the insights led to the development of attitudes and behaviour, pitfalls, techniques and principles (see Appendix N).

The students had an ongoing group project, where each group had chosen a fashion brand to work on, before the workshop. The course coordinator saw the relevance in introducing the gender perspective in their projects.

The findings from this research were presented in an online workshop using Zoom and Miro. 15 students in five groups of three-four in each, participated. In the seven hours scheduled for the workshop, the purpose was to understand and discuss how designers best can learn about the complexity of gender in design and how this knowledge can be utilized in future work.

The workshop was created with respect to the ongoing project of the students. With frequent contact with the course coordinator, a plan was made (Appendix N). The purpose was to supply the students with tools to work with gender in design while providing this project with insights on the effect of using these tools on the design process and final outcome.

Through various tasks and theory, the workshop provided an arena to reflect and discuss ways to learn about the interplay between the binary gender system in society, design, and people. Moreover, it was used to understand what is needed in the field to design for gender diversity. In essence, the workshop

- * encouraged critical thinking and reflection,
- * offered definitions of relevant terms related to and associated with gender,
- * provided knowledge and information on the history of gender and the binary gender system, and
- * presented the challenge in the context of design: pitfalls, design techniques, and principles

The presented theory included information on the gender challenge and its relevance to design. Insights from this project were presented as general attitudes and behaviour of people, common design pitfalls, useful techniques and principles in becoming aware of and working with gender in design.

The practical tasks were executed in Miro. The students discussed in their groups in Breakout Rooms in Zoom, which I did not have the access to join. However, the students had the option to join the common zoom room, where I was present. Additionally, at the end of the workshop, participants were encouraged to reflect upon their learning outcomes.

In addition to reflection and planning tasks, the main task was to create a new concept for a chosen physical area of their

chosen brand. The main task had the purpose of testing and evaluating the presented theory in practice, and triggering reflection and discussion upon previous tasks. The concept had to pay attention to their chosen brand and gender diversity.

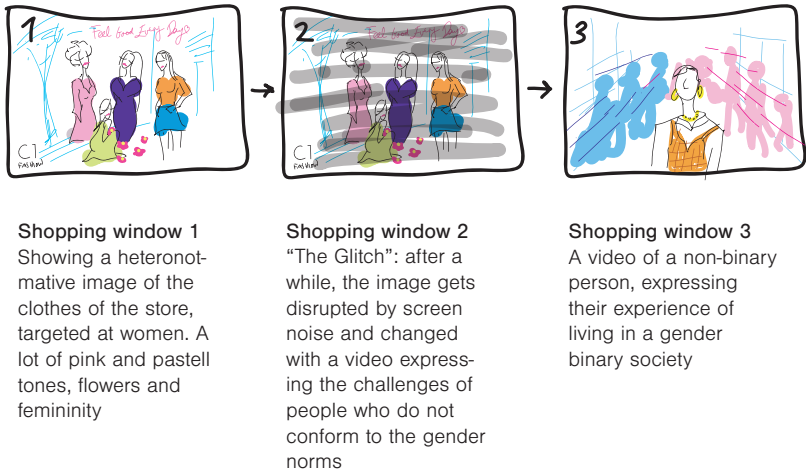
In the end, two concepts from the workshop were complete enough to present to five people in my circumference for feedback. The purpose of this was to retrieve additional insights on the effect of rethinking gender in design on people.

Outcome and analysis

To preserve the privacy of the participants, brand names have been replaced with dummy names, and original visuals replaced with imitations.

During the workshop, I had many interesting and inspiring discussions with the students and the teacher. The overall impression was great interest and motivation from the students to continue their work from the workshop to future practice.

Because I did not have access to the group discussions while during the practical tasks, the students were asked to create a presentation of their final concept and learning outcomes. Two of the groups presented their work.



Shopping window 1
Showing a heteronormative image of the clothes of the store, targeted at women. A lot of pink and pastel tones, flowers and femininity

Shopping window 2
“The Glitch”: after a while, the image gets disrupted by screen noise and changed with a video expressing the challenges of people who do not conform to the gender norms

Shopping window 3
A video of a non-binary person, expressing their experience of living in a gender binary society

Fig 18 - Recreation of final concept of group 1 in the workshop with Høyskolen Kristiania.

Group 1

During the workshop, the first group realized the heteronormative depiction of gender in their chosen brand. With their final concept, they wanted to challenge this. By arousing emotions, their goal was to change people’s attitudes towards gender. Their approach to the design challenge was to create a collage representing diversity. This resulted in “The Glitch” (see Fig 18), a shopping window concept depicting a heteronormative image of gender which, after a while, is disrupted. After the disruption, the story of a person who does not identify with the heteronormative and binary is presented.

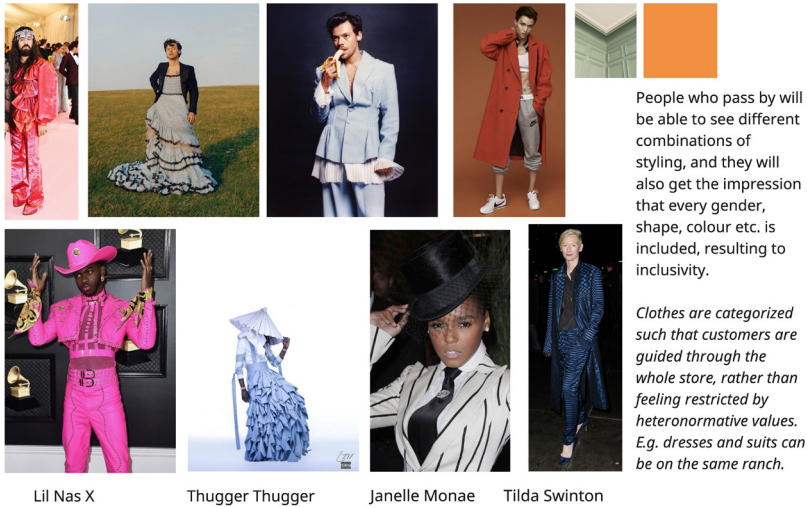


Fig 19 - Screenshot of final concept of group 2 in the workshop with Høyskolen Kristiania.

Group 2

The next group worked with a brand that depicted more diversity originally. However, they noted that the brand speaks more to women. Their approach to the challenge was to do generation research and create a moodboard (see Fig 19). The vision of their concept was “to make individuals feel accepted and safe when walking into a store, by making the interior and space to a more gender-neutral design”. Their final concept focussed on the layout of the store, where every zone should spark interest in every customer, regardless of gender identity and expression. Moreover, “people who pass by will be able to see different combinations of styling, and ... get the impression that every gender, shape, colour etc. is included, resulting in inclusivity”.

Learning outcomes

The following were some of the learning outcomes from the workshop, presented by the students:

“We as designers have a great responsibility when it comes to influencing people”

“You have to ask critical questions and ask why we do things the way we do”

“The important thing for the future is to include, rather than exclude so that every gender group feel seen and cared for”

“We must challenge ourselves, society and the customer we work with”

Individual reflection

To retrieve insights on the students' perspectives on working with gender in design, a questionnaire was distributed to the participants after the workshop. Six of the participants responded.

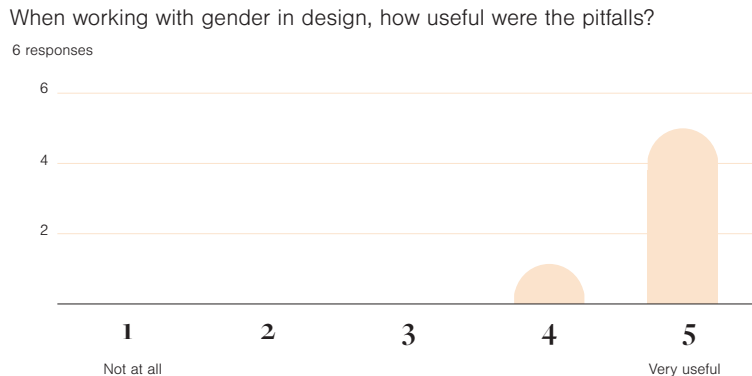
The overall feedback reflected an interest and acknowledgement of the importance of the topic in design.

“I find it extremely important that everyone, especially designers are aware of the heteronormativity that is heavily ingrained in the Western Society today, in order to make a change and be more inclusive of binary transgender men and women and non-binary people who aren't as visible in society due to these attitudes.”

(individual reflection after workshop)

Because I wanted to evaluate the findings from my research, the students were asked to rate the usefulness of knowing common pitfalls, having various principles to follow, and being provided with different techniques to use in the design process:

Fig 20 - Results from individual reflection after the workshop with Høyskolen Kristiania. Assessing value of pitfalls.



Pitfalls

The students expressed the value of knowing the common design pitfalls (see Fig 20).

“There are areas I have not thought about - good to get highlighted”

(individual reflection after workshop)

Making them aware of this led to “important conversations” (individual reflection after workshop).

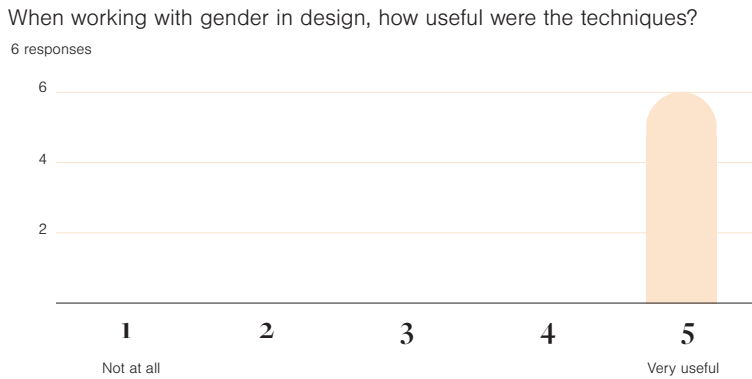


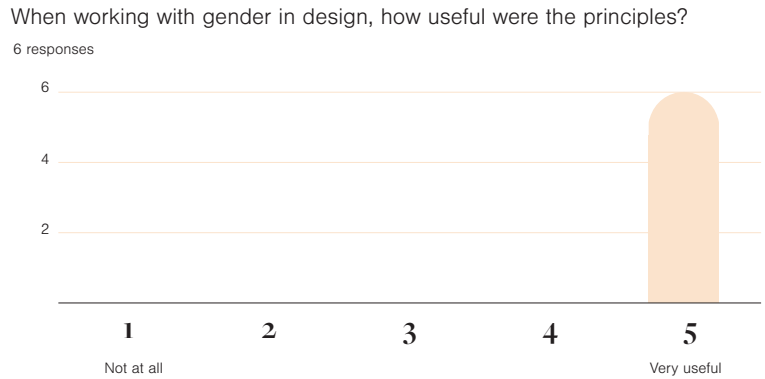
Fig 21 - Results from individual reflection after the workshop with Høyskolen Kristiania. Assessing value of techniques.

Techniques

The presented techniques were “exciting and educational” (answer from post-workshop questionnaire). Moreover, one of the respondents stated that the technique “initiates discussions about gender and diversity in the context of design, which is good” (individual reflection after workshop).

Though not all of the techniques were utilized, the students acknowledged a value from the presented techniques (Fig 21). Moreover, as one of the students said in the individual reflection, the goal is to inspire to work with gender in design. Being inspired on such a complex and often overlooked challenge as gender, is - to me - an important a step in the right direction.

Fig 22 - Results from individual reflection after the workshop with Høyskolen Kristiania. Assessing value of principles.



Principles

The nine principles presented, based on my previous research, seemed to help the students in reflecting and creating gender-inclusive spaces (Fig 22).

“I think keeping these principles when working on design is important in order to ensure an approach and a result ... that is inclusive to everyone. I believe that if all designers did this, the [collective] impact ... on society would change society’s attitudes from today’s [binary] default”

(individual reflection after workshop)

Finally, I would like to emphasize additional feedback from the workshop which illustrate the importance of rethinking gender in design:

“I very much was looking forward to doing this workshop today and I was not disappointed. Thank you for making my peers more aware and making me feel seen and included.”

(individual reflection after workshop)

In conclusion, one can state that the presented material and findings of this research lead to raised awareness of the gender challenge and an applicable framework for how to work with gender in design. It is of value to implement and continue working on in future design practice. Nonetheless, what do people think?

Feedback from people

The resulting concepts of the workshop reflect the effect of working with gender in design. Design influences people, both target groups and other people who come in touch with our solutions. For this reason, it is of value to ask what people think about these concepts.

To retrieve a bit of insight on how such concepts would be perceived and received by people in society, I presented concept 1 and 2 to five of my acquaintances, resulting in three cis-men and two cis-women responding (see Appendix O).



Concept 1

The common initial reaction towards the first concept was it being thought-provoking. The respondents expressed the brand of this concept to be gender inclusive. The concept initiates reflection on gender challenges. However, one of the respondents made a valuable remark:

“A good concept, but it might be a bit negatively loaded. For a cis-person which have never experienced gender dysphoria this might be just one extra thing that it is easier to just not acknowledge (same as with poverty, hunger and other social injustices)”

(feedback on concept 1 from the workshop)

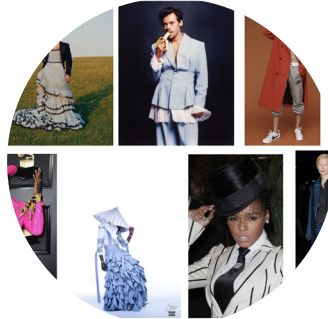
Designers need to understand how people of various backgrounds and gender stories perceive our solutions to make a change and create acceptance for gender diversity. We have to consider the context and circumstances and choose an approach to the design challenge and communication of the solution accordingly.

Further, some of the respondents said that the concept would catch their eye, but not enough to make them seek more information:

“I think it would make me think twice about gender norms in our society, but maybe not enough to actively seek more information about the subject on my own.”

(feedback on concept 1 from the workshop)

However, I would argue that for gender diversity to be normalized in society, it does not necessarily require everyone to become activists. In my opinion, seeing a more diverse representation of genders for people to consume unconsciously (or consciously) can be enough.



Concept 2

The next concept also received positive feedback. Participants perceived the concept to be inclusive and inspiring. One of the respondents mentioned the concept could reduce the stigma of the current and common layout in fashion stores:

“One can look at all kinds of clothes one prefers, without feeling shame or embarrassment from going into the ‘wrong’ department.”

(feedback on concept 2 from the workshop)

A concept like this could thus lead to less stigma for all, both those of us who do conform to the gender norms and those who do not. On the contrary, some of the respondents expressed that the concept “might not persuade me into wearing “women’s clothing”, but it would undoubtedly normalize more gender fluidity” (cis-man, feedback on concept 2 from workshop). Nonetheless, I would argue that this is exactly what should be the intention of working with gender in design. Gender diversity does not mean erasing

or disregarding the existence of heteronormativity. It means including variations and providing options.

“I don’t think this would have too much of an impact on me in the city centre as I like to think that my clothing choices are derived from what I think works for me. However, I do not disregard the possibility that my style has developed as a result of heteronormative values and that seeing more different examples of styles on a more regular basis could change what I perceive as my style.”

(feedback on concept 2 from the workshop)

The purpose of questioning contemporary gender norms is because they create expectations in society that everyone should follow them. These values fit some of us, but not all. When attitudes and behaviours deviating from the norms are stigmatized, it is difficult for individuals to express their identity, thus difficult for others to accept.

“I think the concept is daring in our heteronormative society and could cause some strong initial reactions from narrow-minded people. I think this concept is something that should be implemented as the standard for brands that sell general clothing. ... By not labelling clothes by gender and showing ... all sorts of styles is a healthy way to display human differences and promote inclusion.”

(feedback on concept 2 from the workshop)

Reflection

The number of respondents is not representative of the whole society. Since the respondents are people in my circumstance, who I would argue are young and reflective individuals, they might have been influenced by knowing the goal of my project. The concepts might have been perceived differently by other genders or generations. However, the answers can function as an indication of the future attitude towards such solutions.



4 *Transitioning Gender in Design*

Main insights

How should designers handle gender challenges in practice?

Testing and evaluating the findings of this research provided important insights into how designers should handle gender challenges in practice.



Before approaching a design challenge, it is important to become **aware of our own biases**. **Emphasize** with those of us who are prone to systemic oppression. Asking ourselves how we may contribute to perpetuating the current gender norms and values can be hard, but is necessary in order to change. Be conscious about **the approach** to the design challenge. How can we contribute to creating a more inclusive future? And equally important, how do we prevent a future of systemic oppression?

Societal challenges and systems influence our attitudes and behaviour. To retrieve a holistic view of these societal forces, designers need to ensure the **use of various methods**. Because gender plays out in various ways in life, it can be useful to gather data without being present and reflect upon gendered behaviours and attitudes. **Ask questions** about the status quo.



Because designers influence people when introducing our solutions to society, we have a responsibility in understanding the effect. We have to think about **who we include in the target group and who we exclude**. We have to be aware of the **diversity of individuals** within a target group, as well as the influence of those excluded. We have to understand how our solution affects a diversity of people. We have to understand **our privilege** and how we influence society.

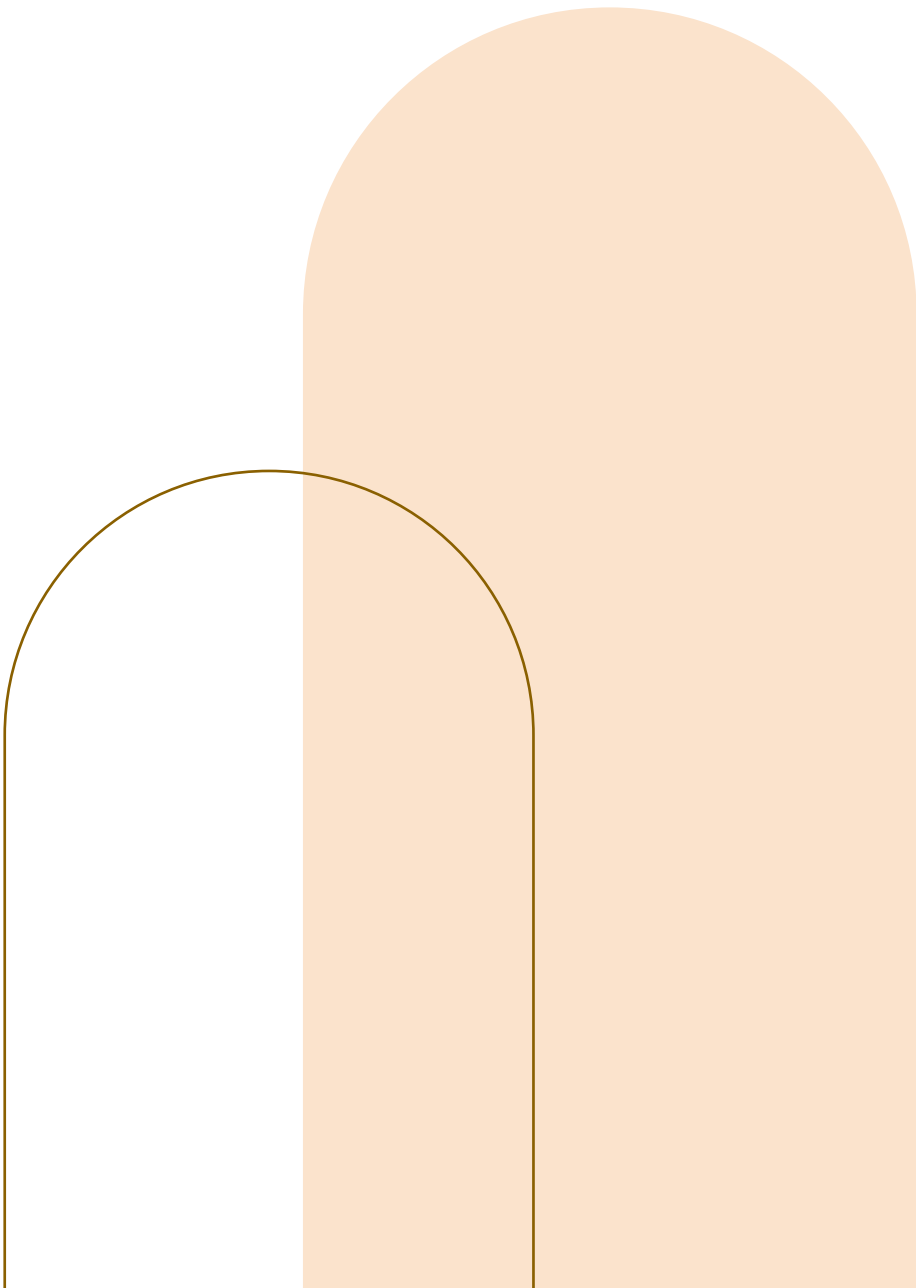


Priming ourselves with diversity is useful for the insight phase of a design project, but it should also be a goal designers work towards in society. We can all retrieve a great value in being primed with diversity and various gender expressions. **Provide options** to people. Make gender diversity **acceptable**.

How we communicate our solutions to the world is equally as important as the process. For people to accept gender diversity, it is important that design reflects people and makes it **relatable**. Designers must approach **various perspectives**; Include people we might disagree with, in the design process; Involve a variety of people who are not necessarily in the target group; Include transtalents in the process; Involve genderqueers in the testing; Meet people; Read about it; Normalize diversity for ourselves; Share our knowledge; Normalize it for society.



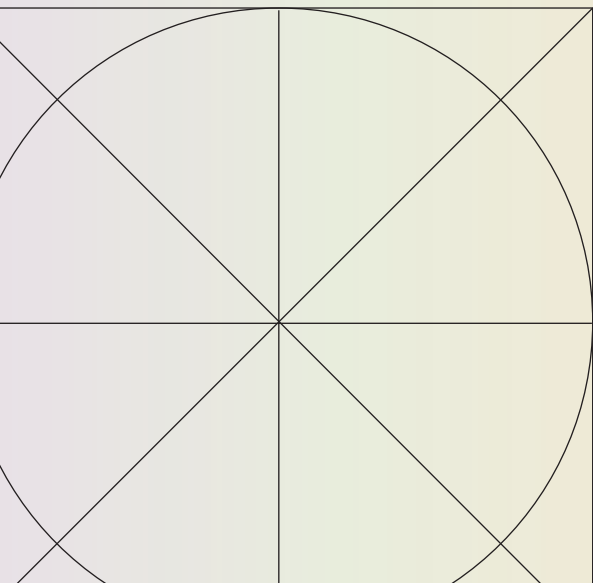
In this chapter, ways to work with gender in design have been explored. This resulted in an understanding of how designers can become aware of our own gender bias, and further understand how to utilize this knowledge in practice. The next chapter summarizes the findings of this research by presenting recommendations on how to work with gender in design.



Chapter 5

**Rethinking Gender
in Design**

Concluding the findings



This final chapter concludes the findings and insights and presents the result of the project. The result is a proposal for a new design practice accounting for gender diversity. This includes categorization of the main insights from previous chapters in general attitudes and behaviour towards gender diversity in society, common design pitfalls, techniques and principles to become aware of and inspired to work with gender in design. The result is proposed as a guide, contributing to inclusive design. Additionally, the process and results are discussed, and recommendations for future research, proposed.

Conclusion

“The strategic question is not ‘can gender change?’, but ‘in what direction is gender changing?’”

(Connell & Pearse, 2009, p. 51)

Research in, amongst others, psychology, medicine, biology, and sociology provides evidence on how the gendered nature go beyond and comprise more variations of gender than the binary man and woman. A less segregated understanding of gender is supported by events and behaviour through history, as well as in other cultures and societies today. Fluidity in gender is common for many animals on this planet, including humans. However, the rigid, binary gender system seems to repetitively reproduce itself through design.

The debate on gender beyond the binary has entered some areas of design. Gender-neutral clothing, gender-inclusive classrooms, and gender blind recruitment are some of the recent interventions endeavouring a less gender-biased society. However, with the binary gender system and mindset greatly hardwired in Western societies still, the challenge of retrieving and spreading knowledge on the topic must be taken seriously in design.

This thesis has had the purpose of answering the following research question:

How are people, society and design practice influenced by the binary gender system, and how can we utilize this knowledge to design for a more gender-inclusive future?

The research question is comprised of sub-questions, targeting different aspects and focus areas of the gender challenge and has been answered in the previous chapters:

- * How is society influenced by the concept of gender? (chapter 1)
- * What does gender mean to people and how do we relate to the binary gender model? (chapter 2)
- * How does the current design practice incorporate gender? (chapter 3)
- * How should designers handle gender challenges in practice? (chapter 4)

As societal forces challenge the normative and traditional concepts of gender and gender identity, the restrictions of the binary gender system become more evident. For this reason, there is a need for a change in how we think of gender in design. By creating a new understanding of gender in design, designers must gain empathy for people with other gendered experiences by accounting for challenges, stigmatizations, and the exclusion we feel and experience, based on our gender identity. Further, this should lead to more conscious decisions in design and a positive development towards a more gender-inclusive society.

Result

As an approach to my research question and based on findings throughout the process, I ended up creating a proposal for a guide on working with gender in design. *Rethinking Gender in Design: the guide* is a way to comprehend the complexity of gender whilst accounting for diversity and challenges deriving from the binary gender system. Thus, contributing to design thinking and inclusive design, focusing on social sustainability through design. *Rethinking Gender in Design: the guide* includes information on general attitudes and behaviours related to gender. Additionally, it proposes recommended techniques and principles to become aware of gender biases and account for gender. This should be read as inspiration to work with gender in design, rather than a solution, requirement or standard for gender-inclusive design.

Gender is a concept concerning everyone. Therefore, *Rethinking Gender in Design* is designed to target all designers, educators, students, professionals, and anyone interested in learning more about the interplay between gender and design.

To make the results accessible and distributable, a pdf graphic with pertinent information on how to work with gender in design was made. The graphic is targeted at all designers who work towards an inclusive society and is suited for a diversity of



contexts. The guide has the purpose of providing open access tools and information on how to design for a gender-inclusive future. This includes guidelines on how to become aware of our own gender bias and how to work with gender in design.

The following sub-chapter summarizes the findings from the previous chapters. This represents the main result of this project and includes

- * general behaviour and attitude towards gender diversity in our population,
- * common pitfalls in design practice, and
- * applicable techniques and principles

See page 27-49 for fullsize guide.

People

In every design project, it is important to account for the people who come in contact with the solution. Given the scope of design practice, it can be hard to know who will come in touch or be influenced by our solutions. When working towards a gender-inclusive society, it can therefore be valuable to account for the various attitudes and behaviours in society. Understanding how people receive and perceive our solutions can provide knowledge on how to approach the design challenge and create acceptance of gender diversity.

The presented material is based on insights from talking to various people throughout the project, as well as answers in the questionnaire. See chapter 2 for the process behind these results.

The provided information about 'People' is not intended to be taken literal or as an absolute fact. Rather, it is meant to inspire designers to account for gender challenges beyond the binary. Making attitudes and behaviours more explicit should enable designers to comprehend the complexity of the gender challenge.

Attitudes

Designers influence people with our decisions, be it people within our target group and others who interact directly or indirectly with our design. The following are just a fraction of the diversity in attitudes in our society. The purpose of presenting these is to illustrate how people's attitudes towards gender diversity can differ. This can be used to understand how people will receive a design introduced to society.

See page 29-31 for details (or 3-5 in the guide).

Rethinking <i>Gender</i> in Design		PEOPLE
Common attitudes		
<p><i>Not bothered by gender</i></p> <p>Usual gender identity Cis-man</p> <p>Relation to gender norms Thinks there is too much focus on gender</p> <p>Gender identity-related challenges Does not experience any specific challenges with their gender identity</p> <p>Thoughts on gender diversity Have not considered the challenges others with other gender identities experience</p> <p>Attitude Bystander (idealist)</p>	<p>“Just chill, let people be who they want to be, as long as it does not hurt anyone”</p>	
<p><i>One or the other</i></p> <p>Usual gender identity Binary, cis-gendered</p> <p>Relation to gender norms Conforms to most gender norms in</p>	<p>247</p> <p>“You are born either as a</p>	

Behaviour

The social forces of the binary gender system can influence our behaviour unconsciously. Because of this, it can be of value for designers to understand how people relate to this. What is the core need for people concerning gender? The following presents some important aspects of people's behaviours concerning gender diversity and identity.

See page 32-33 for details (or 6-7 in the guide).

Common behaviour

Behaviour influence attitude

We like to think of ourselves as open-minded. However, the binary gender system has led to habitual thinking for many. For this reason, we are often not protected by our general attitude in our specific behaviour. In other words, we are prone to resort to and express a norm conforming attitude when we experience the behaviour of others as unexpected based on our gendered assumptions.



We are influenced by our environment. When the only stimuli we receive on gender is heteronormative and binary, we consciously and subconsciously believe that this is the truth. Thus, we are prone to think of nonconforming behaviour as abnormal and notable.

Environment influence assumptions



248 *Standing out within the accepted*

Conforming to the gender norms gives a sense of belonging. However, some affiliations are false because the stigma in the society of crossing these norms may lead to embarrassment and other negative consequences for many. Conforming to the norms is simply easier for


Pitfalls

Designers are a part of society, thus prone to rely on the values and norms of the heteronormative and binary gender system. When this is not accounted for, we continue perpetuating restrictive norms leading to stigma, exclusion, and discrimination of many.

When working with complex and wicked challenges such as the gender challenge, it can be valuable to be aware of common pitfalls. Usually, when designers account for gender challenges, it tends to concern the binary. Hence, accounting for genders beyond the binary can be hard to comprehend. Moreover, we often focus on doing “right”, and less on not doing “wrong”. The pitfalls are thus presented to make designers aware of what to avoid in the design processes.

The pitfalls are based on the observations of how designers handled the gender challenge in this research. I have to point out that some of the presented pitfalls can derive from a lack in awareness of the diversity in people. The pitfalls are thus connected to attitudes and behaviour of people, as presented above. See chapter 3 for the process behind these results.

See page 34-36 for details (or 8-10 in the guide).

Rethinking <i>Gender</i> in Design	PITFALLS
<p><i>Generalizing and stereotyping</i></p> <p>In the process of gathering insights, analyzing and narrowing down to something comprehensible, designers are prone to generalize and, in the worst case, stereotyping people. Consider who is inside and outside of the categories you define for your project, and why. Is the solution at risk of discriminating against people who are already marginalized in society? How can we combat this?</p>	 <p><i>The “special” case</i></p>

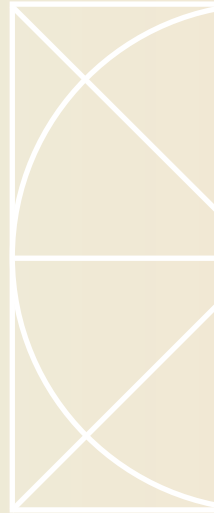
Techniques

When working with intricate challenges, such as gender, it can be convenient to get a pointer on how to approach it. These twelve techniques aims to inspire the designer in becoming aware of gender biases when working with gender in design.

The techniques are categorized by various phases in a common design process: discover, define, and develop. Categorization of the techniques is provided as a suggestion. The reasoning is based on where I concluded the respective techniques best served their purpose.

The techniques are suggestions for how to convert knowledge from “People”, “Pitfalls”, and “Principles” (see page 247-249) to practice. These were found valuable to use or become inspired of when working with gender in design. The presented techniques are based on my own experience of working with gender in design in this research and additional resulting insights from various methods. Insights were analyzed, combined, clustered and defined. See chapter 4 for the process behind these results.

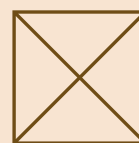
See page 37-45 for details (or 11-19 in the guide).



Discover

Test your boundaries

Empathizing with those of us who are restricted by gender norms on an individual and personal level, is important in understanding the challenges and problems these norms oppose. When do you feel restricted by the gender norms of society?





Principles

Including and empathizing with a diversity of people in the design process is an important element for good design. Understanding people, their behaviour and attitude, also includes understanding how they are influenced by social systems, norms, and values. However, this is often missed by designers because we too are influenced by the same systems.

Gender norms are hardwired in society and often overlooked due to a lack of awareness of our biases. Because designers have the privilege of influencing society with our design decisions, we are also responsible for accounting for the impact it has on social structures and systems.

The gender norms in society today are not only restrictive, but they also exclude the wonderful variety in and of gender. When norms and systems in society result in discrimination and exclusion, designers must be open to challenge these. Here are nine principles for working with and rethinking gender in design.

I would like to emphasise these principles by repeating them as they incorporate the most important findings from this research.

See chapter 4 for the process behind these results.

Principles

Including and empathizing with a diversity of people in the design process is an important element for good design. Understanding people, their behaviour and attitude, also includes understanding how they are influenced by social systems, norms, and values. However, this is often missed by designers because we too are influenced by the same systems.

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The gender norms in society today are not only restrictive, but they also exclude the wonderful variety in and of gender. When norms and systems in society result in discrimination and exclusion, designers must be open to challenge these. Here are nine principles for working with and rethinking gender in design.

The principles are generalized to support a variety of design processes. Some of the principles might fit better or less than others in different design projects. It is up to each and everyone working towards a gender-inclusive future to choose which applies to their project and not.

O1

Know your own gender bias

Prejudice is human - that's how we survive in this complex world. However, when prejudices become exclusionary and discriminating, we need to take a step back and look into the actual consequences of it. The first step in becoming a more open-minded designer is in becoming aware of our own gender bias and how we are affected by the binary gender model in society.

O2

Know your privilege

Designers are privileged. We are in the front seat, if not steering the wheel, of influencing people and society. Because of this, we need to be aware of the impact we can make with our decisions. We must make sure we combat our biases, and design for necessary and desired changes, with a positive impact. We need to make the best of our privilege to design for an inclusive future.

O3

Diversity promote inspiration: expose yourself to it

We are inspired and influenced by our surroundings. Because of the lack of representation of gender diversity in society, it is important for designers to actively expose ourselves to it. Acknowledgement of gender diversity encourages norm challenging and progressive ideas, which can accelerate the progress towards a more gender-inclusive society.

O4

Think of who is inside and outside of the categories

Because of the binary gender system, we are prone to unconsciously put people in boxes of heteronormativity. This can lead to solutions that are punishing us when we break gender norms. Identifying people who are inside and outside of the categories we design for can enable aspects of the design that are important to combat biases, discrimination, and systematic oppression.

05 Ask why

In the activity of involving people in the design process, we need to understand how their behaviour, attitudes, and experiences are influenced by the binary gender system. Though many might express to identify with the current gender norms, they are still restricting us in what is socially acceptable and not. Asking "why" can reveal the social structures which are worth criticising.

07 Make it relatable

People need to see themselves in what is represented in society. Though a lot of famous icons have challenged the heteronormative, we also need the masculine mannequin in a dress, a diversity in sizes of crop-tops, sparkle on the male models, muscles on the female models, trans models, non-binary models, agender models, diversity. We need to normalize the relatable to avoid negative attention to those of us who just want to express ourselves.

These principles aims to summarize the most important findings from this project. Gender influences society, people, and design in various ways. These results are thus overlapping at some points, with the purpose of showing the complexity of the challenge and revealing the connections between society, people, and design.

The principles are generalized to support a variety of design processes. Some of the principles might fit better or less than others in different design projects. It is up to each and everyone working towards a gender-inclusive future to choose which applies to their project and not.

Because the binary gender system is hardwired in society, it can be valuable to follow guidelines when working with gender diversity in design. The principles presented here are based on an analysis of the findings throughout the process. By accounting for the designer and the influence of their decisions on people, the principles are intended to inspire and impart knowledge of how to work with gender in design.

Start somewhere

“For that river to start flowing, we just have to implement as many streams as we can that can gather to the river”

(E. E. P. Benestad, personal interview, Feb 26, 2021)

Rethinking Gender in Design means creating acceptance for gender diversity. The results are intended to inspire designers to expose ourselves to knowledge, diversity, and people. Even reading through them might have induced reflection and inspired some ideas.

“And then it just has to come out and forward. Secrets do not change anything” (E. E. P. Benestad, personal interview, Feb 26, 2021)

Gender variations are human. A small action can mean a lot in the bigger picture of qualifying what is human.

Discussion

This master project started as a continuation of the work carried out in the autumn of 2020. The former project had the goal of raising awareness on the interplay between gender roles and design. Further, this induced the interest in investigating how designers can work with gender in design. The process resulted in the following reflections.

Our privilege and responsibility

Gender diversity should be a goal for all designers working towards an inclusive future, in my opinion. Because designers influence society with our decisions, it is our responsibility to ensure to make the best of our privilege in order to reduce stigma and discrimination related to gender. Gender in design to me does not longer only mean accounting for gender variations. It also means seeing the broader spectrum and diversity, within and outside the binary. It means understanding the influence of social forces and systems on gendered attitudes and behaviour. It means seeing beyond the heteronormative, whilst accounting for the challenges and restrictions the binary gender system opposes. In my opinion, designers should strive to create safe environments, allowing people to explore and find their own, unique identity while feeling a sense of belonging to society.

Rethinking gender in design means understanding the interplay between society, people, and design. In my opinion, design which uncritically relies on contemporary (binary) gender patterns are exactly what leads to or sustains the damaging gender biases. Further, this perpetuates the restrictive and discriminatory gender norms and values. Understanding the influence of social forces on gendered patterns and becoming aware of our own biases can make designers become more in control of our decisions and the effect it has on people and society. A designers' approach to the challenge should be grounded in the mindset of creating valuable solutions for people. We should empathize with people with various perspectives. Through the use of creative qualitative and quantitative methods, designers should strive to see the holistic view of the gender challenge. Current human gender patterns should be used consciously and actively to find how challenges should be approached to create affiliation and acceptance of gender diversity.

Talking to designers, both experts and students, has made me aware of how influenced designers and design practice actually are of the binary gender system. However, it is sometimes difficult to provide explicit answers on how and why gender bias takes place. Furthermore, after awareness is raised, how do we apply the knowledge to practice?

Process and results

Throughout the process of this project, I have found various ways designers can approach the gender challenge and make use of our knowledge in practice, presented in chapter 5 Rethinking Gender in Design. Information on common human attitudes and behaviour towards gender diversity can be useful to understand the effects of our solutions and how it is perceived by people. Common pitfalls are presented to make designers aware of what in our practice contributes to the status quo on gender norms and values. I have to acknowledge that working with gender and social processes in design can be difficult. Nonetheless, gender norms and values concern everyone. This should make gender an important factor to consider in design projects. The twelve techniques and nine principles presented are developed to inspire designers working towards a gender-inclusive society.

Doing a theoretical project has taught me a lot about myself, society, and design practice. The immense knowledge I have gained on gender constructions in society has made me realize how much of the human diversity is hidden behind the binary gender system. And as important, how much I have yet to learn. I am still very much influenced by binary values and norms. It is hard to break free from something I have grown up in. However, the importance of being critical of gendered assumptions and patterns has definitely made an impact on me.

Being critical to current design practice is challenging. I am sure design interventions and methodologies are created with good intentions, and to support a more sustainable future. There is a lot of focus in the field of design to do right. Simultaneously, there is too little focus on not doing wrong. Knowing the influence designers have and the gender bias we are prone to possess, I think it is of value to investigate and question how we design our guidelines and processes.

Approaching the topic of gender with a critical mindset, I had no idea how intricate it would turn out to be. Categorizing my insights into two possible directions (see chapter 1, Current discourse) and deciding on a case study on fashion stores, helped in comprehending the complexity. I knew that focusing on the challenges of the binary gender system would result in a lot of work. Because of the lack of existing guidelines on how to work with such a challenge, I had to make use of creative and experimental tools and methods to gather data and knowledge on the topic. Further, this helped in understanding how designers can approach the challenge in the future. Forcing myself to think outside the (binary gender) box, demanded a lot from me - more than I imagined. I had to make use of what I have learnt in my education, and at the same time be critical towards it. Regardless, the theoretical knowledge and empirical experience I have gained on working with gender in design have been enriching.

Working with this project, I have, to the best of my ability, tried to comprehend the great value of working with gender in

design. Theory provided knowledge on gender in society and current discourse in various fields. However, as the area is not extensively explored, existing literature on the topic is limited and only represents some aspects of a bigger challenge. Using the path of expressions by Sanders and Stappers (2013, p. 55) in interviews and workshops helped in accessing the desired future of subjects and in retrieving desired information. I have also aimed to cover various perspectives by researching theories and opinions I might disagree with, speaking with experts from different fields, and ensuring a diversity of gender identities have contributed with input. This made me comprehend the importance of raising awareness of the interplay between gender norms and design.

The gender challenge in design is large and complex with no correct or absolute answer to it. My results from this project, the *Rethinking Gender in Design: the guide*, is one of many solutions to the challenge.

Limitations

Previous research of the concepts of gender and gender roles were mostly found represented in the fields of biology, psychology, and sociology. Though this might have been a result of the desire to establish a comprehensive understanding of the terms “sex”, “gender”, and “gender roles” in historical, contemporary and scientific contexts, there were little to find in other fields. Papers relevant to design were limited, indicating a need for further research on the topic in the context of design.

The gender challenge is large and comprehensive, affected by and influencing various aspects of human life and social constructions. This thesis mostly revolves around social issues deriving from the binary gender system. However, gender also intersects with many other important factors, such as class, race, (dis)ability, and so on. Intersectional challenges exist but are not explicitly accounted for in this thesis. However, it is important to consider these in future research. Additionally, the research was limited to Western societies, primarily Norway, which might have influenced the results, as perceptions of gender roles and genders vary in cultures, religions, and societies.

Strengths and weaknesses

There are both strengths and weaknesses with the methods presented in this thesis. Firstly, I would like to address the existence of personal biases. As mentioned, I am too influenced by the binary gender system. Hence, sources, research focus, and eventually my interpretations of the data might be influenced by the same bias I am addressing in this thesis. Moreover, knowledge retrieval has been, as in every other research project, influenced by my personal values. Had the project been conducted by someone with other intentions, the conclusions might have differed.

Most of the communication with participants was executed online. For me, this lowered the threshold of contacting people and experts from a further distance. It also made it easier, in my opinion, to schedule interviews, workshops

and focus groups with multiple participants. In the phase of developing experiments, I initially intended to conduct most of them physically to observe the participants. However, the restrictions due to COVID-19 forced me to translate the methods to online alternatives. In my first attempt, I made use of my knowledge in p5, Google Forms, and SuveyKing to create a similar experience for participants while retrieving desired data. I distributed the links to the experiments on social media, such as Slack and LinkedIn. This was at first regarded as more valuable as I was able to reach a larger audience while spending less time in total on gathering data. However, because of a lack of complete respondents and results, I had to change the experiments from online surveys to focus groups. This means that the number of participants were more restricted due to lack of time and reach. However, I was able to listen to discussions between the participants and retrieve better insights into their flow of thoughts. Consequently, the experiments provided less, but valuable qualitative data than initially desired quantitative data.

Moreover, the use of digital tools such as surveys provides the option to preserve the anonymity of participants. This can lead to more honest answers because they do not feel as observed. Additionally, participants can choose an environment they feel comfortable in. The downside of this is that I am not in control of how participants are primed and how their answers are influenced by their surroundings.

Working online has taught me that it is easier for people to decline or ignore a request for participation, than a personal request by mail or in person. On the other hand, when participants are settled, it makes scheduling meetings with multiple people more efficient.

Except for the questionnaire, the selections of participants have mostly been restricted to people in my area. Receiving input from the Norwegian design community on Slack, as well as help from my coaches to find participants, helped in receiving input from a broader spectrum. There is no doubt I should have included a larger variety of participants. Moreover, it is also of value to question the influence of the motives of participants. Some might have participated because they wanted to “help a friend out” or to be perceived as open-minded. Another factor could be that the respondents and participants have an interest and opinion on the topic, whereas the majority of people might not reflect the same. Gender identity is also a sensitive and personal topic, which has made it difficult to reach people who are questioning and the most vulnerable. The research lacks sufficient first-hand experiences of people who do not identify with the binary. As the topic is quite new to me, it is also plausible that the results from the study would have been different if the data were interpreted by another, more experienced researcher.

The strengths of this study are connected to the use of experimental and creative methods to gather data on a topic with a minimal existing focus in design research. Working with

a case study on fashion stores provided valuable specific insights into the relationship between the binary gender system and design practice. Data collection and analysis co-existed throughout the process. This enabled the development of layered and thoroughly evaluated concepts. Generalizing and categorizing the concepts into a guide for designers who have an interest in designing for gender diversity is, with this, my contribution to inclusive design. This creates a good foundation for further work on the topic in the field of design and confirmation of my proposal.

Last thoughts

After working with gender in design, our privilege and responsibility as designers have become more clear to me. By understanding a fragment of the influence designers have, it is in my opinion, extremely important that we are aware of how social conventions and systems affect our decisions. Being in control of all the consequences of our design is probably impossible. However, I would state that designers should, to the best of our ability, aim to reduce the degree and amount of negative impact on society. Speaking to experts both individually and in groups, showed me the value this could bring to design practice. Especially when it comes to topics that are as general and influential as gender. The project has made me realise the great and beautiful diversity of human nature and the importance of qualifying these options to reduce unnecessary and damaging stigma in society.

This project has allowed me to challenge myself both personally and professionally. Working creatively has allowed me to develop and test methods and ideas that have made me reflect upon my values and who I want to be as a designer. My experiences have made me realise the incredible potential, opportunities, and expertise of designers to make a positive impact on people and society. I have grown with and during the process. Hopefully, this work will continue to grow and leave traces in me and the future of design practice.



Future research

There is a shift in societal values and research on gender values and norms, forced by for instance the movement of feminism. However, the same progress remains fragmented in design research. This introduces several challenges, waiting to be addressed in the future.

Gender in design is a wicked challenge - there are a lot of potentially good approaches and proposals to it. This research marks the beginning or the continuation of further research on the interplay between the binary gender system and design. It is still yet to be explored the effects of Rethinking Gender in Design on design practice as a whole and social systems.

Though dissimulation of the results is not within this project's scope, I would like to suggest the possibilities of applications of the results. Because the results are presented in a graphic pdf, it makes it applicable for a variety of contexts and purposes, thus available for a great audience. The results can be shared through for instance blog posts, websites, forums, books, design catalogues (see Fig 23-25). The format is applicable for presentations and lectures, as printed templates and posters. *Rethinking Gender in Design: the guide* can be used for political agendas, information dissemination, or as subject for reflection and inspiration. There are a lot of possibilities in how the result can be utilized and be made available. It is up to each and everyone to make use of the material to fit the desired goal.

Rethinking Gender in Design

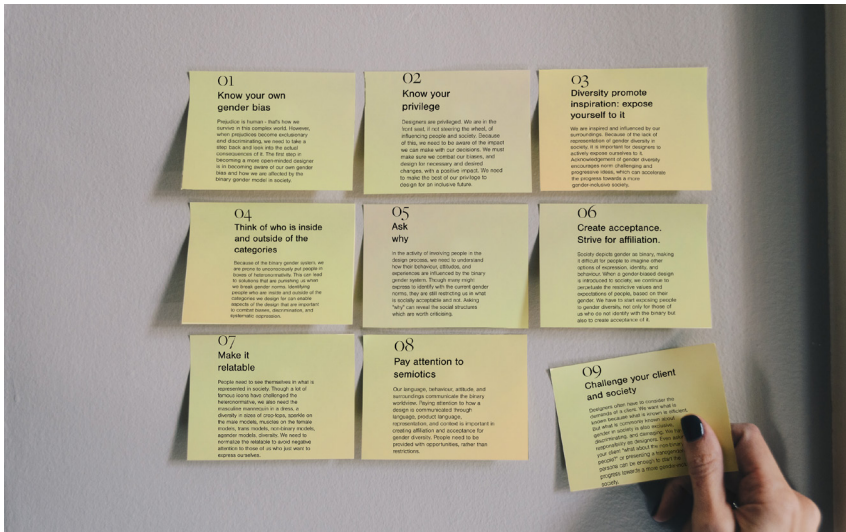


Fig 25 - Principles in *Rethinking Gender in Design: the guide* printed and hung on a wall in the office as a reminder.

In the process of trying to understand the challenge, new and more complex questions arose. Instead of ignoring them, we should recognize and handle them accordingly. Most importantly for future research, I argue, is investigating more thoroughly how the gender challenge intersects with class, age, ethnicity, and race, and related social biases. Moreover, additional research on the impact of different industries on gender bias in design could help tailor various design processes. For instance, how should designers deal with the relations and differences between gender and sex, and how they are handled in biological and societal contexts?

The material and results from this research are, in my opinion, valuable for designers in becoming aware of our own biases. It is a springboard for designers to become informed and inspired to continue the search and work towards better

practice. I would also like to propose an extension to design education. As found in the project before this, there is a lack of awareness in design education on gender bias. Including gender challenges in the education of designers is something I regard as important and valuable in the formation of future designers. The interest Høyskolen Kristiania expressed towards introducing the topic in educational contexts shows the need and desire for further implementation and exploration of gender in design.

Acknowledging the progress in other fields revealed the importance of highlighting the challenge in design practice. The expressed interest from experts in both design and other fields supports this. Moreover, empathizing with people who are the most vulnerable to discrimination and oppression, emphasized the importance of rethinking gender in design. Society is demanding a change in how we treat the concept of gender in design.

Thank you for your attention!



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Appendix

Appendix A

Information and Consent form template (1/3)

Participation in the research project *Rethinking Gender in Design*

The following is a consent form for a master's thesis in Industrial Design, carried out by a student from NTNU. The research seeks to gather data on the challenge of how the binary gender system influence our society. The data will be used to understand how design can contribute to positive development in society, focusing on representation and acceptance of gender diversity. This consent form provides information on the goals of the project and what it means to participate in the study.

Goal

The goal of the project is to research how design is influenced by and reproducing the values of the binary gender system. The insights resulting from the research will be used to understand how we can design for gender diversity. By focusing on how the public space in society, such as the city center, depicts gender, the research seeks to answer the following question: How can we include gender diversity in how we design public space, such that it creates a sense of belonging for genderqueer people, while propelling acceptance of gender diversity in society?

Who is responsible for the research project?

Norwegian University of Science and Technology (NTNU) is responsible for the project.

Why are you asked to participate?

You have been asked to participate because

- I have been recommended to contact you by peers, coaches, or other contacts relevant to the project,
- You have commented on gender in media,
- You have talked about your own gender identity in the media,
- You have an education relevant to the topic of the research, or
- Your work is relevant to the research

What does it mean to participate?

Participation involves a one-hour online video call, discussing the implications and possible design opportunities of a society designed for the binary genders. The purpose is to provide the researcher with your knowledge on the topic. The interview includes questions relevant to your experience and the goal of the project, such as 'What is the value of gender in society?' and

Appendix A

Information and Consent form template (2/3)

‘What do you think is needed for society to become more accepting towards gender diversity?’. Your answers to the questions will be recorded.

Participation is voluntary

Participation is voluntary. If you choose to participate, you can refuse to answer questions and can withdraw from the study at any time, without having to give a reason. All your personal information will then be deleted. It will not affect you negatively if you choose to not participate or later choose to withdraw from the study.

Your privacy – how your information is stored and used

Your information will only be used to the purposes of this study, explained here. The information will be processed confidentially and in accordance with privacy regulations. The obtained data will be stored on the research server of NTNU and will only be accessible to and processed by the researcher. If you agree to participate your name and title will be included in the final published report of this research.

What happens with your information when the research project is finished?

Your information will be anonymised when the project ends/the project is approved, which is estimated to be 2021-08-01. All your personal data and recordings will be deleted.

Your rights

As long as you can be identified in the data material, you have the right to:

- Insight in what personal information is registered and receive a copy of the information,
- Have personal information corrected,
- Have personal information deleted,
- File a complaint to Datatilsynet regarding the processing of your personal information.

What gives the researcher rights to process your personal information?

Your personal information will be processed based on your consent.

On behalf of NTNU, NSD - Norsk senter for forskningsdata AS has ranked that the processing of personal data in this project is in accordance with the privacy regulations.

Where can I find more information?

If you have questions regarding the study or wish to utilize your rights, please contact:

- NTNU, May Helen Lillegård by mail (mayhli@stud.ntnu.no)

Appendix A

Information and Consent form template (3/3)

- NTNU, Casper Boks by mail (casper.boks@ntnu.no)
- Our privacy representative: Thomas Helgesen by mail (thomas.helgesen@ntnu.no)

If you have questions regarding the review of the project conducted by NSD, please contact:

- NSD – Norsk senter for forskningsdata AS by mail (personverntjenester@nsd.no) or phone: 55 58 21 17.

Kind regards,

May Helen Lillegård

Consent form

I have received and understood the information about the project *Rethinking Gender in Design*. I have had all my questions answered to my satisfaction, and I voluntarily agree to

- ☛ Participate in an interview
- ☛ Allow May Helen Lillegård to use information about me in the project, if relevant
- ☛ Have my information (name and title) published such that I am recognisable in the final report

I agree that my information will be processed until the project is completed,

Name of participant [printed]

Signature

Date

I have given the information sheet in advance to the session to the potential participant and, to the best of my ability, ensured that the participant understands to what they are freely consenting.

Name of researcher [printed]

Signature

Date

Appendix B

Interview template (1/4)

Introduction

My masters thesis concerns how design in Western societies is shaped by the binary gender system, and following continues to reproduce the values that system embraces. Essentially, I am focusing on how our surroundings, specifically in the public space, influence our perceptions on gender.

The goal of the interview is to gather different perspectives on how depictions of gender in public space affect our understanding and behaviour towards our own gender identity and gender diversity.

I sent you a consent form in advance to the interview. Do you have any questions in that regard?

As you might read, I will be recording the session. I hope that is ok with you. This is only for practical reasons, so I do not have to take notes during the session. It will not be distributed and will be deleted a month after the master is delivered (4th of july) the latest.

Appendix B

Interview template (2/4)

Questions for people

Identity

How do you identify? Is it important for you?

What is gender (identity and expression) to you?

What are your thoughts on how society depicts gender?

Taboo, stigma, standing out

What would have been different if you identified as another gender? How does your gender identity affect your life?

Belonging

In every society, belongingness is important. Where do you find belongingness with respect to gender?

How do you relate to how society depicts your gender?

Many also want to stand out - being unique ('not like the other girls'). What is your relation to standing out wrt your gender identity?

What differs from how society depicts your gender identity and how you identify?

Belonging in public space

What is the effect of gender in society?

What consequences do you see wrt how society relate to the binary gender model? Specifically in public space?

What are the consequences of society moving away from the binary gender model?

what do we lose?

what do we gain?

What is the value of gender for you?

Have you ever experienced gender inclusive environments in society?

What made you feel included?

Do you have any great and poor examples of gender inclusion?

What are your thoughts on introducing a more gender diverse mode in society?

How can we create affiliation for more gender identities in society?

Should all people with different gender identities be included in the same society?

or is it enough with different, separated 'spots' where people with different gender identities can feel at home?

Appendix B

Interview template (3/4)

Belonging in public space - specifically fashion stores

- Where do you usually buy your clothes?
- what do you look for? (department)
- What are your thoughts about how stores in organize their space wrt gender?
- Most stores organize artifacts with respect to the binary genders.
- What do you think of a society more open to exploration, development, and expression of own gender identity? beyond the binary
- what do you think could be done?
- what can design contribute with?
- What do you think is needed for society to become more accepting towards gender diversity?
- How can design contribute?

Questions for experts

Identity

- What is gender (identity and expression) to you?
- What is the value of gender in society?
- What are your thoughts on how society depicts gender?
- Taboo, stigma, standing out

Belonging

- In every society, belongingness is important. What is the relation between belongingness and gender? Many also want to stand out - being unique ('not like the other girls'). How are standing out and belongingness connected with respect to gender?
- Belonging in public space
- What is the effect of gender in society?
- What consequences do you see wrt how society relate to the binary gender model? Specifically in public space?
- What are the consequences of society moving away from the binary gender model?
- what do we lose?

Appendix B

Interview template (4/4)

what do we gain?

Have you ever experienced gender inclusive environments in society?

What makes it inclusive?

What are your thoughts on introducing a more gender diverse mode in society?

How can we create affiliation for more gender identities in society?

Should all people with different gender identities be included in the same society?

or is it enough with different, separated 'spots' where people with different gender identities can feel at home?

Lets talk about the focus of this project, namely fashion stores

expression of own gender identity? beyond the binary

what can design contribute with?

What do you think is needed for society to become more accepting towards gender diversity?

How can design contribute?

Belonging in public space - specifically fashion stores

What are your thoughts about how stores in organize their space wrt gender?

Most stores organize artifacts with respect to the binary genders.

What do you think could be done differently to give space for exploration, development, and

Appendix C

Questionnaire Setup (1/3)

31.5.2021 Kjønn

Kjønn

Følgende spørreundersøkelse er i forbindelse med en masteroppgave i industriell design ved NTNU, utført av May Helen Lillegård. Oppgaven fokuserer på innflytelsen av det binære kjønnssystemet på vestlige samfunn. I hovedsak tar det for seg hvordan det offentlige rom er formet av og fortsetter å reproducere verdiene det binære kjønnssystemet omfavner (typisk 'menn er maskuline' og 'kvinner er feminine'), og videre hvordan disse påvirker vår oppfatning av kjønn.

Målet med undersøkelsen er å samle forskjellige perspektiver på hvordan omgivelsene påvirker vår forståelse av og atferd til kjønn og kjønnsidentitet.

Undersøkelsen er anonym. Svar det som faller deg inn - det finnes ingen feil svar. Ikke bruk mer enn 10 minutter på å fullføre.

***Må fylles ut**

OBS!
Innlæsningsvis ber jeg deg beskrive deg selv. Grunnen til dette er for å få kontekst til svarene, samt forsikre at resultatet er basert på et mangfold av mennesker.

Binær kjønnsmodell: klassifisering av kjønn i to distinkte kategorier, mann og kvinne.
Cisperson: personer som identifiserer seg med kjønn de fikk tildelt ved fødselen
Ikke-binær: personer som opplever å ikke passe inn i kategoriene "mann" eller "kvinne".
Genderqueer: samlebegrep for identiteter som er verken jente eller gutt.

1. Alder *

2. Kjønsidentitet (eks. ciskvinne, transmann, kjønnsfluid...) *

<https://docs.google.com/forms/d/1M1sN0sBkD2M1uDig3hSFhFuVJ2pWfjcu56th-TVKE/s/edit>

31.5.2021 Kjønn

Kjønn i samfunnet

Binær kjønnsmodell: klassifisering av kjønn i to distinkte kategorier, mann og kvinne.
Cisperson: personer som identifiserer seg med kjønn de fikk tildelt ved fødselen
Transperson: personer med kjønnsidentitet som er ulik kjønn de fikk tildelt ved fødselen
Ikke-binær: personer som opplever å ikke passe inn i kategoriene "mann" eller "kvinne".
Genderqueer: personer som ikke forholder seg til konvensjonelle kjønnskillinger (mann eller kvinne), men som identifiserer seg med begge, ingen av dem eller en kombinasjon.

3. Hva assosierer du med kjønn? *

4. 'Kjønsidentitet' for meg betyr... *

5. Mitt kjønnsuttrykk samsvarer med forventningene i samfunnet.

Markér bare én oval.

1 2 3 4 5

Helt uenig Helt enig

<https://docs.google.com/forms/d/1M1sN0sBkD2M1uDig3hSFhFuVJ2pWfjcu56th-TVKE/s/edit> 2/5

Appendix C

Questionnaire Setup (2/3)

<p>31.5.2021 Kjønn</p> <p>6. Jeg forholder meg til kjønnsnormene i samfunnet.</p> <p><i>Markér bare én oval.</i></p> <p style="text-align: center;">1 2 3 4 5</p> <p>Helt uenig <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> Helt enig</p> <p>7. Folk burde få uttrykke seg og sin kjønnsidentitet på tvers av kjønnsnormene i samfunnet.</p> <p><i>Markér bare én oval.</i></p> <p style="text-align: center;">1 2 3 4 5</p> <p>Helt uenig <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> Helt enig</p> <p>8. Jeg føler meg begrenset av forventningene i forhold til kjønn i samfunnet.</p> <p><i>Markér bare én oval.</i></p> <p style="text-align: center;">1 2 3 4 5</p> <p>Helt uenig <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> Helt enig</p> <p>9. Jeg kan relatere til hvordan min kjønnsidentitet er fremstilt i samfunnet.</p> <p><i>Markér bare én oval.</i></p> <p style="text-align: center;">1 2 3 4 5</p> <p>Helt uenig <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> Helt enig</p> <p><small>https://docs.google.com/forms/d/1MtsN0sBkd2MUnDig3h5FhFauVJ2pwfjca56lh-TVKE/edit</small></p>	<p>31.5.2021 Kjønn</p> <p>10. Jeg er tilfreds med hvordan kjønn er fremstilt i samfunnet.</p> <p><i>Markér bare én oval.</i></p> <p style="text-align: center;">1 2 3 4 5</p> <p>Helt uenig <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> Helt enig</p> <p>11. Hvordan synes du din kjønnsidentitet er representert i det fysiske rom i samfunnet (feks. i butikker, butikkvinduer, reklameplakater, layout av offentlige rom...)?</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>12. Jeg tenker ikke så mye over min kjønnsidentitet.</p> <p><i>Markér bare én oval.</i></p> <p style="text-align: center;">1 2 3 4 5</p> <p>Helt uenig <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> Helt enig</p> <p>13. Hva er ditt inntrykk av hvordan genderqueers (se definisjon over) er fremstilt og representert i samfunnet?</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p><small>https://docs.google.com/forms/d/1MtsN0sBkd2MUnDig3h5FhFauVJ2pwfjca56lh-TVKE/edit</small> 4/5</p>
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Appendix D

Questionnaire Results and Analysis (1/6)

Participants: 45

Age:

20-29: 33

30-39: 2

50-59: 9

60-71: 2

Gender:

Cis-man: 13

Cis-person: 3

Cis-woman: 16

Man: 8

Woman*: 4

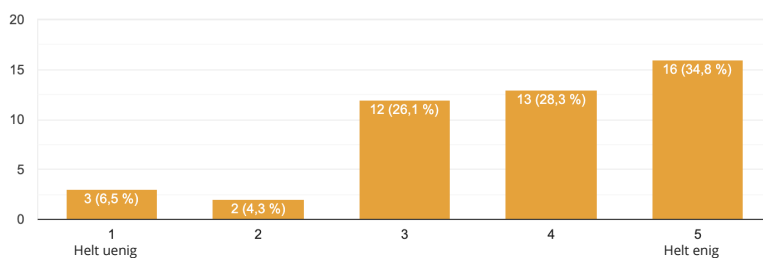
Non-binary: 2

Trans-woman: 1

*one lesbian

Mitt kjønnsuttrykk samsvarer med forventningene i samfunnet.

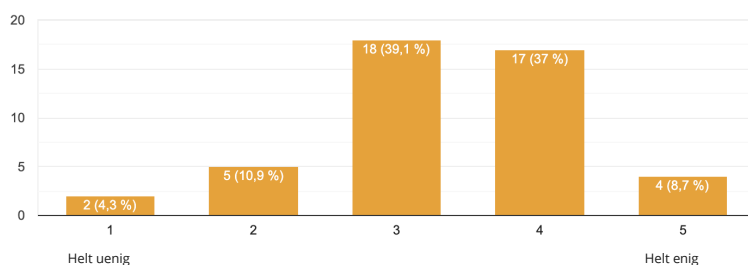
46 svar



cis-man	1	1	2	4	5
cis-person			1	1	1
cis-woman		1	4	6	5
man			3		5
non-binary	2				
trans-woman			1		
woman			1	2	1

Jeg forholder meg til kjønnsnormene i samfunnet.

46 svar



cis-man		2	5	5	1
cis-person			1	1	1
cis-woman			7	8	
man		1	3	2	2
non-binary	2				
trans-woman		1			
woman		1	2	1	1

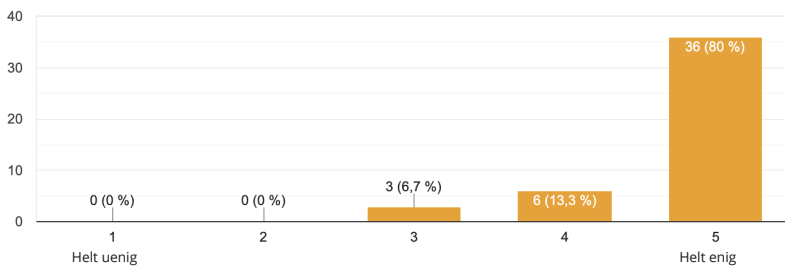
Appendix D

Questionnaire Results and Analysis (2/6)

Folk burde få uttrykke seg og sin kjønnsidentitet på tvers av kjønnsnormene i samfunnet.



45 svar

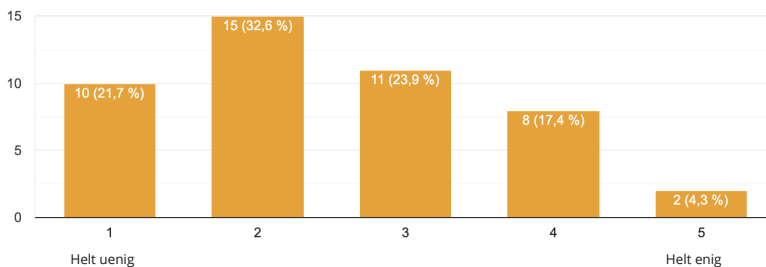


cis-man				3	10
cis-person				1	2
cis-woman		1		1	14
man		1		1	6
non-binary					2
trans-woman					1
woman		1			4

Jeg føler meg begrenset av forventningene i forhold til kjønn i samfunnet.



46 svar



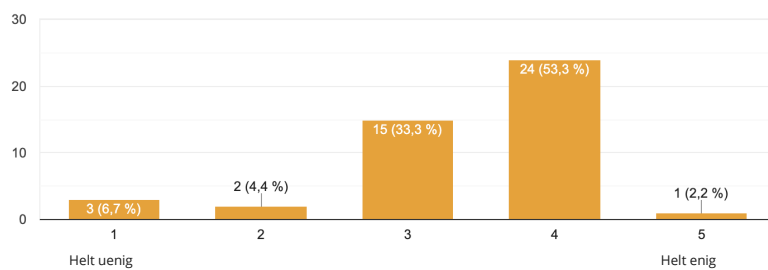
cis-man	3	6	2	1	1
cis-person		3			
cis-woman	3	4	4	5	
man	5		3	1	
non-binary				1	1
trans-woman				1	
woman		2	2		

Appendix D

Questionnaire Results and Analysis (3/6)

Jeg kan relatere til hvordan min kjønnsidentitet er fremstilt i samfunnet.

45 svar

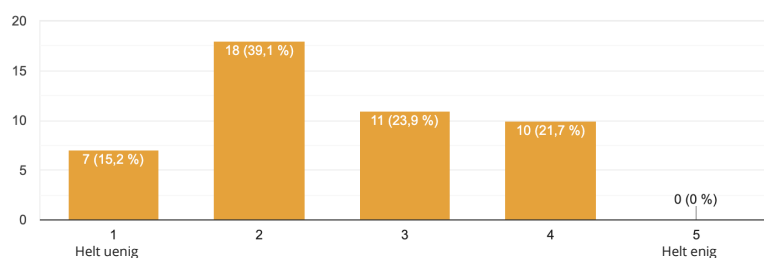


cis-man	1		4	7	1
cis-person			1	2	
cis-woman		1	5	10	
man			2	4	1
non-binary	2				
trans-woman		1			
woman			3	1	

Jeg er tilfreds med hvordan kjønn er fremstilt i samfunnet.



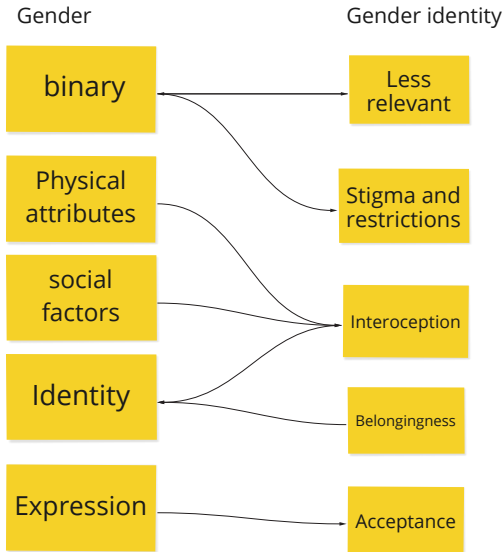
46 svar



cis-man	2	4	3	4	
cis-person		1	1	1	
cis-woman	2	11	3		
man			4	4	
non-binary	2				
trans-woman	1				
woman		2	1	1	

Appendix D

Questionnaire Results and Analysis (4/6)



Insights

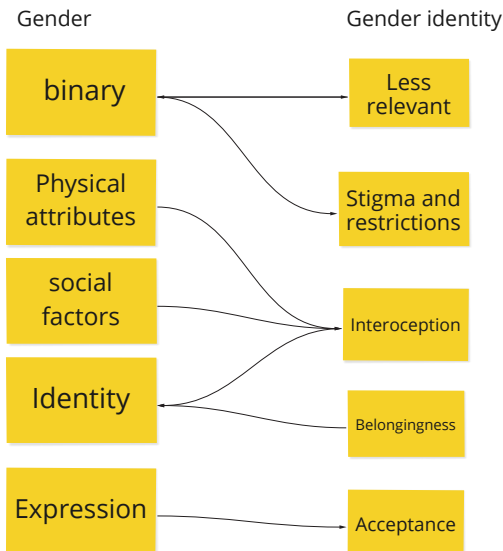
the binary model makes gender identity feel less relevant for cis-people, specifically men.

the binary model is restrictive for everyone who do not identity with the values and expectations

the binary model creates stigma for behaviours which contradicts the expectations of society

gender is complex - depends on many factors.

People need to relate to depictions of gender



Insights

the binary model makes gender identity feel less relevant for cis-people, specifically men.

the binary model is restrictive for everyone who do not identity with the values and expectations

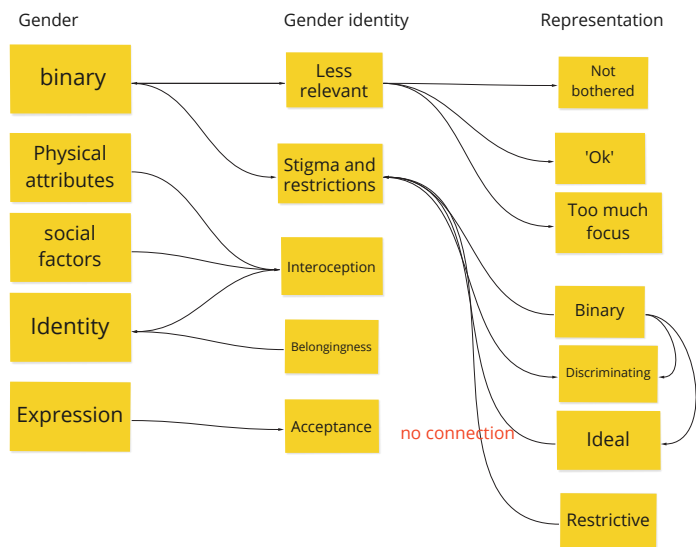
the binary model creates stigma for behaviours which contradicts the expectations of society

gender is complex - depends on many factors.

People need to relate to depictions of gender

Appendix D

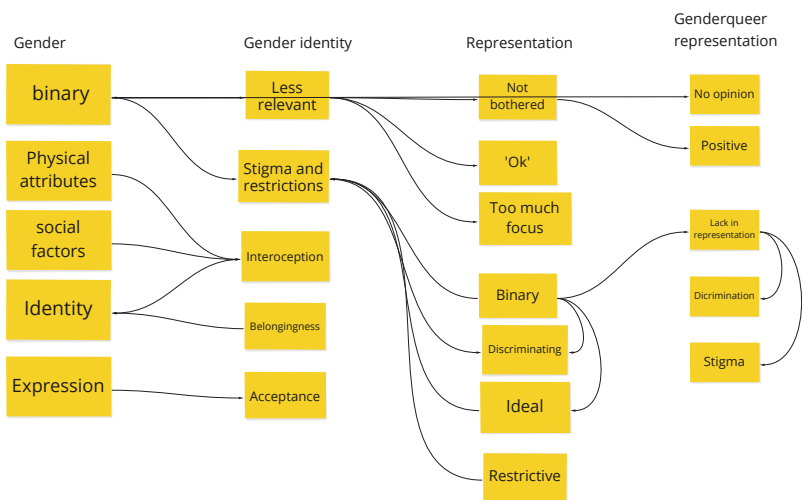
Questionnaire Results and Analysis (5/6)



For some people who conform to the binary model say they are not bothered by how gender is represented or that it is too much focus on gender

The binary model is exclusive and discriminating. Showing the ideals of the binary gender is restrictive for all genders

Representation of gender in society does not reflect gender identities beyond the binary, thus does not give space for exploration and expression of diverse gender identities (except some people who identify with those representations)

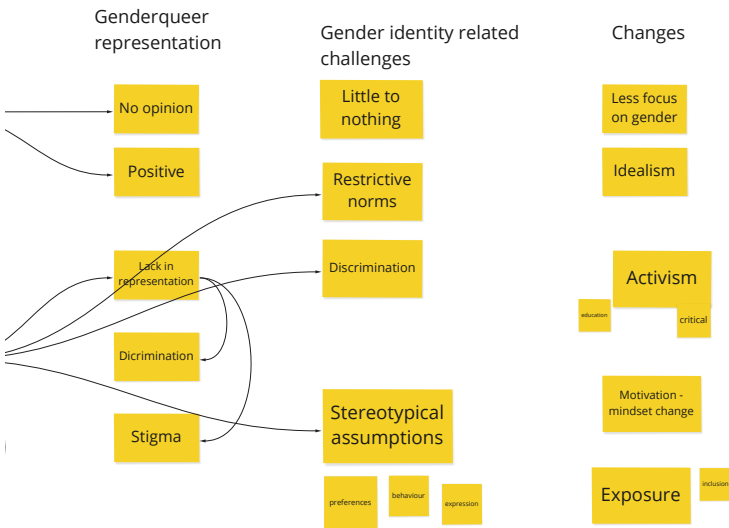


Lack in information and representation of genderqueers and diversity within diverse gender identities leads to lack in knowledge and possibility to understand and acknowledge challenges people feel related to their gender identity

Lack in information, realistic representation of people and genders. This lead to stigma and discrimination of diverse gender identities

Appendix D

Questionnaire Results and Analysis (6/6)



The ideal world with less focus on gender: mostly desired by cis-men, including two women. However, this might be ignorant for the people who do find gender important, as well as society being built around gender. Would this be possible? I think not... yet

We should design for behaviour change. Midsets can be difficult to change. Exposure and representation of diversity is a step. Activism and information dissemination is also effective. However, to normalize gender diversity, it should be integrated to society on the same level as the binary genders. Where do we start?

(idealism) Many are not aware of how their surroundings are affecting their behaviour and preferences (ways of seeing).

Appendix F

Clustering Phase 1 Questions (1/4)



F1: Representing diversity

How are (traditional) gender roles steering our expectations, relations, perceptions, preconceptions, and interpretations of ourselves and others?

How is gendered families related to this?

What is the history of the separation?

What are the consequences of the separation?

How can men and women benefit from more equality?

How does this separation affect society as a whole?

What are the consequences of gender roles?

How does design affect how people perceive

F1+F2: Intersection

✦ **What is the value of gender roles and norms in design, and what are the effects?**

✦ **When is a solution experienced as excluding and stigmatizing, and how can we utilize this insight to rethink gender in design?**

✦ **How can design contribute to an inclusive society for different perceptions of gender and gender roles, without compromising on quality and interest in the solution?**

Could focusing on one lead to improvements in the other?

How is this affected by the 'normal' roles in society?

F2: Encouraging diversity

How does this relate to the man's world?

What are the stereotypes?

for binary genders

non-binary

How does the non-binary stereotypes affect non-binary?

How are stereotypes affecting gender fluidity and people's perceptions?

How are we affected by the binary gender system? How is this restricting in exploring gender identity?

What does gender in design mean?

What is the history of gender identity in design?

Appendix F

Clustering Phase 1 Questions (2/4)

F1: Representing diversity

men and women?

How is/can design contribute to equality between the sexes?

Why is gender in design important? What is the relevance of gender in design today?

What is regarded as stigmatizing, and for whom? How is this reflected through design?

What is the history of gender and gender roles in design? How is this related to patriarchy?

▼ How does gendered design influence people?

- View on themselves
- View on their own gender
- View on other genders
- View of the product (quality, function, expression, use)

What is the value of gender roles?

F1+F2: Intersection

What is the value of gendering in design?

What are the impacts of a design on the values in the society? And what are the consequences of knowing the impacts?

What are the opportunities in design to allow a more including society?

What is the effect of social media (e.g. instagram, TikTok)?

What does gender mean to people, designers, and society?

What makes a woman, what makes a man?

Where do people feel a sense of belonging in relation with gender?

What is accomplishment for designers, regarding gendered design?

What is the relation between belongingness and wanting to stand out (being an individual)?

F2: Encouraging diversity

Is genderless/-full design possible? If so, what is the value and effect?

▼ How does gendered design influence people of different genders?

- View on themselves
- View on their own gender
- View on other genders
- View of the product (quality, function, expression, use)

How are non-binary interacting with the gender roles?

What are the challenges in relation to society?

How is values regarding the binary gender system affecting peoples well-being?

How does identity relate to expression? What is the value of expressing gender identity?

What is the role of design when defining gender standards in the

Appendix F

Clustering Phase 1 Questions (3/4)

F1: Representing diversity

How is patriarchal values affecting peoples well-being?

What does expression of gender has to do with it? Does it have any biological reasons?

What is the role of design in creating taboos concerning gender roles and how does this affect our everyday life?

How can design affect the behaviour and attitude towards women's and men's mental health?

How are gender roles expressed in interpersonal interactions?

What is accomplishment to men and women?

How are inequalities manifested in design?

 why is design not leading to equality?

F1+F2: Intersection

How do you do both?

What are the dangers of lack in these?

How is this made possible through design?

Are there positive and negative consequences of both of these?

Can gendered design exist without being based on stereotypes?

What makes design gendered? (stereotypes?)

F2: Encouraging diversity

society? How can design affect and change this?

What differs in how genders use design, and how does design target genders in different ways? Are there any biases?

What does gender identity mean to people and designers?

How are today's design practice excluding the opportunity of exploring gender identity?

How is this related to factors such as class, race...?

Trans: what did they feel - what were the inner forces to change? What makes people wanting to transition?

WHAT IS GENDER IDENTITY?????

How is sex related to gender identity and expression? Does it differ?

Is this all about liberation of identity and expression, without

Appendix F

Clustering Phase 1 Questions (4/4)

**F1: Representing
diversity**

**F1+F2:
Intersection**

**F2: Encouraging
diversity**

being guided by
gendered design?

When do people feel
accomplished and
content with
themselves?

how does gender
identity affect this?

how is this related to
acceptance?

What are peoples
conceptions of
genderqueer?

What are the
stigmas?

How do designers feel
about thinking of non-
binary when designing?

What are
stigmatising?

Are there anything
that scares them?

What do non-binarys
perceptions of
themselves and others?

Appendix G

Categorizing Questions (1/7)



Categorizing questions

The importance of each questions was chosen basen on what i felt would give the most relevant insights sto this project. However, it is worth noting that theses indications were only guiding, and not based on some analysis. Thus, the importance of each question might end up changing, some questions might drop out, while some new occur.

Questions

Importance	Category	Question	Comment	Challenge	Suitable methods
Very important	main	What is the value of gender (roles + norms) in design, and what are the effects?	This to understand the overall influence and relevance of gender in design (much has been found already in literature). Should ask designers and people how they feel	effect stigma understanding	affinity diagramming artifact analysis brainstorm graphic orga interview literature re
Very important	main	When is a solution experienced as excluding and stigmatizing, and how can we utilize this insight to rethink gender in design?	To understand which aspects create stereotypes causing people to change behaviour accordingly (based on signals from the design on gender)	cause discrimination stigma	experiment
Very important	main	How can design contribute to an inclusive society for different perceptions of gender and gender roles, without compromising on quality and interest in the solution?	Challenge to create a tool such that designers can design for different genders(?)	acceptance belonging contradicting opinions politically correct	experiment interview
Important	value of gender	What does gender mean to people, designers, and society?	What are the mental concepts of society and how is this utilized to create stigma?	cause stigma understanding	interview literature re
Important	cause	What is regarded as 'normal' when it comes to gender? Why?	Gender roles and stereotypes. Would be interesting to hear what people in society thinks	acceptance belonging cause insecurities stereotypes stigma	literature review questionnaire

Appendix G

Categorizing Questions (2/7)

Importance	Category	Question	Comment	Challenge	Suitable methods
Important	cause	<u>What is the history of gender identity in design?</u>	can we learn from the history? compare with other movements and societies such as gay and asia. Use this to explain the construct of gender norms	acceptance belonging cause contradicting opinions discrimination effect politically correct stereotypes stigma	literature review
Not important	cause	<u>How does gender fluidity and unconventional gender identity relate to the mans world?</u>	what hinders many from exploring and expressing. Incel?	acceptance belonging effect health insecurities stigma	literature review
Very important	cause	<u>How are we affected by the binary gender system? How is this restricting in exploring gender identity?</u>	how gender fluidity is restricted by the binary mindset	acceptance belonging cause contradicting opinions discrimination effect insecurities stereotypes stigma	experiment interview literature review
Very important	cause	<u>What is the role of design when defining gender standards in the society? How can design affect and change this?</u>	examining current design practice. A lack in awareness and unconsciously following restrictive norms and values in society	awareness effect gender bias gender values stereotypes	D9 experiment literature review
Not important	value of gender	<u>What is accomplishment for designers regarding gendered design?</u>	Should be to be aware of the user group and effect of the design		
Important	value of gender	<u>What makes design gendered? (stereotypes?) What does gender in design mean? What does it mean for people with different gender identities?</u>	how gender values are manifested in design	awareness cause discrimination effect gender bias stereotypes stigma understanding	

Appendix G

Categorizing Questions (3/7)

Importance	Category	Question	Comment	Challenge	Suitable methods
Important	value of gender	Can gendered design exist without being based on stereotypes? Is genderless/-full design possible? If so, what is the value and effect?	utilizing knowledge to rethink gender in design. genderfree/genderfull design?	understanding	
Important	value of gender	How do people of different gender identities interact with gendered design, and how does design target genders in different ways?		awareness effect gender bias stereotypes understanding	
Not important	value of gender	How is today's design practice relating to exploration of gender identity?	is this even a topic?		
Very important	value of gender	What is the influence of class, race, and age in gendered design?		belonging cause discrimination gender bias gender values stereotypes stigma understanding	
Neutral	value of gender	How is sex related to gender identity and expression? Does it differ?	ContraPoints' video about transtrenders	understanding	
Important	value of gender	How to design for something you haven't experienced?	empathizing	understanding	
Neutral	influence of design	What is the effect of social media (e.g., Instagram, TikTok)?		effect understanding	
Neutral	influence of design	What are the opportunities in design to allow a more inclusive society?	analyse what challenge to investigate		insights analysis

Appendix G

Categorizing Questions (4/7)

Importance	Category	Question	Comment	Challenge	Suitable methods
Not important	influence of design	Could focusing on Focus 2 lead to improvements in Focus 1?			reflection
Important	influence of design	What are the impacts of a design on the values in the society? And what are the consequences of knowing the impacts?		discrimination effect gender bias gender values stereotypes stigma	
Very important	identity	WHAT IS GENDER IDENTITY????? What does gender identity mean to people and designers?		understanding	
	identity	How does identity relate to expression? What is the value of expressing gender identity?		effect understanding	interview
Neutral	identity	What helps and what limits (design) in finding gender identity?		discrimination effect gender bias gender values stereotypes	
Neutral	identity	Trans: what did they feel - what were the inner forces to change? What makes people wanting to transition?	ContraPoints on expression which is to feel and express herself as a woman to others, to not be misgendered. Empathizing		documentaries interv
Neutral	identity	What is okay to ask? What is stigmatizing questions?		understanding	
Important	identity	How does stereotypes affect non-binary?		acceptance belonging discrimination effect gender bias gender values insecurities stereotypes stigma understanding	

Appendix G

Categorizing Questions (5/7)

Importance	Category	Question	Comment	Challenge	Suitable methods
Important	identity	<u>What are the stereotypes? (binary and non-binary).</u>		understanding	
Very important	attitude	<u>How do gendered design and stereotypes influence people of different genders? (view on themselves, others, their own gender identity, other gender identities, and on product (quality, function, expression, use)).</u>		acceptance belonging discrimination effect gender bias gender values health insecurities stereotypes stigma understanding	
Important	attitude	<u>How are non-binary interacting with the gender roles? Does it differ from cis?</u>	Visceral expression (contrapoints)	understanding	
Very important	attitude	<u>What needs to change in design practice for it to embrace gender as a spectrum?</u>		understanding	insights analysis
Neutral	belonging	<u>Where do people feel a sense of belonging in relation with gender?</u>		understanding	

Appendix G

Categorizing Questions (6/7)

Importance	Category	Question	Comment	Challenge	Suitable methods
Very important	belonging	What is the relation between belongingness and wanting to stand out (being an individual)? (How do you do both? What are the dangers of lack in these? How is this made possible through design? Are there positive and negative consequences of both of these?)		understanding	
Important	stigma	What is the role of design in creating taboos concerning non-binary and how does this affect our everyday life?		awareness cause gender bias gender values stereotypes	
Important	stigma	How is design contributing to maintaining stigma and taboo for non-binary?		awareness binary mindset cause discrimination gender bias gender values stereotypes stigma	
Important	health	How are values regarding the binary gender system affecting peoples well-being?		belonging binary mindset discrimination effect gender bias gender values stereotypes stigma	
Neutral	health	When do people feel accomplished and content with themselves? how does gender identity affect this? how is this related to acceptance?		acceptance belonging cause health	

Appendix G

Categorizing Questions (7/7)

● Importance	☰ Category	Ⓐ Question	☰ Comment	☰ Challenge	☰ Suitable methods
Not important	health	<u>What are the needs of genderqueer? do they differ from binary genders?</u>		understanding	

Appendix H

Interview Template Stores

Hei!

Jeg skriver for øyeblikket master i industriell design ved NTNU om hvordan det binære kjønnssystemet påvirker hvordan vi designer offentlige rom i samfunnet. Spesielt fokuserer jeg på hvordan butikker og butikkvinduer (typisk klesbutikker) fremstiller kjønn, og hvordan dette former vårt syn på hva som er innafor og ikke, sosialt. Jeg ønsker å finne ut om endring i organisering og fremstilling av kjønn kan bidra til mer kjønns mangfold, økt aksept for utforskning av kjønnsidentitet, samt mindre stigma og diskriminering rundt dette. I den forbindelse er jeg interessert i å høre deres tanker rundt dette.

Hva er mottoet/målet/visjonen til butikken?

Hva prioriterer dere når dere organiserer butikken?

Hvem bestemmer?

Er det noen mal for hvordan dere sorterer og kategoriserer?

Hvilke prinsipper gjelder?

Hvordan forholder dere dere til kjønn når dere kategoriserer varer i butikken?

Er dere bevisste på hvordan dere organiserer og inndeler butikkene mht kjønn?

Hvordan tenker dere rundt hvordan kjønn blir fremstilt i butikken?

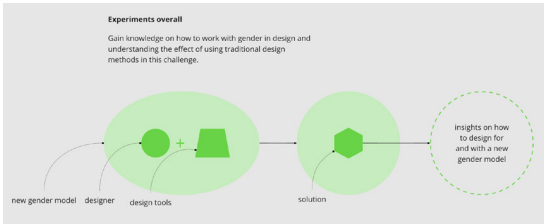
Hvilke friheter har dere til å omorganisere butikken og fremstille kjønn og varene på andre måter?

Appendix I

Focus Groups Setup (1/10)



Experiments



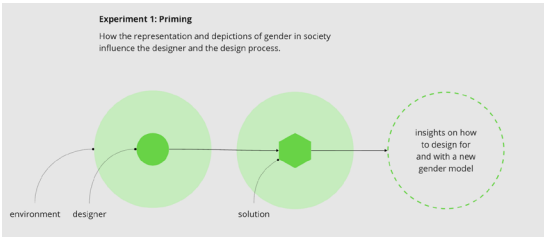
Included in the survey

General information

First changes

Changes to fit as a focus group

E1: Priming



NB! Adjustments had to be made. Because people did not complete the whole sequence of experiments for this part, I had to make adjustments to make it more clear to people that they have to finish it. The adjustments that were made was removing the indication of the experiment consisting of three different experiments. This was at a time with the following amount of answers:

Part 1 (a): 15

Part 1 (b): 10

Part 2 (a): 2

Part 2 (b): 2

Part 3: 4

The answered before the changes were stored and saved, just in case

What

Test how the initial mindset of designers when entering a design project influences the process and outcome, specifically related to gender. The purpose is to reveal the consequences of various approaches, influenced by priming of different values.

Appendix I

Focus Groups Setup (2/10)

How

This experiment is divided into three parts, and participants were divided into two different groups, group A and group B, where only the first part will differ. The

Experiments

2

participants are told they are participating in three different experiments, examining different aspects on different challenges. Participants are conducting the experiment individually. By priming the participants differently, the experiment tries to reveal how designers mindset and reaction towards the images and words primed with, influence the thought process when designing. The images used in the two moodboards are selected to represent society today and an imagined future scenario with respect to gender and norms.

This experiment will be divided into two different focus groups - one which will be online and the other physically at ID. Participants will be people in my circle, as they are easier to reach out to and a higher chance of them wanting to participate. The participants will mainly be students from Industrial Design at NTNU.

Why

- Understand how designers can work differently with gender in design
- Better understand the effect of the mindset designers approach a challenge with,
- Better understand various approaches of a challenge based on their mindset, and
- Better understand the effect on gender norms of the outcomes.
- Additionally, understand how designers relate to gender when designing
- Retrieve general insights on how designers tackle a challenge

Theory

Participants of group A will be more open minded towards gender diversity and acceptance of this.

Setup

Total duration: 30 min

Experiments

3

Appendix I

Focus Groups Setup (3/10)

Part 1: priming [10 min]

In the first part, participants will be primed with images and words. The purpose of this is to simulate an environment and examine the effect of exposing designers with different values on how they relate to gender when designing.

- a. Participants of group A will be presented with images and words representing a fluid gender system and positive images of breaking norms. This represents an imagined future scenario, where gender is more fluid and based on social relations. Additionally, it shows positive outcomes of breaking norms, with the purpose of providing the participants with positive connotations to breaking gender norms.
- b. Participants of group B will be presented with images and words representing binary gender system and negative images of breaking norms and rules. This represents the current society and depiction of gender as binary and heteronormative. Examples of negative consequences of breaking norms are added to (unconsciously) trigger negative connotations to breaking gender norms.

To understand the viewpoints of the participants, they are asked to answer the following:

What is your initial reaction towards the words and images you just saw?

How open-minded do you see yourself? (1-10)

▼ Feedback+reflections on moodboards pre-testing

Diversity

- A lot of diverse people
- Different hobbies
- Dont care
- Embrace what they want to do
- Not what society tells them to do

Tradition

- Nature
- Taking care of kids

Appendix I

Focus Groups Setup (4/10)

- Antropological
- Humans act because of nature

To not make it too obvious what my intentions were in this, it replicates how society depicts gender normally. Linking it to nature and negative images of breaking with norms

Script

Hei og velkommen alle sammen. Tusentakk for at dere tok dere tid til å delta. Jeg håper dere har fått sett litt på samtykkeskjemaet. Der nevner jeg blant annet at timen vil bli tatt opp. Dette blir kun brukt som et verktøy i stedet for å notere. All deltakelse er anonymt. Går det bra?

START INNSPILLING

Da tenker jeg vi kan introdusere oss litt først, navn og hva vi holder på med for øyeblikket. Jeg kan starte.

Nå sender jeg en link til en google form i chatten her på Teams. Kan dere trykke på den og utføre den? Dere har fem minutt. Gi et vink når dere er ferdig :)

<https://forms.gle/BwyD7ZSPwG6ff8g68>

Part 2: designing [12 min]

In the next part (or for the participants, the second experiment), the participants are asked to design two bags for two different personas.

Please design two bags and indicate the intended user group for each of them.

What is the purpose of the bag?

Please upload an image communicating the design. Utilize known design tools to express the use and purpose (e.g. scenario, storytelling, personas)

Empathy mapping - hvilke verdier man tillegger personasen, mer interessant

{upload image}

What challenge does it solve?

Appendix I

Focus Groups Setup (5/10)

Why does it solve this challenge?

For whom does it solve this challenge?

Script

Nå vil jeg at dere skal designe to bagger for to ulike brukergrupper. Hvor dere bestemmer brukergruppene, målet for baggene - altså hvilken utfordring de løser for brukergruppen. Dere har 12 minutt til sammen.

Jeg har sendt en link til Miro hvor dere kan skrive inn notater.

SET TIMER

Part 3: Reflection [8 min]

Hvis dere går litt til høyre er neste del. Nå vil jeg at dere bruker åtte minutt på å reflektere litt over disse spørsmålene, sammen og individuelt noterer ting dere kommer på.

Link: https://miro.com/app/board/o9J_kmUpzjs=/?moveToWidget=3074457356863685812&cot=14

In the last part, participants are asked to complete a questionnaire with the following questions:

What is important when you design?

How would you describe gender?

How is that relevant in design?

What is important to you when you design for men?

What is important to you when you design for women?

This is changed to a discussion between participants.

After this, to understand the participants approach to the experiment, they are asked to answer the following questions:

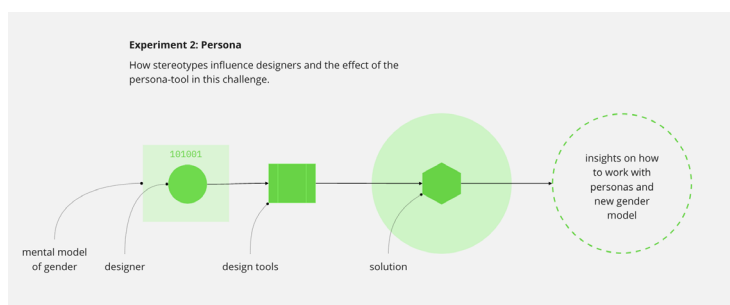
Did you make some reflections you would like to share?

What do you think was the purpose of the three experiments you just participated in?

Appendix I

Focus Groups Setup (6/10)

E2: Personas



What

Test how non-heteronormative personas influence the design thinking, process and outcome. The purpose was to reveal the consequences of various approaches and insights in how traditional and common design techniques function in relation to the gender challenge.

How

The experiment is an online survey where participants are asked to design bags for different personas. Being given some information on the target group through personas and scenario, they are asked to come up with a challenge their design should solve. Participants are conducting the experiment individually.

Why

- Learn how people, specifically designers, relate to new depictions of gender in design
- Understand how working with personas and gender bias influence the design process and outcome
- Understand how personas influence the design process with respect to gender

Appendix I

Focus Groups Setup (7/10)

- Additionally, understand how designers relate to gender when designing

Setup

Total duration: 30 min

Part 1: introduction [10 min]

Script

Hei og velkommen alle sammen. Tusentakk for at dere tok dere tid til å delta.

Målet med denne fokusgruppen er å få **innsikt i hvordan designere jobber** med tradisjonelle designverktøy og tenker rundt samfunnsutfordringer.

Jeg håper dere har fått sett litt på samtykkeskjemaet. Der nevner jeg blant annet at timen vil bli tatt opp. Dette blir kun brukt som et verktøy i stedet for å notere. All deltakelse er anonymt. Går det bra?

START INNSPILLING

Da tenker jeg vi kan introdusere oss litt først, navn og hva vi holder på med for øyeblikket. Jeg kan starte.

Hvis dere går i chatten på teams har jeg sendt noen linker. Dette vil føre til Miro, hvor vi skal jobbe.

https://miro.com/app/board/o9J_lKi2DCo=?moveToWidget=3074457356989107170&cot=14

Forklar oppsett

- to deler
 - en designdel: rask lynoppgave - noter det som faller dere inn, ingenting er feil
 - en refleksjonsdel

Appendix I

Focus Groups Setup (8/10)

Scenario

This scenario will be included throughout the survey, so do not stress with taking notes.

A new clothing store is opening in the city center in a few months. The concept of the store is new and you are included in the process of its development to influence the result. Today, your task is to design a bag based on personas the founders of the store has given you. Based on the information and personas you are provided with, you are asked to find a challenge your design should solve. Because the concept of the store is not yet decided, you are free to decide how you approach the design challenge, as well as *imagining* the layout of the store.

En ny klesbutikk skal åpne i sentrum om noen måneder. Det er enda tidlig i prosessen og dere er ansatt som designteam til å hjelpe med å påvirke konseptet og identiteten til butikken.

I dag er oppgaven deres å designe en bag basert på noen personas grunnleggerne av butikken har gitt dere.

Dere blir altså bedt om å bestemme brukergruppe og hvilket problem deres design skal løse for denne brukergruppen.

Kort oppsummert

1. Velg brukergruppe
2. Bestem hvilket problem deres design skal løse
3. Design en bag

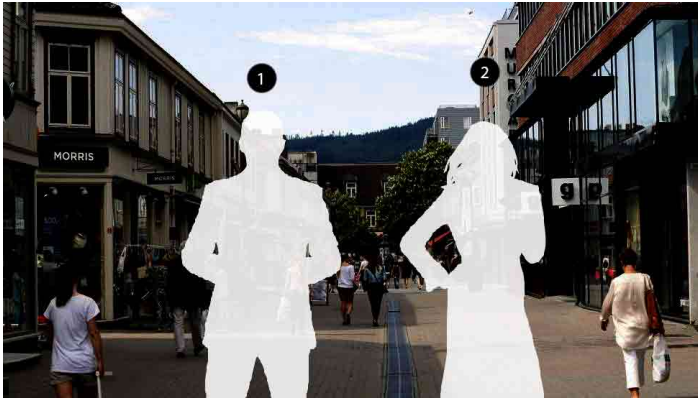
Part 2: Personas and design task [10 min]

Note: the gender of the personas are not indicated

The participants are given two personas which are based on the general depiction of men and women in society. The personas are the following:

Appendix I

Focus Groups Setup (9/10)



Persona 1:

Style: practical and professional
Hobbies: food and wine
Work: engineer

Persona 2:

Style: eccentric
Hobbies: art and fashion
Likes: doing yoga in the park

Before designing, they are asked [1 min]

What are your initial thoughts on the personas?

How do you relate to these personas?

Before proceeding, the participants are asked to indicate who they want to design for. Because I want to see if they are open-minded to design a bag for both of the personas or if they choose to go for one, they are asked:

Please indicate for whom of the personas you want your design to target.

Please shortly describe why.

What is the challenge you want your design to solve for your chosen target?

Appendix I

Focus Groups Setup (10/10)

Please design a bag solving the challenge you described and indicate how you would communicate the design in the store (placement, context...).

Use markers and paper or a preferred application to sketch the design. ~~Upload an image of the design below.~~

Participants draw together in Miro. State that it does not need to be perfect, but that it should signalize the intended meaning.

Part 3: New information

While you worked on your design, the founders of the store added new information to the personas described earlier:



Persona 1

Uses he/him pronouns. Prefer to use pencil skirt and high heels at work. However, because he identifies as a man and is treated as such, he tends to tell the employees at a clothing store that the new skirt or pair of high heels he bought for himself are for his wife.



Persona 2

Uses they/them pronouns. Identifies as non-binary and gender fluid, meaning one day they expresses their femininity, other days their masculinity. However, because of their feminine physical attributes, they is often mistaken for a woman, even though expressing masculinity. When they are in the mens' section in a clothing store, the employees often tell them that "the women's section is over there".

After this they are asked to answer some questions

How does this new information influence your design?

How does this information influence your mental model of gender?

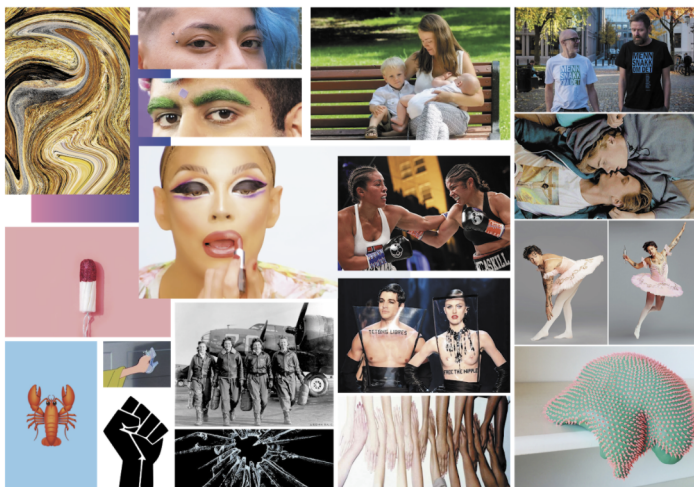
What would you change in your design process?

If you were to propose a new challenge to solve, what would it be?

What would change in your design? Please upload a revised design of your first design.

Appendix J

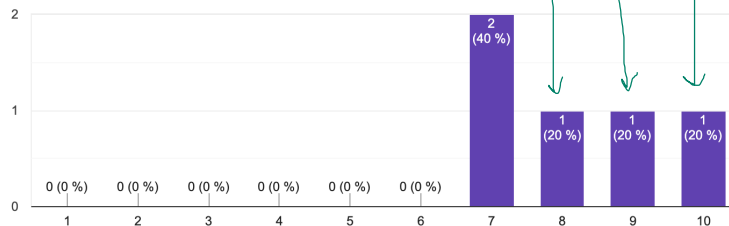
Focus Group 1 Results (1/6)



- joy, diversity, progression, feminist??
- Creative expression, sexual expression, empowerment, ambiguity, love, affectional relationship, bonding, together
- Intimitet, positivt budskap, unikkhet, uttrykke følelser, skille seg ut. "Express yourself", være seg selv, kamp, skille seg ut
- sminke, tabu, styrke
- like it a lot

How open-minded do you see yourself?

5 svar



Appendix J

Focus Group 1 Results (2/6)

Del 2: Designe to bagger

Brukergruppe 1

Beskrivelse

Mødre som ammer

Utfordring designet løser

Bare med seg ammeutstyr

Lett å vaske/hengje og trette/gulping

Vil ikke gjøre det offentlig?

Lett å vaske

Hygienisk

Stolthet, fjerne tabu

Utfordring at man har en unge der

Lynn Tess Susanne Jo

Brukergruppe 2

Beskrivelse

Folk som ikke vil ta poser på butikken

Utfordring designet løser

Vil ikke bære pose=ikke bra for rygg

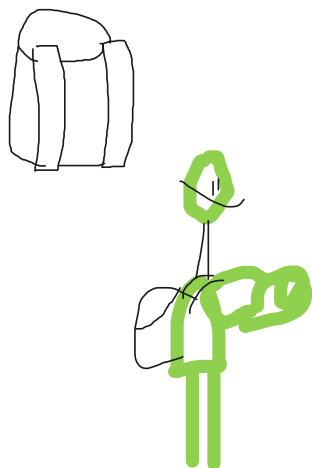
miljø?

Enkel å reparere/sy/fikse

Kompakt, sparer plass

Lett, kan ta den med overalt

Design 1



Design 2

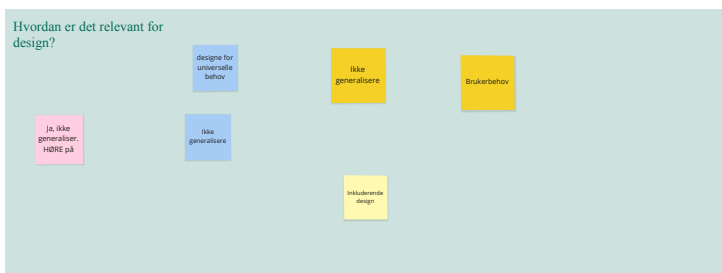
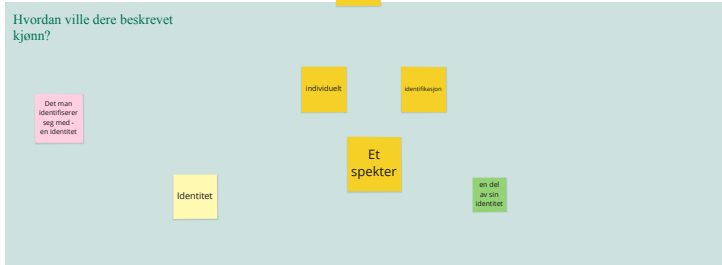
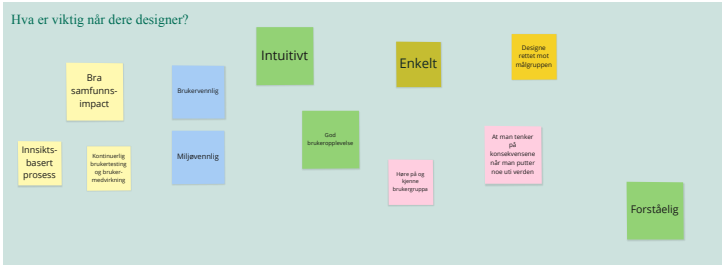


Appendix J

Focus Group 1 Results (3/6)

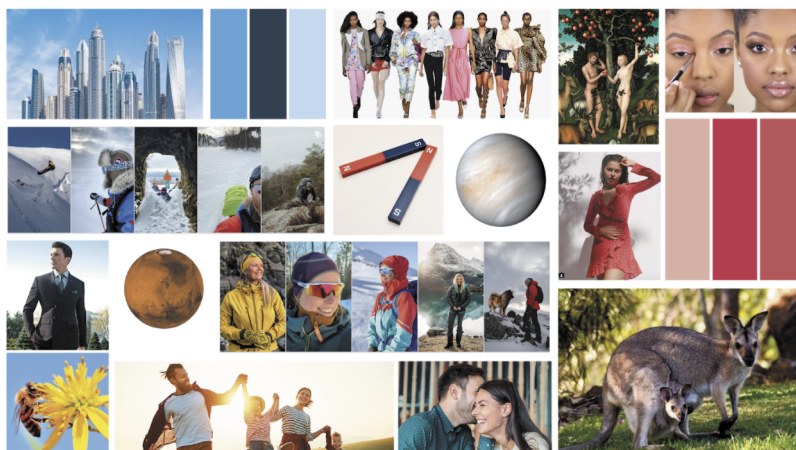
Del 3: Refleksjon

Lynn Tess Susanne Jo Dina



Appendix J

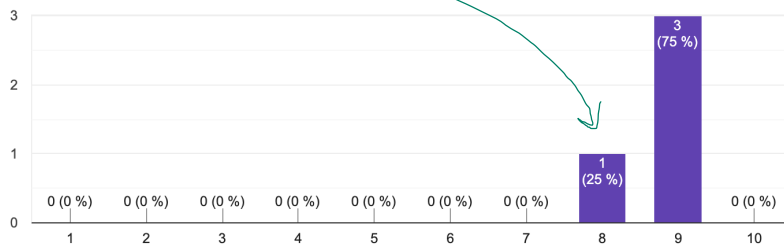
Focus Group 1 Results (4/6)



- Feels like stock. A little staged and fake.
- life and happiness, but a little bit hettrified (google it :P). Also maybe current, western social norms
- Tenker at dette er et moodboard, ser forskjellige seksjoner, og at den er sortert litt basert på farger (blå, rød, gul)
- Sosiale medier, reise

How open-minded do you see yourself?

4 svar



Appendix J

Focus Group 1 Results (5/6)

Del 2: Designe to bagger

Brukergruppe 1

Beskrivelse

Mødre

Utfordring designet løser

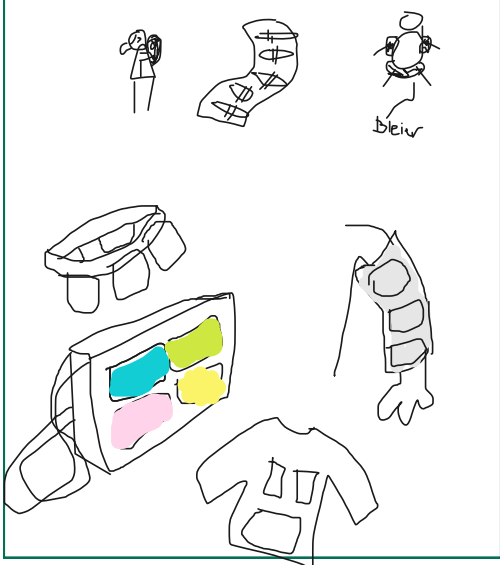
Mye forskjellige ting i baggen

Kjapp tilgang

Tåler grus og søl

Komfort

Design 1



Thomas

Lisa

Eva

Sophia

Brukergruppe 2

Beskrivelse

Leger

Utfordring designet løser

Liten

Alle nødvendige dokumenter

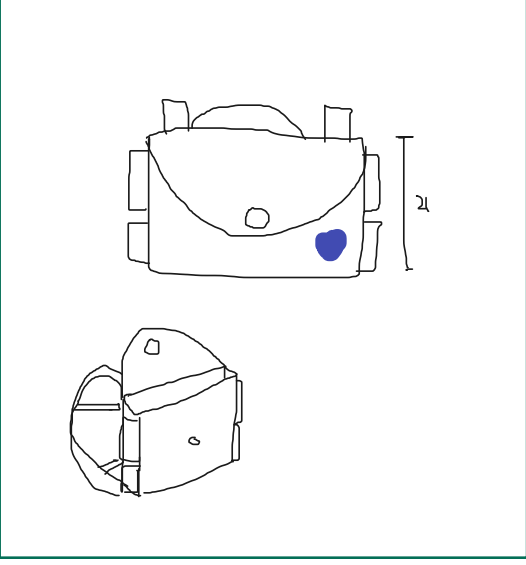
Plass til mange verktøy

Deilighet

Robust, tåler alle miljøer

Praktisk og effektivt

Design 2



Appendix J

Focus Group 1 Results (6/6)

Del 3: Refleksjon

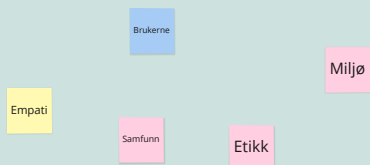
Thomas

Lisa

Eva

Sophia

Hva er viktig når dere designer?



Hva er viktig når man designer for menn?

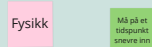
Hva er viktig når man designer for kvinner?



Hvordan ville dere beskrevet kjønn?



Hvordan er det relevant for design?



Appendix K

Questions for SoFI

- Masteroppgaven min omhandler hvordan design i vestlige samfunn er formet av det binære kjønnsystemet og videre reproducerer verdiene et slikt system omfavner. I hovedsak fokuserer jeg på hvordan omgivelsene våre, spesifikt i offentlige rom, påvirker hvordan vi tenker om kjønn.
- Hva er viktig å tenke på i forhold til mennesker og produkter i rommet man designer?
- Hvordan påvirker rommet menneskene og produktene?
- Hvilke faktorer påvirker hvordan man tolker et produkt (eks omgivelser, kontekst, karakteristikk til produktet - isåfall hvilke, priming, funksjonalitet...)
- Hva betyr tilhørighet for dere som designere?
- Hvordan skaper man en opplevelse av tilhørighet?
- Hvordan designer dere inkluderende rom?
- Hvordan forholder dere dere til kjønn i studiet og i praksis?
- Hva betyr kjønn (identitet og uttrykk) for dere som designere?
- Hva lærer dere?
- Hva tenker dere er effekten av den binære kjønnsmodellen i samfunnet og arbeidet deres?
- Hva er grunnen til denne todelingen i flere offentlige rom? Hvordan forholder dere dere til det?
- Hvordan arbeider dere med normer i dag?
- Har dere arbeidet med normkritikk eller behaviour design tidligere? (eksempler?)
- Har dere eksempler på hvordan design kan påvirke oppførsel og holdning til mennesker?
- Hvilke grep/metoder/kommunikasjonsform er effektive med tanke på å skape normendring?
- Har dere arbeidet med kjønn i design før?
- Hvordan designer dere med tanke på kjønn?
- Er det bevisst?
- Har dere arbeidet med pop-up stores?
- Hvordan brukes dette til å lage nye narrativer og konsepter?
- Hva tenker dere er rollen til design når det gjelder å introdusere samfunnet til kjønns mangfold?
- Hvordan kan design bidra til å åpne mulighetsrommet for mennesker? Spesielt med tanke på kjønn
- Hvordan ville dere lært om temaet (kjønn og kjønns mangfold) i design som designere? Eks informasjon vs praktisk
- i grupper vs alene
- ...
- Hva trenger dere for å kunne arbeide aktivt med kjønn og normendring i design?
- type verktøy, metoder, informasjon, retningslinjer, bevisstgjøring...
- Hvilket format ville dere foretrukket å lære om kjønn i design? (eks presentasjoner og seminarer vs bøker og verktøy)

Appendix L

Expert Workshop Setup (1/4)



Workshop: Gender narratives

Purpose	Reflect and discuss gender narratives with experts from different fields.
Participants	Designer: Ingvill Hoffart (EGGS) Sexolog: Stine Khüle-Hansen Gender researcher: Trine Rogg
Duration	1 hour
Equipment	The workshop will be held using Teams. Participants should bring paper and pen.

Setup

Part 0: Introduction [5 min]

Explain goal of master and introduce yourself

Tusen takk for at dere tok dere tid til dette!

Mitt navn er May Helen. Jeg skriver master i industriell design ved NTNU, hvor jeg prøver å finne ut hvordan man kan arbeide med kjønn i design.

*Tidligere har jeg sett på hva kjønn har å si for samfunnet og har merket hvordan design er med på å **reprodusere verdier og normer i tokjønnsmodellen**. Dette er ofte verdier som er begrensende, både for de som ikke identifiserer seg som verken mann eller kvinne, men også for de som identifiserer seg med disse.*

*Masteren min er altså mer **teoretisk orientert**, hvor jeg ser på ulike tradisjonelle designmetoder og effekten av disse når det gjelder kjønn i design.*

Workshoppen inkluderer noen refleksjonsoppgaver, men mest diskusjon.

Appendix L

Expert Workshop Setup (2/4)

For å fokusere litt mer bruker jeg **fysiske klesbutikker** som case og er noe vi skal referere til i denne workshoppen når vi snakker om narrativer.

Ellers er spørsmålene og oppgavene **relativt åpne for tolkning**. Fokuset blir dratt i den retningen dere fokuserer på.

Task 0: Introduksjon [30 sek]

- navigering
- dobbelklikk for å skrive inni

Så kan dere én og én raskt presentere dere selv med navn, deres ekspertiseområde og hvordan dere jobber med kjønn.

Part 1: Gender today [15 min]

Task 1: Individual reflection [2 min]

Bruk to minutt på å reflektere rundt og skriv ned hva kjønn betyr i samfunnet og to minutt på hva det betyr i ditt fag.

I og med at klesbutikker er case i min master kan dere bruke dette som kontekst for å konkretisere det for dere selv også. Gjerne noter på post-it lapper i Miro. Dette kan bli brukt senere.

[ta tiden: 2 min]

Nå vil jeg at dere diskuterer og sammenlikner det dere nettopp presenterte. Ser dere noen likheter og forskjeller?

Task 2: Present [4 min]

Nå kan dere presentere kort hva dere har notert dere. Maks 1 min hver

[ta tiden: 3*1 min]

Task 3: Discuss [8 min]

[Fjern den hvite boksen]

Nå vil jeg at dere diskuterer og sammenlikner det dere nettopp presenterte. Ser dere noen likheter og forskjeller? Her er noen ledende spørsmål dere kan ta

Appendix L

Expert Workshop Setup (3/4)

utgangspunkt i:

[ta tiden: 8 min]

- Er det noen interessante likheter og forskjeller/motsetninger mellom det som ble presentert?
- Hva er det grunnleggende svarene deres tyder på?
- Hva er dagens diskurser rundt kjønn?
- Hvorfor er kjønnsforståelse viktig?
- Hva er effekten av tokjønns-modellen i samfunnet?
- Hvilke kvaliteter er relevante i design (av klesbutikker)?

Part 2: Gender in context [10 min]

Under er eksempler på hvordan kjønn fremstilles hovedsakelig i Trondheim sentrum, samt andre funn. I tillegg er det eksempler på noen som har designet for kjønns mangfold. Jeg ønsker nå at dere tar utgangspunkt i dette, samt deres kunnskap om kjønn og diskuterer hva som er bra og hva som er mindre bra.

[ta tiden: 3 min]

[ta tiden: 6 min]

Hvordan passer deres forståelse av kjønn med hvordan kjønn fremstilles i samfunnet?

Hvordan henger dette sammen med tidligere forståelse av kjønn?

Hvilken konsekvens kan dette ha for samfunnets forståelse av kjønn?

Hvilken konsekvens kan det ha for design?

Part 3: Gender in the future [15 min]

Bruk 5 minutter på å tenk på hvordan kjønn og kjønnsforståelse er om 10 år. Bruk post-it lapper til å notere ideer. Gjerne bruk klesbutikker som kontekst for å konkretisere. Hvordan er de inndelt? Hva har dette å si for samfunnet, normer og verdier? Oppførsel? Hvor er vi på vei? Hva er fremtidens narrativ om kjønn? Hva bør ikke skje?

[ta tiden: 5 min]

Appendix L

Expert Workshop Setup (4/4)

Del 2: Kjønn i kontekst

Reflekter individuelt i 5 minutter. Bruk post-it-lappene til å notere tanker.
Diskuter dereetter sammen i 6 minutter.

Bruk post-it-lappene til å skrive ned refleksjoner og tanker.

- Spørsmål dere kan ta utgangspunkt i:
1. Hvordan passer dere fordelene av kjønnet med hvordan kjønnet fremstilles i samfunnet?
 2. Hvordan bryter dette sammen med tidligere fordelene av kjønnet?
 3. Hvordan kan kjønnet brukes til å bryte samfunnets fordelene av kjønnet?
 4. Hvordan kan kjønnet brukes til å bryte designet?
 5. Hvordan kan kjønnet brukes til å bryte designet?
 - a. Hva blir det om hva man skal gjøre/like gjøre basert på kjønnet?
 - b. Hva er målet ved å bryte kjønnet?
 - c. Hvordan når man målet?

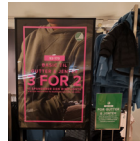


"Kjønnet for meg er først og fremst en indre opplevelse som vi finner ord for i verden omkring oss."

- Esben Esther Pirelli Benestad



"Society is prone to punishing us when we break gender norms"
-france rose hartline



Gucci unveils £1,700 tartan dress with satin bow waist for MEN



Gucci is selling a £1,700 tartan dress with satin bow detail for MEN

"Kjønnsidentitet er en indre opplevelse av type magesfølelse"

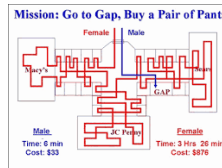
-Esben Esther Pirelli Benestad



"Fysiske forskjeller på menn og kvinner gjør at enkelte produkter, for eksempel sykler, lages spesielt for kvinner og spesielt for menn."



"Kvinner tenker like mye på shopping som menn tenke på sex"



Spørsmålene er kun veiledende

[fjern den hvite boksen]

Diskuter det dere har kommet frem til. Grupper underveis - dvs, dersom noen har liknende forslag, legg dem sammen. Videre skal dere tematisere grupperingene. Jeg har laget forslag til typer grupperinger. Dere kan velge om dette er relevant, om dere vil legge til noe eller lage nye. Tenk også litt på betydningen og verdien for design.

[ta tiden: 8 min]

Part 4: Discussion [15 min]

De siste minuttene ønsker jeg at dere ser tilbake på det dere har gjort til nå og prøver å finne verdien dette kan ha for design. Dvs. hvordan kan designere dra nytte av dette i arbeidet? Hvordan bør design og designere reagere på kjønnsdiskursen?

[ta tiden: 15 min]

Hvordan kan man bruke dette til å lage nye narrativer om hva kjønn er?

Hvordan kan designere og design dra nytte av det?

Hvordan kan det brukes innen design?

Appendix M

Interview Sara Tellefsen Setup

Kjønn i kontekst



"Fysiske forskjeller på menn og kvinner gjør at enkelte produkter, for eksempel sykler, lages spesielt for kvinner og spesielt for menn."

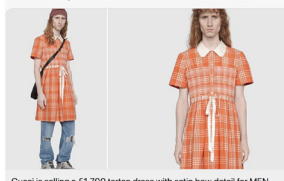


"Kjønn for meg er først og fremst en indre opplevelse som vi finner ord for i verden omkring oss."

- Esben Esther Pirelli Benestad

"Society is prone to punishing us when we break gender norms"
-france rose hartline

Gucci unveils £1,700 tartan dress with satin bow waist for MEN

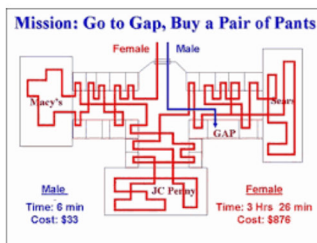


Gucci is selling a £1,700 tartan dress with satin bow detail for MEN

"At man lager sykler basert på kjønnsforskjeller er selvsagt bare en kulturell fordom"
-Trine Rogg Korsvik (historiker og kjønnsforsker)

"Personlig så er ikke jeg enig i at kjønn er en indre opplevelse (...). De rollene er noe som blir dyttet på oss og at inni oss er vi menneske og ikke først og fremst et kjønn"

-Trine Rogg Korsvik (historiker og kjønnsforsker)



"Jeg ser mer på kjønn som en type struktur og kultur som dytter folk mer inn enn at det er en indre essens"

-Trine Rogg Korsvik (historiker og kjønnsforsker)

"Kvinner tenker like mye på shopping som menn tenke på sex"



Men der har man fortsatt en tendens (...), i brukerinvolveringen, å tenke strenge kategorier og båser."
-Ingvill Hoffart (tjenestedesigner, EGG5)



"Kjønnsidentitet er ryggmargen i mennesket, slik jeg tolker det"
-Stine Kühle-Hansen (sexolog)

Appendix N

Workshop Høyskolen Kristiania Setup (1/7)

Rethinking Gender in Retail Design

This document is mainly for communicating the purpose. There is another document on the proposed info to be shared with the students.

Designers are influenced by our surroundings. As members of a society which builds on the binary gender system, we are prone to produce solutions perpetuating the heteronormative and binary values such a system holds. Many people identify with these representations and interpretations of gender, but for some, these manifestations are perceived and experienced as excluding, discriminating, and restrictive.

This workshop highlights the challenges of the binary gender system. The purpose is to understand and discuss how designers best can learn about the complexity of gender in design and how this knowledge can be utilized in future work. By creating awareness of the gender challenge and own biases related to the binary gender system, the goal is to enable designers to create meaningful solutions for gender diversity.

Through various tasks and theory, the workshop gives an arena to reflect and discuss ways to learn about the interplay between the binary gender system in society, design, and people, and what is needed in the field in order to design for gender diversity. The workshop

- encourages critical thinking and reflection
- provides knowledge and information on the history of gender and the binary gender system
- offers definitions of relevant terms related to and associated with gender
- presents the challenge in context of design: pitfalls, design techniques, and principles
- encourages participants to reflect upon learning outcomes

What: Workshop

Where: Zoom

When: 12th of May 2021

Duration: 0915-1600 (7h)

Participants: Retail design students from Høyskolen Kristiania, in 5 groups of 3-4

Materials: laptop, your chosen brand

We will be using Miro for brainstorming and the practical tasks. Each group will be given their own workspace in Miro. Please prepare the following before the workshop

1. Watch this Miro tutorial (from 1:04): <https://youtu.be/7L1-0DOGHDY?t=63>
2. Play around in Miro yourself: https://miro.com/app/board/o9J_LGGs0Pc=?moveToWidget=3074457358212148886&cot=14

Structure

The workshop is divided into four parts, alternating between **theoretical input** and **practical tasks**. Before the end of the workshop, students will present their work and findings throughout the process, as well as express their personal reflections in a questionnaire.

09:15 Preparation [15 min]

- Practical information and preparation

Appendix N

Workshop Høyskolen Kristiania Setup (2/7)

The workshop starts with a reflection task. The groups are given two personas with minimal information. Their task is to describe the personas further, to make them fit the target group of their chosen brand. The timer is set to ten minutes, in which the students are to use their intuition and immediate assumptions to be able to finish in time.

The purpose of this task is to

- confront the design students with the challenge of gender bias when designing
- immerse the students in the challenge
- start the creative, reflective, and critical thinking

The task is introduced in the following way

Below are two personas with a bit of information. Work together as a group to fill in the information in the templates below. You don't have to complete all the categories. The personas should fit the vision of your brand.

Use your intuition and immediate assumptions. Take notes of what you discuss as it can be used later. You have 10 minutes in total.

09:45 Introduction of the gender challenge [45 min]

Next, the students are introduced to the challenge of gender bias and design with a presentation. The presentation includes:

1. Introduction of presenter and purpose of workshop
2. Terminology
3. Gender theory
4. History and culture
5. Gender identity in a binary society
6. Gendering - a design challenge
7. Expose new information on the personas from Reflection exercise

10:30 Break [15 min]

10:45 Analysing brand [30 min]

This practical task is based on the theory presented before. The students use their chosen brand to explore and analyse. The purpose of the task is to

- connect theory and practice and experience gender bias in context
- trigger reflection and discussion
- make the students explore the challenge of gender bias themselves and learn from the theory

The task is introduced in the following way:

The suggested durations are guiding. Students manages the time themselves.

1. Examining the target group [10 min]

Describe the intended target group of your chosen brand. Use your Miro board to take notes and visualize and communicate your findings.

Appendix N

Workshop Høyskolen Kristiania Setup (3/7)

You are free to choose how to communicate the target group. Here are some suggestions:

- Moodboard
- Empathy mapping (link)
- Post-its
- Storytelling

2. Examine the gender perspective [15 min]

Reflect upon and discuss the questions below. Write down ideas and thoughts throughout the discussion.

- What is the gender narrative the brand depicts?
 - o What means do they use to communicate this narrative?
- How does this relate to the binary and heteronormative gender model?
- Are there any stereotypical depictions of gender?
 - o What is value of this? (positive and negative)
- Do you find anything surprising regarding their relation to gender?
- What is the relation of the brand towards gender roles and gender identity (binary and fluid)?
- What overall impression does the brand convey, with respect to gender?
- What does the brand expect of their customers based on their gender?
- What does the brand assume about gendered expressions?
- How does the brand relate to the heteronormative and binary expectations of society?

11:15 Ways to work with gender in design [30 min]

This theory is based on the findings from my research in this project.

The presentation includes:

1. Pitfalls (current practice)
2. Techniques for the design process
3. Presenting the next task

11:45 Planning and research [15 min]

This practical task is based on the theory presented before. The students will develop a plan on where they see points of improvements from a gender diverse perspective for their chosen brand. In other words, they will have to choose a focus area in the physical space of the store and a method on how to work with gender in design. The purpose of the task is to

- find design opportunities with respect to gender
- work with gender in design by utilizing suggested methods (or come up with their own)
- connect theory and practice and explore how we can change the gender narrative

The task is introduced in the following way:

This task prepares you for the final task later today. The task should be regarded as a planning phase where you decide your focus area and process. Think of how your chosen brand could contribute to rethinking gender and induce the move towards a more gender inclusive society.

Appendix N

Workshop Høyskolen Kristiania Setup (4/7)

Based on what you found in the last task, choose one physical area to focus on. Your choice of focus should be based on where you find an opportunity to rethink gender for your brand. Beneath are some examples you can choose from, or come up with your own:

- windows (also look at the surroundings of your chosen location)
- layout
- changing rooms
- categorization of artifacts inside the store
- zones or departments
- presentation of products
- pop-ups or concept spaces

Please argue for your choice of focus area.

2. Choosing two techniques

Next, you are going to decide on how you want to work. Please choose two of the following and argue for your choice:

- Test your own boundaries
- Context safari (online)
- Prime yourself with diversity
- Non-heteronormative personas
- Generation research
- Creating a utopian or dystopian future
- Product design
- The approach to the challenge
- Find the common ground

12:00 Lunch break [1 h]

13:00 Our responsibility [15 min]

The last theory part concerns the responsibility of designers in this challenge. The main content of this presentation are principles found in this project.

The presentation includes:

1. Design principles when working with gender in design
2. Presenting the main task

13:15 Redesign [1h 45 min]

In this practical task, the students are looking back at previous work throughout the workshop. They will use their gained knowledge on the topic from theoretical and practical tasks to rethink gender for their chosen brand. The purpose of the task is to

- connect theory and practice and explore how we can change the gender narrative
- trigger reflection and discussion
- retrieve insights in how to work with gender in design

The task is introduced in the following way:

Appendix N

Workshop Høyskolen Kristiania Setup (5/7)

Based on your planning before the break, create a new concept for the brand with respect to gender. You should think about

- what challenge/problem in relation to gender you want to solve
- the message/vision you want to communicate
 - o How to communicate the message
- the impact the message should have on people and society
 - o What could be the effect on customers and people who pass by?
 - o How can this create acceptance of gender identity exploration and expression?
 - o How can this create affiliation for potential customers?

Work with the brand identity, play with gender norms, roles, and expectations. You should also argue for the choices you make.

Questions to reflect on:

- How does the environment influence how we perceive the brand/space in relation to gender?
- Is it more inclusive? or stigmatizing?
- How could it influence people who
 - o do not identify with the binary gender values?
 - o do identify with the binary gender values?
 - o are insecure about their gender identity?

The concept should

- o challenge normative gender values,
- o account for variations in gender and preferences,
- o align with the vision of the brand,
- o be consistent to the brand identity, and
- o relate to the products the brand is selling

2. Prepare presentation

The presentation should include

- Brief explanation of the concept
- How this concept relates to gender
- Takeaways from the workshop (what you have learned)
- Insights on how to work with gender in design

15:00 Presentations [50 min]

6 min (6*6=36min) or 20slides x 20sec: presentation of each group + plenary discussion

15:50 Plenary discussion [10 min]

- Do you have some reflections you would like to share?
- What are your thoughts on working with gender in design?
- How can this be valuable for you in your future work?
- Any other comments?

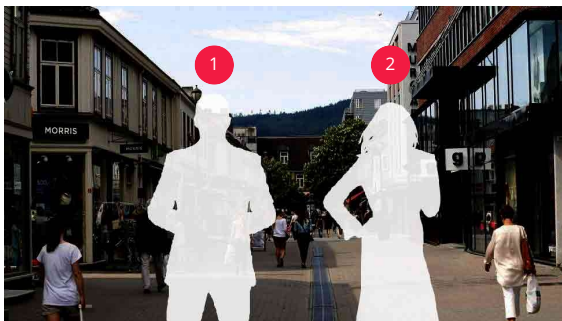

Appendix N

Workshop Høyskolen Kristiania Setup (6/7)

Reflection Exercise

Work together as a group to fill in the rest of the persona information in the templates below. You don't have to complete all the categories. The personas should fit the vision of your brand.

Use your intuition and immediate assumptions. Take notes of what you discuss as it can be used later. You have 10 minutes in total.

Not bothered by gender

Usual gender identity
Cis-man


Relation to gender norms
Thinks there is too much focus on gender in society

Gender identity-related challenges
Does not experience any specific challenges with their gender identity.

Thoughts on gender diversity
Have not considered the challenges others with other gender identities experience.

Attitude
bystander, (idealist)

"Just chill, let people be who they want to be, as long as it does not hurt anyone"



One or the other

Usual gender identity
Binary cis-gendered

Relation to gender norms
Conforms to most gender norms in society

Gender identity-related challenges
Finds some representations of gender challenging and restrictive

Thoughts on gender diversity
People should define themselves as they want, but that the division of man and woman is important

Attitude
Believes there is a distinction between the biological sex and psychological gender. Binary is biology - biology is binary

"You are born either as a man or a woman. How you define yourself is up to you"



The reflective herd

Usual gender identity
Binary cis-gendered


Relation to gender norms
Conforms to norms gender norms in society, but points out how some can be restrictive and discriminating

Gender identity-related challenges
Stereotypes and expectations

Thoughts on gender diversity
All genders should be included, but is not actively conscious of own gender biases

Attitude
Moral driven - equality and equity for all

"We have to respect and accept each other, regardless of our gender identity and expression"



The activist

Usual gender identity
All genders

Relation to gender norms
Plays with and challenges them

Gender identity-related challenges
Discrimination, stereotyping, stigma

Thoughts on gender diversity
Should be taught in school and informed about in society

Attitude
Believes a more fluid gender model should be recognized as the normal

"Society should educate people on gender diversity"

Appendix N

Workshop Høyskolen Kristiania Setup (7/7)



Not seeing does not mean it does not exist
 Gender is largely represented as one or the other - masculine men or feminine women. However, it does not mean deviations of the norm does not exist. Heteronormative values and norms lead to many devastating stories for people who are restricted by these, thus not being able to fully express themselves as their true self to the world.



Not asking why
 Designers are experts in pinpointing challenges, examining peoples behaviour and finding needs. However, asking why these are the challenges; why this is the behaviour; why these are the needs, are sometimes ignored. In context of gender, this might be the reason for why norms and values are reproduced in design.



Disclaiming the responsibility
 As the majority of us stay true to the gender norms in society, this is therefore what we design for. However, this mindset says that the oppressed have to confront society before the design practice can change, all though we know how much influence and impact space and design in general have on people and society. Thus, the problem becomes even bigger when designers, who are responsible for designing a society for all its inhabitants, denies the existence of everyone except the binary and transfers the responsibility of bending the norms onto individuals.



Ignoring the problem
 Excluding the concept of gender from the design project removes the importance of being aware of and considering the challenges and issues which are rooted in the heteronormative and binary gender system. If we ignore gender challenges, we are prone to overlook and disregard important needs, thus reproducing the same values which leads to the oppression of some.



Generalizing and stereotyping
 In the process of gathering insights, analyzing and narrowing down to something comprehensible, designers are in the danger of generalizing, and worst case, stereotyping, people. Consider who is inside and outside of the categories you define for your project and why. Is your solution prone to discriminate or go on accordance with people who are already marginalized in society? How can you combat this?



The binary default
 Though the heteronormative, binary genders represent the majority to day, it does not mean variations within the binary and of gender as a whole does not exist. Defaulting to the binary masculine men and feminine women is not a rare case and is easily justified with how our culture defines gender. However, doing this not only reduces the diversity of gender as a concept, it also reduces the diversity within the binary and major genders.



The 'special' case
 When those of us who do not conform to the gender norms are considered, they are often regarded as a special 'topic' that only comes up when it is specifically relevant to the storyline. If every case of gender non-conformativity is presented as special, heteronormativity/keeps being regarded as the normal.

1 Know your own gender bias
 Prejudice is human - thats how we survive in this complex world. However, when prejudices become exclusive and discriminating unconscious biases, we need to take a step back and look into the actual consequence of it. The first step in becoming a more open-minded designer and steering away from gender stereotypes is in becoming aware of your own mind and how it is affected by the binary gender model in society.

2 Understand your privilege
 Designers are privileged. We are in the front seat, if not steering the wheel, of influencing people and society. Because of this, we need to be aware of the impact we can make with our decisions. We must make sure we combat our biases, and design for changes which are necessary, desired, and have a positive impact. We need to make the best of our privilege in designing for the better.

3 Diversity promote inspiration: expose yourself to it
 We are inspired and influenced by our surroundings. Because of the lack in exposure and representation of non-conforming depictions of gender and gender diversity in society, it is important for designers to actively expose ourselves to it. Acknowledgment of gender diversity encourages norm challenging and progressive ideas, which can accelerate the progress towards a more gender inclusive society.

4 Think of who are inside and outside of the categories
 Because "the default status of gender is still cisgender and binary" (f. r. hartline, 2021, March 3) we are prone to unconsciously put people in boxes of heteronormativity and create solutions which are "punishing us when we break gender norms" (f. r. hartline, 2021, March 3). Identifying people who are inside and outside of the categories we design for can enable aspects of the design that are important to combat biases, discrimination, and systematic oppression.

5 Ask why
 In the activity of involving people in the design process with the purpose of empathizing and understanding their experiences, we need to understand how their behaviour, attitudes, and experiences are influenced by the binary gender system. Though a lot of cis-men might express a lack in desire to wear a dress, the social norms of clothing conventions are still restrictive for the men who want. Asking why can reveal the social structures which are worth criticising.

6 Create acceptance. Strive for affiliation.
 Society depict gender as binary, making it difficult for people to imagine the options of expression, identity, and behavior. When a gender biased design is introduced to society, we continue to reproduce the restrictive values and expectations of people based on their gender. We have to start exposing people to gender diversity, not only for those of us who do not feel affiliation with the binary, but also to create a societal acceptance of this.

7 Make it relatable
 People need to see themselves in what is represented in society. Though a lot of famous icons have challenged the heteronormative, we also need the masculine mannequin in a dress, a diversity in sizes of crop-tops, sparkle on the male models, muscles on the female models, trans models, non-binary models, agender models, diversity. We need to normalize the relatable to avoid negative attention to those of us who just want to express ourselves.

8 Pay attention to semiotics
 Our language, behaviour, attitude, and surroundings communicate the binary worldview. Paying attention to how a design is communicated through language, product language, representation and context is important in creating affiliation and acceptance for gender diversity. People need to be provided with opportunities on gender, rather than restrictions.

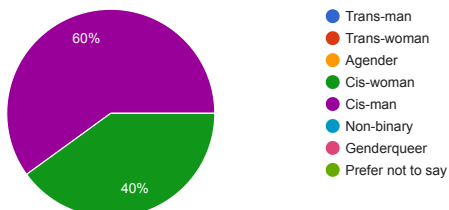
9 Challenge your client and society
 Designers often have to consider the demands from a client. We want what is known, because what is known is efficient. But what is commonly known about gender in society is also exclusive, discriminating, and damaging. We have a responsibility as designers. Even asking your client "what about the genderqueers?", categorizing the clothes unrelated to gender, or presenting a transgendered persona, can sometimes be enough to start the progress towards a more gender inclusive society.

Appendix O

Workshop Høyskolen Kristiania Feedback on Concepts (1/3)

Gender identity

5 svar



What is your initial reaction towards this concept?

5 svar

I like the concept and think that it is important.

I feel this concept would show that the brand focuses on including non-binary gendered people and show that they have put in an effort to try to understand how the life in a binary gendered world is. The concept might also open some peoples mind, or at least make some aware of the maybe unknown struggles of non-binary gendered people.

A good concept, but it might be a bit negatively loaded. For a cis-person which have never experienced gender dysphoria this might be just one extra thing that it is easier to just not acknowledge (same as with poverty, hunger and other social injustices)

Det virker å være en tankevekker til cis-personer, som lever i en verden der de ikke faller utenfor i forhold til den binære kjønnsmodellen. Det at dette konseptet åpner opp et annet perspektiv som ikke vanligvis fremstiller, kan være svært hjelpsomt for å gjøre mennesker bevisst

Dramatisk

What impact would this have on you if you saw this in the city centre?

5 svar

I would be curious and watch it.

Appendix O

Workshop Høyskolen Kristiania Feedback on Concepts (2/3)

It seems like an eye-catching concept that I would stop to look at. I would think that this is a brand that focuses on inclusion and that tries to approach our society and their products with an open mind.

I think it would make me think twice about gender norms in our society, but maybe not enough to actively seek more information about the subject on my own.

Jeg ville blitt veldig positivt overrasket, da dette ikke er noe man ofte møter på. En vei i riktig retning

Ville lagt merke til dette og tenkt at det er et godt budskap. Hadde ikke påvirket meg mye mer enn det.

Do you have other thoughts?

0 svar

Det finnes foreløpig ingen svar på dette spørsmålet.

What is your initial reaction towards this concept?

5 svar

Like it :) better than what exists now

I think the concept is daring in our heteronormative society and could cause some strong initial reactions from narrow-minded people. I think this concept is something that should be implemented as the standard for brands that sell general clothing (e.g. you don't just make dresses). By not labelling clothes by gender and showing styles from all sort of styles is a healthy way to display human differences and promote inclusion.

Great concept!

At dette er et inkluderende konsept som ikke setter grenser for kjønns spesifikke klesnormer. Åpner opp for selvstendig identifikasjon

Godt konsept som inkluderer og kan inspirere andre til å ikke følge normer i forhold til klesstil og kjønn. Lurt å bruke kjente personer som forbilder.

Appendix O

Workshop Høyskolen Kristiania Feedback on Concepts (3/3)

What impact would this have on you if you saw this in the city centre?

5 svar

Would make me happy

I dont think this would have to much of an impact on me in the city centre as I like to think that my clothing choices are derived from what I think works for me. However, I do not disregard the possibility that my style has developed as a result of heteronormative values and that seeing more different examples of styles on a more regular basis could change what I perceive as my style.

It might not persuade me into wearing "womens clothing", but it would undoubtedly normalize more gender fluidity.

at man ikke er bundet til en del av butikken, men at man kan se på alle slags typer klær man foretrekker, uten å føle en slags skam eller forlegenhet av å gå i "feil" avdeling.

Med klær som ikke sorteres etter kjønn ville jeg hatt større åpenhet i forhold til å kjøpe egne klær. Dette kunne ha påvirket mine valg i stor grad i klesshopping.

Do you have other thoughts?

2 svar

The concept was a bit confusing to understand

Might be a good idea to also focus on more day-to-day clothes as well, and not only clothes fit for the red carpet.

