User-centered design

25.1.2021

Kirsi Niinimäki

User

A) Fictional figure

B) Target group to whom you are designing for

C) Test group who can help in the design process

"User" as a fiction
"User" as an inspiration

- Yle 23.1.2021
- Janette Laakso
- Autuas Ukkonen

How to get information from users

1) Sales statistics, numbers
2) Surveys
3) Interviews
4) Observation
5) Lead users
6) Test groups
7) Participatory design, co-design
8) Open design

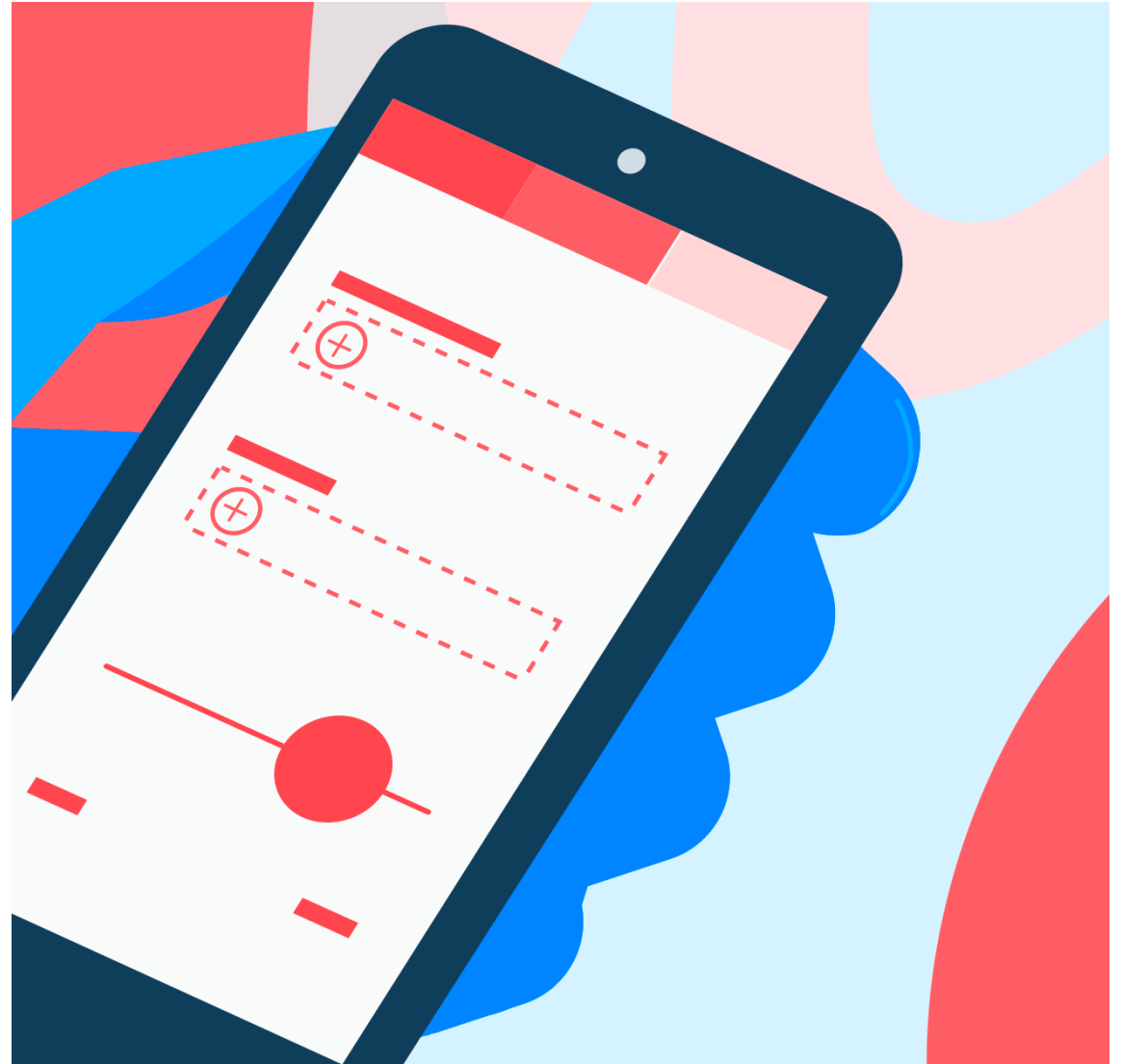# Sales statistics, numbers

- Following previous sales figures
- Consumer purchase preferences

Surveys

- Large group of consumers

- Takes some time to do a proper questionnaire and tests it

- Fast to analyze

- Webropol, online survey

- Creates a link, which you can send by email or publish online

Interviews

- When there exists only view specialists

Or very special, well defined group

- New area, no publications

- Takes time to do +
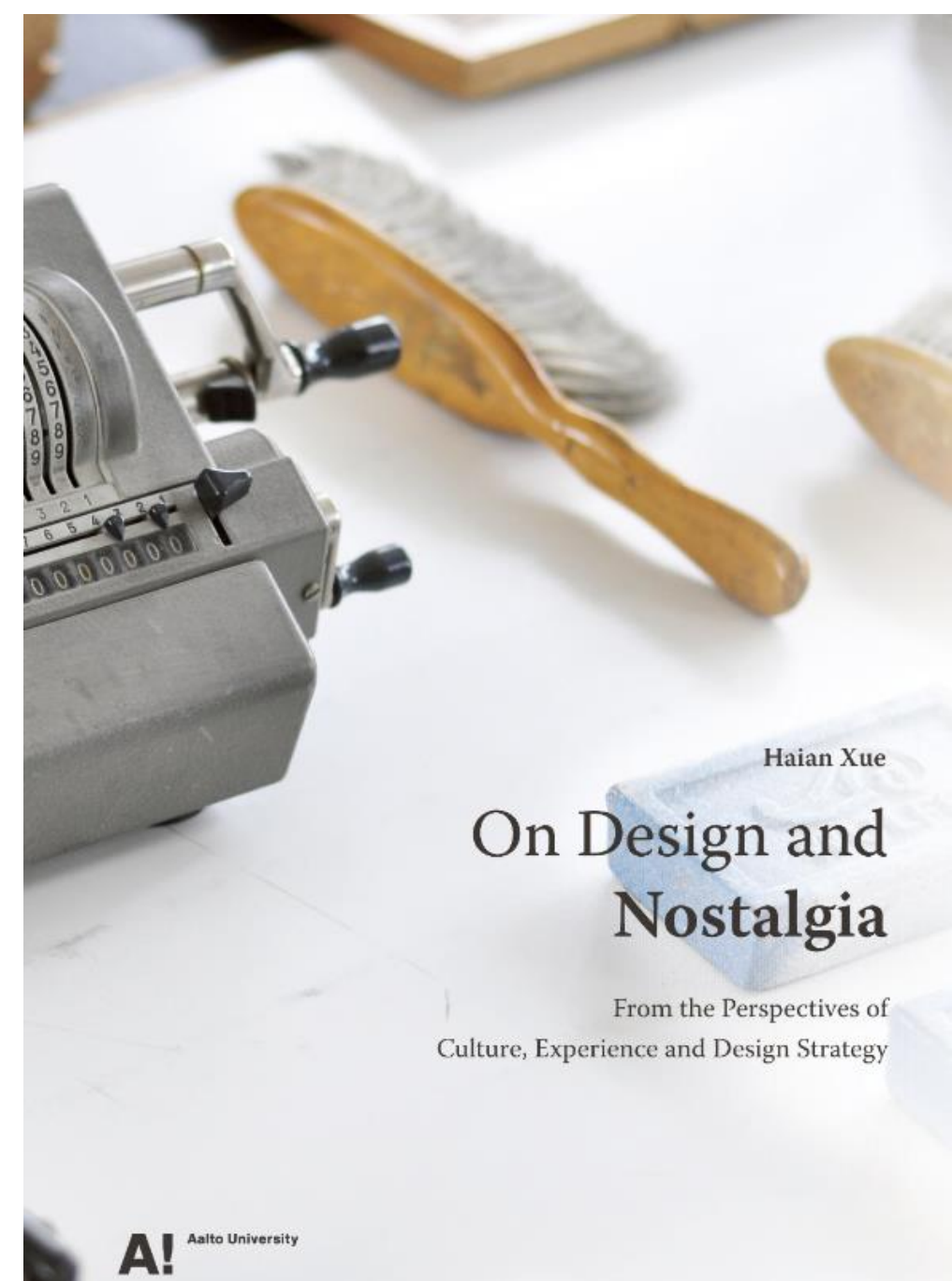
transcribe +

analyze answers

Figure 21. Sarvis' Katrilli (1969) and Pitopöytä (1976) being sold at the Helsinki Retro and Vintage Design Expo 2014 (photo by the author)

Figure 39. A 1960s original Jopo that is still in use today (photo by the author on 14 Dec. 2015 in Helsinki)

Haian Xue (2017) On design and nostalgia

Haian Xue

On Design and Nostalgia

From the Perspectives of
Culture, Experience and Design Strategy

A! Aalto University

Observation

- Ethnography
- Spying, observing
- Design ethnography, design intervention

Mutambo Kumbu, MA thesis 2017, Zambian dress in the focus

Interviews + observation

- Maarit Aakko (2016) *Fashion in-between : artisanal design and production of fashion.* Doctoral dissertation.

- Examining the concept of 'artisanal' in the context of contemporary fashion, this doctoral dissertation aims to decode the essential features of artisanal fashion. It also analyzes the significance of this approach and its relationship to the current cultural and societal environment. The study takes a particular look at the designer's role in artisanal houses, and examines his/her ability to control and influence the process and the outcome. Compared to the mainstream clothing industry, artisanal fashion, with its emphasis on craftsmanship, offers an alternative approach.

Fashion In-between

ARTISANAL DESIGN AND PRODUCTION OF FASHION

MAARIT AAKKO
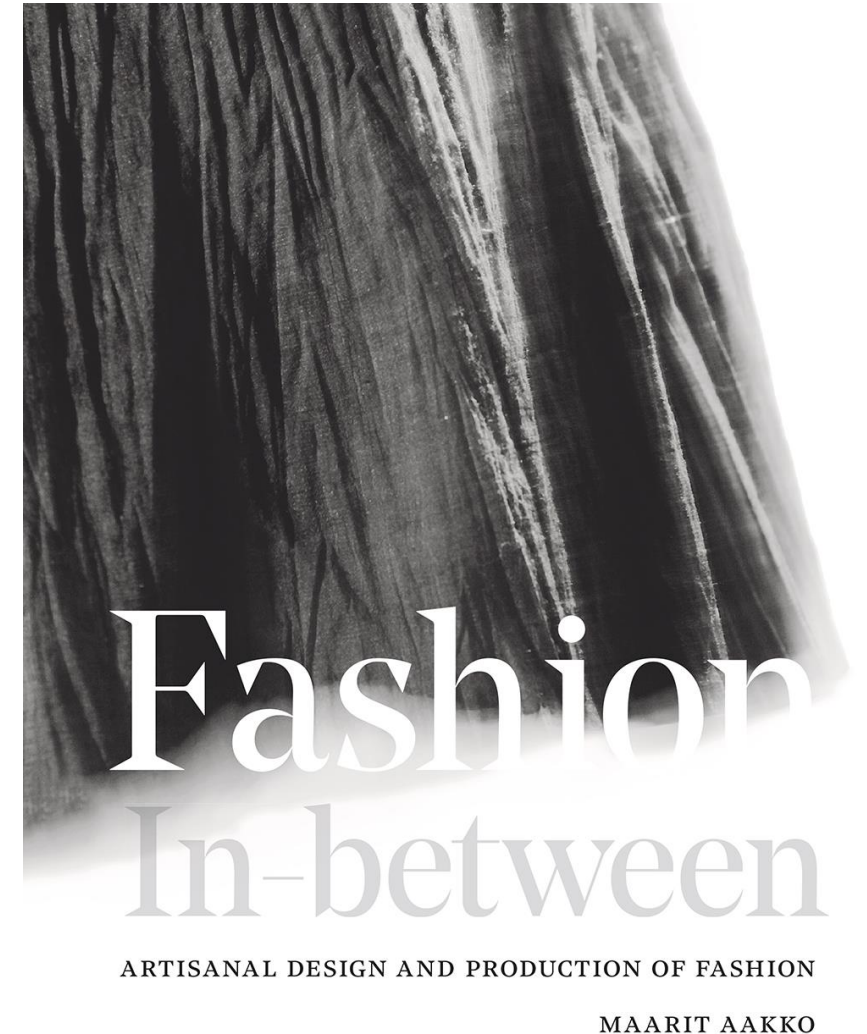
Observation

Talking Through Our Bodies

Draping with a moving subject as a fashion design process
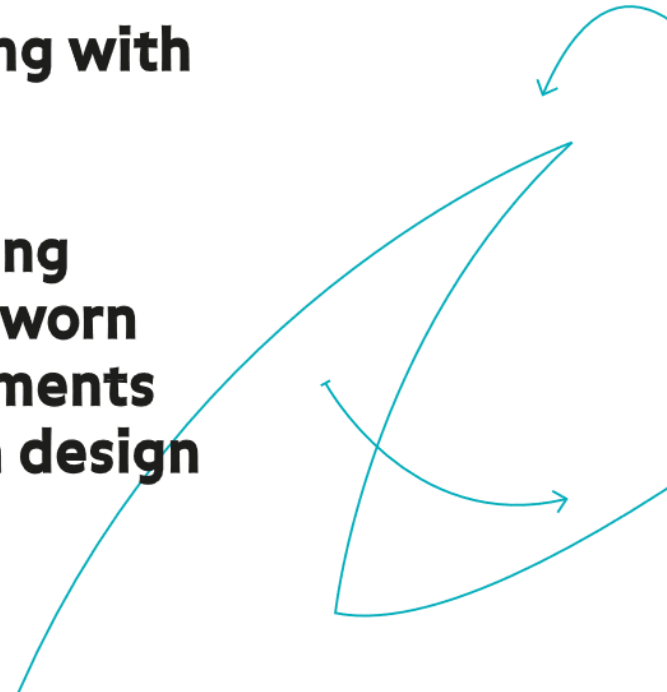
Kasia Gorniak, Master's Thesis, 2017

Probes

- Julia Valle Noronha (2019) Doctoral dissertation

Julia Valle-Noronha

Becoming with Clothes

Activating wearer-worn engagements through design

6
Experiment 2: Wear\Wear
183

FIGURE 54
Folding a dress for the Wear\Wear experiment. The picture shows the moment before (left) and after the heat press (right).
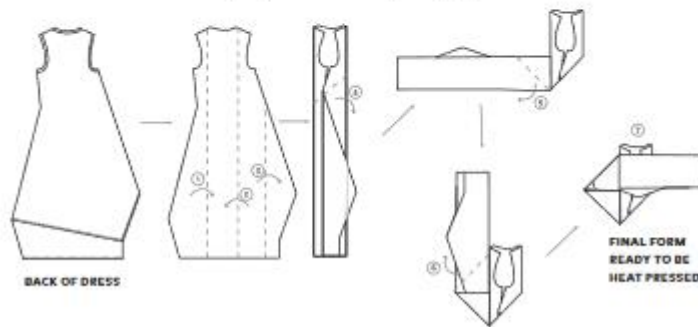
FIGURE 55
Instructions for folding the pieces before heat-press. All pieces were folded following the same instructions, regardless of their size/length.

BACK OF DRESS

FINAL FORM
READY TO BE
HEAT PRESSED

Experiment 2: Wear\Wear
196

FIGURE 64
The picture shows a group discussion for the Wear\Wear project Belo Horizonte. On the day, the pieces received were brought to the space and supported the discussion.
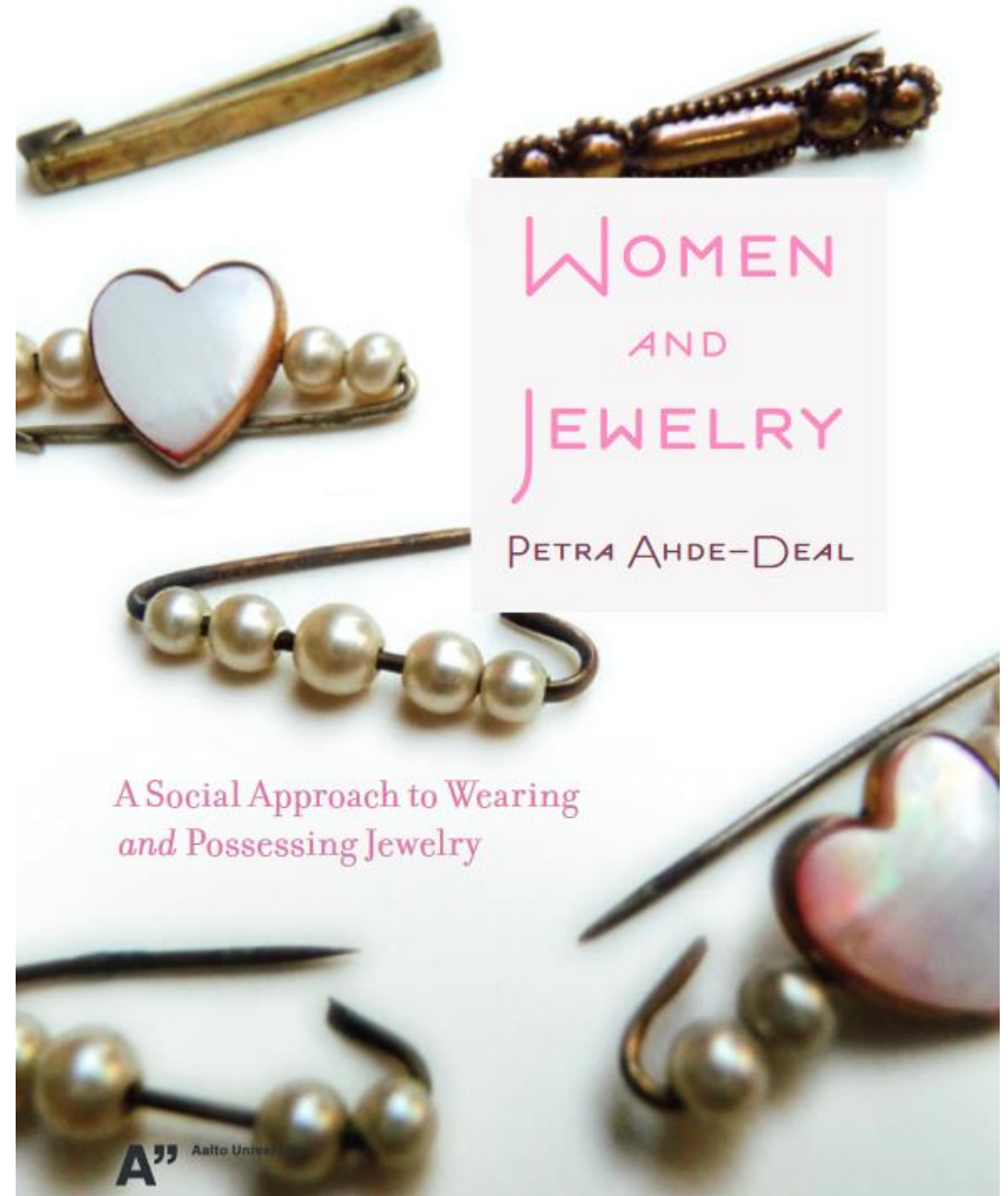
Probes

- Petra Ahde-Deal (2013)

Lead user study

Cultivating Sportswear Innovation

A Mixed Approach Combining The Lead User Method and Participatory Design

Yi-Ning Chuang   2019

**Mountaineering –
A Combinatory Approach for Identifying Lead Users and Other Rare Research Subjects**

Samuli Mäkinen
Pia Helminen
Mikael Johnson
Sampsa Hyysalo
Jouni K. Juntunen
Stephanie Freeman

2013

- Pioneering consumers
- Very early phase of product development

(fuzzy front end of product design)

- Developing the idea further towards commercial innovation
- Especially in the wearable/sport, technical sector, e.g. mountain bikers
- E.g. Pia Hannikainen (2005) *Disabled Persons as Lead Users in Mobile User Interface Design.* Aalto University

Test groups

When designing and prototyping a new product

Kyber Nina (2017) *Hupulla vai ilman? – Modulaarisen malliston matka käyttöliittymän kautta kuluttajalle*
With hood or without? – The journey of modular collection through the user interface to the consumer

- Työssä käytetyt tutkimusmenetelmät ovat kirjallisuuskatsaus sekä **kolmivaiheinen fokusryhmähaastattelu**. Haastatteluiden ja käyttäjäkokemuksen avulla haetaan vastauksia siihen, miten Minujun tuotepalvelumallin menestymismahdollisuudet voidaan optimoida markkinoilla. Lisäksi tarkastellaan, miten Minujun tulevaa toimintaa voisi kehittää mahdollisimman asiakaslähtöiseksi, toimivaksi, kysyntää vastaavaksi sekä minkälainen käyttöliittymä toimii Minujun kuluttajalle parhaiten.
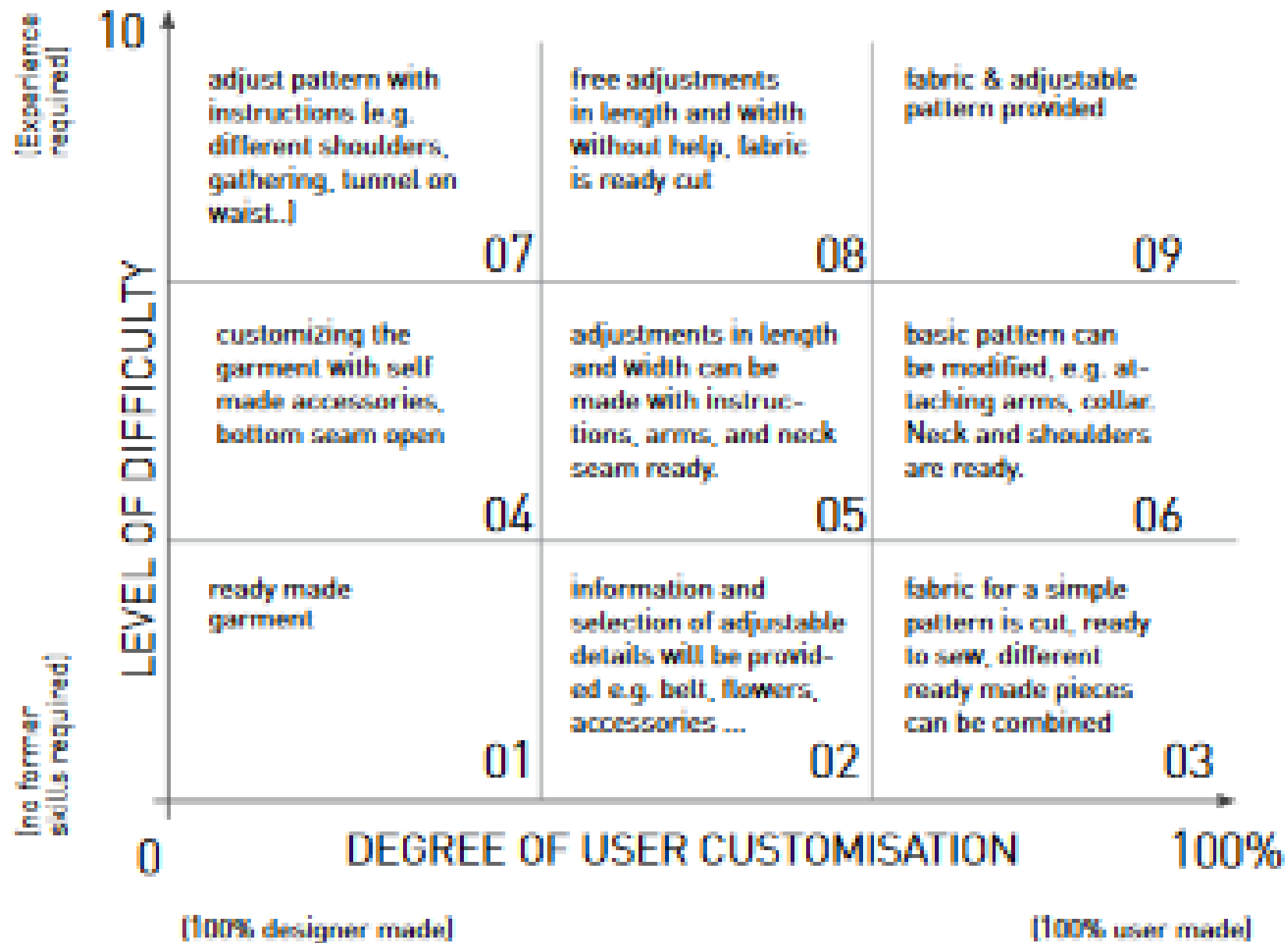
Participatory design, co-design

JOYFUL
PARTICIPATION
IN NEW WAYS
OF DESIGNING
AND MAKING
CLOTHES.

ENABLING PERSON-PRODUCT ATTACHMENT
TO POTENTIALLY REDUCE UNNECESSARY
CONSUMPTION.

Hirscher Anja Lisa

2013, MA thesis, Aalto University

adjust pattern with instructions (e.g. different shoulders, gathering, tunnel on waist..) **07**	free adjustments in length and width without help, fabric is ready cut **08**	fabric & adjustable pattern provided **09**
customizing the garment with self made accessories, bottom seam open **04**	adjustments in length and width can be made with instructions, arms, and neck seam ready. **05**	basic pattern can be modified, e.g. attaching arms, collar. Neck and shoulders are ready. **06**
ready made garment **01**	information and selection of adjustable details will be provided e.g. belt, flowers, accessories ... **02**	fabric for a simple pattern is cut, ready to sew, different ready made pieces can be combined **03**

Y-axis: LEVEL OF DIFFICULTY (Experience required) / (no former skills required) — 0 to 10

X-axis: DEGREE OF USER CUSTOMISATION — 0 to 100%

[100% designer made]   [100% user made]

Hirscher (2013, 110)

Lauri Pirita (2017) *Extract, Concept for a Coordinated Print Collecion for Mass Customixzation.* MA thesis
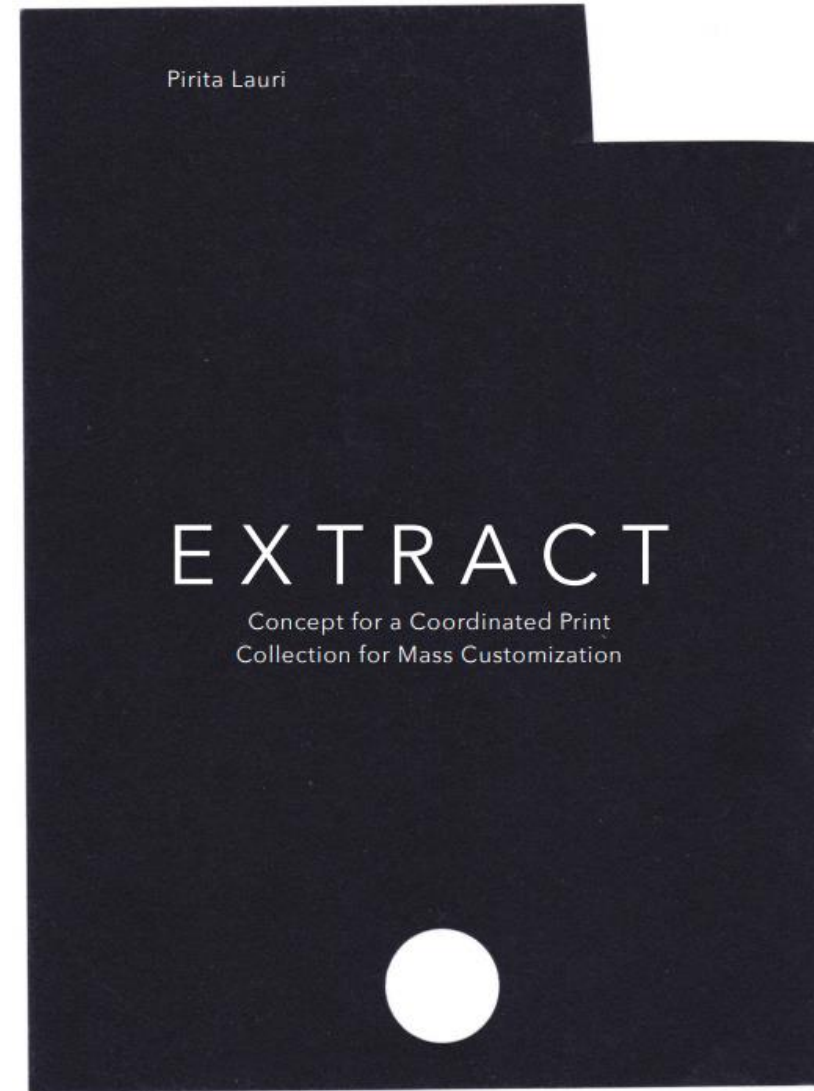Aalto University

a

b

c

Fixed product size
Fixed composition
size 450cm x 300cm

Picture 22. Flowerfall toolkit. First the user (a) observes the collection as a whole and chooses a product, then s/he (b) explores the collection and makes his/her choice. Now (c) the extracted digital product can be produced into physical form.
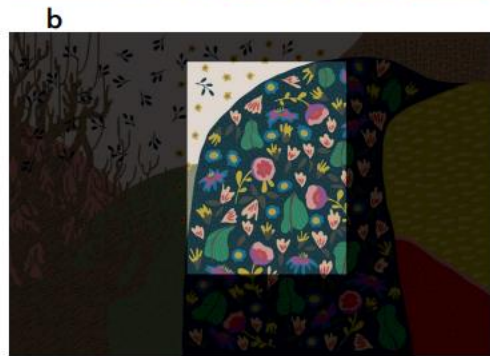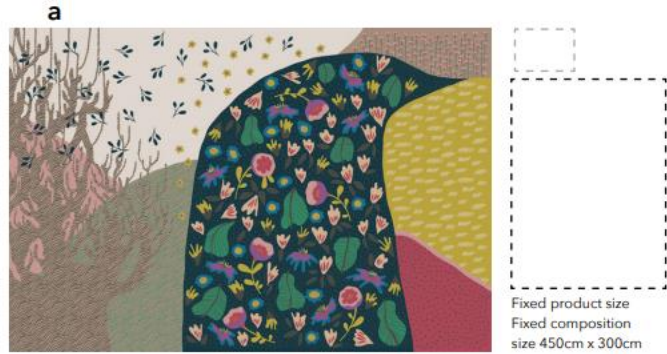
Duvet cover, 150cmx200cm

Picture 23 Flowerfall, detail in actual scale.

Pirita Lauri

E X T R A C T

Concept for a Coordinated Print
Collection for Mass Customization

Open design

- Natalia Mustonen (2013) *FASHION OPENNESS Applying an Open Source Philosophy to the Paradigm of Fashion.* MA thesis, Aalto University

- My research-based thesis investigates the philosophy and approach of open source being applied to fashion practice in order to reflect on the benefits this may offer to creating a more environmentally, socially and economically sustainable fashion system. At the breaking point of the industrial and post-industrial era, caused by information technology, we are experiencing the trend of "openness" among many fields, such as media, politics, music and science. Escaping increasingly from hierarchical thinking and one-way communication, also fashion is striving for sharing structures and user **empowerment.**

Different roles, different power structures

Figure 4. The evolution of the role of the customer in the historical context (Fuad-Luke, 2009: p95)

Mustonen Natalia (2013, 24)
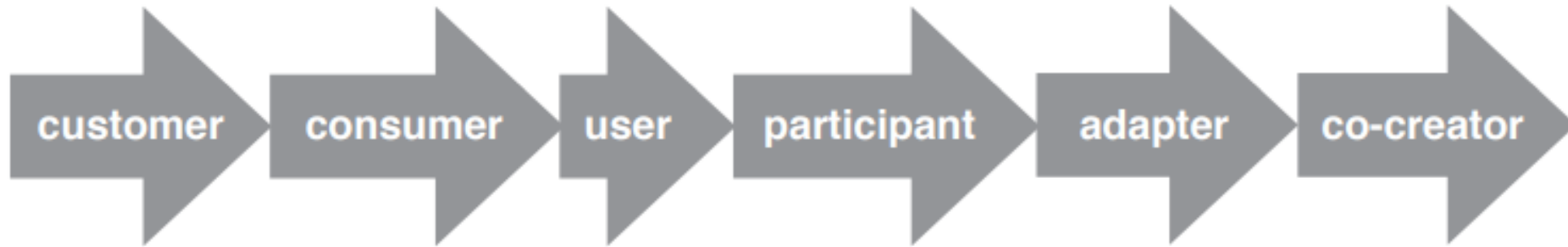
ENABLERS:
the internet/Web 2.0, information technology -> platforms/spaces for openness, either virtual or physical

DRIVERS:
economic, ecological and social crisis -> search for innovative systems that are adjustable to present reality

Level 5. Empowerment: DIY, elimination of waste, search for meaning, slow-culture, participation into construction of culture

Level 4. Collaboration: co-creation, participation, customization, 'the death of author' and the ego etc.

Level 3. Sharing: spreading knowledge, free distribution of intellectual property, 'common pool' of ideas/ designs/blueprints/toolkits, altruism
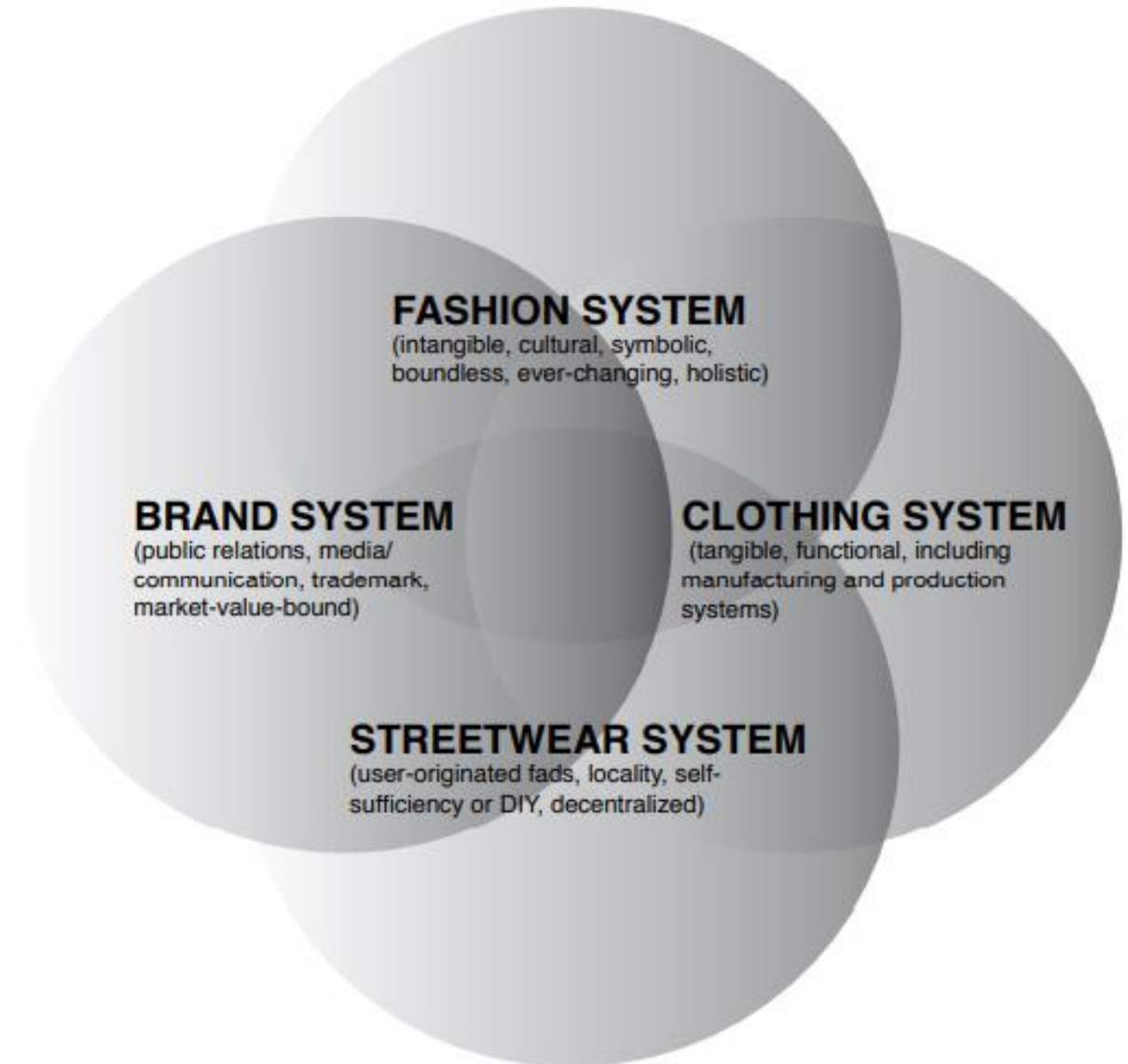
Level 2. Open-ended: unfinished, undefined, hackable, modifiable, modular, open for development

Level 1. Transparency: honesty, exposing the system

Mustonen Natalia
(2013, 37)

System level

Figure 7. Apparel related systems.

FASHION SYSTEM
(intangible, cultural, symbolic, boundless, ever-changing, holistic)

BRAND SYSTEM
(public relations, media/ communication, trademark, market-value-bound)

CLOTHING SYSTEM
(tangible, functional, including manufacturing and production systems)

STREETWEAR SYSTEM
(user-originated fads, locality, self-sufficiency or DIY, decentralized)

Mustonen Natalia (2013, 42)

How to get information from users

1) Sales statistics, numbers
2) Surveys
3) Observation
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How to get information from users

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Abstract
Objective approach
Distance
Fictional

How to get information from users

1) Sales statistics, numbers
2) Surveys
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Real person(s)
Real emotions
Real meaning
Real user experiences
Reality might surprise designer
What kind of consumption practices your design is causing

How to get information from users

1) Sales statistics, numbers

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Reality
System level understanding
Connections
Designing-manufacturing-business
Economical-environmental system
Design-material system

Group discussion; User(s)

A) Fictional figure

B) Target group to whom you are designing for

C) Test group who can help in the design process

-how you position your interest

-how would you like to collect information from user

-how to use user-centered information in a design process

Discussion. When you return, write sentence or two to chat box.