

Empathy, Mindfulness and Ethical Values in Fashion Consumption



Hochschule ReutlingenReutlingen University









Learning Objectives

After this lecture you should be able to:

- Demonstrate both basic and in-depth knowledge in the field of fashion consumption and the post-consumer phase.
- Illustrate central terms concerning the consumer's mindset, empathy and mindfulness.
- Describe and apply didactic and methodical approaches to mindfulness.
- Describe and apply instruments of ethical thinking.
- Link your knowledge of the textile and clothing industry and the textile value chain to mindfulness and ethical thinking.
- Apply mindfulness and ethical thinking in your field of study.

2



Global Clothing Production and Consumption

- The apparel market encompasses all kinds of clothing. After sales across the apparel industry decreased in 2020 during the coronavirus pandemic, the global demand for clothing and shoes is set to rise again. The revenue of the global apparel market was calculated to amount to about 1.5 trillion U.S. dollars in 2021 and was predicted to increase to approximately 2 trillion dollars by 2026. (Smith, 2022).
- Consumer spending on clothing and footwear worldwide is estimated more than 2 trillion U.S. dollars in 2021. By 2025, that figure is forecasted to reach 2.5 trillion dollars. This estimate refers to the domestic demand of private households and non-profit institutions serving households. (Degenhard, 2021).



Facts about the Consequences of Clothing Production and Consumption (1)



- According to the Ellen MacArthur Foundation (2017) ...
 - less than 1% of the material used to produce clothing is recycled into new clothing in a closed-loop process,
 - only 20% of clothing waste is collected for reuse or recycling (including down-cycling), leaving the remaining 80% for landfilling or incineration,
 - infrastructure for collection varies in terms of extent and efficiency, thus resulting in large differences among countries,
 - in some of the largest and more developed economies of the world (e.g. USA and China) collection rates range from merely 10% to 15%, and
 - in many low-income countries in Asia and Africa no collection infrastructure can be found.
- The report identified the linear 'take-waste' model of the fashion industry.







Facts about the Consequences of Clothing Production and Consumption (2)



- While the amount of clothes the fashion industry produces has grown, profit margins have shrunk and the impact on the environment has increased.
- Between 2000 and 2015, clothing production doubled, while the number of times an item of clothing is worn before it is thrown away decreased by 36%.
- This trend led to the global fashion industry producing around 2.1 billion tonnes of greenhouse gas emissions in 2018 which made up to 4% of the global total.
- Due to lower prices and lost revenues from overstock, stockouts, and returns profit margins of the world's leading apparel retailers decreased by an average of 40% from 2016 to 2019.
- The Covid-19 pandemic highlighted the fragility of the textile and fashion supply chains and made the industry experience a profit decline of 90% compared to 2019. (Ellen MacArthur Foundation, 2021).



Facts about European Clothing Consumption



- Since 1996, the amount of clothing bought per person in the EU has increased by 40% as a result of sharply falling prices, which has shortened the lifespan of garments.
- Every year Europeans buy almost 26 kg of textiles and dispose of 11 kg. Used clothing can be exported from the EU, but most of it (87%) is incinerated or ends up in landfills. (European Parliament, 2020).
- The growing quantity of old clothes goes hand in hand with a loss of quality when competing for low prices. The result is poor quality, a short lifespan and rapid disposal.
- Well-preserved textiles and clothing are sold by consumers themselves as second-hand goods, so that increasingly poor quality arrives at the collection and textile recycling companies.





Facts about Reuse and Recycling in Germany (1)

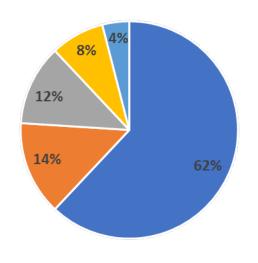


- According to the Federal Environment Agency, around 60 items of clothing are purchased annually per person in Germany (approx. 15 kg). Domestic availability is estimated at over 1.5 million tonnes. The statistically recorded container collection volume in Germany was 1.3 million tonnes in 2018.
- Although the reuse rate has increased, this increase does not correspond to a higher added value for the textile recycling companies. Due to the lower quality of the goods and increased costs in the recycling process, the margins of the collection and textile recycling companies are falling.
- The percentage of waste to be disposed of during sorting has doubled since 2015 and now amounts to 4% of the total quantity. (Textile Recycling Association, 2020).



Facts about Reuse and Recycling in Germany (2)







Recycling

Waste for Disposal

- Further Use (cleaning rags)
- Recycling (RDF/thermal)
 - RDF = Refuse Derived Fuel

Statistically recorded container collection volume in Germany in 2018: 1.3 million tonnes Source: Textile Recycling Association, 2020





62% Second Hand reuse

14% Recycling reuse - cleaning rags, insulation materials 12% Fibre Recycling

12% Incineration substitute fuels, removal



Fast Fashion and the Consumer Carousel

- The consumption behaviour of people regarding textiles has changed fundamentally in recent years, leading the Textile Recycling Association in Germany (2020) to speak of a rapid consumption of shoes, clothing and household textiles.
- The development has led to an increase in the actual collection volume, while the quality of the collected goods and thus their value has deteriorated.
- The large quantities of incoming old clothes are virtually no longer matched by sales markets, as e.g. exports to the top consumer countries in Eastern Europe and Africa came to a complete standstill overnight due to the COVID-19 restrictions.







Facts about Recycling

- Textile recycling has become much more difficult because of the enormous increase in synthetic man-made fibres, which are mostly blended with natural fibres.
- Polyester is the most important fibre and synthetic fibres account for more than two-thirds of the world market.
- PET recycling plays a very minor role in terms of quantity.
- In recycling, the high synthetic fibre content is the biggest obstacle:
 - On the one hand, fibre-to-fibre recycling already fails due to the identification of the components used, as the labels are partly cut out of the clothing.
 - On the other hand, the technical processes for separating different fibre mixtures by type are still in the development stage. (Wu et al., 2022).



Open-Loop versus Closed-Loop Recycling

- There are two main types of recycling processes that differ in the overall sustainability of the supply chain of raw materials:
- Open-loop recycling postpones disposal through converting manufactured goods into new raw materials such as PET bottles into fibres.
- Closed-loop recycling is a recycling process through which a manufactured good is recycled back into itself or a similar product without significant degradation or waste. It is focused on supply chain sustainability.
- When consumers sort something out for recycling, they do not have a choice about which product it ends up as and whether that constitutes open loop or closed loop recycling.





11









Circular.ID – a Closed-Loop Initiative

- The Berlin-based company Circular.fashion has developed the first ID-based sorting system for used clothing in Germany.
- The intelligent sorting station is part of the "Closed Loop Pilot" project, which the company launched together with the non-profit umbrella organisation of used clothing collectors and sorting companies FairWertung. Together with the fashion industry, a closed-loop system shall be created.
- The participating fashion brands develop circular collections that are equipped with a Circularity.ID. This code provides customers with information on the garment, care and return options. On the other hand, information on the material composition and possible further recycling is included.



Circular.fashion UG, https://circular.fashion/en/s oftware/circularity-id.html



Cradle-to-Cradle-Approach

- The aim is to only use products and materials that are safe for humans and the environment and that can therefore be returned to the production cycle in the sense of a circular economy.
- Considerations of reuse and recycling are already taken into account in the design.
- The Cradle to Cradle Products Innovation Institute in San Francisco has developed the Cradle to Cradle Certified[®] product programme, which evaluates and certifies products and materials with regard to closed life cycles.
- Products should be able to be returned to the production cycle again and again, so that no more waste is produced and valuable resources are preserved.

13



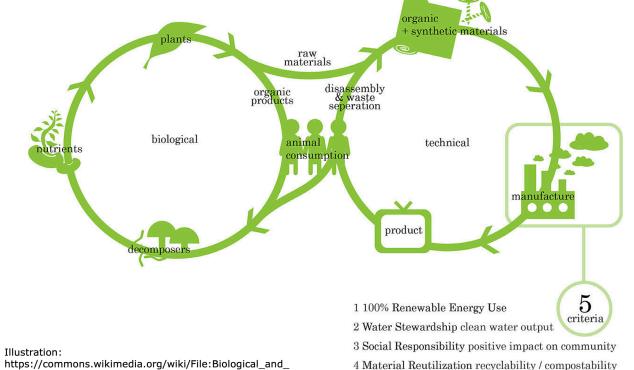








Cradle-to-Cradle-Approach



technical_nutrients_(C2C).jpg

4 Material Reutilization recyclability / compostability 5 Material Health impact on human & environmental

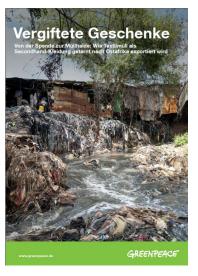
Fashion DIET





From Industry to Consumer

- The conventional textile and fashion industry, especially the fast fashion industry, and their consumers are nowhere near circularity (Cobbing et al., 2022).
- However, there are more and more alternative approaches such as Cradle-to-Cradle and Circular.fashion. These approaches focus on quality instead of quantity in terms of sustainability and establish a circular design and economy.
- For these new business models to be successful and make a change towards a circular economy, well-informed, reflected, mindful and collaborative consumers are needed.
- The question is how these consumers can be reached through ESD as a main reason for the unsustainable practice is the lack of knowledge and mindfulness about the environmental impact of the linear textile system (Rathinamoorthy, 2020). 15



Fashion DTET







Slow Fashion Monitor 2021 (1)

A survey of 1,490 consumers between the ages of 15 and 69 on sustainable fashion: attitudes, purchasing behaviour, sustainability labels as well as brand use and assessment

Use and Acceptance

8% of consumers own several sustainably produced garments.





79% of citizens have a benevolent attitude, but most of them remain inactive.

13% hardly attest any relevance to the topic of sustainable fashion



(Splendid Research, 2021)

Important Criteria for Clothing	• +		
comfort	100%	94%	98%
durability	96%	89%	84%
environmentally friendly production	96%	67%	20%
fair production	94%	64%	20%
design	85%	74%	70%
brand	62%	31%	22%

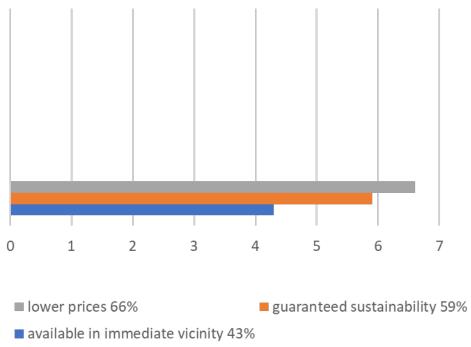


Slow Fashion Monitor 2021 (2)

Fashion DIET

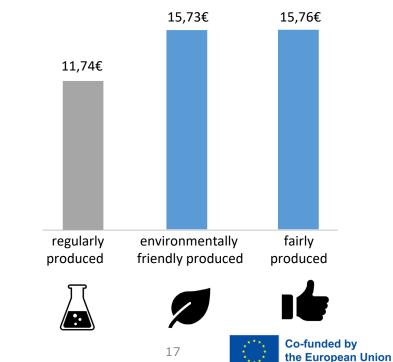


Price People Are Willing to Pay for a Simple T-shirt



Aspects that Increase the Willingness to Buy Sustainable Fashion

(Splendid Research, 2021)







Slow Fashion Monitor 2021 (3)

Brand Recognition

hessnatur 31%



Shop connoisseurs attest **environmental awareness** to a **particularly high level**.





The majority of users would **recommend** this shop to others.



(Splendid Research, 2021)



The seal achieves the **highest level of trust** with 73 out of 100 points.







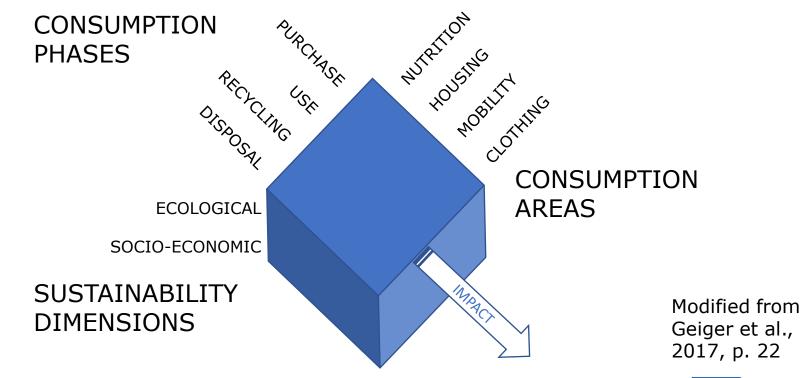
- According to the survey of the "Slow Fashion Monitor 2021" at the beginning of February 2021, 79% of respondents state that sustainability in the textile and fashion industry is important to them, but they do not (yet) buy appropriately produced garments.
- This is referred to as the "attitude-behaviour gap". This gap is to be reduced in order to enable competent action in accordance with one's own convictions.
- On the one hand, this gap is to be overcome by promoting cognitive competences with regard to meaningful rational decision-making in the fashion market. Decision-making competences should be supported by the development of mindfulness and empathy.







Cube Model of Sustainable Consumption







Goals of Sustainable Consumption

- Consumption should be ecologically and socially responsible so that people living now and in the future have living conditions that allow them to meet their needs. Consumption encompasses various areas of life or areas of need such as food, mobility, housing and clothing.
- Consumption does not end with the purchase of products but consists of further consumption phases such as the use, recycling and disposal of consumer goods. This results in a responsibility for the entire consumption process up to the disposal of products.
- The figure shows the four consumption areas as examples of the most ecologically and/or socio-economically relevant ones. (Geiger et al., 2017).





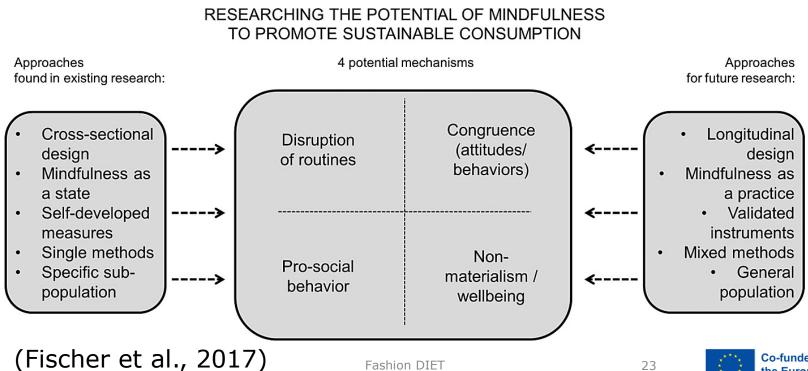


- Impact-oriented approaches have been dealing with the various ecological consequences of concrete behaviour since the 1960s.
- Different approaches have tried to break down these results into a meaningful everyday overview of most relevant household actions, such as key points for particularly impactful behaviours based on ecobalances.
- Prioritising high-impact behaviours is important not only for consumers who need to allocate limited resources of attention and motivation to relevant behaviours. For sustainability researchers and policy makers it is important to find effective ways to change consumption behaviour that make a real difference.
- A systematic literature review explored that mindfulness can be considered to have potential to promote sustainable consumption. (Fischer et al., 2017).



Recommendations for Research on Mindfulness and Sustainable Consumption







BiNKA-Study: Sustainable Consumption through Mindfulness



- Research Question: How can the development of mindfulness help to disrupt routines and lead to a sustainable consumption behaviour?
- Goal: research and promotion of sustainable consumption through mindfulness
- By consumption we mean all acts of procurement, use and disposal of goods and services that serve to satisfy needs in different areas of life. Sustainable consumption is ecologically and socially responsible, so that people living now and in the future have living conditions that enable them to meet their needs as well. (Geiger et al., 2018, p. 6).
- Examination of the consumption segments nutrition and clothing





Mindfulness and Mediation



- Mindfulness and meditation approaches have demonstrable positive effects in regard to dealing with emotions. Scientific studies have been conducted on this in the laboratories of mind-and-life researchers.
- It has also been found that mindfulness and meditation not only relax the mind and body but can influence areas of the brain and even partially restructure them.
- These findings have led to mindfulness and meditation gaining more and more social interest and already finding their way into many fields of action. (Baer et al., 2006; Bruin, 2021, p. 42).



Mindfulness Training for Sustainable Consumption



- Education for Sustainable Consumption (ESC) through mindfulness training aims to address the discrepancy between environmental awareness and actual action.
- Mindfulness training aims to contribute by strengthening awareness of core values and attitudes as well as one's own actions.
- The "attitude-behaviour gap" is to be reduced and competent action in accordance with one's own convictions is to be made possible.
- As part of ESD, ESC should be an important tool for changing existing unsustainable consumption patterns.
- ESC goes beyond pure knowledge-based education in the context of more sustainable consumption patterns. The acquisition of specific consumption competences is in the foreground. Learners should be empowered to actively and responsibly act in a sustainable way.





Tasks on Mindfulness and Meditation

- Listen attentively to a spoken text on the social dimensions of the textile economy or watch a video documentary or film attentively.
- How did you feel while listening or watching?
- What insights did you gain?
- What new questions have emerged?
- How do you feel right now in your clothes?
- How would you use such an audio, video or film methodically?
- Do research on social aspects such as wages, gender discrimination and child labour in the textile and clothing industry.





Social Aspect: Gender Discrimination

- An estimated 60 million workers drive the global garment industry and generate its billions of profits.
- 80 percent are women and girls. Their employment is part of a broader integrated business practice of creating barriers for workers to enforce their basic labour rights.
- The textile and clothing industry is known for its undignified working conditions, low wages, forced overtime and unsafe working conditions.
- In garment production, women are often deprived of maternity leave, childcare and a safe route to work. They are discriminated in the workplace and are not safe from assault. (<u>Clean Clothes Campaign</u>, 2022)





28



Social Aspect: Living Wage



- The <u>Fashion Checker</u> website reveals details about supply chains of the world's biggest fashion brands, including adidas, H&M, Primark and Zalando.
- The online tool of the Clean Clothes Campaign, in which the Christian Initiative Romero (CIR) is also active, reveals where and how clothes were produced.
- For this purpose, both ends of the supply chain were surveyed: hundreds of workers as well as fashion retailers for the first time on such a large scale.
- The result: 93% of the surveyed fashion houses do not pay their suppliers a livable wage for the workers. 63% provide no or only rudimentary information about their supply chains.
- The international human rights initiative Clean Clothes Campaign demands that living wages shall be paid to all workers in the garment industry.



29





Request to Pay Workers a Living Wage

- A living wage is a human right for all people all over the world.
- A worker should be able to cover basic needs such as:









Social Aspect: Child Labour





- Free plug-in for browsers
- Goal: To avoid products that are associated with the exploitation of children in order to force manufacturers to tighten up their control procedures.
- The aVOID team works closely with brands and collects data to help fight against child labour.
- By installing the extension, users instantly see whether the clothes they browse on the computer are made by use of child labour.
- Source: http://www.avoidplugin.com/



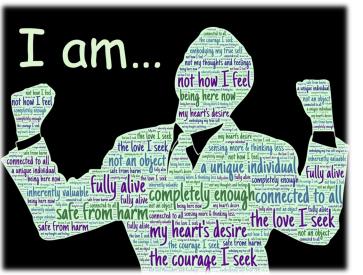


Moral and Ethical Education in the Context of Fashion and Textiles

Values are abstract, cross-situational fundamental beliefs that develop over a lifetime in interaction with the social and cultural environment.

Values serve four primary domains:

- identity preservation,
- action orientation,
- motivation and
- sense-making (Bohus & Bents, 2018, p. 51).



Pixabay



Fashion DIET

Moral Convictions

Convictions, which can be strong or weak, stable or changeable, consistent or contradictory, individually or socially shared, express what a teacher believes, what he or she trusts, what he or she subjectively considers to be correct and with which subject-related pedagogical ideas, views, world views and value orientations – with which professional ideal – he or she identifies.

(Reusser & Pauli, 2014, p. 644).

What moral convictions can lecturers/teachers/ educators personally hold in the context of fashion and textiles?

33







Beutelsbach Consensus

Elements of the Beutelsbach Consensus* (1976):

- Prohibition of overpowering (no indoctrination): Teachers should not impose their opinion on learners but should enable them to form their own opinion with the help of the lessons. This is due to the objective of political education, which is to educate learners to become responsible citizens.
- Observing controversial positions in science and politics: Learners should be enabled to form their own opinions by teachers presenting and discussing a topic controversially if it appears to be controversial in science or politics.
- Enabling learners to analyse their own interests in political situations: Learners should be enabled to analyse the political situation of society and their own position and to actively participate in the political process. (Wehling, 1977, pp. 179-180).







- The positive relationship of biospheric and altruistic values and the negative relationship of egoistic and hedonic values to environmentally conscious behaviour are established findings in environmental psychology research.
- Recent findings have shown that compassion, the sensitivity to the suffering of other individuals, is also relevant to environmentally responsible intentions.
- The role of compassion in combination with universal altruistic, biospheric, egoistic and hedonic values was investigated with regard to an environmentally responsible behaviour with an explicit social and hedonic component: sustainable fashion consumption. (Geiger & Keller, 2018).





Fashion Consumption and Values (2)

- Result of the review study (n = 981): Compassion is positively associated with sustainable purchase criteria.
- The manipulation of compassion in an online study (n = 197) resulted in a small, positive effect on the willingness to pay more for fair trade clothing.
- In addition, hedonic values were found to have a consistent negative relationship with sustainable fashion consumption in both studies.
- This confirmed previous research on the critical relevance of hedonic values in relation to pro-ecological behaviour. (Geiger & Keller, 2018).



Textiles and Clothing - Planned Obsolescence?

- "Planned wear and tear" or "planned obsolescence" is understood to mean the planned, premature wear and tear of products.
- Planned wear and tear as an intentional shortening of the product's lifespan for the purpose of increasing sales is discussed very controversially in regard to sustainability.
- A distinction is made between material and functional, economic and psychological obsolescence. (Prakash et al., 2016).







CC BY-SA-ND Grundmeier



Material and Functional Obsolescence

- Material and functional obsolescence relates to the technical lifespan of a product.
- There is a consensus in science that the product's lifespan is usually a plannable quantity to which product developers orient themselves.
- Textile examples are functional wear, workwear and technical textiles such as tents.



CCO Fabricio Macedo, Pixabay







Material and Functional Obsolescence in Regard to Clothing

- Compared to buying new, neither repairs nor alterations to clothing are worthwhile financially and in terms of time when it comes to fast fashion items.
- For this reason, planned obsolescence can also be assumed, at least in part, for clothing, since it is no longer only manufactured in such a way that it deteriorates after a short period of use, but also in such a way that it can no longer be repaired.
- An example of this are firmly sewn elastic bands, which are difficult to replace. (Derwanz, 2018, pp. 199-202).



 It includes not only the technical possibility of repair (reparability), but also the availability of the repair service and above all its costs.

• The reparability of products is discussed as functional

• This is because weighing up the costs between replacement purchase and repair is often considered to be the decisive factor in whether a repair is carried out. This is also a reason for changes in periods of use.

Economic Obsolescence

and economic obsolescence.



CC BY-SA-ND Grundmeier



Fashion DTE1







Psychological Obsolescence

- It is assumed that consumers are more open to novelties, appreciate innovative companies and buy new products that stand out from their predecessors due to improvements in function and utility.
- If there is a real need for a new purchase, an orientation towards innovations seems to be welcome. However, consumers also tend to make new purchases even though existing products are still functional, thus causing high resource consumption.
- In addition to material obsolescence, psychological obsolescence plays a particularly important role for clothing, as despite being in good condition it can be seen as fashionably outdated.



Destroyed-Effects

- Comment on the photos. Of what kind are the destroyed effects?
- Assess in terms of obsolescence, both from an ecological and ethical point of view.
- Look for more fashion photos which show destroyed effects.
- Do a wardrobe research. Do you wear fashion items with destroyed effects yourself? Find reasons why and discuss them in the plenary. _{CC BY-SA Grundmeier}



Fashion DIET



Awakening Mindfulness and Empathy via ...

- Visiting non-academic and out-of-school places of learning.
- Doing wardrobe research.
- Using sustainability-oriented apps for fashion consumption.
- Compiling an easy-to-follow set of rules for fashion consumption, which contributes to the concept of circular economy that utilizes the waste, which is being transformed into new products and useful resources (Rathinamoorthy, 2019).







Non-University and Out-of-School Places for Learning

Museums and exhibitions on sustainable fashion consumption like the

- interactive <u>Fashion for Good Museum</u> in Amsterdam and
- exhibitions such as <u>Fashioned from Nature</u> or <u>use-less</u>.

"Buy less, choose well, make it last." Quote by Vivienne Westwood, patroness of the exhibition use-less, CC BY-SA-ND Grundmeier







Wardrobe Research: Studying and Reflecting one's own Fashion Behaviour

- Kate Fletcher, Professor at the Centre for Sustainable Fashion, University of the Arts London, and her research partner Mathilda Tham, Professor in Design at Linnaeus University, Sweden, asked women as part of the project *Lifetimes* to keep a fashion diary, selecting both their favourite and never-worn garments and documenting their rituals around laundry.
- Based on the data of their wardrobe research, they were able to develop future scenarios on both fast and slow clothing, with a clear focus on the preservation, selection, wear and care of clothes.







Sustainable Fashion in Communities

- Belonging to a community, sustainability knowledge can be shared on small scale at a local level. The participants can carry out their activities in order to fulfil their needs. They can create alternative visions and follow new everyday practices that can transform consumption towards sustainability.
- In this way consumers have the power to shake the position of megasized fashion brands. (Schlosberg & Coles, 2016).
- In communities new sustainable aesthetics can appear including the acceptance of vegan textiles, second-hand, up-cycling, re-designing etc. Also places can be found for new activities and networks.





Buying Second-hand Fashion

- Second-hand works offline and online.
- Second-hand apps such as Amsterdam based *Vinted* or Hamburg based *Rebelle* are online services which help people, who sort out their wardrobe, to resell their worn articles.
- Through the platforms, new consumers can be found for articles that are too good or too expensive to be recycled or even thrown away.
- The apps allow online transactions.
- Sources: https://www.rebelle.com/, https://www.vinted.de



CC BY-SA-ND Grundmeier







Leasing Fashion

- Leasing service and app.
- Leasing service with selected fashion brands. Users lease articles as long as they like. Users can send the item back or choose another item or renew the leasing.
- Textile-to-Textile Recycling: Items are laundered and repaired.
- Sources: https://unown-fashion.com, https://kleiderei.com/





https://www.thenuwardrobe.com

Fashion DIET

Co-funded by

Swapping Fashion

- Swapping means the exchange of clothes, whereby ownership is redistributed from one person to the next without any money involved (Henninger et al., 2019).
- Clothing swap promotes circulation of clothing at consumer level by meeting in person or online and tries to get maximum utilization of items (Rathinamoorthy, 2017).
- Mobile clothes swapping app: Users swap and borrow styles with thousands of "Renuwers". Users also can upload items in a few easy steps with photos from their mobile phones. Access fee for the app is not perceived as a cost for clothing.
- Source: https://www.thenuwardrobe.com





Building Action Knowledge

Task: Rethinking and Reusing Fashion

Lending, borrowing and swapping can be actions which create and strengthen connections – even networks.

- In learning groups, research recommendations for sustainable fashion.
- Compare and discuss their sources.
- Compile an easy-to-follow set of rules with a maximum of 10 points.
- Present your set of rules in the plenum.





CC BY-SA-ND Grundmeier



Sustainability-Oriented Action Competences in Fashion



Seven possible recommendations for sustainable clothing:

- Look for eco-fair seals and certifications.
- Buy second hand.
- Avoid the used look.
- Consume less.
- Avoid unnecessary textile finishing.
- Wash and care in an environmentally oriented way.
- Reuse, repair and recycle.

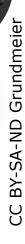
CC BY-SA-ND Grundmeier





Skill Sharing

- Skill sharing can happen in, for example, decluttering, mending or upcycling workshops as well as sewing cafés or private sewing clubs.
- Sharing craft skills is very popular among (young) consumers and can be a grassroots activity or a commercially organised action.
- There are also a variety of apps to encourage decluttering, repairing, self-tailoring and DIY, and to get into contact with others.
- Fletcher (2014) regards community based local actions as an "antidote to unsustainability". However, textile craft is not only based on sustainabilityoriented values but also fosters feelings of self-managing and skill development.
- A subjective "happiness" through creative flow and senses of community, sociability and connectedness might arise. (Futterman Collier & Wayment, 2021; Niinimäki et al., 2021). 52



Co-funded by

the European Union



Group Work and Discussion "Earth First"



- How do you think you can create mindfulness and empathy in the fashion sector?
- Kate Fletcher, Professor at the Centre for Sustainable Fashion, University of the Arts London, and Mathilda Tham, Professor in Design at Linnaeus University, Sweden, published their approach "Earth Logic. Fashion Action Research Plan".
- Read their conclusions of a longtime analysis of the fashion industry and market as well as consumer behaviour, which resulted in a radical invitation for systems change in the fashion sector. This is less about clothing and its production, but about how people interact with their clothes.
- Based on their findings consider in separate groups whether you can follow their strategies and future scenarios for the industry, policy makers and consumers.





Further References

- Braumüller, J., Jäckle, V., Lorenzen, N., & Scherer, L. (2020). *Fashion Changers Wie wir mit fairer Mode die Welt verändern können*. Knesebeck.
- Derwanz, H. (2020). Mending: Female Education in Waste Prevention Over the Centuries. In R. Ek & N. Johansson (Eds.), *Perspectives on Waste from the Social Sciences And Humanities: Opening the Bin* (pp. 55-74). Cambridge Scholars Publishing.
- Henninger, C. E., Ryding, D., Goworek, H., & Alevizou, P. J. (2017). *Sustainability in Fashion A Cradle to Upcycle Approach*. Palgrave Macmillan, Springer.
- Muthu, S. S. (Ed.). (2019). *Sustainable Fashion: Consumer Awareness and Education*. Springer.
- Thomas, D. (2020). Fashionopolis. Why What We Wear Matters. Penguin Group.





OER Explanation

- OER Licence CC BY-SA except the logos and where otherwise stated e.g. images, photos, pictures.
- Blur effects of the image edges have been done by the author for Fashion DIET.
- A full citation of text and image sources is always given at the first mention of the authors in the notes beneath the slide, otherwise short citation in the text or on the slide.





Contact

University of Education Freiburg Institute of Everyday Culture, Sports and Health Department Fashion and Textile Prof. Dr. Anne-Marie Grundmeier E-mail: grundmeier@ph-freiburg.de

