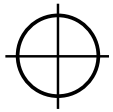
AESTHETIC SURGERY

1-3 Hours
1-2 days

Group
Discussion



Collect

Description

Using aesthetics and design thinking is one of the ways designers prolong the lifetime of garments. This activity emphasises the designer's professional skills for making transformations though textile techniques. By exploring techniques that change the surface and shape of existing textiles and clothing, students' understanding of how post-consumer waste can be transformed into new design is expanded - at the same time this process creates ideas for fashion services that can prolong the lifetime of garments by giving them a second design expression.

What does it take to give new life to existing garments?

Delivery

Introduce the students to different textile techniques to manipulate form and surface. This can include traditional techniques such as form fixation, smocking, felting, re-knitting or re- weaving. Additionally, supplement with a review of how fashion and textile designers work with the various techniques in a contemporary context.

STEP 1: INDIVDUAL AND CLASS
Each student brings used clothes to experiment with (alternatively, ask for donations at a recycling facility or in your local area).

Using these garments as base material, ask students to work with a minimum of two different techniques. Students can either choose to work with the textile surface or the whole piece of clothing, where the meeting between body and clothing is also experimented with. This process should be (photo-)documented.

Links to pillar(s)
Environmental
Cultural
Economic

Releated Activities

Circular systems
Garments with many lives

Identifying circular loops

Materials origin and function

Recycling facility

Delivery

STEP 2: CLASS
Students' samples and experiments are presented to the class. Discuss how techniques can be applied using newer digital technologies, or in combination with digital technology to challenge time and affordability.
A guiding question could be:

What are the pros and cons of choosing analogue craft or digital technologies?

STEP 3: GROUP
Based on insights and experiences, students develop a concept for a fashion service system that can give garments a second life. The business model is outlined and visualized on a poster to present to the class.

STEP 4: CLASS
Ask students to present their business model to each other.

Preparation, Support Material Sources & Output

Create an introduction to textile manipulation techniques which can be supplemented with examples and/or design cases.

The activity results in creation of posters illustrating different fashion service systems for recycling post-consumer waste.

Suggested resources

Global Fashion Agenda. "Circular Design Toolbox"

Hvass, K.K. 2018. "A Consumer-centered Approach for Managing Post-consumer Textile Flows". In: Niinimäki, K. (ed.) Sustainable Fashion in a Circular Economy, Aalto University pp. 170-191.

TED's TEN: "9 – Design to dematerialise and develop systems services"

BIOMIMICRY

1-2 days

Group
Excursion
Individual

Create
Collect

Description

Exploring nature has inspired countless functionalities today. Looking at mechanisms such as photosynthesis and self-sustaining ecosystems, or more detail-oriented elements such as skin, shells, assembly, eyes, ears, communication systems etc. might spark new perspectives on garments. This activity is about studying nature to look for these unique qualities and using them to inspire future garment design. The invention of Velcro which is based on the grappling hooks of seeds, is one example of how natural solutions have inspired the clothing industry

Which qualities inherent in natural species can inspire future garment design?

Delivery

STEP 1: INDIVIDUAL
Ask students to take a walk in the forest and find one living species that they find interesting. Make them investigate the species, its functions, its qualities, its surroundings etc. Students can conduct an 'imaginary interview' with the species to find out more about its specific qualities (use the podcast "Everything is Alive" to set the scene for the interview). Insights are concretised in a one-page format by answering the following questions:

- What species is it?
- What is interesting?
- How can it be used?
- How is a biomimetic concept translated?

Afterwards these insights can be used to replicate these qualities into the garment design.

Links to pillar(s)
Environmental
Cultural

Releated Activities

Shopping experience

Value chain on non-human species

Delivery

- How can functions of these specific species be used in relation to fashion or material development such as smart textiles and garment functions? Keywords could be strength, water-resistance, colour-changeability, stickiness etc.

STEP 2: GROUP
Try to make an all-year collection based on this specific function.

- How can you optimise/minimise the function?

Preparation, Support Material Sources & Output

This activity has been developed with inspiration from "TED's Ten: 6 - Design that looks at models from nature & history"

Suggested Resources

Benyus, J. 2009. “Biomimicry: Innovation Inspired by Nature”. Harper Perennial.

Dénommé, M. 2019. “Sitting in Trees”. In Fletcher, K., L.S. Pierre, and M. Design and Nature: A Partnership. Taylor & Francis, pp. 38-43

Everything is Alive. Podcast episode 11: “Shannon, Bath Towel”

Lenau, T. A., Orrù, A. M. & Linkola, L. 2018. “Biomimicry in the Nordic Countries”. Nordic Council of Ministers.

TED’s Ten: “6 - Design that Looks at Models from Nature & History”

BUYING HABITS

1-3 hours

1-2 days

Discussion
Group Activity

Collect

Description

Understanding consumer patterns for buying may ignite new ideas for a future fashion system, that is a sustainable alternative to the existing one. This activity proposes that students meet their future customer to collect insights on the motives and desires that drive us in desiring and acquiring new clothes.

How might we use people's aspirations for buying clothes as inspiration for new ideas?

Delivery

STEP 1: GROUP
Ask students to interview each other or consumers on the street to find out their buying habits and make them visualise these insights.

Questions could be:

- How often do you purchase new clothes?
- When was the last time you purchased clothes?
- What kinds of clothes do you buy?
- How much money do you spend on clothes (and shoes and accessories) in a month/ in a year?

Afterwards these insights can be used to replicate these qualities into the garment design.

STEP 2: CLASS
Ask students to present their visualisations and insights and use these as a basis for a plenary discussion.

Links to pillar(s)
Cultural
Economic

Releated Activities

Designing the label before the clothes

Letter of concern

Preparation, Support Material Sources & Output

The creation of visualisations of findings from interviews

Suggested Resources

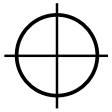
Burns, B. 2010. “Re-evaluating Obsolescence and Planning for it”. In: Cooper, T. (eds.) Longer Lasting Products: Alternatives to the Throwaway Society. MPG Books Group, pp. 39-61

Fuad-Luke, A. 2009. “Chapter 4. Contemporary Expressions: Design Activism, 2000 onwards” in: Design Activism - Beautiful strangeness for a sustainable world, Earthscan, London, pp. 77-138

CIRCULAR SYSTEMS

1-2 days

Group
Discussion
Artefact- / material driven



Collect
Conceptualise

Description

When designing for circularity there are different ways to go about this. One way is to draw attention to how we create and dispose of materials. This activity focuses on circular systems based on material content of garments. Depending on garment design and material composition there are different strategies for re-cycling, such as design for mono-materiality and disassembly, and design for upcycling. Therefore, the designer can choose to address different strategies for creating garments to be re-cycled into new ones.

How might we design garments with a second or even third life using the same materials?

Delivery

STEP 1: INDIVIDUAL
Ask the students to do an investigation of their wardrobe with focus on the material content.:

- Place mono-material garments in one pile and mixed-material garments in another.
- What circular systems can be designed from the garments in the two different piles (mono-material and mixed-material)?

Afterwards these insights can be used to replicate these qualities into the garment design.

STEP 2: GROUP
Arrange students into small groups. Ask them to wear either mono-material garments or mixed-material garments for a week, so each group can collect insights on wearing both types of material content. Use the findings for the basis of a group discussion:

Links to pillar(s)
Environmental

Releated Activities

Aesthetic surgery

Designing for active lives of clothes

Fashion service systems

Garments with many lives

Identifying circular loops

Material origin and function

Wardrobe stories

Delivery

- What are the good and bad aspects of mono-/mixed-materials?
- Draw or in other ways visualise how design solutions of a material circular system can look like for both mono-material garments and mixed-material garments.

STEP 3: CLASS
Use the student examples for a discussion on material awareness and garment design.

Preparation, Support Material Sources & Output

The creation of drawings/visualisations of circular systems

This activity has been developed with inspiration from TED's Ten: "2 - Design for Cyclability"

Suggested Resources

Laitala, K., Klepp, I.G., & Beverly, H. 2018. "Does Use Matter? Comparison of Environmental Impacts of Clothing Based on Fiber Type", Sustainability 10(7), 2524.

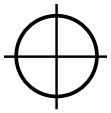
Ravnløkke, L. & Bang, A.L. 2016. "The Body Stocking: Design Aesthetics and Functionality as a Means for Sustainable Fashion and Textiles". In Proceedings of the 10th International Conference on Design & Emotion. Amsterdam, The Netherlands.

TED's Ten: "2 - Design for Cyclability"

CONCEPTS BASED ON SUSTAINABILITY APPROCHES

1-2 days

Group



Conceptualise

Description

When developing a sustainable business concept, it is fundamental to consider which approaches towards sustainability have been activated, i.e. how and why a concept can be identified as sustainable rather than promoting it as just being sustainable.

This activity applies the two learning tools, the Sustainable Design Cards and Material Pathways, to outline the ways in which you can argue for and discuss sustainability in the fashion and textile industry, based on a combined lifecycle and longevity approach. Depending on the level and direction of the activity, it can either use one or both decks.

How to articulate sustainable approaches in the fashion and textile industry?

Delivery

STEP 0: CLASS
If students have not previously worked with the Sustainable Design Cards and Material Pathways, a first step can be to ask all students to:

- Select 2-3 cards, that relate most to their own practice
- Select 2-3 cards, they would be curious to learn more about
- Select 2-3 cards, they find difficult to understand

These can be discussed in a plenary session. You can collate students' answers using online survey providers such as Kahoot or Google Analytics.

STEP 1: GROUP
Groups of students are asked to select 3 cards from the Sustainable Design Cards and/or Material Pathways deck and develop a concept based on these ('need to have' cards). Supplementary cards can be used to guide or support the concept ('nice to have' cards)

Links to pillar(s)
Economic
Environmental

Releated Activities

Materials origin and function

Framing sustainable change in a company

Delivery

- How do strategies affect each other? How do they oppose, or how do they support each other?
- How will the chosen cards affect your designs, choice of material, function, aesthetics etc.?
- What will the lifecycle of the products/service look like?

STEP 2: CLASS
Students present their concepts in class. The following questions can be used to explore the chosen concepts:

- How have the approaches been activated in the concepts?
- How do the approaches relate to or navigate in the product lifecycle?

Preparation, Support Material Sources & Output

Sustainable Design Cards and Material Pathways – either printed decks, PDF or access to the webpage (www.sustainabledesigncards.dk, www.materialpathways.dk)

This activity has been developed with inspiration in the "Sustainable Design Cards" and "Material Pathways" decks from Design School Kolding.

Suggested Resources

Ashby, M.F. & Johnson, K. 2014. "Chapter 8. Materials and Sustainability". In Materials and Design: The Art and Science of Material Selection in Product Design, pp. 156–78. Butterworth-Heinemann

Hasling, K.M. & Ræbild, U. 2017. "Sustainability Cards: Design for Longevity". I Proceedings of PLATE 2017 – Product Lifetimes and the Environment, 166–70. Delft, the Netherlands.

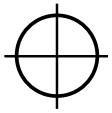
Hasling, K.M., Ræbild, U. & Kofoed, L.H. 2017. "Sustainable Design Cards". Design School Kolding (www.sustainabledesigncards.dk)

Hasling, K.M, Ræbild, U., Patel, A. & Herrtua, I. 2020. "Material Pathways".

DESIGNING LIVES FOR ACTIVE LIVES OF CLOTHES

More than 2 days

Group
Individual
Artefact- /
material driven



Collect

Description

This activity focuses on personal experiences of the use phase driven by garments as a material object. The intention is to provide insights and foster a discussion on how to reduce the volume of clothing production and acquisition. Owning large volumes of clothing potentially leads to the possession of garments that are never worn, and thus results in wasted recourses. To minimise waste created in the textile industry, it is preferable to make full use of the garments we own. This activity illuminates weekly needs in relation to clothing, and the preferences we have for the clothes we wear.

How do we design for a longer and more active life of clothing?

Delivery

STEP 1: INDIVIDUAL
Ask every student to select one outfit to wear for a week and to document their individual experiences in a diary. The following questions can be used as a guideline:

- Does your outfit match your needs?
- What did you need and why?
- How did you experience your needs being, or not being met?
- What were the pros and cons of the individual items of your outfit?

STEP 2: GROUP
Each student uses their individual documentation to present their experiences to the group.

OPTIONAL: GROUP
Hereafter the students can create a capsule collection upon their findings.

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Links to pillar(s)
Cultural

Releated Activities

Circular systems

Wardrobe stories

Preparation, Support Material Sources & Output

Make a hand-out document with questions to support the students' reflection of their experience.

Creation of visual presentation of findings and insights

Suggested Resources

Laitala, K., Klepp, I.G., & Beverly, H. 2018. "Does Use Matter? Comparison of Environmental Impacts of Clothing Based on Fiber Type", Sustainability 10(7), 2524.
TED's Ten: "1 – Design to minimise waste"

Woodward, S. 2020. Chapter 2: Orienting yourself to things in: Material methods: Researching and thinking with things. SAGE Publications, pp.11-33.

DESIGNING THE LABEL BEFORE THE CLOTHES

1-3 hours

1-2 days

Group Discussion

Conceptualise

Description

Most garments come with a label that describes for example, the kinds of fibres it consists of, where it has been produced, and how to care for it. In terms of the supply chain and potential future use of the garment, the label provides only a small aspect of the wider picture. There is further information that could help users when considering the garments before and during their purchase.

This activity asks students to reflect on and consider what kinds of information they would include on a garment label to emphasise the values they would like to transfer and communicate in a garment. This can range from information on issues relating to material sourcing such as working conditions, transparency and traceability, but also for example the sensorial perception of the fabrics used.

How might labels communicate the value put into the garment?

Delivery

STEP 1: GROUP
Ask students to design a garment label with information, aesthetics, and stories that they would be proud of adding to their designs. Encourage students to make an optimistic and visionary label that expresses their sustainable values.

- Find examples of labels that work good/bad. What kinds of information and means do they convey?
- Generate ideas, develop, test and create the concept, information and visual appearance of your label

STEP 2: CLASS
Have students present their garment labels and communicate the underlying value systems to each other.

- The garment labels should be uploaded, collated and shared among the students.

Links to pillar(s)
Social
Environmental
Cultural
Economic

Releated Activities

Buying habits

Framing sustainable change in a company

Ideology manifesto

Letter of concern

Shopping experience

Space for passionate voices

Delivery

STEP 3: GROUP
The label is now the students' manifesto for creating a garment.

- How would a garment be designed, produced and sold in order to live up to the label?

Students make a visualisation of the garment design describing the details of their considerations behind it.

Preparation, Support Material Sources & Output

Collection of garment labels

The creation of visualisations for garments design and concept

Suggested Resources

Clancy, G., Fröling, M. & Peters, G. 2015. "Ecolabels as drivers of clothing design". Journal of Cleaner Production 99, pp. 345–53.

Close the Loop. "Retail"

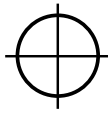
Koszewzka, M. 2011. "Social and eco-labelling of textile & clothing goods as means of communication and product differentiation". Fibres & Textiles in Eastern Europe, 19(4), pp. 20–26

Parker, L. & Dickson, M.A. 2009. "Sustainable Fashion. A Handbook for Educators". Labour Behind the Label

EXPLORING MATERIAL PARAMETERS

1-3 Hours
1-2 days

Group
Discussion
Artefact- /
material driven



Comprehend

Description

When considering materials in design and sustainability, often the material's direct environmental impact is examined; the resources used for transforming a raw material into a fabric or finished garment. Yet, sometimes the necessary information is not available to perform a comprehensive lifecycle evaluation, but other means can be used to explore materials use through a sustainability lens.

Based on relative scaling, this activity offers an alternative way to assess materials that trains students in, not necessarily knowing the correct answer (who really does?), but to identify, evaluate and discuss relevant aspects and parameters in the process.

How to describe material sustainability?

Delivery

STEP 1: INDIVIDUAL
Ask the students to collect physical samples (~10cm x 10cm) of textiles made from different materials and by different production techniques. The samples do not have to come from new textiles but can come from textile scraps, leftovers as well as from discarded garments.

STEP 2: GROUP
In groups, select 5-10 samples from the individual collections for the further work.
Ask the groups to define 5-10 parameters that they consider describes aspects of sustainability. This can for example relate to a product lifecycle such as water consumption and use of pesticides, or it can relate to product longevity such as durability or maintenance. It can also relate to aspects such as economy, experience and legislation amongst others.

OPTIONAL: The groups can share their identified parameters in a joint repository.

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Links to pillar(s)
Environmental
Cultural

Releated Activities

Insights of unused garments

Materials origin and function

Touching materials

Delivery

With basis on one parameter at a time, groups should physically arrange the material samples from extremes such as 'less'-'more', 'little'-'very'. For some parameters, students can use literature and databases as guides, while for others, they need to find alternative assessment strategies. UAsk students to photo document and upload the material charts.

STEP 3: CLASS
In class, ask students to share insights regarding their identification of parameters and scaling exercise. Guiding questions can be:

- Which parameters were easy to assess through the scaling exercise? Which were not and why?
- In which other ways could materials be examined?
- What kinds of information would you like to have? What kinds of information do you think the industry would like to have? What kinds of information do you think the user would like to have?

OPTIONAL
Based on the repository of parameters, ask students in groups or in class, to link and cluster these visually. This to investigate and unravel: 1. The kinds of parameters students identify and 2: How parameters are linked to and interact with each other.

Preparation, Support Material Sources & Output

A Repository of parameters for material sustainability. Photo documentation of material charts.

Developed with inspiration in Close the Loop. "Resources"

Suggested Resources

Close the Loop: "Resources" (https://close-the-loop.be/en/phase/2/resources#tab-1)

Hasling, K.M, Ræbild, U., Patel, A. & Herrtua, I. 2020. "Material Pathways". Design School Kolding

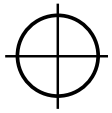
Laitala, K., Klepp, I.G., & Beverly, H. 2018. "Does Use Matter? Comparison of Environmental Impacts of Clothing Based on Fiber Type", Sustainability 10(7), 2524.

Ravnløkke, L. & Bang, A. L. 2016. "The body stocking: Design aesthetics and functionality as a means for sustainable fashion and textiles". I Celebration & Contemplation, pp. 378–386. 10th International Conference on Design & Emotion, Amsterdam.

FASHION SERVICE SYSTEMS

1-3 Hours
1-2 days

Group
Individual
Discussion



Comprehend
Conceptualise

Description

The designer can take part in the development of a new fashion system, by not only creating a traditional collection of garments, but also by becoming system thinkers and by designing strategically around garments. This can for example be in the form of fashion services that allow for leasing, up-cycling, and re-selling.

Services like these may require certain conditions that influences the business model, such as company size and market segment. Furthermore, the design of a collection within a service may also influence the design framework including limitations and possibilities. Fashion services ask us to discover and consider the system behind.

How can we design garments for services?

Delivery

STEP 0: INDIVIDUAL PREPARATION
Ask students to watch the short movie for 'TED's Ten: 9 – Design to Dematerialise and Develop Systems & Services' as preparation for the activity or show in class before starting the activity. The movie provides a common understanding of what systems thinking and fashion services can be.

If wanting to further inform students before the activity, Global Fashion Agenda's 'Garment Collection Toolbox' provides examples of various takeback systems, and relevant issues connected to these. Furthermore, it describes four systems based on existing companies

STEP 1: CLASS
Discuss the relevance of different takeback systems. Think in physical and digital platforms of for example rental, borrow, trade etc.

- Which systems could work for collective fashion?

Links to pillar(s)
Economic

Releated Activities

Circular systems

Identifying circular loops

Delivery

STEP 2: CLASS
Ask students to outline a system from elements relevant in a fashion service. Make a poster that illustrates the system with important elements.
The visualisation of a current and future 'Wardrobe Metabolism' (Fletcher and Grose, 2012, pp. 89) can be used as an example of how to illustrate a system.

- What could the service system look like?
- What would the system require?
- What is required of the design of garments for the system to work?

STEP 3: CLASS
Ask a couple of groups to present their service systems based on the above questions:

- Students can be asked to share their poster with proposed service systems

Preparation, Support Material Sources & Output

Creation of posters outlining fashion service systems

This activity has been developed with inspiration from TED's Ten: "9 - Design to Dematerialise and Develop Systems & Services" and Global Fashion Agenda's "Garment Collection Toolbox".

Suggested Resources

Fletcher, K. & Grose, L. 2012. Chapter 7: Optimized lifetimes in: Fashion & Sustainability: Design for Change. London: Laurence King, pp. 85-91.

Global Fashion Agenda. "Garment Collection" Toolbox.

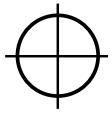
Petersen, T. B., & Riisberg, V. 2017. "Cultivating User-ship? Developing a Circular System for the Acquisition and Use of Baby Clothing". Fashion Practice 9 (2), pp. 214–34.

TED's Ten: "9 – Design to Dematerialise and Develop Systems & Services"

FRAMING SUSTAINABLE CHANGE IN A COMPANY

1-2 Days
More than 2 days

Group
Excursion



Create
Conceptualise

Description

This activity focuses on the role of the designer as a facilitator of sustainable change. Fashion companies face many challenges, and one solution does not suit all businesses. It is therefore important for students to know how they can enter a business and business model to introduce and contribute to sustainable change.

This activity seeks to broaden students' understanding of value creation and identifies the designer's role and impact. The aim of this activity is to prepare students for internships and show how tools can be used to create dialogue with industry in different collaborative projects.

How might we empower designers to facilitate sustainable change?

Delivery

Groups of students are paired with collaborating companies. This could be 3-5 employees from across different departments within the company's (for example, management, sales, design, logistics, production, etc.) and 2-4 students. The companies might define a specific challenge that they would to work with, but this setting can also be used for broad challenges; such as addressing some of the Sustainable Development Goals. Whichever agenda the company has, this activity suggests starting by bringing forth what the company stands for.

STEP 1: GROUP
Ask the students to prepare a course of 1-2 workshops, where they can work with the company on a common agenda. The students will facilitate the progression and use their design skills, such as use of brainstorms, provoke/trip up, prototype, visualise, etc. to initiate change and new insights for the company.

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Links to pillar(s)
Economic

Releated Activities

Concepts based on sustainability approaches

Designing the label before the clothes

Shopping experience

Delivery

The Gain Power toolkit comprise of 8 tools to help the designer to contribute to strategic planning of sustainable change. Selected tools can be combined in different ways. It can be a good idea to start with 1 or 2 of: Value Identification, Business Model Canvas, Stake Holder Map, and then 1 or 2 of: Past and Future Ruler, Product Development Tool, Designed Value Chain, Collection Tool, Assessment Tool. Students select 2-3 tools from the Gain Power toolbox to prepare and plan a program of how to facilitate the workshop(s) with the company.

- Which tools makes sense to use within the frame of the given company, their field and challenge?
- What is the order of the tools and activities?
- How are the activities introduced?
- What do the different students occupy during the workshop?
- What materials are needed for the workshop, such as pens, paper, tape etc.?

STEP 2: GROUP
The groups of students organise 1 or 2 workshops with the company and document the process. During and after the events students reflect on their experiences of acting as facilitators.

Each group creates a presentation of their workshop program and the insights they have gained which they present to the class.

- Did you have any aha experience?
- What did and didn't work well?
- What changes happened along the way? And where in the process did you see these changes happen?
- What would you do differently next time?

STEP 3: CLASS
Each group presents their work and insights for the entire class.

Preparation, Support Material Sources & Output

Contact companies and secure appointments before the activity starts.

The delivery of a workshop programme.

The activity has been developed with inspiration in the "Gain Power" toolkit by Design School Kolding.

Suggested resources

Design School Kolding 2017. "Gain Power: An empowering toolkit for designers to understand business and organisational context"

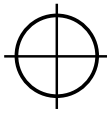
Heikkilä, P., Fontell, P., Määttänen, M. & Harlin, A. 2018. "Review of Textile Recycling Ecosystem and a Case of Cotton". In: Niinimäki, K. Sustainable Fashion in a Circular Economy. Helsinki: Aalto University, pp. 192-217

Osterwalder, A. 2011. "Business Model Generation". I.D.G. Books India Pvt. Limited.

GARMENT WITH MANY LIVES

1-3 Hours
1-2 days

Group
Discussion



Conceptualise

Description

When designing for circularity, a multiplicity of examples of designing for the first loop exist, whilst garment design for the second and third loops are rarely exemplified and discussed. This likely due to the lack of control designers and companies have on the overall supply chain or product lifecycle, and the lack of knowledge and transparency of a product's life after it leaves retail.

Nevertheless, designing for multiple loops from the beginning, can enhance the degree to which resources (materials, parts and products) can stay in circular loops, profiting both economic and environmental interests.

How to design for multiple lives?

Delivery

STEP 1: CLASS
Discuss options for multiple loops in the same garment using the Butterfly Diagram as a reference.

STEP 2: GROUPS
Ask students to propose and sketch multiple loops concepts in the Butterfly Diagram. Encourage development of multiple loops systems; (1) close to the user (at maintenance and reuse level), (2) far from the user (at material resource level), and (3) as combinations of different loop levels. If possible, students should bring in examples of companies that have worked with similar loop systems.

STEP 3: CLASS
Ask students to present their developed multiple loops systems. The discussion can be guided by the following questions:

- Which loop systems seem easy to implement, and why?
- Which loop systems seem difficult to implement, and why?

Links to pillar(s)
Culture
Economic
Environmental

Releated Activities

Aesthetic surgery

Circular systems

Identifying circular loops

Recycling facility

Preparation, Support Material, Sources & Output

This activity has been developed with inspiration from "The Circular Design Guide" and "TEDs Ten: 2 – Design for Cyclability".

Templates with the Butterfly Diagram to support the delivery.

Suggested Resources

Ellen MacArthur Foundation 2012. "Chapter 2: From linear to circular Accelerating a proven concept" in: "Towards the Circular Economy vol. 1"., pp. 21-34

Mestre, A., & Cooper, T. 2017. "Circular Product Design. A Multiple Loops Life Cycle Design Approach for the Circular Economy". The Design Journal 20, nr. Sup1, pp. 1620–1635.

Rissanen, T., Grose, L., & Riisberg, V. 2018. "Designing Garments with Evolving Aesthetics in Emergent Systems". Proceeding of the Global Fashion Conference 2018. London, United Kingdom.

HACKING POST-CONSUMER WASTE

3 days

Group
Discussion
Individual

Create
Collect
Comprehend

Description

EU regulations (Green Deal Circular Economy Action Plan) refers to the need to raise circularity in the textile and fashion industry. As most of the production takes place outside of the EU, the biggest problem inside the EU results in post-consumer waste. Currently, only 1% is recycled and around 25% reused. By 2025 EU member states will be required to collect textile waste separately and circulate it. There are many issues with post-consumer waste, namely the complexity of materials and the lack of sufficient amounts of mono-materials is a great challenge regarding upcycling or recycling. This problem can be used to inspire students to design circular products in the future and support achieving higher recyclability of post-consumer textile waste.

How can we increase recycling and circularity through design?

Delivery

STEP 1: GROUP OR INDIVIDUAL
Students collectively spend a day in a post-consumer waste sorting centre analysing different materials and qualities. As an outcome, they increase their understanding of consumer behaviour and identify discarded patterns.

STEP 2: GROUP OR INDIVIDUAL
Students pick the type of materials they want to use for their creative upcycling project (e.g. wool, old radios, denim, etc.)

STEP 3: GROUP OR INDIVIDUAL
Students are asked to produce design prototypes (not limited to clothing or commercially viable products). They learn from ready-made products and make a prototype. Students reflect on how to communicate and exhibit the outcomes, and works are exposed to the wider audience.

fashion SEEDS
Erasmus+
ual: university of the arts london
EKA Estonian Academy of Arts
POLITECNICO MILANO 1863
DK

Links to pillar(s)
Environmental

Releated Activities

Recycling facility

Aesthetic surgery

Preparation, Support Material Sources & Output

Contact collecting and sorting organisations beforehand to arrange appointments

Creativity exercise using post-consumer waste

The ability to learn from ready made products

Suggested Resources

Binotto, C. & Payne, A. (2017) The Poetics of Waste: Contemporary Fashion Practice in the Context of Wastefulness, Fashion Practice, 9:1, 5-29

ECO TLC (2019), Annual Report 2019 https://refashion.fr/pro/sites/default/files/fichiers/ECO_TLC_EN_BD.pdf

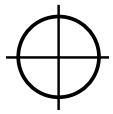
European Commission (2020), Circular Economy Action Plan, For a cleaner and more competitive Europe: https://ec.europa.eu/environment/circular-economy/pdf/new_circular_economy_action_plan.pdf

Watson, D., Kant Hvass, K., Moora, H., Martin, K., Nausede, V., Gurauskiene, I., Akule, D. (2020) Post-consumer textile circularity in the Baltic Countries. Current Status and Recommendations for the Future. Nordic Council of Ministers. https://pub.norden.org/temanord2020-526/

IDENTIFYING CIRCULAR LOOPS

1-2 days

Group Activity



Create

Conceptualise

Description

This activity introduces designing for a circular economy. The suggested references provide background knowledge of why it is relevant to develop within a circular economy, as well as showing examples of how to address loops in lifecycle flows. The Butterfly Diagram by the Ellen MacArthur Foundation (2012) is an adaption of McDonough & Braungart's (2002) Cradle to Cradle Protocol and can be used to understand and map resource flows building on technical and biological cycles. Examples of loop systems within the technical cycle are to: 'reuse', 'refurbish', 'remanufacture', 'recycle'.

To get the most out of the valuable resources it takes to make garments, it is relevant to look at ways we can cultivate activity and keep clothes circulating in inner loops, as well as understanding resource flows. Here you can consider which options a company might have at present, and what a company might be able to develop in the future.

Which potentials are there for concept development in fashion?

Delivery

STEP 1: GROUPS OR INDIVIDUAL
Ask students to select, research and analyse an existing fashion company and:

- Use the Butterfly Diagram to map existing product life cycles of the company through desktop research. Here printed copies of the Butterfly Diagram can be used as templates in the activity
- Identify potentials for 'inner circular loops'
- Visualise potential ideas by making a new product life circle

STEP 2: GROUPS
Ask students to develop design proposals for and within the new loops. These can either be sketch-based or hands-on prototypes.

Links to pillar(s)
Social
Environmental
Cultural
Economic

Releated Activities

Aesthetic surgery

Circular systems

Fashion service systems

Garments with many lives

Materials origin and functions

Value chain of non-human species

Preparation, Support Material Sources & Output

Printed Butterfly Diagram templates

Illustrations of product lifecycles

Visual examples (sketches or prototypes) of ideas

Suggested Resources

Ellen MacArthur Foundation. "Fashion and the Circular Economy"

Global Fashion Agenda. "Circular Design Toolbox"

McDonough, W., & Braungart , M. 2002. "Cradle to Cradle: Remaking the Way We Make Things". North Point Press.

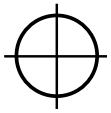
The Circular Design Guide. "Understanding circular flows"

IDEOLOGY MANIFESTO

1-3 hours

1-2 days

Group
Discussion
Individual



Create
Conceptualise

Description

To act sustainably also means understanding what you stand for; your values, beliefs, intentions, motives and desires for the future. A way to unfold this is through writing and sharing manifestos.

In this activity, students are asked to write manifestos as a way to help them express the types of contributions they want to make in the fashion world. Depending on the course setting, manifestos can either target sustainable fashion as a whole, or individual pillars.

What is the ideology of tomorrow?

Delivery

STEP 1: INDIVIDUAL
Each student is assigned with either the environmental, economic, cultural or societal pillar. Based on desktop research, the student should collect insights and materials and use these insights to describe a common ideology in ten bullet points.

STEP 2: GROUPS
Students are grouped so that each pillar is represented in a group. Students present their pillar-based ideologies, and together agree on one shared manifesto that engages all four pillars. The manifesto can be excerpts of the four ideologies or a new manifesto that integrates ideologies in one text.

STEP 3: GROUPS
Students are to upload their manifestos, which are collated into a catalogue and shared amongst themselves.

Links to pillar(s)
Social
Environmental
Cultural
Economic

Releated Activities

Design the label before the clothes

Discussion based on media

Space for passionate voices

Preparation, Support Material Sources & Output

Introduce students to different manifestos

Creation of a catalogue of manifestos

Suggested Resources

Fashion Revolution. "Manifesto for a Fashion Revolution"

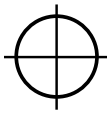
Union of Concerned Fashion Researchers 2019. "Manifesto".

John Emerson/Backspace 2007. "100+ Years of Design Manifestos".

INSIGHTS OF UNUSED GARMENTS

1-2 Days

Group
Indivdual
Discussion



Collect
Comprehend

Description

When garments are not used anymore, they are discarded or forgotten in the back of the wardrobe as storage. There can be many reasons for this; such as technical aspects resulting in parts of the garment being broken, worn out or no longer fitting correctly. Other aspects are just as relevant to explore, and these can be connected to aesthetic preferences or social and emotional characteristics of the wearer. Insights on why clothing are no longer in use may spark ideas for designs that stay in active use and last longer.

Have you any garments for storage? And why is that?

Delivery

STEP 1: INDIVIDUAL OR GROUPS
A: Students investigate their own closets
B: Students visit each other to have a look into their individual wardrobes.

Ask students to take out pieces of clothing that have never been used, are used rarely or are no longer worn. Use the following questions to make them reflect on why these garments are placed in this category:

- Where do the garments come from and what are the stories behind them?
- Why are the garments not used? (for example aesthetic, technical, functional, emotional, trend-related aspects)
- What are pros and cons of the identified garments?

Ask students to cluster garments in accordance to identified aspects and to photo document.

Links to pillar(s)
Cultural

Releated Activities

Exploring material Parameters

Touching materials

Wardrobe stories

Delivery

STEP 2: GROUPS
Ask students to categorise insights, either from 2-3 individual students' investigation or from a group investigation.

- What are the patterns of non-use?
- Photo document the visual overview

STEP 3: CLASS
Ask the class to share insights in a plenary discussion with focus on, how these insights can be drivers for idea generation for the designer

Preparation, Support Material Sources & Output

- Narratives on unused garments
- Visual overviews of insights on unused garment
- Prepare a short introduction to the wardrobe study and the tasks the students should go through

Suggested resources

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

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

Ravnløkke, L. & Bang, A.L. 2016. "The body stocking: Design aesthetics and functionality as a means for sustainable fashion and textiles". In Proceedings of: Celebration & Contemplation, 10th International Conference on Design & Emotion, pp. 378-386, Amsterdam.

The Woolmark Company & Nielsen 2018. Global Wardrobe Study.

Woodward, S. 2020. Chapter 5. Understanding Things-In-Relation: Surface Assemblages, Inventories and Interviews in: Material Methods: Researching and thinking with things. SAGE Publications, pp. 74-94.

LETTER OF CONCERN

1-3 hours

Group
Discussion
Individual

Conceptualise

Description

In addition to technical and physical aspects such as origin of the raw material, material compositions, design intentions and sizing, it is important to consider and acknowledge all the human beings that have been involved in the realisation of a garment.

In this activity, students are asked to investigate and reflect on the social and ethical conditions of the clothes they are wearing through understanding and discussion of transparency and traceability in the fashion supply chain. The scope of their investigation could include worker conditions and rights, legislation and corporate responsibility.

What kinds of social concerns might we have when acquiring new clothes?

Delivery

STEP 1: INDIVIDUAL
Ask students to identify the brand and the last piece of clothing they bought from them. They should then answer the following questions:

- What did you buy, which material is it made from and where is it made?
- If you had to write a letter to the brand behind your product, what would you ask? What would you require? What would you wish for?
- Likewise, if you had to write a letter to the person making your item, what would you write?

Afterwards these insights can be used to replicate these qualities into the garment design.

STEP 2: GROUPs
Ask students to read out their letters of concern to each other and discuss the (lack of) transparency in the fashion supply chain. Questions could focus on:

Links to pillar(s)
Social
Cultural

Releated Activities

Buying habits

Designing the label before the clothes

Delivery

- What kinds of information and knowledge have students sourced or are missing?
- What are challenges with more transparency in the fashion supply chain?
- How can the designer help to enhance transparency?

STEP 3: CLASS
Collection of letters

Ask students to share their letters of concern, for example by uploading to a shared platform or mailing the tutor. The letters of concern can be collated into a collective testimony and shared with students.

Preparation, Support Material Sources & Output

A collection of letters of concern to be shared with students

This activity has been developed with inspiration from Fashion Revolution and Redress

Suggested Resources

Fashion Revolution. "Fashion Revolution Week"

Fashion Revolution. "Fashion Transparency Index 2020"

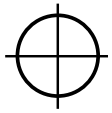
Labour Behind the Label

Redress. "Get involved as in individual"

MATERIALS ORIGIN & FUNCTION

1-2 Days

Group
Individual
Artefact- /
material-driven



Comprehend

Description

Identifying raw materials and components in a garment can provide an overview of the many material and manufacturing choices a designer and/or fashion brand make during product development. Every single choice, as well as the combination of choices leaves an environmental footprint.

A first step to understanding the potential environmental footprint of a garment is understanding the 'material journey' of the multiple materials and components used in a garment. Rather than focusing on quantitative measures, this activity builds on qualitative mapping of material flows.

What materials and components do your garments consist of?

Delivery

STEP 1: INDIVIDUAL OR GROUPS
Research where materials come from by asking students to:

- Choose an existing product, comparable to what you wish to design.
- Take the product apart and group components in material fractions based on functions such as main fabric, zipper, lining, buttons, tags, sewing thread etc.
- Identify the materials used.
- Research and map resource flows of the materials used from raw material, processing and product manufacturing.

STEP 2: CLASS
Ask students to prepare a visual presentation and share findings with the rest of the class, and discuss:

- If the material complexity could be lowered, what kind of alternative material choices could you make in a second iteration of the garment design?

Links to pillar(s)
Environmental

Releated Activities

Aesthetic surgery

Circular systems

Concepts based on sustainability approaches

Exploring material parameters

Identifying circular loops

Recycling facility

Preparation, Support Material, Sources & Output

Visual presentation of findings and insights.

This activity has been developed with inspiration from The Circular Design Guide's Smart Material Choices.

Suggested Resources

Circular Design Guide. "Smart Material Choices".

Fletcher, K. 2012. "Durability, Fashion, Sustainability:

The Processes and Practices of Use". Fashion Practice 4(2), pp. 221–238.

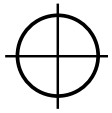
Hasling, K.M, Ræbild, U., Patel, A. & Herrtua, I. 2020. "Material Pathways". Design School Kolding

Nørup, N., Pihl, K., Damgaard A. & Scheutz, C. 2019. "Evaluation of a European textile sorting centre: Material flow analysis and life cycle inventory". Resources, Conservation and Recycling 143, pp. 310–319.

RECYCLING FACILITY

1-2 Days
More than 2 days

Group
Excursion



Collect

Description

This activity support students to go out and meet the world – in this case a recycling facility, which provides a personal experience of the volumes and issues related to post-consumer waste. Seeing clothes that have been disposed of, not only gives an image of the condition of the clothes but also confronts students with design related choices that might give clothing a longer life – whether it is choices related to aesthetics, technical aspects, or other.

Seeking expert knowledge on this part of the textile industry, educates students on the practicalities of handling post-consumer waste. Understanding the volumes and complexity of this process can inform the students' future design choices and might even spark ideas for concepts of recycling.

What was the reason for disposing the last garment you let go of?

Delivery

STEP 1: CLASS
Go to a recycling facility that collects and sort textiles and clothing and talk to the people working there. Ask them to show and explain the loads of textile waste, the machinery, the sorting process and the output material.

- What are the existing options for recycling post-consumer waste?

STEP 2: INDIVIDUAL
Each student:

- Listen to this view of the textile industry
- Explore the place and document insights by drawing and taking notes
- Write half a page of reflections on your experience

Delivery

Links to pillar(s)
Economic
Environmental

Releated Activities

Aesthetic surgery

Garments with many lives

Materials origin and function

OPTIONAL. SEP 3: GROUP
Arrange with the recycling facility that they donate an amount of clothes for the students to study and perhaps experiment with (see the activity Aesthetic surgery). Ask students to focus on 3 pieces of clothing. They should undertake an analysis and study garment functionality in order to consider the technical aspects of durability:

- What is the condition of the garments?
- What kind of garment is it?
- How is the garment constructed?
- Which seams, lines, details, etc. is used in relation to the clothes and its function?
- How is the textile constructed - what techniques are used; weave, knit, non-woven, after treatment etc.?
- How do these different aspects of the garment align with each other, and how does this affect the overall durability of the garment?

Suggested Resources

Aeon Videos 2016. "Unravel: The final resting place of your cast-off clothing"

Close the Loop. "End of Life"

Global Fashion Agenda. "Textile Recycling Toolbox"

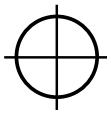
Heikkilä, P., Fontell, P., Määttänen, M. & Harlin, A. 2018. "Review of Textile Recycling Ecosystem and a Case of Cotton". In: Niinimäki, K. Sustainable Fashion in a Circular Economy. Helsinki: Aalto University, pp. 192-217

Textile Exchange 2017. "Global Recycled Standard"

SHOPPING EXPERIENCE

1-2 days

Group
Excursion
Discussion



Collect
Comprehend

Description

When purchasing garments, the experience is not only defined by interacting with the clothing itself, but also how the garments are presented and the atmosphere created by the specific surrounding environment. The aesthetic factors of the atmosphere are key, as visual stimuli are powerful in creating images and symbols.

This activity aims to create a discussion of alternative ways of presenting clothes and other fashion items that can support more sustainable consumption patterns in stores. Analysis of existing experiences designed for the moment of purchase can be used to reflect on the role of objects, environments and atmosphere. The idea of this activity is to use this reflection to discuss intended shopping experiences created to acquire new clothes, and how these insights can be transformed into desires and aspirations for sustainable fashion.

How might we re-invent the experience of shopping?

Delivery

STEP 1: INDIVIDUAL
Ask students to go to a clothing store and observe - not the clothes, but everything around it: The interior, the racks, the clothing hangers, the mirrors, the tables, the tags, the floor, etc. - everything else than the clothes.

- How are the clothes and other fashion items presented?
- What objects or surroundings create fascination and desire for fashion?

This should be documented through photos and sketches.

OPTIONAL: The students can be asked to upload the documentation in a predefined format, e.g. 1 A4-sheet, PDF

STEP 2: INDIVIDUAL
Ask then students to go for a walk in the forest (or another place outdoor), observing the atmosphere and the elements around the trees creating that atmosphere and then observing everything else other than the trees.

Links to pillar(s)
Cultural
Economic
Environmental

Releated Activities

Buying habits

Designing the label before the clothes

Framing sustainable change in a company

Delivery

- Describe your experience. What do you find intriguing or/and fascinating?
- What is decisive for this experience?

This should be documented through photos and sketches.

OPTIONAL: The students can be asked to upload the documentation in a predefined format, e.g. 1 A4-sheet, PDF

STEP 3: CLASS
Ask students to share observations and facilitate a discussion on alternative experiences for brands to present their clothes, and for customers to engage with clothes in a shopping situation.

- What objects or surroundings create fascination and desire for fashion?
- What experience can replace the desire for purchasing a new item of fashion?
- How to create such an experience – what would the surroundings consist of?

Preparation, Support Material, Sources & Output

Repository of atmospheric documentation from students' visits to respectively clothing stores and nature (if students are asked to share this).

Suggested Resources

Cho, J. Y. & Lee, E.-J. 2017. "Impact of Interior Colors in Retail Store Atmosphere on Consumers' Perceived Store Luxury, Emotions, and Preference". Clothing and Textiles Research Journal 35 (1), pp. 33–48.

Close the Loop. "Retail"

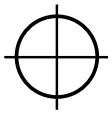
Fletcher, K. 2019. "Wild Dress. Clothing and the natural world". Uniform Books.

St. Pierre, L. 2015. "Nature's System". In: Fletcher, K. & Tham, M. (eds.). Routledge Handbook of Sustainability and Fashion, Routledge, pp. 33-42.

SPACE FOR PASSIONATE VOICES

1-2 days

Group Discussion



Create Comprehend

Description

If students are to present an argument, then it needs to be well researched and informed by their own values and experiences. Important skills developed in this activity are critical thinking and informed decision making. The purpose here is for students to create a common understanding of the problems in fashion, standing up for ideas, taking sides and looking for role models.

How to raise your voice?

Delivery

STEP 1: GROUPS
Ask students to access an online blog or discussion forum and takes sides in the debate.

- Who do you agree with (the most) and why?
- Who do you disagree with (the most) and why?
- What is your opinion?
- What do you find most absurd?

STEP 2: GROUP
Students are now listening to the responses of another group. Based on these, ask students to make counter arguments.

STEP 3: CLASS
Create a debate in class, where students are given the task to argue for or against a thematic issue.

Links to pillar(s)
Environmental
Cultural

Releated Activities

Design the label before the clothes

Ideology manifesto

Delivery

STEP 4: CLASS
Optional

Preparation, Support Material Sources & Output

Identify online blogs and discussion forums that can be used as basis for creating a debate. These should raise questions and debates on topics such as planetary boundaries, labour conditions, mass consumption, local versus global, animal leather versus synthetic leather.

This activity has been developed with inspiration from the online course "Fashion and Sustainability: Understanding Luxury Fashion in a Changing World" developed by Kering and London College of Fashion, UAL.

Suggested Resources

Future Learn, Fashion and Sustainability: Understanding Luxury Fashion in a Changing World

Mazzarella, F., H. Storey & Williams, D. 2019. "Counter-narratives Towards Sustainability in Fashion. Scoping an Academic Discourse on Fashion Activism through a Case Study on the Centre for Sustainable Fashion", The Design Journal, 22:sup1, pp. 821-833 (for tutors).

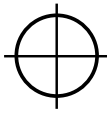
TED's Ten: "10 – Design activism"

von Busch, O. 2020. "The Psychopolitics of Fashion: Conflict and Courage Under the Current State of Fashion". Bloomsbury Publishing.

TOUCHING MATERIALS

1-3 hours
1-2 days

Group
Individual
Artefact-/
material driven



Collect

Conceptualise

Description

In fashion, the garments' visual appearance often gets the main attention even though many other aspects define how a user values the garment. Consequently, to support a more comprehensive understanding of product parameters, it is necessary to activate the senses and explore how these can be used to understand and create meanings, associations and emotions to the garment.

Even though all senses are relevant, this activity will look specifically into how tactility and the perception of touch and feel can be used to evaluate, and select materials for garment design.

How to create garments based on sensorial experiences?

Delivery

STEP 1: INDIVIDUAL & PLENARY
Ask students to research ways to perform haptic experiments with materials. Share and discuss these in class. Ask students to collect or bring materials for a joint material repository.

STEP 2: GROUP
Ask the group to identify and agree on four aspects they would like to investigate with their haptic sense.

The following will be repeated for all students in the group:

- From the material repository, each student chooses ten materials.
- The student gets blindfolded and his/her materials are randomly arranged on a table. The student is then asked to order the materials based in the aspect using his/her haptic sense.
- This should be repeated for all four aspects

Links to pillar(s)

Cultural

Releated Activities

Exploring material parameters

Insights of unused materials

Wardrobe Storiess

Delivery

- During the sessions, the students should be encouraged to share insight
- Photo document the material charts

When all students have been through the sessions, ask students to compare material charts and discuss denominators in the material samples.

- How can aspects be linked to materials' physical appearance when considering e.g. fibre, construction, surface, weight, elasticity, flexibility.

Suggested Resources

Bang, A. L., 2013. "The repertory grid as a tool for dialog about emotional value of textiles". Journal of Textile Design Research and Practice 1(1), pp. 9–25.

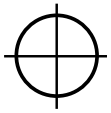
Hasling, K.M. & Bang, A.L. 2015. "How associative material characteristics create textile reflection in design education". Journal of Textile Design Research and Practice 3, nr. 1–2, pp. 27–46.

Yanas, E.A. 2019. "Learning tactility from Bauhaus: Educational pedagogy of Laszlo Moholy-Nagy". In Proceedings of ASDR2019: International Association of Societies of Design Research Conference 2019: Design Revolutions. Manchester School of Art, Manchester Metropolitan University.

VALUE CHAIN OF NON-HUMAN SPECIES

1-2 days

Group
Individual
Artefact- /
material driven



Conceptualise
Comprehend

Description

This activity aims to recognise and unravel the existence of the non-human species in the value chain and building on this it aims to surface the impact of these in the production system.

With industrialised and out-sourced production, connection to the production process and what it involves has either become weak or entirely broken. This accounts for the origin of resources used, the way resources are being processed and travel, but to a large extent also for the multiplicity of living, humans and especially non-humans involved. This activity aims to illuminate the resources often overseen when valuing the supply chain.

How does the non-human species affect the production of clothes?

Delivery

STEP 1: INDIVIDUAL OR GROUP
Ask a student to pick a garment that they own and know a lot about and map the value chain of the garment as well as they can.

- What kinds of resources have been used?
- How and where has the garment been produced?
- How has it been transported, where and how was it sold?
- Who has bought it, and where will it likely go when the student no longer uses it?

STEP 2: INDIVIDUAL OR GROUP
Map all the non-human species that are directly involved in the process. These can be animals, plants, bacteria, microorganisms.

- Which species are providers, helpers, collaborators, challengers, consumers...?
- Which non-human species are indirectly affected positively or negatively in the process?

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Links to pillar(s)
Environmental

Releated Activities

Biomimicry

Identifying circular loops

Delivery

Allow time for students to make as thorough and detailed a map as possible and to reflect upon the ways this value chain has affected other lives than human.

STEP 3: CLASS
Facilitate a discussion on the impact and value of human and non-human species in the supply chain.

Suggested Resources

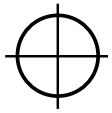
Fletcher, K., St. Pierre, L. & Tham, M. (eds.) 2019. "Design and Nature: A Partnership". Routledge
Fletcher, K. & Tham, M. 2019. "Earth Logic. Fashion Action Research Plan". The JJ Charitable Trust

Tham, M., Ståhl, Å. & Hyltén-Cavallius, S. 2019. "Oikology - Home Ecologics: a book about building and home making for permaculture and for making our home together on Earth". Linnaeus University Press

WARDROBE STORIES

1-3 Hours

Group
individual
Artefact- /
material-driven



Comprehend

Description

The wardrobe method is suggested as a way for the fashion designer to gain insights of the use phase. The methods can be used as various approaches to make a so-called wardrobe study. Making a study of somebody's wardrobe can give an understanding of use perspectives. For the fashion designer this may spark ideas of alternative consumption patterns and design solutions directed at longevity and active use.

The activity focuses on personal experiences and preferences with one's own clothes. It is intended to bring awareness to use practice. Insights gained from the activity can be used as a source of inspiration to design for caring use relations.

What is your favourite garment? And why is it a favourite piece?

Delivery

STEP 1: INTRODUCTION
The video from TED's Ten 8 – Design to Reduce the Need to Consume can be used to introduce the need for alternative use patterns.

STEP 2: INDIVIDUAL
Ask students to categorise the garments in their wardrobe. The categories can be made after the students' own choosing. Ask the students to select 8 pieces from their favourite category, and make a visual documentation of the garments, e.g. photos, sketches.

STEP 3: CLASS
Present the selected garments to each other by using the following questions:

- Where do you have the clothes from?
- What do you like/dislike about it?

STEP 4: CLASS
Ask students to prepare a visual presentation of findings and insights to share with the rest of the class.

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Links to pillar(s)
Cultural
Social

Releated Activities

Circular Systems

Designing for active lives of Clothes

Insights of unused garments

Touching materials

Preparation, Support Material, Sources & Output

Visual presentation of findings and insights

Suggested Resources

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

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

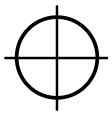
Niinimäki, K. & Koskinen, I. 2011. "I Love this Dress, It Makes Me Feel Beautiful! Empathic Knowledge in Sustainable Design". The Design Journal 14(2), pp. 165–86.

TED's Ten: "8 – Design to Reduce the Need to Consume"

WASTE FLOW ANALYSIS

1-2 Days

Group
Indivdual
Discussion



Create
Collect
Comprehend

Description

Textile waste in the fashion, clothing and textile industries has been identified as one of the great challenges faced today. On average, in a traditional production process, over 18% of textile is discarded, adding considerably to the resource waste in the textile industry chain. However, a series of design strategies may enable a lower waste production at the end of the production stage. In this activity, students will collect information on production processes, map waste flows and create design proposals directly with a company, that help in waste reduction, support transition towards a circular business model and improve economic performance.

How can design contribute to reduce waste within production?

Delivery

STEP 1: GROUP
In groups of 4-5 students spend one week in a clothing factory and map the production process with the waste flows in mind. To do so, they will make use of policy documents that discuss textile waste management (e.g. Circular Economy Action Plan). Each group focuses on one part of the process (e.g. cutting, packing, sewing, etc.). They take notes on the different actors and practices that are involved in the process and on the quality and quantity of waste produced. At the end of the week, students produce a single report where all the processes are illustrated and a waste flow chart is created.

STEP 2: GROUP
Having the waste flow chart in mind, students are invited to identify one type of waste (e.g. cutting leftovers, fabric roll ends, etc.) and propose upcycling design solutions and proposals within the course of one week on how to reduce waste.

Links to pillar(s)
Economic
Environmental

Releated Activities

Recycling facility

Garments with many lives

Fashion service systems

Delivery

STEP 3: GROUP
The design prototypes are shared with industry representatives and evaluated in regard to their commercial and production viability.

Preparation, Support Material Sources & Output

Take contact to and make appointments with companies

Waste mapping sample excel sheets

Access to factory machinery

Visual overviews of waste flow charts

Proposals how to reduce waste within the production through design

Proposals for possible industrial symbiosis at the local level

Suggested Resources

European Commission (2020), Circular Economy Action Plan, For a cleaner and more competitive Europe: https://ec.europa.eu/environment/circular-economy/pdf/new_circular_economy_action_plan.pdf

Hasling, K.M., Ræbild, U. & Kofoed, L.H. 2017." Sustainable Design Cards". Design School Kolding (www.sustainabledesigncards.dk) (Concepts based on sustainability approaches)

Kilmi, J. & Laberenz, L. (2015). "Out of Fashion"

Niinimäki, K. (ed.) (2018) Sustainable Fashion in a Circular Economy. Espoo: Aalto ARTS Books

Valle-Noronha, J. & Aus, R. (2020) Upcycling Aruna: Experiencing design-led sustainability via situated learning. In Bertola, Paola (ed.) Fashioning Social Innovation. Design empowering communities to foster sustainability in culture intensive industries. Milano: Mandragora.