

WEEK11-Final Reflection

Looking back on this course, I am struck by the profound overlap between design, environmental change, and political ecology. My practice, and that of designers worldwide, is not an isolated act, but an interactive dance with Earth's ecosystems and the sociopolitical forces that shape them.

The global environment is both the canvas and palette for our creative endeavors. From this perspective, we must consider our role as designers, not just producers, as active participants in the story of sustainability. The work of Fry, Dunn, Lavie, and Wood helps us understand how design can reflect and transform environmental narratives. Their philosophies call on us to embrace biomimicry, circular economies, and visionary policies, and work toward a future that is not only environmentally friendly but also politically conscious. 'The True Cost' is a compelling documentary that explores the complex story behind the clothing we wear, highlighting the people who make them and the significant impact of the fashion industry on our world. While the price of clothing has decreased over the decades, the human and environmental costs have escalated dramatically. The film investigates who truly pays the price for our clothing by showcasing footage from various countries, from glamorous runways to impoverished slums. Featuring insights from prominent figures like Stella McCartney, Livia Firth, and Vandana Shiva, 'The True Cost' takes viewers on an enlightening journey, revealing the hidden realities of the fashion industry and prompting us to reconsider our consumption choices.

My position within this broader ecological context is one of responsibility and opportunity. As a citizen and creator, my mission is to create projects that are not only beautiful but also politically and ecologically responsible. My future direction is prioritizing principles that minimize ecological footprint, promote sustainable lifestyles, strengthen communities, and increase biodiversity.

Reflecting critically on my disciplinary focus, I recognize that designers need to engage in visionary politics to effect the change we wish to see in the world through design. This involves shifting from traditional innovation towards more participatory and socially sustainable approaches (Ehn et al., 2014).

Velcro was invented by George de Mestral in 1941 and was inspired by the burrs he found on himself and his dog. Being an engineer and entrepreneur, Mr. de Mestral examined the burr under a microscope and realized the small hooks of the burr and loops of the fur/fabric allowed the burr to adhere exceedingly well.



Figure 1: Biomimicry of a burr (UP) for the invention of Velcro (DOWN), George de Mestral, 1941

In conclusion, my practice and that of designers in general must be informed by a new critical reading of the global context. We must inform our ideas, evaluations and analyses through a variety of creative strategies to ensure that our projects are not only responsive to environmental change but also stimulate political and environmental change. It doesn't have to be. It's our legacy to the world we live in and the future we are creating.

bibliography

Dunne, A. and Raby, F. (2013). *Speculative Everything : Design, Fiction, and Social Dreaming*. [online] Erscheinungsort Nicht Ermittlbar: Mit Press. Available at: <https://s3.amazonaws.com/arena-attachments/916882/ea648c9007886b4fa30ee25e16ff16b2.pdf> [Accessed 20 Nov. 2024].

Ehn, P., Nilsson, E.M., Topgaard, R. and Press, M. (2014). *Making future : marginal notes on innovation, design, and democracy*. [online] Cambridge ; London: The Mit Press. Available at: <https://www.diva-portal.org/smash/get/diva2:1405387/FULLTEXT01.pdf> [Accessed 20 Nov. 2024].

Fry, T. (2018). *DESIGN FUTURING : sustainability, ethics and new practice*. [online] Berg. Available at: <https://readings.design/PDF/tony-fry-design-futuring-sustainability-ethics-and-new-practice.pdf> [Accessed 19 Nov. 2024].

Figure 1: Sagapixel (2020). *Biomimicry of a burr (Left) for the invention of Velcro (Right).* Micro Photonics Inc. Available at: <https://www.microphotonics.com/biomimicry-burr-invention-velcro/> [Accessed 27 Nov. 2024].

WEEK10-the Eco-Political Landscape of Design

Looking at the Future

Designers’ role in sustainable design goes beyond beauty and functionality. They are mediators of political ecology, a field that studies the interaction between environmental change and sociopolitical dynamics. As a designer, my work engages the intersection of global environmental issues and the political ecology of design, with each creative idea being a statement about our collective future.



Figure 1: Spear Thistles Mask Performance, Sally Li, 2024



Figure 2: Foraging of the Spear Thistles, Sally Li, 2024

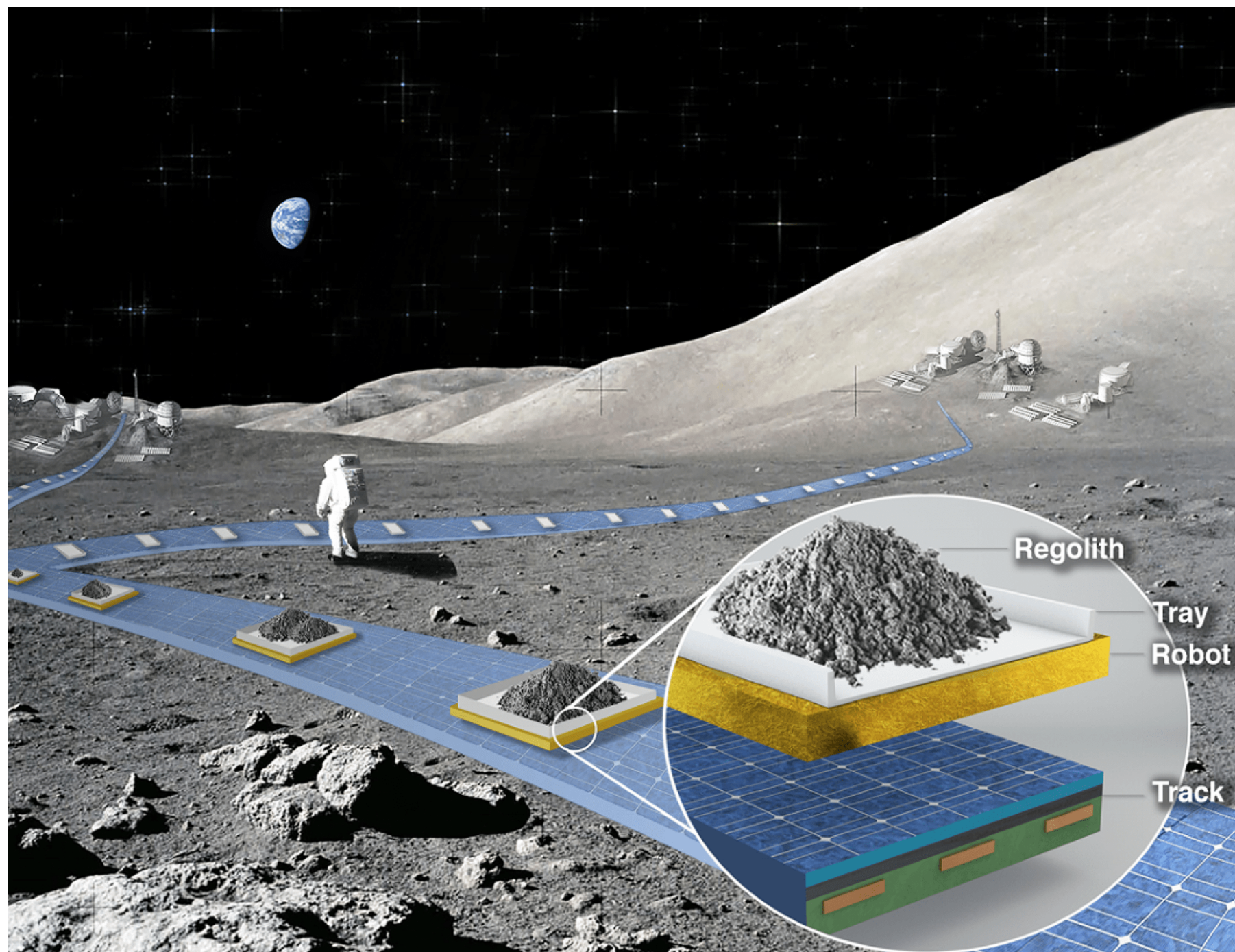


Figure 3: Artist's depiction of the FLOAT lunar railway system to provide reliable, autonomous, and efficient payload transport on the Moon, Ethan Schaler, 2022

The work of Tony Fry, Dunn & Lavie, and John Wood helps us understand the potential of design to not only reflect but also transform our environmental story. Fry's concept of "future distance" highlights the unsustainable conditions that distance us from the future and calls designers to the forefront of sustainable development. Dunn & Lavie's speculative designs invite us to imagine and discuss different possible futures, while Wood's micro-utopias inspire and encourage collective optimism to create a better world.

As I critically examine the direction of my field, I recognize the need for designers to engage in visionary politics and embody the change they wish to see in the world through design. This includes moving away from traditional innovation toward more participatory and socially sustainable approaches, as outlined in the book *Creating the Future: A Side Note on Innovation, Design, and Democracy*.

Finally, my practice, and that of designers in general, needs to be informed by new critical perspectives on the global environment. We must inform our ideas, evaluations, and analyses through a variety of creative strategies to ensure that our projects are not only responses to environmental change, but catalysts for political and environmental change—but they don't have to be.

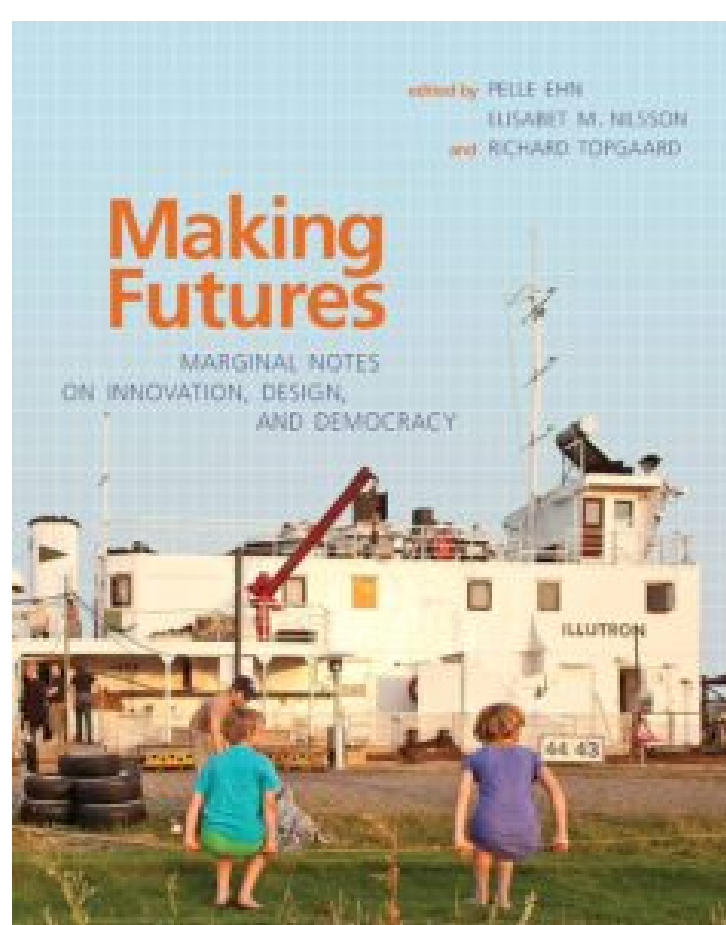


Figure 4: Book Cover of *Making Futures – Marginal Notes on Innovation, Design, and Democracy*, The MIT Press, 2014

Workshop: Manifesto Writing and Eco-Design Archive

1. Sustainability First: Prioritize designs that minimize ecological footprints and use resources efficiently. Promoting sustainable lifestyle.
2. Empower Communities: Engage local communities in the design process to ensure that solutions meet their needs and respect their contexts.
3. Biodiversity Combination: Incorporate natural ecosystems into design to

enhance biodiversity and create harmonious environments.

4. Innovative Solutions: Encourage the use of materials and technologies that promote environmental health and resource regeneration. Value Design quality. Create products and systems that endure over time, reducing the need for constant replacement and minimizing waste.
5. Education and Awareness: Design should aim to educate the public about environmental issues and inspire collective action.

bibliography

Dunne, A. and Raby, F. (2013). *Speculative Everything : Design, Fiction, and Social Dreaming*. [online] Erscheinungsort Nicht Ermittellbar: Mit Press. Available at: <https://s3.amazonaws.com/arena-attachments/916882/ea648c9007886b4fa30ee25e16ff16b2.pdf> [Accessed 20 Nov. 2024].

Ehn, P., Nilsson, E.M., Topgaard, R. and Press, M. (2014). *Making future : marginal notes on innovation, design, and democracy*. [online] Cambridge ; London: The Mit Press. Available at: <https://www.diva-portal.org/smash/get/diva2:1405387/FULLTEXT01.pdf> [Accessed 20 Nov. 2024].

Fry, T. (2018). *DESIGN FUTURING : sustainability, ethics and new practice*. [online] Berg. Available at: <https://readings.design/PDF/tony-fry-design-futuring-sustainability-ethics-and-new-practice.pdf> [Accessed 19 Nov. 2024].

Figure 1,2 are my own work

Figure 3: Schaler, E. (2022). *Artist's depiction of the FLOAT lunar railway system to provide reliable, autonomous, and efficient payload transport on the Moon*. NASA Innovative Advanced Concepts. Available at: <https://techport.nasa.gov/projects/106037> [Accessed 19 Nov. 2024].

Figure 4: The MIT Press (2014). *Making Futures: Marginal Notes on Innovation, Design, and Democracy*. Available at: <https://www.amazon.co.uk/Making-Futures-Marginal-Innovation-Democracy/dp/0262537486> [Accessed 19 Nov. 2024].

WEEK9-Designing for a Sustainable Future

Capitalism and Environment

In the design world, our creative efforts are not isolated fantasies, but are closely tied to the global environment and the political forces that shape it. Designers are global citizens and creators who have a responsibility to consider the impact of their work on the environment and sustainable development efforts.

The concept of the Anthropocene requires recognition of our important role as geological agents, changing the planet through our actions. This recognition transforms design from being just a profession to a central player in the story of environmental change. Our work builds on foundational research that explores the dynamics of human nature, such as Crutzen and Stormer's "Anthropocene Discourse" and "Capitalocene Discourse", which highlight the role of capitalism in environmental destruction.

From my personal perspective and in a wider context, I see my design practice as a catalyst for change, and I believe in the ecological design principles developed by van der Leyen and Cowan, which we strive to adhere to below. Their five principles provide me with guidance in developing environmentally sustainable solutions that work in harmony with nature, engage all designers, and care about nature.

Design, Climate and Responsibilities

The Flood is the culmination of a three-year collaboration between co-writers and directors Fisher Stevens and Leonardo Dicaprio, exploring the devastating effects of climate change. The documentary explores humanity's ability to overcome the most difficult challenges. This highlights the interconnectedness of the global climate and the urgency of our situation. DiCaprio and Stevens bring a sense of urgency to communities by proposing practical solutions, such as a carbon tax to shift investment toward renewable energy and cutting subsidies to fossil fuel companies. They emphasize the need for political engagement, urging voters to support leaders who value science and the scientific process, and warning corporate interests

against resistance to climate action.

My work as a designer and global citizen reflects my commitment to the environment. My design philosophy is to respond to the political ecology around us, advocating for designs that are not only visually appealing but also environmentally friendly. This requires careful self-reflection on the development of your field and your place in it to ensure that your contributions help build a more sustainable and just world.



Figure 1: Transect Walk, Sally Li, 2024

In summary, as designers, we have a responsibility to express ideas and critical thinking in a variety of creative ways: verbally, visually, and in writing. Our mission is more than just creativity. It is about shaping a future that is in harmony with the environment and respects the political ecology in which we live. Through this lens, we can fully understand our ability to shape a richer world.

bibliography

IGBP (2015). *Anthropocene – IGBP*. [online] Igbp.net. Available at: <http://www.igbp.net/globalchange/anthropocene.4.1b8ae20512db692f2a680009238.html> [Accessed 12 Nov. 2024].

Moore, J.W. (2015). *Capitalism in the web of life : ecology and the accumulation of capital*. London ; New York: Verso.

Van and Cowan, S. (1996). *Ecological Design*. [online] Island Press. Available at: https://books.google.co.uk/books/about/Ecological_Design.html?id=7UQfsbumtzUC&redir_esc=y [Accessed 11 Nov. 2024].

Figure 1 is my own work.

WEEK8-Vital Materialism

Keep the Awareness

Penny Spark’s *The Age of Plastic* and Gabrys et al’s *Accumulation*. They are not just texts, but mirrors to the complex cultural significance of materials like plastic that embody both decline and progress. Reading this book made me think critically about my personal position as a designer in a wider context. How can I contribute to a more sustainable narrative as a citizen and creator?

Figure 3: Social Sculpture 'Intarvention' in Gardner's Crescent Garden, Sally Li, 2024

Breath

In this public talk, Jennifer will use materials from her forthcoming book, *Global Citizens: An Outdoor Toolkit for Environmental Action*, to explore how environmental sensing technologies can shape atmospheric citizenship and create a more breathable world. She will discuss collaborative efforts to monitor air pollution from fracking infrastructure, record emissions in urban environments, and create air quality gardens. As these projects demonstrate, how people respond to, care for, and fight changing environmental conditions has implications for political actors and groups seeking to create a kinder world.

I believe my field has a responsibility to promote critical conversations about the impact of design on the environment. This includes not only the physical products we create, but also the cultural stories we perpetuate. As a designer, I am a storyteller, and the stories I tell must be sustainable and regenerative.

From the disappearance of plastic to the possibilities of radical materials, my thinking about the course topics has been a journey of critical reading and creative response. I have tried to communicate these ideas in a variety of ways: visually through projects, through verbal discussions, and now in writing. Each strategy is a tool to engage with the world, inspire thought, and inspire action to achieve a more harmonious coexistence with the environment.

Workshop



Figure 4: Plastic Hybrid, Sally Li, 2024



Figure 5: Raw Materials and Making Process, Sally Li, 2024

What are vital materials? Plastic can breathe too. ‘If matter itself is lively, then not only is the difference between subjects and objects minimized, but the status of the shared materiality of all things is elevated.’ The vase I created was intended to highlight the conceptual idea of *materials* being important in design practice. The vase has channels that allow the flowers more air, acting as an airway, but also showing that they are a living plastic mix. Interestingly, during the process of creating the vase, sometimes pieces of the vase would fall out, making it more like a living thing.

bibliography

Franklin, K. and Till, C. (2019). *Radical matter : rethinking materials for a sustainable future*. London Thames Et Hudson.

Gabrys, J., Hawkins, G. and Michael, M. (2017). *Accumulation : the material politics of plastic*. London: Routledge.

Sparke, P. (1993). *The Plastics Age*. Overlook Books.

Figure 1: Bremner, A. (2003). ‘*Plastic Beach*’ (detail). *Courtesy of the Estate of Robert Callender*. Available at: <https://www.artrabbit.com/events/robert-callender-plastic-beach-poetry-of-the-every-day> [Accessed 8 Nov. 2024].

Figure 2,3,4,5 are my own work

WEEK7-Reshaping the View of Materials

Man, Materials, and The Planet

In this week's lecture, we looked into the concepts of material and new materialism, which provided new perspectives for my practice. I began to see matter as a dynamic and influential subject rather than a simple passive entity, rethinking our relationship with the environment as the biggest materials producer on the planet.

I realized that as designers, we are not only creators, but also citizens, and our design choices have a profound impact on the environment. '*A Plastic Ocean*' is a documentary that shows the impact of plastic pollution on marine ecosystems and highlights the importance of reducing plastic consumption and improving recycling systems. It's urgent and essential to respond to the consequences we have had on our planet. The company *Ecovative Design* is already trying to create a new material by using mushroom mycelium to create sustainable packaging materials, replacing traditional petroleum-based plastics.

<https://ecovative.com>

After the collapse of the Soviet Union, Cuba turned to organic farming, reducing the use of chemical fertilizers and pesticides and increasing food self-sufficiency.



Figure 1: Agricultura biologica a Cuba, Raedle, J, 2018

The example of Cuba, which was forced to abandon sugar monoculture and rely on organic farming to survive, shows that sustainable development is not only possible but necessary (Scuri, 2018).

Enforcing the Circular Economy or Not?

In this week's debate, we argued about whether '*This house (i.e. we) would enforce a circular economy.*' I was on the '*for*' side of this topic. I argued that enforcing a circular economy is essential because it will not only do good for sustainable development, reducing waste, and also help fight climate change. Amsterdam in the Netherlands is using circular economy principles to convert urban waste into energy (Ellen MacArthur Foundation, 2024), showing the practical application of circular economy at the city level.

Additionally, as a response to the against side's view on job losses, I argued that enforcing a circular economy can create new business models and jobs, particularly in the repair, reuse, and recycling sectors. The Ellen MacArthur Foundation reports that a circular economy could generate new economic opportunities and boost competitiveness.

Fashion design shifts towards renting or swapping clothes, reducing waste and creating new service-oriented jobs. Brands such as Patagonia promote the repair and recycling of clothing to reduce the impact of fast fashion on the environment (Marcario, 2015).

What's interesting is when it comes to voting for support, oppose, or remain neutral, thinking this is a relatively large topic that requires more consideration on the topic, most of us choose the neutral.

bibliography

Ellen MacArthur Foundation (2024). *Shaping a sharing economy: Amsterdam*. [online]

www.ellenmacarthurfoundation.org. Available at:
<https://www.ellenmacarthurfoundation.org/circular-examples/shaping-a-sharing-economy-amsterdam> [Accessed 28 Oct. 2024].

Marcario, R. (2015). *Repair is a Radical Act – Patagonia*. [online] eu.patagonia.com. Available at:
<https://eu.patagonia.com/gb/en/stories/repair-is-a-radical-act/story-17637.html> [Accessed 28 Oct. 2024].

Scuri, E. (2018). *How organic agriculture in Cuba saved its population from hunger – LifeGate*. [online] LifeGate. Available at:
<https://www.lifegate.com/organic-agriculture-in-cuba> [Accessed 31 Oct. 2024].

Figure 1: Raedle, J. (2018). *Agricultura biologica a Cuba*. Getty Images. Available at: <https://www.lifegate.com/organic-agriculture-in-cuba> [Accessed 31 Oct. 2024].

WEEK6-Annotated Bibliography

By examining the environmental crises facing humanity and the planet, we hope to delve deeper into how designers can respond to these issues. I base my discussion on a range of scientific research that highlights the relationship between design, ecology, and sustainability. I am particularly interested in these sources because they provide a theoretical and practical basis for understanding the role of design for change in addressing environmental issues. By studying these texts, I gain a deeper understanding of how to change my design for change practice to promote sustainable development and environmental protection.

**Bennett, J. (2009). *Vibrant Matter: a Political Ecology of Things*. [online] Durham: Duke University Press. Available at:
<https://www-jstor-org.eux.idm.oclc.org/stable/j.ctv111jh6w> [Accessed 21 Oct. 2024].**

Challenging traditional anthropocentric perspectives, the book argues that objects and “things” have unique and dynamic forms that can impact human societies and ecosystems. Drawing on the philosophy of Spinoza and others, the author argues that all humans and non-humans possess a dispositional essence and “thing-power” – an inherent life force and the ability to influence others. The author believes that life exists not only in humans but also in non-human substances and objects. The book attempts to move away from the view that life is attributed to mysterious or supernatural forces and instead emphasizes the inherent vitality and autonomy of life. This perspective is important for understanding how to make design more sustainable and provide objects with an environmentally friendly life cycle.

**Braungart, M. and McDonough, W. (2002). *Cradle to cradle: remaking the way we make things*. [online] London Vintage. Available at:
<https://www.vlebooks.com/Product/Index/273455?page=0&startBookmarkId=-1> [Accessed 13 Oct. 2024].**

The book proposes that products and materials should be designed to be infinitely recyclable, rather than becoming waste after a single use. They advocate that design should follow the principles of natural ecosystems, that is, there is no so-called “waste”, and every output is the input of another process, striving to establish a symbiotic relationship between human industry and the environment including using renewable resources, designing safe products, extending product life, using renewable energy, etc. This book provides practical advice for businesses and designers to create cost-effective and environmentally friendly products.

**Fallan, K. and Jørgensen, F.A. (2017). *Environmental Histories of Design: Towards a New Research Agenda*. *Journal of Design History*, 30(2).
doi:<https://doi.org/10.1093/jdh/epx017>.**

This paper explores the intersections between environmental history and design history, highlighting the need for a deeper exchange between the two fields. It argues that while environmental history has examined the role of technology and material culture in environmental change, the specific contribution of design has often been overlooked. Conversely, design history also faces challenges in its approach to environmental issues. The paper argues that building a mutually beneficial understanding between environmental history and design history could facilitate the development of a new interdisciplinary research agenda exploring the environmental history of design. This paper contributes to a more comprehensive understanding of the role of design in environmental sustainability and lays the foundation for future research in this area.

Altés, A. and Lieberman, O. (2013). *Immediate Architectural Interventions, Durations and Effects: Apparatuses, things and people in the making of the city and*

the world. In: *Intervention, Durations, Effects: Notes of Expansive Sites and Relational Architectures*. [online] Baunach, Germany: Spurbuchverlag, pp.28–45.

Available at:

<http://umu.diva-portal.org/smash/record.jsf?pid=diva2%3A652100&dswid=-3537>

[Accessed 10 Oct. 2024].

The paper discusses the concept of “immediate architectural intervention” and criticizes the architectural profession’s disconnect from social, political and ethical concerns. It argues that architecture has focused on the serial production of either “anti-architecture” or the creation of “stunning” figurative buildings, abandoning the design of coexistence. The authors propose a relational and collaborative approach to architecture that intervenes in the world and paves the way as it goes, rather than viewing architecture as an autonomous entity. They emphasize the need to intervene “inside”, act in the moment, use existing tools, and be aware of history and context.

WEEK5- Green Pulse

Designing for a Just and Sustainable World

My recent research and practice have been influenced by many of the insightful ideas presented in this week’s lectures, involving the global context of political ecology and environmental design. These stories are not just about struggles over resources and rights, they also show how design activism can reconfigure systems and redistribute resources to promote more equitable social structures.

I began to see design as a political act, one that went beyond simply creating colorful objects, and involved questioning and transforming existing social structures through material practice. I am learning to incorporate circular economy principles into my designs so that my work is not only aesthetic but also environmentally friendly. This requires paying more attention to materials, manufacturing processes and how products are disposed of at the end of their life cycle.

By reading Edward Burtynsky’s work and watching related documentaries, I have a deeper understanding of modern consumer culture and its impact on the environment. These works inspired me to think about how to tell different stories in design and how to challenge and change the traditional view of objects through design. Hornborg argues that we are trapped in a collective fantasy about the nature of modern technology that prevents us from imagining solutions to economic and environmental crises other than technocratic fixes (Alf Hornborg, 2001). He shows how the power of machines produces increasingly asymmetric exchanges and distributions of resources and risks between distant populations and ecosystems, leading to an increasingly polarized world order.

Linear vs Circula Workshop

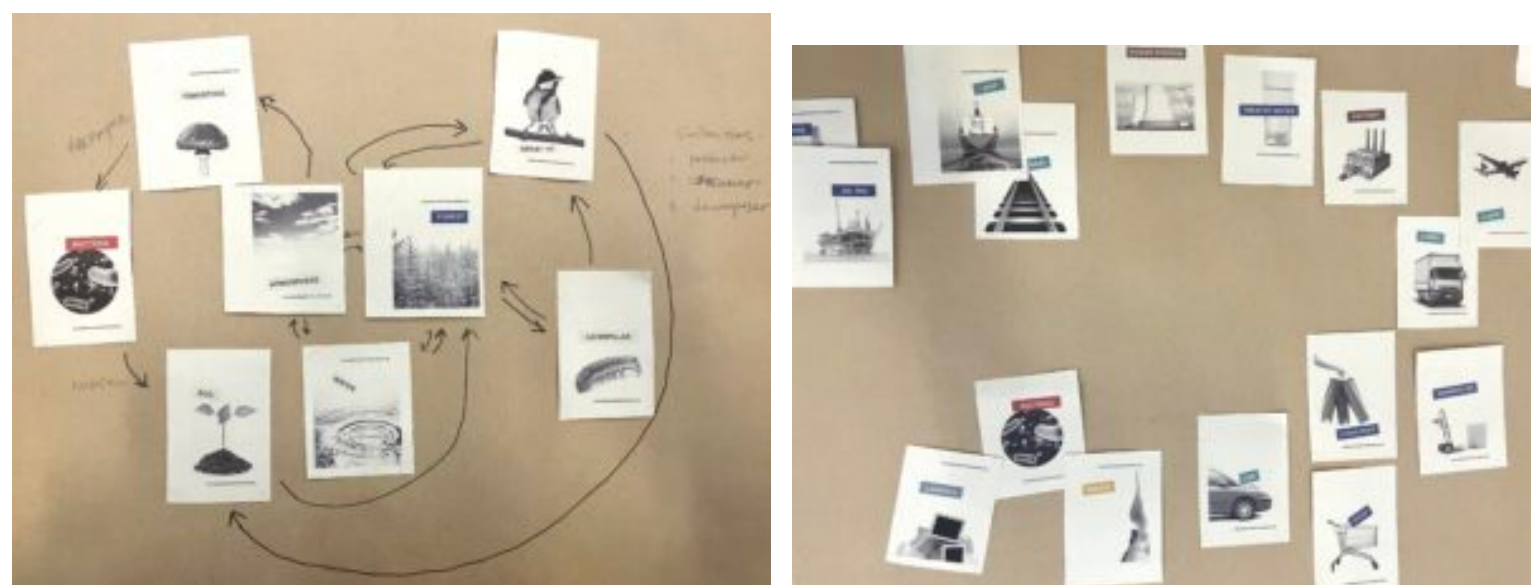


Figure 1: Group Work of System Discussion, Sally Li, 2024

In this week’s workshop, we discussed the differences and similarities between linear systems and living systems. We found that although they both have producers, consumers, and decomposers within the system, the living system is completely circular and each part of it can contribute to the others. On the other hand, products from the linear system will end up in landfills and the life of it also causes plenty of pollution and waste. This comparison process gave me a new insight to rethink the process of design and the whole life of a design product at each stage.

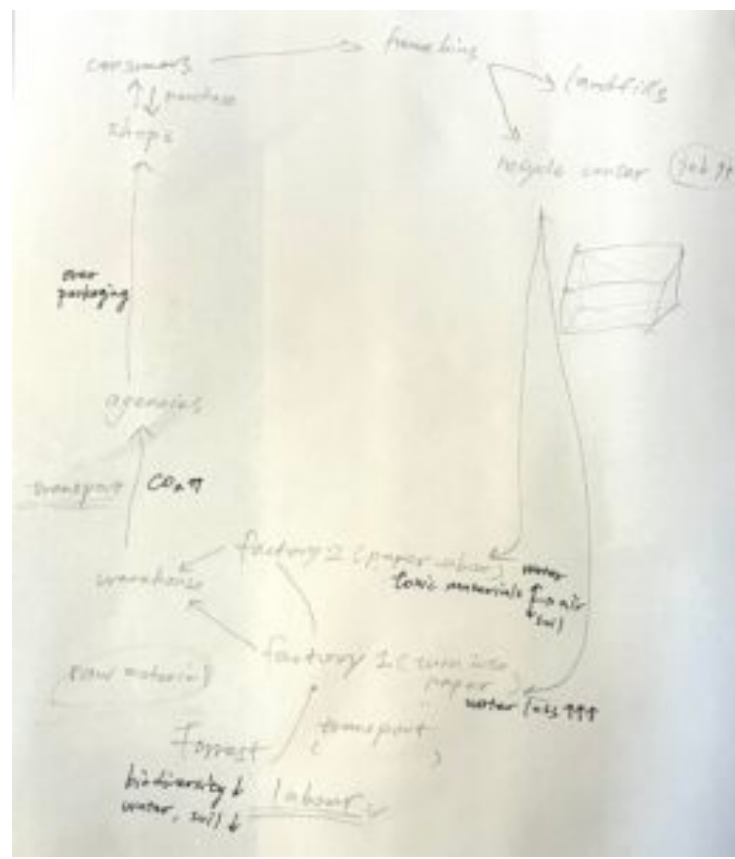


Figure 3: Redesign of Delivery Box System, Sally li, 2024

We chose a delivery box as our product to redesign. Firstly, we discussed the regular production chain which contains a lot of harm to the environment like greenhouse gases and toxic substances produced by factory production and transportation (Figure 2). Although we already have recycled centers to deal with waste and sustainable bio-material companies like Ikea and *mushroom packaging*, it still costs huge amounts of labor. So we thought that we could create a more streamlined system that cut the process between producers, consumers and decomposers (Figure 3).

bibliography

Alf Hornborg (2001). *The Power of the Machine*. Rowman Altamira.

Figure 1,2,3 are my own work

WEEK4-Stuff and Labour

The Importance of An Object's Story

In this week's lecture about 'STORIES OF STUFF', I was driven to rethink how as a designer, how our outputs and production can crossover the field of social justice and environmental sustainability issues on a broader scale. Through reading Julie Hill's work and watching Annie Leonard's '*Stories of Stuff* ', I start to realize that design products are not just functional stuff but also carriers of complex stories regarding history, social labor and environmental impact.

Tracing the History of An Object

We should be really considerate about the raw materials we use for our design and bear in mind how our products will end eventually. As designers, we have the duty to not only create esthetic and practical products but also make sure that their environmental and social impacts are positive. I think Geoffrey Gorman serves as a great model whom I can learn from. He is a practicing artist, creating his original found material sculptures in Santa Fe, New Mexico. His works were made of really

funky materials like rags wires and wax etc. It is his potent imagination and awareness of ‘the story of stuff’ that transforms the worthless and mostly garbage-destined odds into gallery-bound.



Artworks by Geoffrey Gorman, <https://www.geoffreygorman.com/>

Labor and Ecology

Who's labor? Unlike the traditional construction industry, Earthship is a type of house built with natural and recycled materials, with energy conservation in mind. It is designed to produce energy, water and food for its own use. This organisation sells lands and services to help you build your own green homes which also available for rentals. it serves as a thrilling one for me to reflect that labor is a focus of green thinkers. It is both central to the operation and reproduction of our environmentally economy, and a fundamental formative force influencing individual subjectivity, intellect and worldview.





[Earthship Images](#)

Rethinking the Way of Production

In this week's debate seminar, I was on the team 'against' for '***Designers have not yet come to terms with their complicity in the creation of the conditions of environmental crisis or with their environmental responsibility, nor have they yet reformed their practices accordingly.***' I argued that nowadays designers not only have increased awareness of environmental issues already but also take responsibility (Innovation Training, 2018). Despite sustainable materials used by multiple companies and incorporations, schools and educational institutions are making efforts to shift designers' mindsets from the very beginning of their design careers. The cases I have used to support my arguments are as below.

Jasper Morrison is a renowned industrial designer who advocates for sustainable practices. His works focus on minimalism and longevity which encourage and inspire consumers to invest in durable products rather than disposable ones.



Jasper morrison per cappellini, sedia thinking man's chair, 1988

Ikea has committed to using sustainable materials in its products. From versatile bamboo products to durable and recyclable metal such as aluminum, Ikea also has a reusable bag product called 'ISTAD', which is based on renewable materials from the sugar cane industry. It can be used over and over again thus reducing plastic bag waste.



bamboo products from Ikea
<https://www.ikea.com/gb/en/this-is-ikea/sustainable-everyday/sustainable-materials/bamboo-and-its-many-sustainability-benefits-pub9f2a7ee0>



aluminium lamp from Ikea(left)
<https://www.ikea.com/gb/en/this-is-ikea/sustainable-everyday/sustainable-materials/metal-strong-stylish-and-recyclable-pub36245d60>

ISTAD resealable bags from Ikea(right)
<https://www.ikea.com/gb/en/this-is-ikea/sustainable-everyday/sustainable-materials/only-recycled-or-renewable-based-plastic-in-ikea-products-by-2030-pube6434c20>

Sustainability Design Lab from RISD

<https://www.risd.edu/academics/campus-resources/sustainability-design-lab>

bibliography

Innovation Training (2018). *Design Thinking Mindsets for Human-Centered Design*. [online] Innovation Training | Design Thinking Workshops. Available at: <https://www.innovationtraining.org/design-thinking-mindsets/> [Accessed 11 Oct. 2024].

WEEK3-Human Activities, Nature and Designers

Current Situation of the Environment

Global environmental issues, such as climate change and loss of biodiversity, require designers to rethink material choices, production processes and consumption patterns. For example, the IPCC report highlights the urgency of global warming, which has prompted us to explore how to reduce carbon footprints through design, learning how to integrate these global issues into design work by using sustainable materials and circular design principles to create products with less impact on the environment.

Waste Land, Lucy Walker, Released on 2010 and premiered in Berlin Film Festival 2010 (Berlinale)

Ecology and Economy

In the book ‘Do Androids Dream of Electric Sheep’, the author created a world in which humans, androids, and animals have all reached a dead end, and are on the verge of being replaced at any time. They depend on each other but can be replaced at any time. The boundaries between human, ecology and economy are mixed and vague. With the continuous development of the future economy, will this imaginary world become realistic? Are we losing our *animalis* while the economy thriving?

How To END The Climate Crisis In One Generation, Paul Hawken on The Rich Roll Podcast

The Role of Design

Environmental design is more than an academic subject, it is a call to action. I am working to transform my design practice into a force for good that promotes a more sustainable and just world. This requires me to continually learn, adapt, and innovate to meet the challenges of our time.

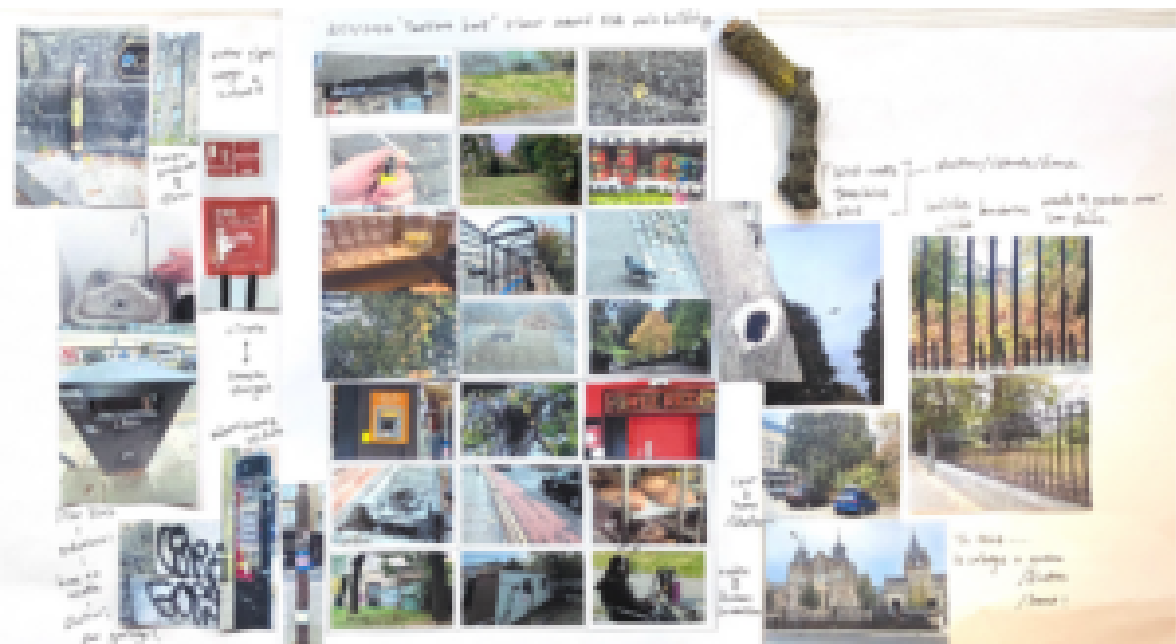
William McDonough on Cradle to Cradle Design, TED2005, the concept of circular design

The Change of Production and Consumption

Design is not just a combination of form and function, it is also the intersection of politics and ecology. Through reading the work of Joanna Boehnert, we can see how design reflects and reinforces social power structures. Designers as product-makers should be encouraged to question and challenge these structures, promoting social justice and environmental sustainability through design, considering how design can serve society and how it can promote more equitable and sustainable ways of living.

“The Patterned Ground Treasure Hunt”

It’s interesting and meaningful to consider the surroundings around us in a new sight through a 1-hours treasure hunt.



The Treasure Hunt Worksheet 1, Sally Li, 2024



The Treasure Hunt Worksheet 2, Sally Li, 2024

Islands: Can blind paths be considered as islands? The truth is blind people are the minority within the society. They can be isolated from the whole system due to their disability.

Home: Bird nests are becoming rarer and rarer nowadays, are human activities constantly a reason behind the shortage of animals’ homes?

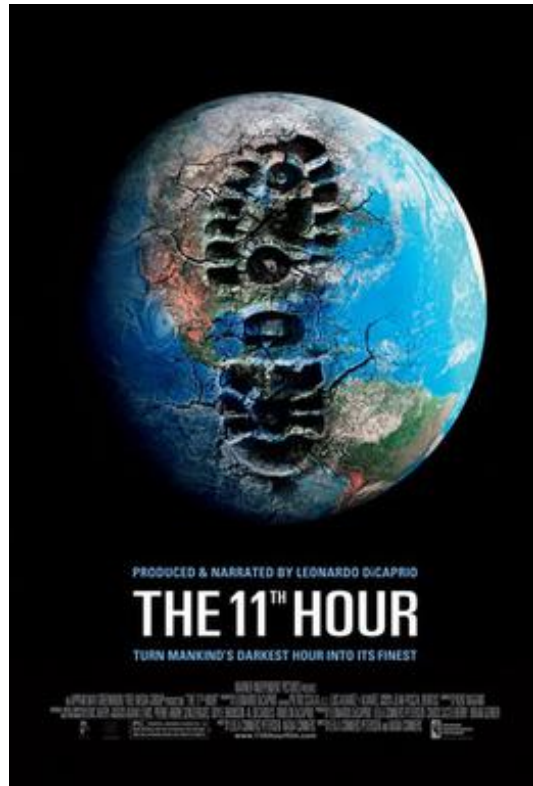
Shelter: Bus stations are shelters for pedestrians and those waiting for the buses.

It prevents wind, rain and snow for us as a human invention and a result of human activities. There are plenty of cases like this around us like telephone booths, smoking areas, etc. Are we human beings an invasive species to the earth who constantly build shelters on the soil?

The Future of Design

If we dream big enough, maybe someday in the future, designers from all over the world despite their area or nationality would together reach a common goal regarding the sustainability of ecology, economy and design itself. It can become a big sustainable cycle for the outsider and be divided into multiple small groups through different design fields. Each small group also serves as a sustainable cycle on a specific scale which contributes to the outside layer.

Films□



The 11th Hour Poster ,[Warner Independent Pictures](https://en.wikipedia.org/wiki/File:The_11th_Hour_Poster.jpg#Licensing(CC_BY-SA_4.0_GFDL)),
[https://en.wikipedia.org/wiki/File:The_11th_Hour_Poster.jpg#Licensing\(CC BY-SA 4.0 GFDL\)](https://en.wikipedia.org/wiki/File:The_11th_Hour_Poster.jpg#Licensing(CC_BY-SA_4.0_GFDL))

bibliography

Dick, P.K. (1968). *Do Androids Dream of Electric Sheep?* Mariner Books.

WEEK2-WE ARE ONE

An Indivisible Whole

Nature and humans are interconnected and form a whole. We live in nature and walk on the soil. Separating ourselves from our surroundings is unrealistic. It is illogical to hold a dualistic view of nature and civilization, the environment and people. We must acknowledge that any human activity has a bearing on the environment and that the environment constantly influences human activities, social growth, and cultural development. These effects and modifications are ongoing consent changes. We cannot break them simply because their interdependences are too delicate and difficult to detect. In the book *Environmental Histories of Design: Towards a New Study Agenda*, the authors argue that in the context of the Anthropocene, design history and environmental history must forsake dualism and engage in cross-disciplinary study. Engaging with the natural environment can considerably help design history and ecological history can be advanced by focussing more on the importance of the created environment. Design and designers hold an ambiguous place in contemporary environmental discourse.

Designer's Role

We should never forget our role and position on the earth while promoting the importance of experience. That is, we are not simply thinking heads, but bodies with feelings and consciousness, and we understand the world via experiencing.

As a textile designer from the PGT program Design for Change, I can't help but consider the role of textiles and materials in the present day, along with the function, obligation, and future actions of textile designers in this ongoing ecological crisis. Fabric design has an extensive past, but it has to contend with sustainability problems such as water usage, power consumption and emissions of greenhouse gases, toxic dye use, and an enormous amount of textile waste.

Rewriting the history of fabric design from an ecological and sustainable perspective could highlight developments and movements that have pushed the industry towards greater environmental stewardship. For example, the emphasis could be on the adoption of organic cotton, natural colors, and waste-reduction measures through design.

	Water consumption	Chemicals	Soil erosion and poisoning	Resources needed	Energy	Animal suffering
Cotton	🚰🚰🚰	🦋🦋🦋	☠️☠️☠️☠️	🌱🌱	💡	n/a
Hemp	🚰	🦋	☠️☠️	🌱🌱🌱	💡	n/a
Wool	🚰🚰	🦋🦋🦋	☠️☠️☠️☠️	🌱🌱🌱	💡💡💡	🐑🐑🐑
Leather	🚰	🦋🦋🦋	☠️	🌱🌱	💡💡💡	🐮🐮🐮
Linen	🚰	🦋	☠️☠️	🌱	💡	n/a
Silk	🚰🚰🚰	🦋	☠️	🌱🌱🌱	💡💡💡	🐛🐛🐛
Bamboo	🚰	🦋🦋🦋	☠️☠️	🌱🌱	💡💡💡	n/a
Tencel™	🚰	🦋	☠️☠️	🌱🌱	💡💡💡	n/a
Viscose	🚰	🦋🦋🦋	☠️☠️	🌱🌱	💡💡💡	n/a
Piñatex®	🚰	🦋	☠️	🌱	💡💡💡	n/a
Econyl®	🚰	🦋🦋🦋	n.v.t.	🌱	💡💡💡	🐙
Polyester	🚰	🦋🦋🦋	☠️☠️☠️☠️	🌱🌱	💡💡💡	n/a
Elastane*	🚰	🦋🦋🦋	☠️☠️☠️☠️	🌱🌱	💡💡💡	n/a
Nylon	🚰	🦋🦋🦋	☠️☠️☠️☠️	🌱🌱	💡💡💡	n/a

*Same for spandex and lycra

Image: from web
<https://www.projectcece.com/blog/432/most-sustainable-fabrics-in-fashion/>

The design ought to consider into consideration not only aesthetics and usefulness but also the broader social and environmental implications. As designers, we have the ability to influence not only items, but also cultures, experiences, and lifestyles. Transformative fabric design entails taking into account how each design element influences the environment and society. This includes selecting sustainable materials, accounting for energy consumption during production, and developing goods that are recyclable or biodegradable.

Case Studies

The Eden Project: <https://www.edenproject.com>



The Eden Project in Cornwall, 2000, UK Image: from web
<https://common.earth/eden-project>

The Bullitt Center in Seattle, USA

Vegan Leather



Image : by marchenko_family via Canva Pro, from web
<https://www.sustainablejungle.com/sustainable-fashion/vegan-leather-sustainable>

Books

1. **“Design Like You Give a Damn: How to Create Social Change Through Design”** by Various Authors. A collection of essays and case studies that showcase how design can address social and environmental challenges.
2. **“The Upcycle: Beyond Sustainability-Designing for Abundance”** by William McDonough and Michael Braungart. This book expands on the concept of upcycling, which is about creating value from ‘waste’.
3. **“Sustainable Fashion and Textiles: Design Journeys”** by Kate Goldsworthy.
 - This book provides an overview of sustainable design practices in the fashion and textile industries.
4. **“The Sustainable Fashion Handbook”** by Sandy Black.
 - A comprehensive guide to the ways in which the fashion industry is moving towards sustainability.

Online Resources

1. **Inhabitat** (<https://inhabitat.com>).
 - A website dedicated to sustainable design and eco-friendly technology.
2. **Designboom** (<https://www.designboom.com>).
 - An architecture and design blog that often features sustainable and innovative designs.
3. **The Sustainable Fashion Forum** (<https://sustainablefashionforum.com>).
 - A platform for sharing ideas and solutions for sustainability in fashion.
4. **Fashion Revolution** (<https://fashionrevolution.org>).
 - A global movement that aims to change the way fashion is sourced, produced, and consumed.