

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

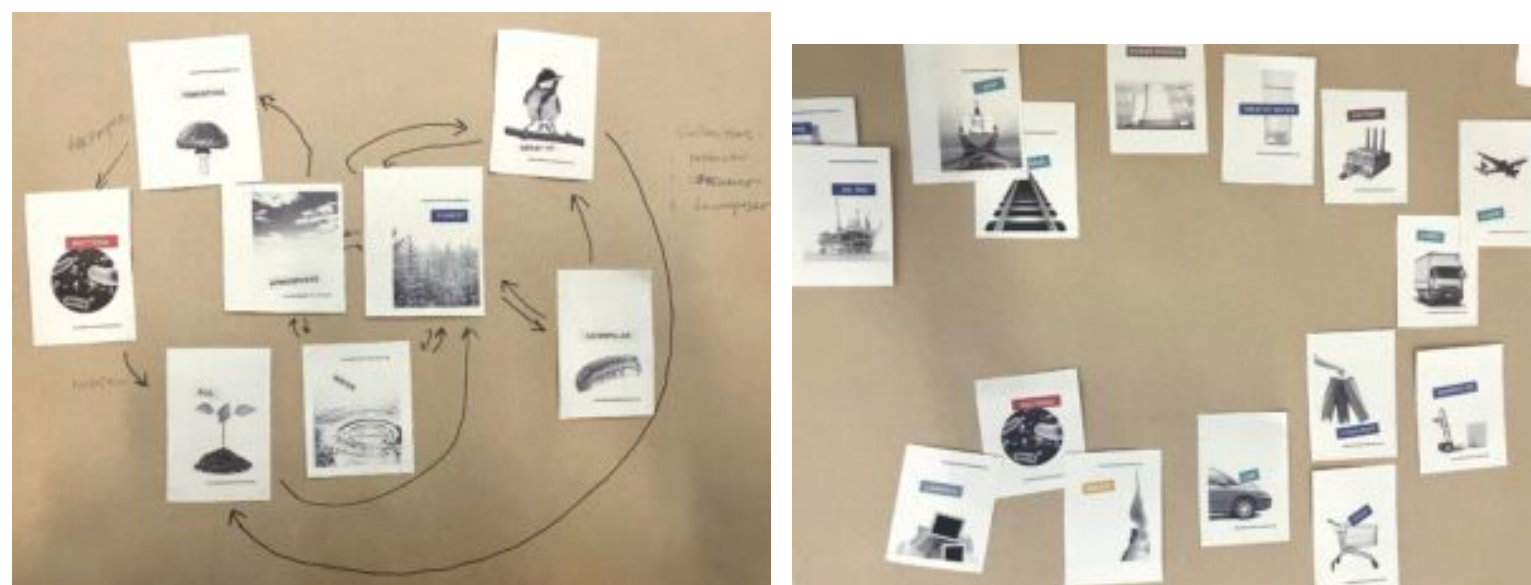


Figure 1: Group Work of System Discussion, Sally Li, 2024

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.

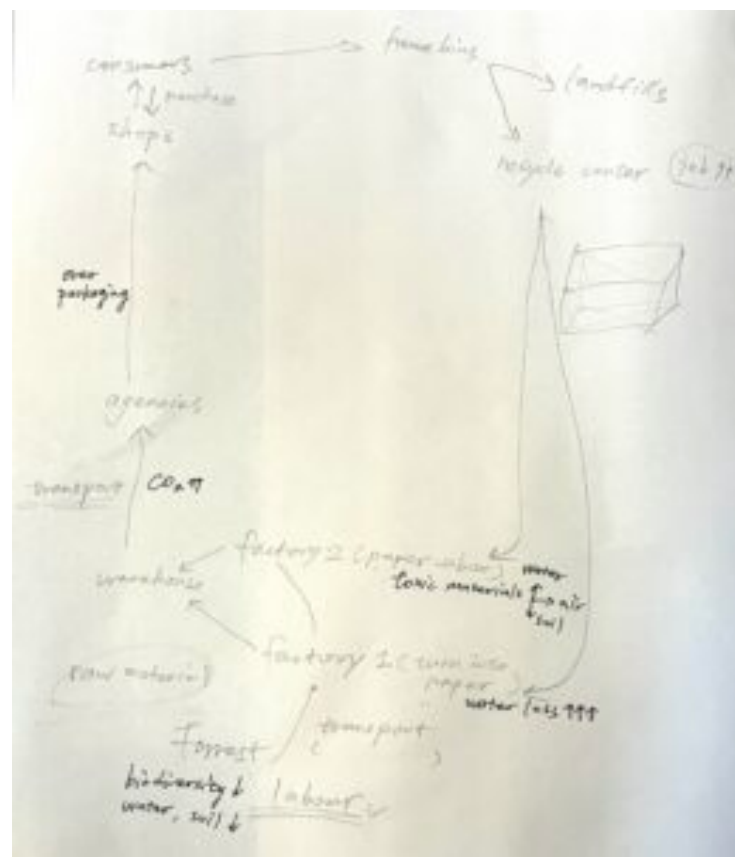


Figure 3: Redesign of Delivery Box System, Sally li, 2024

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>

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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.

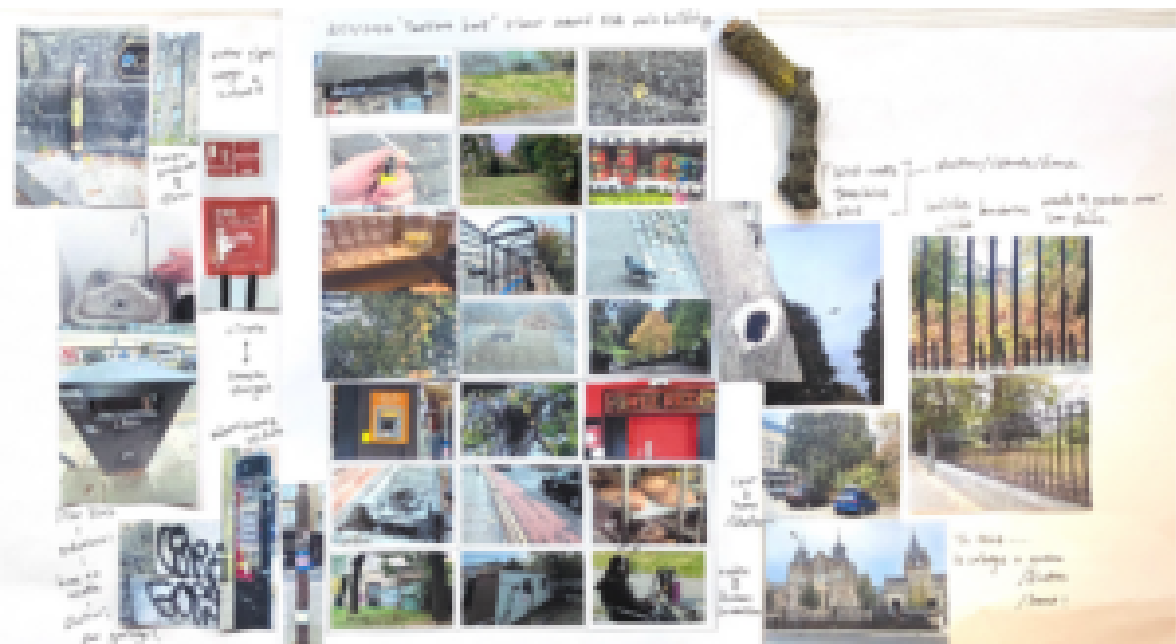
William McDonough on Cradle to Cradle Design, TED2005, the concept of circular design

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?

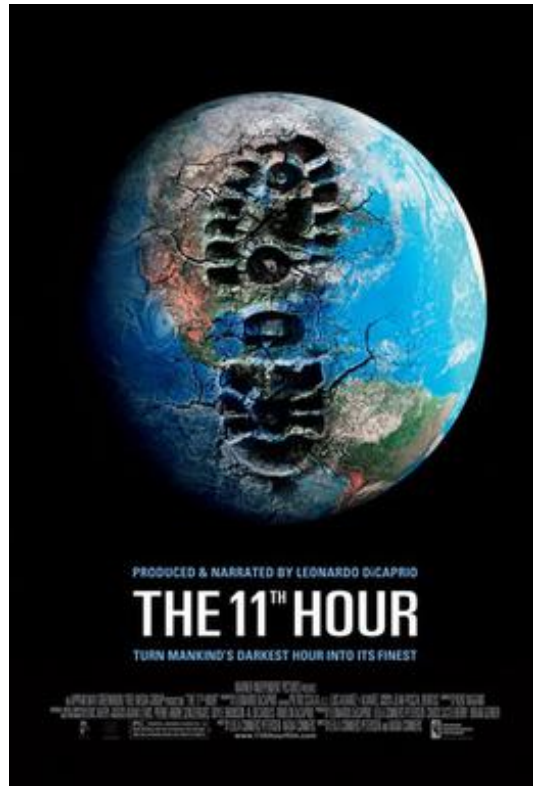
Shelter: Bus stations are shelters for pedestrians and those waiting for the buses.

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),
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[GFDL](https://creativecommons.org/licenses/by-sa/4.0/))

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