

Week 11 – Reflection

Every ending is a new beginning. As this course concludes, I'm filled with a bittersweet feeling – delighted by the learning experience yet aware of the vast knowledge still ahead. This isn't the end of my journey; it's a step toward becoming a better designer and contributing to sustainable initiatives. My deepest aspiration is to discover a path where humanity coexists harmoniously with the planet, respecting its limited resources without exploitation.

My core takeaway is challenging the prevalent Western notion of "Man vs. Nature" which invites us to examine our position within the environment and encompasses socio-cultural, economic, political, and ecological aspects. This mindset underscores our interconnectedness with the environment rather than positioning us as separate entities.

A designer is a title that holds responsibility. Sometimes it is not about being extraordinary and changing the world, it is worth reminding ourselves that small impact is still impact. I found this article regarding simple actions to reduce one's carbon footprint assuring, especially with the reflection questions proposed:

<https://www.greenpeace.org.uk/news/what-simple-actions-can-people-take-to-reduce-their-carbon-footprints/>.

Central to this exploration is the idea that altering our modes of production and consumption is fundamental to achieving responsible and sustainable design practices. It implies a transformative shift in how we create, use, and discard products. This change requires a departure from conventional patterns of consumption that often prioritize rapid production and disposal, leading to environmental degradation. Furthermore, we also need to research the environmental histories of products. This involves tracing their origins and exploring where materials come from, and the

ecological footprint of extraction processes. This course has opened my eyes to the hidden manufacturing processes, labour, and other production factors that I had not considered.



Water of Leith. Photo by Christina Yang.

Currently there is a “two year rule” in the Law of the Sea that pressures governments into allowing deep sea mining without proper regulations. The impending International Seabed Authority meeting underscores the urgent need to oppose this practice, posing severe threats to deep ocean ecosystems and risking stored carbon release. Despite claims of aiding green initiatives, deep sea mining carries significant ecological risks which are often not highlighted in the media. Through the lens of ‘new materialism,’ the focus extends beyond the traditional understanding of pollution as a byproduct of material use, prompting deeper reflections on the complex relationships between bodies, materials, and ecological systems. Here is the link to the article:

<https://www.greenpeace.org.uk/news/deep-sea-mining-a-concrete-threat-we-need-to-shut-down-now/>.

The final theme, “Environmental Futures,” intricately weaves together time, hope, and design possibilities. While it’s tempting to lose hope, it underscores the significance of perseverance, urging us to persist and envision realistic interventions embracing ecological principles. Here, design becomes a pivotal force, driving positive environmental transformations. Cheers to putting this knowledge into good use!

Reference list

Harkness, H. (2023) Theme 1_Lecture 1A [PDF], Experience and the Environment: *Design and the Senses, Making and Consuming*. University of Edinburgh.

Harkness, H. (2023) Theme 1_Lecture 1B [PDF], Experience and the Environment: *Design and the Senses, Making and Consumption*. University of Edinburgh.

Harkness, H. (2023) Theme 2_Lecture 2A [PDF], Experience and the Environment: *Labour, Social Justice and Environmental Design*. University of Edinburgh.

Harkness, H. (2023) Theme 2_Lecture 2B [PDF], Experience and the Environment: *Labour, Social Justice and Environmental Design*. University of Edinburgh.

Harkness, H. (2023) Theme 3_Lecture A [PDF], Materials and (new) Materialism: *Bodies, Resources and Pollution*. University of Edinburgh.

Harkness, H. (2023) Theme 3_Lecture B [PDF], Materials and (new) Materialism: *Bodies, Resources and Pollution*. University of Edinburgh.

Harkness, H. (2023) Theme 4_Lecture A [PDF], Environmental Futures: *Time, Hope and Possibilities in Design*. University of Edinburgh.

Harkness, H. (2023) Theme 4_Lecture B [PDF], Environmental Futures: *Time, Hope and Possibilities in Design*. University of Edinburgh.

What simple actions can people take to reduce their carbon footprints? (2023) *Greenpeace UK*. Available at: <https://www.greenpeace.org.uk/news/what-simple-actions-can-people-take-to-reduce-their-carbon-footprints/>.

Deep Sea Mining: A concrete threat we need to shut down now (2023) *Greenpeace UK*. Available at: <https://www.greenpeace.org.uk/news/deep-sea-mining-a-concrete-threat-we-need-to-shut-down-now/>.

Week 10 – Practice Humility

Entering the Anthropocene, defined by humanity's unparalleled influence on Earth's systems, shifts our perception of time and responsibility. The Capitalocene is propelled by our capitalist systems which we, as a collective, need to reflect on. By cultivating humility in the face of our immense impact, we pave the way for a more conscientious and respectful coexistence with the Earth and all its inhabitants.

What I have found to be incredibly useful to use as a rule of thumb is "The Guiding Principles for Slow Design" introduced

by Strauss and Alastair Fuad-Luke. These principles are a fundamental ground to move forward with in my Graphic Design career.



The Meadows. Photo by Christina Yang.

The Slow Design principles can be applied to anything including the University of Edinburgh's buildings. Here is my take: instead of appearing to be perfect, the campus buildings can incorporate exposed structural elements and designs that reveal the history of student experiences. To expand beyond functionality, the architecture can encourage expressions by creating spaces that inspire creativity. Furthermore, spaces for quiet reflection and open areas allow students to reflect and process. The architecture design can also promote community by designing communal areas for engagement such as group study spaces and help students participate by fostering a sense of community within the university. Last but not least, acknowledging the need for change and adapting to the

need for different spaces, usage of sustainable materials, and having flexibility are elements to a holistic sense of wellness.

It is interesting to reflect on the relationship between design and time since design, in its various forms, encapsulates perspectives on how time is perceived. One aspect is “slow time” which emphasizes the value of unhurried processes, mindful craftsmanship, and sustainable practices. Designs that embody “slow time” prioritize longevity. Another notion is “long now” which represents a far-reaching perspective that transcends immediate concerns, which means sustaining across generations and enduring solutions over short-term gains. This emphasizes durability, adaptability, and a sense of responsibility. Then there are “presents in the making” that reveal our relationship with materials influenced by our current perceptions of time. Together, these concepts become a canvas reflecting societal attitudes, cultural values, and evolving understandings of time. Designing a future embedded with awareness is one step closer to building a better tomorrow. As we confront the reality of living in an era where our actions hold the power to mold the Earth’s fate, the concept of time undergoes a profound transformation – it urges us to pause, reflect, and acknowledge our limitations.

Van der Ryn and Cowan’s Five Principles for ecological design:

1. Solutions Grow from Place
2. Ecological Accounting Informs Design
3. Design with Nature
4. Everyone is a Designer
5. Make Nature Visible

My manifesto:

1. The vision is for designers, architects, and consumers all to prioritize the planet for sustainable living.
2. To take responsibility for material sourcing and use innovative and cradle-to-cradle principles to minimize environmental impact.
3. To ensure fair labour conditions and have ethical production throughout.
4. To educate and collaborate throughout disciplines to create a new generation of sustainable thinkers.
5. To integrate elements of nature into design, drawing from its efficiency and promoting biodiversity.

Class manifesto combined:

1. Design for the future using the past. Use existing materials in circulation and knowledge and ideas to develop future ones to benefit the environment. Find recycling methods for all waste.
2. Design following and for nature. Nature has already figured out the most successful way to thrive, let's copy. Create for all, human and non-human. Eliminate the binary opposition between humans and nature. Let us breathe with the earth.
3. Design to link up – Interlink between different sectors and processes. Become circular. Good design is a natural continuation. Understand the lifecycle of what is created.
4. Take responsibility. Be critical about projects, be transparent where designs have failed, boycott carbon-heavy clients. Acknowledge the balance between designers & stakeholders. Recognize the systems at work.
5. Respect the material.
6. Design with place in mind. Acknowledge and respect what's already there. Design should be a reflection of the context of its location. No one size fits all! Consider the local climate, and embrace the skills of local people and materials from that specific area.

7. Un/non-design. Conserve, leave alone, don't make, don't take up space, and even subtract (rather than add)!

Reference list

Harkness, H. (2023) Theme 4_Lecture A [PDF], Environmental Futures: *Time, Hope and Possibilities in Design*. University of Edinburgh.

Van der Ryn, S., & Cowan, S. (2007). *Ecological design*. 10th anniversary ed. Washington, DC, Island Press.

Week 9 – Green Futures Need Action Now

Our fingerprints are everywhere, disrupting vital carbon and nitrogen cycles to crafting radionuclides and fossilized plastics in unprecedented quantities creating disturbing ethical implications of dominance.

Ecological design is a design approach that seeks inspiration from and mimics natural systems – it aims to create sustainable, efficient, and regenerative solutions. The comparison between ecological design and conventional design often highlights the differences in their approaches to resources, waste, systemic thinking, and adaptability. This comparison is useful as it serves to underscore the significant shifts required in design thinking and practices

to address environmental concerns and create sustainable solutions. Embodied in the works of Sim Van der Ryn and Stuart Cowan, ecological design mirrors life, seamlessly integrating with living systems to minimize environmental impact. To me, the juxtaposition of ecological design against conventional methods serves as a compelling framework, instilling a sense of urgency to integrate ecological principles at the heart of our design endeavors.

“Scale linking” in the context of ecological design refers to the principle of integrating patterns and structures found in nature across different scales into the design process. It involves recognizing and incorporating geometrical, structural, or organizational patterns present in natural systems and applying them at various scales within a design. This concept is vital because natural systems often exhibit fractal or self-similar patterns across different scales. For instance, the branching patterns of trees mimic the branching of their smaller twigs and branches, which in turn resemble the larger branches and the overall shape of the tree. These patterns repeat at various scales, creating a coherent and efficient structure.



A park near Dean Village. Photo by Christina Yang.

Green roofs embody the five principles of ecological design. First, it mimics nature by covering building rooftops with vegetation, similar to how natural landscapes support plant life. They utilize native plants suited to the local climate, fostering biodiversity and supporting local wildlife, thus emulating natural ecosystems. Secondly, it promotes sustainability by providing insulation and reducing energy costs. Additionally, it absorbs rainwater by reducing runoffs and helping manage stormwater. Lastly, they contribute to air purification and carbon sequestration, enhancing the environment. Green roofs incorporate various scales of biodiversity, from microorganisms in the soil to larger plants, mirroring the layering and diversity seen in natural ecosystems. The Anthropocene narrative is a symphony of perspectives and revelations, urging introspection, accountability, and a collective vision for a harmonious

future where humanity and the planet thrive in a balanced, symbiotic dance.

Reference list

Harkness, H. (2023) Theme 4_Lecture A [PDF], Environmental Futures: *Time, Hope and Possibilities in Design*. University of Edinburgh.

Van der Ryn, S., & Cowan, S. (2007). *Ecological design*. 10th anniversary ed. Washington, DC, Island Press.

Week 8 – Plastic is Everywhere

In the late 19th century, plastics emerged as clever alternatives, celebrated for their role in enabling middle-class growth and technological advancements in photography, film, and electrical applications. Although initially praised, plastics faced a decline, becoming synonymous with inauthenticity. Designers successfully revamped plastic's image, aligning it with modernist beliefs. Fast forward to the 1970s, heightened environmental awareness shed light on plastic's harmful impact.

Adapting to environmental concerns, chemical companies downplayed chemical talk. Today, plastics are emblematic of our synthetic mess and resource toll. Robert Callender's

'Plastic Beach' vividly visualizes plastic debris, sparking contemplation on plasticity. Eco-building explores natural materials, 'Thing-Materials' like recycled tires, and energy-saving options.

Mark A. Miodownik passionately advocates for the reunion of material arts and sciences, emphasizing the enriching dialogue between creativity and scientific rigor. Meanwhile, Kate Franklin and Caroline Till present cutting-edge material approaches, injecting innovation into the discourse. This narrative intricately explores the interconnected nature of matter, using plastics as a compelling case study in grappling with material challenges and recalcitrance. The overarching theme goes beyond understanding materials; it calls for active engagement with the environmental impact, laying the groundwork for Environmental Futures – an immersive exploration into the intersection of time, hope, and design possibilities amid the ever-evolving dynamics between humans and their environment.



Plastic creation by me. Photo by Christina Yang.

This week's workshop was inspiring, prompting me to spend a day at home doing this art project. I transformed plastic water bottles using scissors to shape them, cutting edges, and using red, orange, and yellow markers for a colorful touch. Then, I used a lighter to give it a curved texture and secured everything with hot glue. Given the prevalence of plastic water bottles, I felt comfortably acquainted with the materials.

Working on this project was a lot of fun. I envision it as a stylish decor or accessory piece, and the best part is that

I've taken a step towards upcycling by giving these bottles a new purpose beyond their initial use. The material "pushed back" when I got a cut from the sharp plastic edges. While I'm proud of this individual piece, scaling up the production would be labor-intensive, and I'm unsure if I would make more than ten. This experience has sparked a contemplation on the intricacies of working with unconventional materials and the art of upcycling. As I reflect on this creative journey, I'm reminded that every cut and challenge is a part of the story, making the final piece even more meaningful.

Reference list

Bennett, Jane. (2010) *Vibrant Matter: a Political Ecology of Things*. Durham Duke University Press.

Harkness, H. (2023) Theme 3_Lecture B [PDF], *Materials and (new) Materialism: Bodies, Resources and Pollution*. University of Edinburgh.

Week 7 – Materiality and Sustainability

Carbon's Journey is a thrilling account of carbon's adventures in the air after escaping a chimney. Wind, water, and diverse terrains influence its tumultuous eight-year voyage, showcasing its dynamic interactions with living organisms like falcons. Yet, it underlines its fleeting role in biological

systems, making for an engaging narrative of organic escapades. Diving into Historical Materialism coined by Marx: It's a vibrant lens for understanding history, spotlighting the dynamic relationship between the physical world, economic forces, and social change. By identifying internal contradictions in material production systems as the 'engine of history,' it critiques our consumerist obsession with material goods.

Switching gears to the 'material turn' in social sciences: Imagine a thrilling shift toward 'materiality' rather than just the physical aspects of objects. Drawing inspiration from James Gibson's environmental classification, it challenges the notion of imposed forms, asserting instead that they dynamically generate and dissolve in material fluxes. This perspective, emphasizing the dynamic and relational nature of material properties, encourages us to tell their stories, providing a captivating narrative lens on the fascinating interplay of forces within materiality.



Playground in Leith. Photo by Christina Yang.

Imagine a kids' playground as an exciting analogy for exploring these concepts. The playground represents the chapters' exploration of materials innovation, substance, and form. It's like the various play structures and equipment that make up the space, each designed with different materials to create a dynamic and engaging environment. Now, think of the children at play as the 'ecologies of material's social lives.' They interact with the playground structures, creating a lively and interconnected social scene.

Sarah Wilkes' chapter on sustainability could be compared to the playground's emphasis on safety and eco-friendly design. It's like the swings and slides being made from recycled materials, teaching kids about the importance of taking care of their environment. The idea of the co-constitution of substances and subjects is like the children themselves, actively shaping and being shaped by their play experiences.

Now, let's bring in Jane Bennett's ideas. In the playground, 'Thing power' is evident when you see inanimate play structures coming to life through the actions of the children. The litany for vital materialists resonates with the belief in the playground's vitality, recognizing that not only humans but also the non-human elements—like the swings, slides, and the ground itself—contribute to the energy and excitement of the space. Think of 'Thing Power' examples in the playground: Litter becomes a teachable moment about cleanliness, electricity powers interactive features, food may be part of a picnic area, metal structures provide durability, and worms in the soil contribute to the playground's ecosystem.

Reference list

Bennett, Jane. (2010) *Vibrant Matter: a Political Ecology of Things*. Durham Duke University Press.

Harkness, H. (2023) Theme 3_Lecture A [PDF], Materials and (new) Materialism: *Bodies, Resources and Pollution*. University of Edinburgh.

Week 6 – Annotated Bibliography: Rethink How We

Package Materials

Alexander, C, & Reno, J (eds) 2012, *Economies of Recycling : The Global Transformation of Materials, Values and Social Relations*, Bloomsbury Academic & Professional, London. Available from: *ProQuest Ebook Central*. [26 October 2023].

Recycling, a key aspect of environmental reform since the 1970s, involves converting used materials into new ones. It faces challenges due to the cost of keeping materials in place for revaluation, often leading to dumping waste in regions with lax regulations. This book explores the moral and political significance of recycling in transforming nature and human beings, highlighting its impact on diverse people and regions. It also discusses the historical shift from household recycling to organized urban recycling and its influence on modernity.

Ebnesajjad, S (ed.) 2013, *Plastic Films in Food Packaging : Materials, Technology and Applications*, Elsevier Science & Technology Books, San Diego. Available from: *ProQuest Ebook Central*. [26 October 2023].

This book introduces the use of plastics in food packaging, emphasizing commercial plastic films that act as barriers to protect food from contaminants. It explores the significance of flexible packaging in preserving food quality, replacing traditional containers for some products. The book also delves into the chemistry of various plastics used in packaging films and highlights the role of specialty polyesters like PET and PEN in the industry.

Ingold, T 2000, *Perception of the Environment : Essays on Livelihood, Dwelling and Skill*, Taylor & Francis Group, London. Available from: *ProQuest Ebook Central*. [26 October 2023].

This book traces its roots back to the author's academic journey, motivated by a desire to unite the realms of natural science and humanities within anthropology. It highlights the author's quest to bridge the gap between biophysical and sociocultural anthropology, emphasizing the essential complementarity of these dimensions in understanding human existence. It proposes a relational, ecological, and developmental synthesis that breaks down the traditional dualism between person and organism. Additionally, it grapples with the challenges of using concepts like "the Western" and "the modern" while emphasizing the importance of critical inquiry and rational thinking within academia.

Ouyang, Y, Xu, M, Yang, L, & Liu, XT (eds) 2014, Research on Food Packaging Technology, Trans Tech Publications, Limited, Zurich. Available from: *ProQuest Ebook Central*. [26 October 2023].

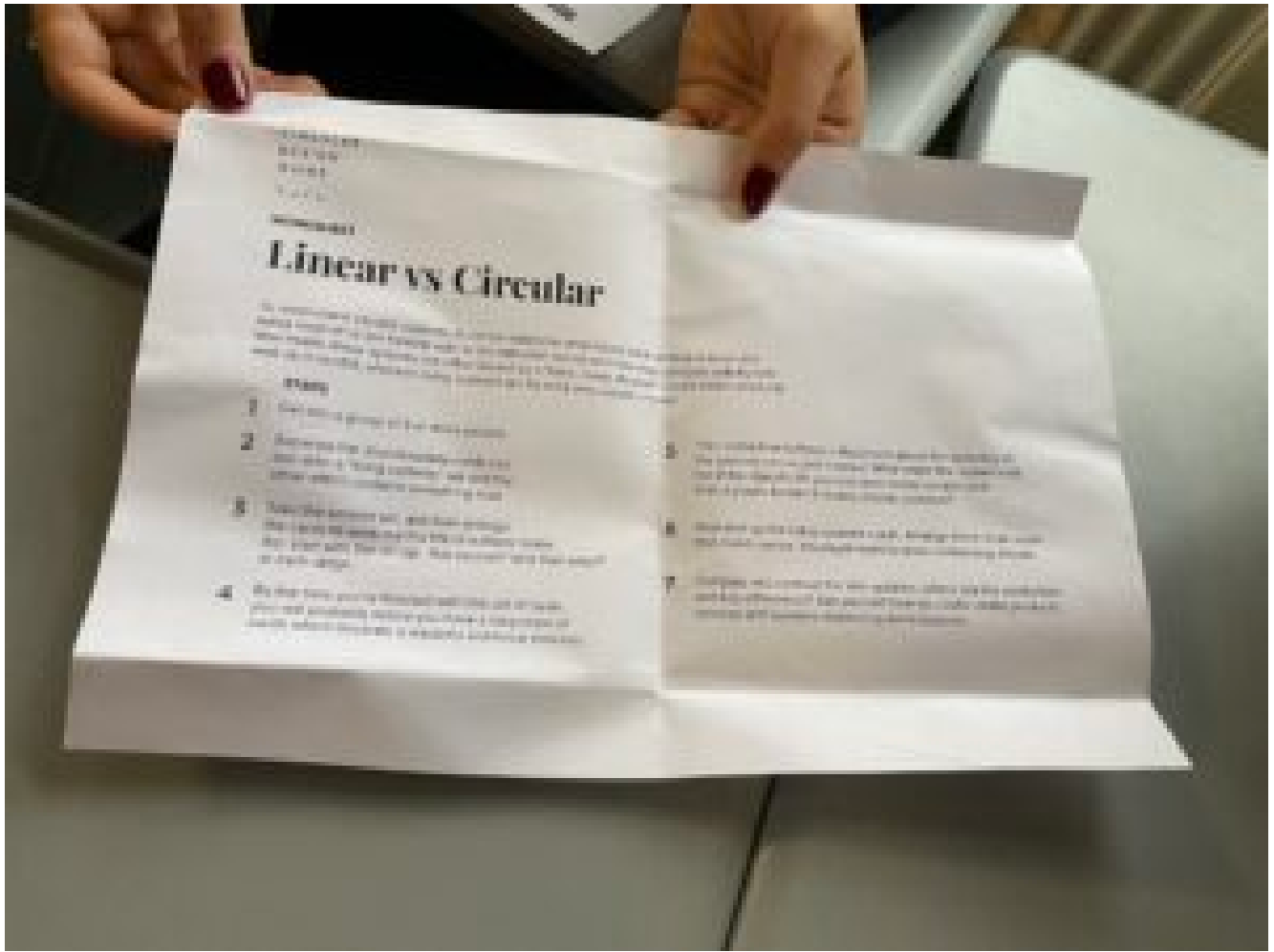
This book discusses the "2013 China Academic Conference on Food Packaging," a collaborative effort between the China Academy of Printing Technology and Tianjin University of Science and Technology. It highlights the growth of China's packaging industry and its importance in ensuring food safety. The conference covered topics such as new materials in food packaging, food packaging safety, and the application of technology in food safety.

Week 5 – Possessions with a Past

Design + Activism = Design activism. What does that entail?

From what I've gathered in the lecture, it's about reallocating resources, reconfiguring systems, and reprioritizing. It may sound simple in nature but it encompasses challenges like neoliberalism, economic recession, social injustices, political laws, and climate change. When we talk about design activism, it's not just about solving these problems; it's also about coming up with new ideas and ways of thinking about them, which can lead to the creation of new ontologies. In other words, design activism is both material, idea-driven, and political in nature; addressing everyday aspects of life while being motivated by concepts and insights.

A good friend of mine works as a civil engineer, and I've noticed that the lessons from the Standing Rock protest and camp can provide an excellent example for the field of civil engineering. Much like the goal of creating a new community of change, civil engineers can adopt an approach that focuses on the local community, working closely with residents to plan and build infrastructure projects that suit their needs and cultural heritage. In civil engineering, understanding a site's history, as highlighted at Standing Rock, is equally important to make wise choices that honour the area's heritage and environment. Furthermore, the idea of promoting shared, sustainable practices in design echoes the significance of using eco-friendly methods and involving the community in the engineering process. This commitment to being conscientious custodians of the environment aligns seamlessly with the core principle of stewardship in civil engineering, guaranteeing that infrastructure serves the needs of future generations.



Linear vs. Circular workshop description. Photo by Christina Yang.



Life of a plastic water bottle. Photo by Christina Yang.



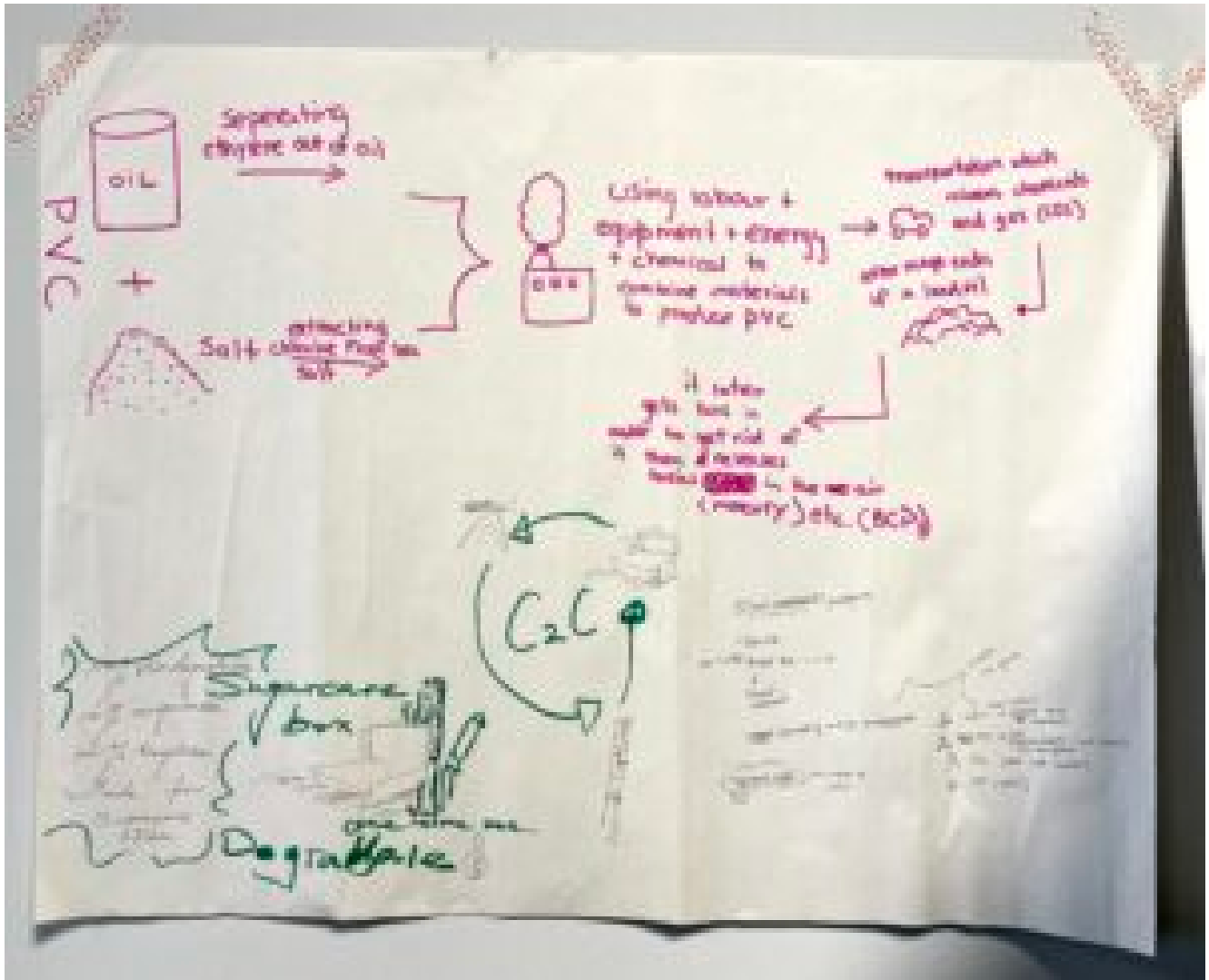
Linear system. Photo by Christina Yang.



Circular system. Photo by Christina Yang.

A circular economy, as defined by the Ellen MacArthur Foundation, embodies an economic framework focused on regeneration and resource optimization while minimizing waste. The role of storytelling is pivotal in understanding how products are created and used, potentially transforming production processes and post-use scenarios. Recognizing the influence of capitalist societies, labour, and their environmental impacts is essential for achieving both social and environmental justice. In this week's workshop, "Circular Redesign – From Linear Economies to Circular Ones," the interconnectedness of social and environmental justice is reinforced. The proposed shift from a linear "cradle-to-grave" approach to a more comprehensive "cradle-to-cradle" model aligns with the transition to a circular economy, aiming for

regeneration and redemption, with a strong emphasis on sustainability and waste reduction. In our group's exploration, we delved into various pathways concerning waste and repurposing, with a focus on examining food packaging for the second part of the workshop.



Group exploration: Food Packaging. Photo by Christina Yang.

Reference list

Lee, Deishin, and Lionel Bony. "Cradle-to-Cradle Design at Herman Miller: *Moving Toward Environmental Sustainability*."

Harvard Business School Case 607-003, May 2007.

Harkness, H. (2023) Theme 2_Lecture 2A [PDF], *Stories of Stuff: Social Justice and Environmental Design*. University of Edinburgh.

Week 4 – Deconstruct Capitalism

Capitalism... what a loaded word. The first step to deconstruct anything is to break it down to understand it. According to Karl Marx, capitalism involves private ownership of production means, mass production technologies, profit-driven motives, and the accumulation of surplus value. Workers are portrayed as compelled to sell their labor power to make a living. Within this work, Marx's theory of historical materialism is prominently developed, shedding light on the stark realities of industrial exploitation and social hardship; alienation is depicted as the dehumanization of workers and exploitation.

The way we make things reveals our ideologies, our values, flaws, and hopes and dreams. There are two types of planetary material flows: biological nutrients that benefit the biosphere and technical nutrients that serve the technosphere (industrial processes). William McDonough and Michael Braungart introduced the "Cradle to Cradle" concept in their 2002 book, "Cradle to Cradle: Remaking the Way We Make Things." This book advocates for an environmentally sustainable approach to design and production. The Hannover Principles, written in 1992 for the EXPO 2000 World's Fair in Hannover, Germany, serve as foundational principles for sustainable design, emphasizing our interdependence with

nature. McDonough and Braungart critique the traditional “Cradle to Grave” industrial model, which results in waste, pollution, and resource depletion as products are discarded. They propose a “Cradle to Cradle” approach, where products are designed with recycling and environmental safety in mind. Cradle-to-Grave is the linear industrial model, while Cradle-to-Cradle advocates designing products for recyclability and environmental harmony. The authors coin the term “Monstrous Hybrids” for products or processes that harm the environment by combining unnatural materials. These hybrids result in pollution, waste, and resource depletion. The Cradle-to-Cradle approach focuses on using materials that can safely reintegrate into natural systems.



*Grayson Perry's Work: Selfie with Political Causes, 2018.
Photo by Christina Yang.*

Selfie with Political Causes, 2018

Colour woodcut

Edition of 15 plus 2 artist's proofs

I made this piece in response to the rise of the social justice warriors, particularly online. They are out to rid the world of racism, homophobia, sexism and poverty but they struggle with the unhelpful toxic by-products of democracy, free speech and tolerance. The imagery was inspired by an Indian miniature painting - an equestrian portrait where the horse was enormous with a tiny figure perched upon it. I liked the feeling of a puny human sat upon a powerful mount that was a bit out of control. This woodblock print was cut by a computer-controlled router, then hand-printed using the back of a spoon. The dimensions were governed by the largest available size of Pampas for the frame.

Courtesy the artist, Pampas | Contemporary Editions Ltd
and Victoria Miro

Grayson Perry's description: Selfie with Political Causes, 2018. Photo by Christina Yang.

I had a visit to the Royal Scottish Academy (National Galleries of Scotland) where I had the opportunity to explore Grayson Perry's exhibition, *Smash Hits*. The piece, "Selfie with Political Causes" (2018) left a lasting impression because it challenges the superficial nature of our society. The artwork and *Cradle-to-Cradle* both critically examine the prevailing cultural norms and practices. "Selfie with Political Causes" questions the authenticity of outward appearances, highlighting the hollowness that can exist beneath constructed images. Similarly, *Cradle-to-Cradle*

thinking encourages a reevaluation of the traditional linear industrial model, where products are designed with a focus on their outward appearance and functionality but often lack sustainability and consideration for their environmental impact.

Reference list

Lee, Deishin, and Lionel Bony. "Cradle-to-Cradle Design at Herman Miller: *Moving Toward Environmental Sustainability*." Harvard Business School Case 607-003, May 2007.

Harkness, H. (2023) Theme 2_Lecture 2A [PDF], Experience and the Environment: *Labour, Social Justice and Environmental Design*. University of Edinburgh.

Week 3 – Unearthing

We're currently facing a critical time with a multitude of environmental crises threatening our world. This week's lecture struck a chord with me, addressing issues like climate change, habitat destruction, pollution, and resource depletion, all of which endanger the well-being of both the current and generations onwards.

It's evident that human activities, especially in sectors like industrialization, urbanization, and agriculture, have a substantial impact on our environment. It is imperative that we comprehend these interactions and take measures to minimize

their detrimental effects. This brings us to the topic of ecosystems, which are currently experiencing a rapid loss of biodiversity. This loss has far-reaching consequences, not only for our ecology but also for our economy.

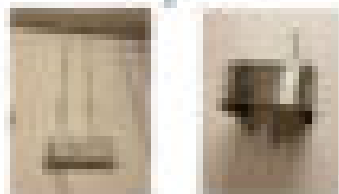
Ecological literacy fosters an awareness of our deep connection to the natural world, promoting sustainable lifestyles. This educational approach acknowledges that our environment is the foundation of prosperity and calls for a cultural shift in priorities. The concept of eco-literacy was introduced by David Orr. Ecoliteracy and environmental design promote sustainable practices that protect biodiversity. Additionally, the scarcity of resources, such as the depletion of finite resources like fossil fuels and freshwater, underscores the necessity for more sustainable resource management and design solutions.

There is a bright side, which is the potential technology to provide for sustainable design and resource management. For example, graphic design agencies are increasingly adopting sustainable practices, notably eco-friendly inks and materials. This shift is a response to environmental concerns and includes the use of water-based inks, soy/vegetable inks, UV inks, and even innovative algae inks. These alternatives reduce volatile organic compounds (VOCs), air pollution, and health risks associated with traditional solvent-based inks. Simultaneously, many agencies are choosing recycled and biodegradable materials for their projects. This sustainable approach not only lessens their carbon footprint but also sets an example for the design industry, meeting consumer demands for eco-conscious solutions and demonstrating a commitment to environmental responsibility.

Pipes • electronic pipe • metal pipe • hole in ground • channel of air • hole in wall	Wilderness • forest • field • garden	Lichens • on wall • on ground • on rock
Fire • fire light • fire light • fire light	Paths • narrow path • path • path	Viruses • virus • virus
Water • water • water • water	Shells • shell • shell • shell	Animals • animal • animal • animal
Climate • wind • wind • wind	Islands • island • island • island	Trees • tree • tree • tree
Trade • trade • trade • trade	House • house • house • house	Pets • pet • pet • pet
Dust • dust • dust • dust	Boundaries • boundary • boundary • boundary	Food • food • food • food
Pollution/ Pollutants • pollution • pollution • pollution	Buildings • building • building • building	Radio • radio • radio • radio

Worksheet for A Patterned Ground Treasure Hunt. Photo by Christina Yang.

Pipes



Wilderness



Lichens



Fire



Parks



Viruses



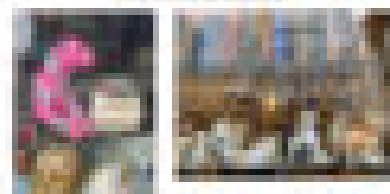
Water



Shelter



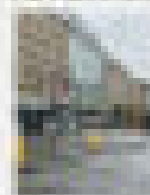
Animals



Climate



Islands



Trees



Trade



Home



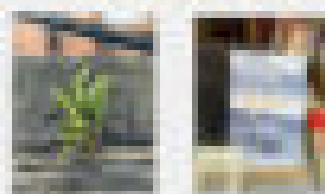
Pubs



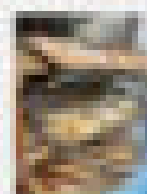
Dust



Boundaries



Food



Pollution/
Pollutants



Buildings



Radio



Categorizing for A Patterned Ground Treasure Hunt. Photo by Christina Yang.

The workshop this week focused on the nature-culture relationship, exploring the entanglements between the two. Dr. Rachel Harkness stated that this exercise is inspired by the “Patterned Ground” book; a collection of short essays underscoring the significance of acknowledging the world as an interplay between nature and culture, as well as the interactions between human and nonhuman elements. The workshop was an enriching one, and the class discussion helped me better grasp the concepts – the key idea is that humans are not separate from nature, but deeply interconnected with it.

Reference list

Harrison, S., Pile, S. and Thrift, N. (2004) *Patterned ground: Entanglements of nature and culture*. London: Reaktion.

Harkness, H. (2023) Theme 1_Lecture 1B [PDF], Experience and the Environment: *Design and the Senses, Making and Consumption*. University of Edinburgh.

Week 2 – Language and Dualism

This week’s lecture highlights the historical tendency in Western thought to not only dichotomize the mind and body but also to establish a clear divide between ‘Culture’ and the remote concept of ‘Nature.’ This single notion ignites deep

discussions around the power of language for division. Tim Ingold introduces the concept of 'Nature' with a capital N, highlighting its nuanced connotations compared to the environment. It's imperative to acknowledge the Western perspective and break free from the dualistic thinking we have imposed upon our culture. Furthermore, we can observe other dualisms such as male and female, emotional and rational. A thought-provoking quote from Philippe Descola and Gisli Palsson's work in 2013 [1996] emphasizes the idea that "Nature is a social construct, and conceptualizations of the environment are shaped by ever-changing historical contexts and cultural specificities."

The Anthropocene, marking an era of significant human impact on the environment, prompts scholars in design and environmental history to assess design's role in shaping environmental narratives, advocate for design activism in addressing environmental challenges, recognize the influence of nonhuman agents, and emphasize narratives of care and responsibility in an ever-changing world. The three case studies mentioned by Fallan and Jorgensen to demonstrate the renewal of understanding in environmental histories of design are: The Pink Plastic Flamingo, The SUV, and The Hoover Dam.



Zebra constrained in a building. Photo by Christina Yang.

In my discussion group, I've noticed the importance of the narrative being promoted, particularly how companies often shift the burden of responsibility onto consumers despite holding the greatest power for impactful change. Additionally, the distinction between genuine environmental efforts and greenwashing as a capitalist marketing tool has become evident. My discipline in Graphic Design encompasses packaging design which is essential to put environmental considerations at the forefront. I believe that making environmentally friendly choices more convenient and enhancing the user experience can encourage more people to opt for eco-friendly

alternatives. For example, replacing paper straws with durable options like wheat or corn stalk straws can improve user satisfaction and reduce environmental impact. Price's work on the Pink Plastic Flamingo suggests that nature can be commodified and reduced to a kitschy symbol, highlighting how consumer culture shapes our perception of the natural world. Rollins' study of the SUV reveals that nature is often manipulated to fit human desires and preferences, emphasizing the anthropocentric view that nature should serve human convenience, even at the expense of environmental concerns. Both works illustrate how human interactions with nature are deeply influenced by consumerism and societal values, prompting us to reevaluate what we view as the norm.

Reference list

Fallan, K. & Jørgensen, F.A. (2017) Environmental Histories of Design: Towards a New Research Agenda. *Journal of Design History*. 30 (2), 103–121. doi:10.1093/jdh/epx017.

Harkness, H. (2023) Theme 1_Lecture 1A [PDF], Experience and the Environment: *Design and the Senses, Making and Consuming*. University of Edinburgh.