# week 11- environmental futures: reflecting on the course



# "If design is ecologically responsive, then it is also revolutionary." (Papanek, 1977:200)

For me, this quote summarises my learning research and thoughts perfectly. As emphasized consistently in my blog posts, I firmly believe that as the next generation of designers, it is extremely important to proactively embrace a design approach that works with our environment, not against it.

I have found this course to be both enlightening and eyeopening. Though I was already aware of environmental issues and driven by a sense of responsibility in my own practice, I did not anticipate the depth of insights and paradigm shifts that awaited me.

The key idea I will take away from this course is the interconnectedness between the environment and design. It has become a key focus of mine to create designs which are not only visually appealing but consider our environment within every stage of the making process. This realization was heavily influenced by the ecological design philosophy of Van

Der Ryn and Cowan, which emphasises the interconnectedness of all living entities. The concept of interconnectedness has fundamentally altered my perspective, serving as a constant reminder that design goes beyond aesthetics and function.

The concept of "cradle-to-cradle" design, put forward by McDonough and Braungart, has also hugely impacted my perspective on sustainable design. The cradle-to-cradle framework challenges the traditional model of "cradle-to-grave" by envisioning materials that can be continually recycled or biodegraded. This reading imparticular made me reflect on my design decisions and consider the full lifecycle implications of my designs. I feel morally obliged to make a conscious effort to integrate sustainability into every project.

Though theorists have definitely helped assist my learning, I have been sure to remind myself that they are largely philosophical, and have used my blogs as a means of being critical of their idealist nature. However, I do think it is important that as designers we are open-minded and are able to imagine all sorts of possible futures, as these discussions are the key to starting change.

# Changes I have started to make...

As a result of my reflection over the past 10 weeks, I have found myself increasingly drawn to the philosophy of slow design. The principles that underpin this approach align seamlessly with my design practice of textiles. In a world where fast fashion is such a huge issue, I am trying to design with intention, selecting materials that are not only aesthetically pleasing but also environmentally responsible.

My own research led me to watch the **RiverBlue documentary**, which explores the environmental impact of the fashion industry on rivers around the world. The film highlights the pollution caused by the production of clothing, particularly

the extensive use of toxic chemicals and dyes, which often end up contaminating water sources. I found the documentary to be an extremely eye-opening exploration of the dark side of the fashion industry. It has urged me to be more conscious of my clothing choices and consider ways that I can contribute to advocating for sustainable and environmentally friendly practices within textiles and fashion.





Of the back of this, I have begun exploring organic fibres, and sustainable dyeing techniques that prioritize longevity over disposability.

#### Summarising my findings surrounding natural dyes:

Natural dyes are a great choice for conscious fashion as they advocate that the process of design is slow and intentional. It can also be a zero-waste alternative, especially when food waste is used for dyeing purposes. While there are complexities around sustainably upscaling natural dyes, they are still a great option for small, conscious fashion brands. I think that upscaling these processes for large-scale companies will require a lot of transparency and compromise. I don't think either natural or synthetic dyes are entirely right or wrong, but could be combined to work towards a more environmentally conscious design outlook.

#### Natural dye development so far...



fabrics dyed with black tea



fabrics dyed with logwood



fabrics dyed with black beans



soaking hornbeam bark for natural dye colour



soaking ivory leaves in dye bath to extract natural colour As I continue my journey in the textile design field, I believe that the principles of slow design will remain at the core of my practice. Following this course, I feel a renewed

sense of responsibility to create products and materials that not only minimize harm but actively contribute to the regeneration of our environment. I have begun to understand that environmental design is an evolving discipline that demands continuous learning and adaptation. As a young designer, I believe that I have a commitment to staying informed and being responsive to an evolving industry with constant challenges. I am driven by the prospect of transitioning into a professional role within the textiles industry, where I can contribute to the development of new materials that challenge the conventions of traditional design, through thoughtful, intentional, and ecologically conscious practices.

#### References:

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Cowan, S. and Van der Ryn, S. (1996) *Ecological design.* Washington D.C: Island Press.

Papanek, V. (1977). Design for the Real World: Human Ecology and Social Change. New York: Pantheon.

River Blue. (2017). [DVD]. Directed by: David McIlvride and Roger Williams. Canada: Paddle Productions.

### week 10: environmental

# futures- reflecting on the Anthropocene



In recent weeks, my exploration of environmental design has led me to reflect on the concept of the Anthropocene and I felt the need to revisit it in these final weeks of blog posts. Initially, I found this idea perplexing and somewhat unnecessary- a complex term for something we already know. However, as I started contextualizing it within theories and research throughout the course, I began to recognize its significance in reshaping our relationship with the environment.

"'Anthropocene' is the proposed name for a geologic epoch in which humans have become the major force determining the continuing livability of the earth." (Lowenhaupt Tsing, Bubandt, Gan and Swanson, 2017:1). The concept of the Anthropocene reflects a shift in our understanding of humanity's impact on the Earth and acknowledges that humans have become the primary force determining the planet's continued livability. Additionally, the term "Capitalocene" introduces a critical perspective, emphasizing the crucial role of capitalist systems in driving environmental changes.

What strikes me is that both these terms have been devised by humans themselves. It appears that we have been aware of our impact for years, enough to theorize and define, yet not enough to make meaningful change. Surely increased awareness of human influence should make us more considerate. The notion that our actions can alter the course of geological history

should, in theory, evoke a sense of responsibility to act cautiously and sustainably. However, the reality is different, and the majority continues to prioritize short-term gains over long-term consequences, contributing to what Tony Fry termed as a "still accelerating defuturing condition of unsustainability" (Fry, 2009).

The concept of defuturing suggests that, by persisting in unsustainable actions, we are robbing ourselves and other living species of a future. It has now been over a decade since Fry's warning, which provokes the question: Why do we still resist the critical need for a shift in design thinking, continuing to compromise the well-being of our environment?

### The perspective of time

The idea of living in the Anthropocene prompts a reconsideration of our relationship with time. Unlike traditional geological ages that natural processes, the Anthropocene highlights how human activities, particularly capitalism, are rapidly altering the environment. This acceleration challenges our conventional understanding of time, emphasizing the urgent need to recognize the rapid geological impact of human actions. I would argue that if this was better understood and more widely explained, it could be a critical point for change and better understanding within wider society.

## An unsettling feeling

For me personally the Anthropocene instills an unsettling feeling. It truly puts into perspective the rapid and uncomfortable changes humans are imposing on the environment. The level of uncertainty created by human activities is discomforting and highlights the misguided sense of power that our humancentric societies possess. Paradoxically, our belief in total control over our environment has led to a situation

where we have very little control. Though perhaps most concerningly, the misguided feeling of power still largely remains.

"The warning given by the Anthropocene concept, and the recent advances in the sciences of the Earth system, thus go much further than an anthropocentric view of the 'environmental crisis', no matter how alarming" (Bonneuil, 2017:19). The Anthropocene prompts us to think about the impact of humans and capitalist systems on earth. It provides an unsettling yet beneficial perspective, encouraging us to understand why changes need to be made and how critical it is to take more sustainable paths forward.

## Designer of the week...

However, despite the challenges, there are positive developments. As a textile designer focused on material innovation, I am optimistic about our future. One noteworthy example is cactus leather developed by **Desserto**.

After two years of research and development, Adrián López Velarde and Marte Cázarez created a marketable cactus-based material. This innovation minimizes water use, eliminates the need for irrigation systems, and contributes to reducing greenhouse emissions. Unlike other supposedly sustainable alternatives, cactus leather avoids toxic substances in processing and dyeing. This example highlights the potential for sustainable practices in design, offering a glimpse into a future where innovative materials work with, not against, our environment.





https://desserto.com.mx/home

References -

A.L. Tsing, H. Swanson, E. Gan, and N. Bubandt (eds.) (2017) Arts of living on a damaged planet: ghosts of the Anthropocene. Minneapolis, University of Minnesota Press.

Bonneuil, C. (2017) The shock of the Anthropocene : the Earth, history and us. London, Verso.

Fry, T. (2009) Design Futuring: Sustainability, Ethics and New Practice, Oxford, Berg.

# week 9: ecological design



Ecological Design- Sim Van Der Ryn

#### and Stuart Cowan.

"Thinking ecologically about design is a way of strengthening the weave that links nature and culture." (Van Der Ryn and Cowan, 1996:33)

This week's blog post will discuss the key reading for theme 4, "Ecological Design" by Sim Van Der Ryn and Stuart Cowan. The book explores how ecological principles are applied to design, emphasising the importance of sustainable designs that consider the impact on our environment. The authors advocate for a shift in perspective from traditional, linear design thinking to a more holistic, ecological approach. Like many of the theorists we have covered in the course thus far, they stress the interconnectedness of all elements of our environment and the need to consider the long-term consequences of design decisions, defining ecological design as "any form of design that minimizes environmentally destructive impacts by integrating itself with living processes." (Van Der Ryn and Cowan, 1996:33)

The authors outline five fundamental principles for ecological design, summarized as follows:

Solutions grow from place- Conventional practices often overlook the importance of learning from and adapting to a place over time. The physical structure of a design should not only serve its intended purpose but should also contribute to the overall efficiency and sustainability of its environment. By doing so, designers can create spaces that harmonize with their surroundings, promoting a sense of belonging and sustainability.

Ecological accounting informs design- It stresses the need to understand and minimize the ecological costs associated with resource consumption, pollution, and habitat destruction. Seeks to minimize waste and energy consumption through efficient design strategies, recycled materials, and using

renewable resources whenever possible.

**Design with nature-** Emphasizes the importance of studying and learning from natural systems. Over many years nature has developed efficient and sustainable solutions, and ecological design seeks to incorporate these strategies into human-made systems.

Everyone is a designer- This principle challenges the traditional roles of designer, participant, and user. "The best design experiences occur when no one can claim credit for the solution" (Van Der Ryn and Cowan, 1996:73) The authors believe that ignoring distinctions between designer, participant, and user is beneficial as it leads to more organic and community-driven design solutions.

Make Nature Visible- Users become more mindful and responsible as they actively engage with the technology. If a design requires people's involvement it connects them with their own biological processes and encourages a sense of responsibility and mindfulness.

Upon reflection, I feel these principles are fairly realistic and would require more simple mindset shifts and more accessible lifestyle changes than other philosophical approaches I have read prior in the course. As a designer, I feel inspired by the approach and think it challenges us to see beyond the functional demands of a project and consider the broader impact on the environment. Though these principles are posed as an optional framework for change, I personally believe that adopting them should not be seen as an option but a responsibility.

Overall, I think "Ecological Design" challenges us to think beyond the current day and embrace a future where our designs not only coexist with our environment but actively contribute to its thriving. In my opinion, it is essential that writing like that of Van Der Ryn and Cowan is widely endorsed within the design community, and made accessible to the next generation of designers. The responsibility of rectifying the environmental impact left by previous generations lies in our hands and I believe that redefining our approach to environmental consciousness and encouraging broader conversation surrounding our responsibility to the planet will be the foundation for change.

## Designer of the week...

An example where Van Der Ryn and Cowans ecological design principles are already being used is within the concept of green roofs. Instead of viewing rooftops as merely functional, green roofs envision these spaces as opportunities for biodiversity, energy efficiency, and water conservation. By combining living natural materials and architectural design, they not only enhance the aesthetic appeal of structures but 'help to create new wildlife habitats within urban environments or recreate habitats that were lost during development.' (Green Roof Organisation, 2023).

- Green roofs mimic natural ecosystems and integrate with the local environment.
- Optimize resource use on green roofs, minimizing the need for external inputs like water and fertilizers.
- Enhance building energy efficiency by providing insulation and reducing heat absorption.
- Focus on long-term durability and have minimal maintenance requirements to reduce the generation of waste over time.
- The community is involved in the design, use and maintenance of green roofs.

I personally think Green Roofs are a good example of a relatively simple change that could easily be applied to the majority of our future architectural design work. I think it demonstrates well that by making multiple small changes of a

similar nature we can gradually come together across all design disciplines to contribute to wider change.



https://www.greenrooforganisation

.org/green-roofs/

#### References

Cowan, S. and Van der Ryn, S. (1996) *Ecological design*. Washington D.C: Island Press.

Green Roof Organisation. (2023). *Green Roof Organisation*. Available at: https://www.greenrooforganisation.org (Accessed: 18 Nov 2023)

# week 8: re-thinking plastic



This week's theme posed an extremely thought-provoking and challenging question: is it time to fall in love with plastic

again? As an environmentally conscious designer, plastic and its implications on our environment are something that I have personally spent a lot of time researching. So to me, in a world increasingly aware of its environmental impact, this question initially seemed totally paradoxical. However, after re-evaluating my perspective and considering recent discussions and research, it has become apparent that the key is not to ignore the challenges posed by plastic but rather to reconsider our relationship with it.

## The rise of plastic

"Plastics renewed the ambition of shaping the world according to our purposes with no resistance from nature" (Vincent, 2013:27)

Plastic, due to its durability and malleability, has played a crucial role in technological advancement and societal transformations. Initially presented as a luxury alternative, it quickly became associated with inauthenticity and bad taste, leading to the rise of single-use plastics. The convenience of these disposable plastic products fueled a throwaway culture, contributing to severe environmental repercussions.

## An environmental awakening

Oceans filled with plastic waste, landfills overflowing with non-biodegradable products, and loss of biodiversity. Just to name a few of the many issues caused by our selfish, human-centric throwaway culture. As a result the world has begun waking up to the environmental cost of plastic, and a material that was once praised for its versatility and convenience, has now become one of the most widely criticised for its role in environmental degradation and pollution.

### Designing for a sustainable future

This awakening has also sparked innovation, with researchers and designers exploring biodegradable alternatives and sustainable solutions. The focus has shifted to creating a circular economy where plastic can be reused, repurposed, and recycled.

#### Bioplastics and sustainable alternatives

Bioplastics, derived from renewable resources like corn starch or sugarcane offer an interesting compromise. These materials break down more easily than traditional plastics, addressing the issue of long-lasting environmental impact.



Australian biomaterials company **Great Wrap** have developed a compostable bioplastic alternative to clingfilm made from waste potatoes, designed to break down in soil in just 180

days. https://greatwrap.co
m.au

#### End of single-use plastics through circular design

There has been a shift towards circular design is revolutionizing the perception of material lifecycles, particularly for plastic. Durable, reusable alternatives are gradually replacing single-use plastics, in an attempt to

alleviate environmental pollution.

#### Upcycling and repurposing

Designers have begun creatively repurposing plastic waste into functional and aesthetic creations, showcasing the beauty of giving plastic a second life. This approach resonates strongly with my personal design ethos and is a conscious consideration that consistently informs my work.

## Not always as simple as it seems...

Though there has undoubtedly been progress towards more mindful use of plastic and plastic alternatives amongst both small designers and larger companies, this shift has also presented challenges.



Danish company Lego has abandoned its programme to make recycled plastic bricks from discarded bottles after projections suggested that if applied at the large scale required, the material would ultimately have a higher carbon footprint.

The company introduced its first prototype bricks using recycled PET in 2021 as part of the aim to have all of its products made from sustainable materials by the end of the decade. However, after two years of testing, Lego has now scrapped the project as calculations indicated that retooling its factories to process rPET - instead of the acrylonitrile butadiene styrene (ABS) would ultimately generate more emissions over the lifecycle. product's https://www.dezeen.com/2023 /09/26/lego-recycledplastic-bottle-bricks/

# Recycled doesn't necessarily mean sustainable

The Lego example demonstrates the challenges involved in scaling up sustainable practices, whilst also highlighting the importance of addressing the complexities surrounding greenwashing, whether intentional or unintentional.

Companies portraying a false or exaggerated commitment to sustainability, eco-friendliness, or other environmentally responsible practices demands our consideration as designers. Had the brand proceeded with its recycling initiative, it would have made products that were even less sustainable than its conventional counterparts, despite the

appearance of being recycled and environmentally friendly. This serves as a stark reminder that evaluating the authenticity of sustainable products and companies will be of uppermost importance as we move towards a more environmentally friendly future.

# Finding a balance

To conclude, I would personally argue that like with most environmental design issues, it's about finding a balance. I believe that plastic will undergo a revival, and as designers, we will need to redefine our relationship with the material to something that is positive and innovative. By embracing responsible design practices, exploring alternative materials, and finding a balance between convenience and sustainability, we can pave the way for a future where plastic contributes positively to environmental well-being.

### Designer of the week...

#### **Plastic Baroque collection**



**James Shaw** is a London-based designer who makes furniture from the sweepings left on plastic-recycling facility's floors after the processing of high-density polyethylene, such milk bottles and other food packaging.

I love this collection as I think it showcases the huge potential for innovation that arises from repurposing waste materials. The unconventional style and texture of his material choice add value and character to his interiors, making them seem quite luxurious, despite their origin as recycled waste. This collection not only exemplifies Shaw's unique creative process but also highlights the transformative power of design, turning discarded materials into functional and aesthetically pleasing pieces.

#### https://jamesmichaelshaw.co.uk

#### References

Gabrys, J. Hawkins, G and Michael, M (eds). (2013). Accumulation: The Material Politics of Plastic. *Routledge* Available at: doi:https://doi.org/10.4324/9780203070215.

### week 7: vibrant matter



# Jane Bennett: Vibrant Matter

In this week's post I wanted to reflect on the set reading of the week, Jane Bennett's book "Vibrant Matter". The reading made it apparent to me how important it is to consider our connection with the world of non-human things, and challenge traditional materialism. Though challenging at times, the reading introduced me to a range of compelling and thought-provoking ideas that really challenged my perspective on life and matter. It was clear to me that her work has the potential to contribute to a wider awareness of our interconnectedness with the environment. However, due to its philosophical nature, I was aware to approach her writing with caution and made sure to reflect on its strengths and weaknesses.

# Understanding the vibrancy of matter

Bennett introduces the concept of the "vibrancy of matter," suggesting that matter is far from being passive or lifeless but instead, it possesses a kind of liveliness and vitality. She asks the reader to recognize the force of inanimate objects and non-human entities and their potential to influence human activities. This reimagining of matter challenges our traditional, human-centric perspective and encourages us to consider the interconnectedness of all things. I would argue that this perspective is essential to wider environmental action, as though it is a relatively simple idea, it challenges the reader to understand the insignificance of humans, and ultimately the very little control we have over life outcomes.

#### **Assemblages**

One of the key concepts of Bennett's theory is the "assemblage." In the words of Bennett, "Assemblages are ad hoc groupings of diverse elements, of vibrant materials of all sorts." (Bennett,2010:23) She believes that human, non-human entities, objects, and environments are all part of a dynamic network of relationships and connections. Understanding the assemblage helps the reader to comprehend the web of

interactions that shape our world, and again reiterates the importance of seeing ourselves as part of our environment rather than in control of it.

### Is vital materialism radical?

Vital materialism is considered radical because it challenges the anthropocentric view that humans are the centre of all existence. It challenges this very traditional and established hierarchy by suggesting that agency and vitality are not exclusive to humans. The approach acknowledges the shared vitality of all matter, emphasizing the fact that living organisms cannot and should not be separated, categorised, or ranked. By acknowledging the agency of non-human entities, vital materialism invites us to reconsider our ethical responsibilities towards the environment and non-human life forms.

# Vital materialism as an ecological approach

I personally believe that advocating for a better understanding of agency and life through an approach like vital materialism could potentially shift society towards a more environmentally aware and considerate state. Though I do understand that some aspects of the concept may be slightly idealistic and over-simplified, for example, neglecting the realities of competition and natural selection, I would argue that vital materialism should not be seen as a radical approach. Instead, it should perhaps be seen as inspiring, encouraing humans to adopt a more responsible attitude and consider the impact of our actions on all aspects of the ecosystem, including non-human entities. I think the reason these ideas may seem so unrealistic and extreme to some purely comes down to a lack of understanding and awareness, which is a product of years of deeply ingrained societal

perspectives of human to non-human hierarchies. However, I do appreciate that the term "radical" can be context-dependent, so the perceived radicalism of vital materialism may depend on the context in which it is discussed.

To conclude, Jane Bennett's "Vibrant Matter" challenges our conventional understanding of our relationship with our environment. In my opinion, her ideas surrounding the vibrancy of matter, assemblages, and vital materialism provide a fresh and enlightening perspective on our relationship with the world around us. However, Bennet's work is slightly controversial, while it presents a fresh perspective on materialism, it also raises questions and concerns surrounding realism and practicality. Nevertheless, in saying this, if we remember that materialism, like any philosophical framework, is simply a tool to enhance our understanding and provoke critical reflection, then I would argue that it could be very useful.

The reading was undoubtedly very challenging, both in terms of concept and vocabulary, which was one of the main concerns I personally had about her work. I do believe her ideas provide a good foundation for a widespread change in mindset, however, her ideas have relatively little value if they can't be fully communicated to those who are less academically inclined.

# Designer of the week...

# "Design should be part of life and not separate from it" (Mau, 2021)

Building on my concerns about the accessibility of environmental design thinking in broader society, I want to touch on **Bruce Mau**, a Canadian designer and author, as an exemplary figure in this regard. The Massive Change Network, Mau employs design thinking to address global challenges and

develop sustainable solutions and has collaborated with major international brands including Coca-Cola.

I believe Bruce Mau serves as a perfect example of a designer who not only advocates for sustainable and environmentally conscious design practices but also communicates his ideas in a clear and accessible manner. I find his talk, "How Design Can Change the World," delivered at Business of Design Week 2021 (linked in the summary video below), particularly inspirational. Here, Mau summarises very clearly how designers can contribute to sustainable lifestyles, through a commitment to creating solutions that consider the long-term impact on the environment and society.

What resonates with me the most is Mau's emphasis on empathy as the fundamental mindset driving transformative design. By focusing on empathy, a universally experienced human emotion, he suggests an achievable and realistic motivation for broader society. His insights not only make the principles of sustainable design accessible but also inspire a mindset shift, urging designers and the wider society to think creatively and empathetically towards building a better future.

#### https://www.brucemaudesign.com

#### References-

Bennett, J. (2010). The Agency of Assemblages, Duke University Press eBooks. Available at: https://doi.org/10.1215/9780822391623-002.

Dezeen (2022). Design should "be part of life and not separate from it" says Bruce Mau. Available at: https://www.youtube.com/watch?v=JSMwI-z0F3k&t=115s (Accessed 5 November 2023)

# Annotated bibliography: the textiles industry and circular design



# The relationship between the textiles industry and circular design.

Evaluation of the sources below provides insight into the relationship between the textile industry and circular design. 'It has been suggested that designers could play a significant role in the circular economy; it is estimated that 80–90% of a product's lifecycle impacts are decided during the design phase (Graedel et al, 1995). Circular design aims to redefine sustainability models, urging a more cohesive and interconnected design approach where the "full lifecycle of products and processes emulate natural systems, in which there is no waste" (McDonough, 2009). However, this is perhaps far from the current reality, and in many cases, designers are failing to implement the changes required to move towards a circular textile industry.

Fletcher, K. (2014). Sustainable Fashion and Textiles. (online) Routledge. doi:https://doi.org/10.4324/9781315857930.

The author presents a critical outlook on the sustainability of the textile industry, presenting an analysis of each stage of current textile design approaches. The book is divided into two halves, the first explaining and evaluating the four key stages of designing for textiles: material extraction, production, use and disposal. The second explores potential approaches to alter the ways in which we consume. Fletcher presents a broad perspective on sustainability issues, presenting alternative opportunities for design opportunities which enable cyclical design qualities from production through to use. Through a reflection and critique of each stage of a product's life cycle, the author concludes that there is a level of ignorance within the industry, and companies currently fail to take responsibility for their contribution to the environmental crisis, 'because handling waste is expensive and brands will want to minimize exposure to such costs, it incentivizes the creation of products that are more durable and are easier to reuse and recycle' (Fletcher, 2014). Ultimately the author concludes that the future of the fashion textiles and industries are 'complex unpredictable', though does imply that an interconnected and cyclic design approach is the key to a more sustainable textile industry. However, as evidenced by the later publication from the Environmental Design Agency (2022), cited below, a decade on there has still been very little movement towards cyclical, sustainable design practices.

Hornbuckle, R. (2018) 'What Else Do We Know? Exploring Alternative Applications of Design Knowledge and Skills in the Development of Circular Textiles', *Journal of Textile Design Research and Practice*, 6 (1), pp. 23-41. DOI:

#### 10.1080/20511787.2018.1434745.

The journal draws on existing research to explore ways of applying existing design knowledge to introduce a circular economy, specifically within the textile industry. The author acknowledges that in recent years textile designers have begun to expand the conventional view of design's role and appreciate that there is a need for change and consideration surrounding our environment. Thus far there has been some attempt to address the challenges of material circularity, however, this is 'far from the reality of mainstream design practice' (Hornbuckle 2010). Though there are various ways that textile designers can apply their knowledge and skills to implement circular design, Hornbuckle concludes the environmental crisis is too complex for the industry to independently. The author advocates interdisciplinary, collaborative projects being the key to change. Though acknowledges that more work needs to be done to refine these methods of collaboration, 'including a much clearer understanding of how designers from different disciplinary backgrounds and cultures can work together' (Hornbuckle, 2010).

Goldsworthy, K. Earley, R and Politowicz, K. (2018) 'Circular Speeds: A Review of Fast & Slow Sustainable Design Approaches for Fashion & Textile Applications', *Journal of Textile Design Research and Practice*, 6 (1), pp. 42-65. DOI: 10.1080/20511787.2018.1467197

In 'Circular Speeds' the authors offer a definition of a circular design model in the context of a a range of design speeds, specifically slow to fast fashion. The article reviews both historical and contemporary industry approaches, alongside academic design research, to suggest the ways in which the notion of 'speed' can offer new opportunities for a more sustainable industry. Through an offering of reflection

and guidance, the authors offer a diverse range of approaches to coming together to devise a vision for an industry that is sustainable and circular. Similarly, to the article by Hornbuckle cited above, it is proposed that 'by working in communities of practice, designers can identify both the physical and psychological barriers to more sustainable solutions, translating them into creative proposals for transformation.' (Hornbuckle, 2018). Again, this suggests that multi-disciplinary integration is crucial in moving towards an industry of circular design.

Norris, L. (2019) 'Waste, dirt and desire: Fashioning narratives of material regeneration', L. Pickering, S. Armstrong, & P. Wiseman (eds.), *The Sociological Review,* 67 (4), pp. 886-907. doi:10.1177/0038026119854273.

The article explores three contexts where manufacturers and retailers have experimented with adding value to fashion and textiles with the aim of reshaping their narratives of material sustainability. The author criticises the current state of an industry 'which currently recycles less than 1% of its own cast-offs back into clothing' (Norris, 2019), presents the reader with the concept that keeping fibres in circulation for longer may not only be environmentally sustainable but also economically advantageous. Norris advocates for a drive towards a more circular textiles system in Europe, presenting frameworks developed from sustainability and resource effectiveness. The article summarises by suggesting some evidence where different attempts are being made for creating value around material, particularly amongst new brands, yet suggests we are still in an 'era of transition' and only now is the textiles industry beginning to take sustainability through design circularity seriously. Much like the earlier dated writings cited above, the author concludes through an emphasis on the need for change. This perhaps indicates that though there has been recognition that revision of current design practises is essential, the concept of circular design

remains largely overlooked and disregarded by the textile industry.

European Environment Agency, (2022) Textiles and the environment: the role of design in Europe's circular economy. Publications Office of the European Union. <a href="https://data.europa.eu/doi/10.2800/578806">https://data.europa.eu/doi/10.2800/578806</a>

'Textiles have on average the fourth highest negative life cycle impact on the environment and climate change' (European Environment Agency, 2022). The publication explores this statement through research and statistics, relaying the information to the reader with the purpose of creating an urgency for change. The authors analyse the major challenges faced by Europe to make changes to the textiles industry both in terms of production and waste, presenting four pathways for change: longevity and durability, optimised resource use, collection and reuse, and recycling. From the perspective of the author, a shift away from mass consumption to a circular textile production and consumption system is essential. 'Circular design is an important component of circular business models for textiles. It can ensure higher quality, longer lifetimes, better use of materials, and better options for reuse and recycling.' (European Environment Agency, 2022). This publication gives way to an interesting comparison between the earlier dated texts cited above. Written over the span of a decade, all of the texts demonstrate a sense of awareness that circular design is a key enabler of the transition towards sustainable textile production. Nonetheless, as statistically proven within this publication, to date, there has been a severe lack of action and failure to change.

To conclude, it is clear that 'textile designers have the potential to play a key role in the…shift to a circular and sharing economy. The need to create materials that are

recycled and can be recycled again means that we require textile designers to take centre stage in this new era.' (Goldsworthy, Earley and Politowicz, 2018). However, thus far there has been fairly little attempt to move the industry towards the circular design economy that is so clearly essential for a healthy and sustainable environmental future.

#### References:

Graedel, T. E., Comrie, P. R., Sekutowski, J. C. (1995) 'Green product design.' *AT&T Technical Journal*, (74) (6), pp. 17-24.

McDonough, W. (2009) Cradle to cradle: remaking the way we make things. London: Vintage.

# week 5: social and environmental justice



The concept from this week's lecture that I found I was the most inspired by, was design activism and the relationship between design, social and environmental justice.

### So what is design activism?

'Design activism reallocates resources, reconfigure systems and reprioritises interests. It is necessarily broad in its scope and aims...Design activism is overtly material in that it grapples with the everyday stuff of life; it is also resolutely driven by ideas and understandings. It is a making of politics.'

(Guy Julier, 2013:144-145) - writer and academic who has spent the past 30 years researching global changes in design, economics and society)

As designers we are trained to constantly seek improvements to how people live, however, it is becoming more and more apparent that design processes are often ethically questionable due to a lack of consideration or awareness of their implications. As I have touched on previously, within the design industry, practises have been strongly focused on maximising profits with little attempt to understand or solve the social and environmental problems that they are contributing to. However, design activists are looking to break this mould and look at how we can utilise the power of design to create change for the better. They look to bring about change by focusing on designing for community and moral beliefs and values rather than individual gain.

# Standing Rock Protests

From this week's lecture, the 2016 Standing Rock protests were the example of design activism that particularly stood out to me, and I then went on to research and try to understand further in my own time.

The Standing Rock encampment in North Dakota began in 2016 and was made up of many of the tribes and protestors that opposed the Dakota Access pipeline. The pipeline was intended to run

from North to South Dakota, passing Lake Oahe, which acts as the main source of water for the indigenous population in that area. The pipeline posed a huge threat to their health, but also to that of millions of others whose water and land could also be contaminated by any leaks. Within a few months, more than 4000 people resided in the camp, with thousands more on weekends.





I find it so inspiring that the camps became places of social organisation based entirely around a sense of community and care for the environment. So many people came together to share their experiences and knowledge of what was happening in their environment; working as a collective to share ideas on sustainable living and creating a future involving a peaceful and purposeful relationship with our environment.

It was interesting to read further into 'Learning from the Standing Rock as a Site for Transformative Intercultural Pedagogy' by Jilly Traganou and Regine Halter. Something that particularly stuck with me was the lessons for design towards the end of the reading. Their first objective inspired by the Standing Rock encampment is that 'the participants in the site of encounter (students and educators of design from different parts of the world) should agree and aspire to the goal of creating together a new community of change.' (Traganou, 2019:88-89). This also aligns with their fourth objective which states the importance of collectively developing a new community of change.

I think that particularly within the West we need to take a

less individualistic approach to both design and our environment in general and begin to move towards community-based mindsets. In a society that is currently driven by capitalism, there is very little we do to immerse ourselves in the community, but I think this idea is fundamental to change for a better future.

# What can I take from this as a designer?

I think as designers, we all need to come together to create a community of change, bringing our different knowledge and disciplines together to 'prefigure what a future, desired society would feel like' (Traganou, 2019:88-89). With the common motivation of bettering our environment, designers should begin to create now for the future that we want to see in the world.

Though the transition might be slow, if awareness and responsibility continues to be raised amongst the design community, I truly believe that we will slowly see change.

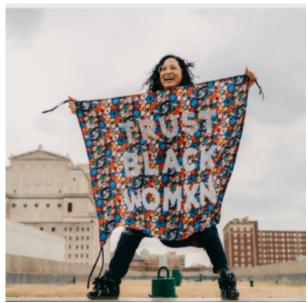
### Designer of the week...

Aram Han Sifuentes is a social practice and fiber artist who uses textiles and sewinf as her medium to investigate identity politics, immigration, citizenship and other poltical and environmental issues in the United States. Her work is political and informed by her own experience as an immigrant living and with her parents working in the garment industry.

For me it is so inspiring to see ways other designers within my discipline are creating awareness. I think her protest banners and garments are an amazing way of using textile design to create artwork that combines experience, activism and community. Using design in this way raises awareness and

speaks out for vulnerable communities and people who don't necessarily feel safe attending a protest.





https://www.aramhansifuentes.com/statement-bio

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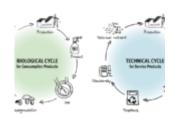
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# week 4: remaking the way we make things



# In Cradle to Cradle: Re-Thinking the Way We Make Things

This week's reading was by architect William McDonough and chemist Michael Braungart who combine design and science that

present the ways in which society would benefit from a circular economy that is inspired by nature's abundant supply chains, with the ultimate goal of eliminating the concept of waste. They put forward the concept of 'cradle-to-grave' and 'cradle-to-cradle' design cycles which is an idea that has really inspired me to start constantly trying to seek improvement in my own designs.

Cradle-to-grave: Product is created, used and disposed of

**Cradle-to-cradle:** Sees waste as an eternal resource. Developing a product where all resources can be used effectively, and in a cyclical way.

The book also put forward a design framework of three principles, which I personally found quite interesting, though perhaps slightly unrealistic and idyllic.

#### 3 principles:

- 1. everything is a resource for something else- everything can be designed to be disassembled and safely returned to the soil or re-utilized as high-quality materials for new products.
- 2. use clean and renewable energy- we should use clean and renewable energy, such as solar, wind, and other energy systems still being developed today; capitalizing on these abundant resources while supporting human and environmental health.
- **3. celebrate diversity-** creating designs that respond to the unique challenges and opportunities of each place that they become part of so that they fit elegantly and effectively.

Although these principles do seem relatively reasonable, the reality of the large-scale changes that would have to be implemented makes them slightly naive. As a result of our irresponsible design history, there are already large amounts of products and large-scale energy systems that don't fit this

mould. Furthermore, ignorant mindsets surrounding the current environmental crisis, as well as priorities of designing for trends and financial gain, may mean designers are reluctant to make these changes.

Though I don't think our current system can change entirely, the overall message of the reading was optimistic and the principles were insightful. I do believe that as designers it is our responsibility to find a balance between profit and ethical practice. Concepts such as downcycling where valuable components of products can be reused could be a good way to begin reusing products that are already in circulation. I also think it is key for designers to implement the cradle-to-cradle mindset as it could be revolutionary for the future of both our environment and design practice.

### Designer of the week...

Berlin-based designer **Tobias Juretzek** works with an Italian recycling company to source unwanted clothes and with Italian furniture manufacturer Caamania and Horm to saturate them with a binding agent and compress them into chair-shaped moulds. It is currently a very hands-on, small-scale, process, but he has plans to scale up and use the pre-consumer waste streams of the fashion industry to create furniture.

The Rememberme chair was inspired by his interest in the nature and value of our relationships with the objects we own. The characteristics, details and colours of the original clothes of clothes remain visible, giving the chairs a unique and unconventional appearance, but also challenging people to think differently about waste.



http://www.tobiasjuretzek.com

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# week 3: producing and consuming differently



#### The debate...

This week we continued to explore designers' role in environmental responsibility. This week's seminar debated the argument "Designers have not yet come to terms with their complicity in the creation of the conditions of the environmental crisis or with their environmental responsibility, nor have they yet reformed their practices accordingly" which I found to be an extremely thought-provoking topic of conversation.

I was given the opportunity to represent the 'against' side of the argument so tried to present evidence of ways that designers have started to move towards more environmentally responsible making and production processes. I drew on my own design discipline, Textiles, and largely based my argument around the Slow Design movement which is currently hugely relevant and having a significant impact within the Interior and Textiles industry. The trend is the interior industry's equivalent to the anti-fast fashion revolution and is a form of creative activism that presents an opportunity to slow down the process of design research, production and outcome. It focuses on the longevity of a product, valuing sustainability but also focusing on the whole story and lifecycle of a product or design and the consumer's appreciation of it.

I feel that this more conscious way of designing, producing and consuming, is very relevant to the 'against' side of the debate and also links nicely Kate Soper's concept of 'alternative hedonism'. The idea that we should rethink how we live in the light of impending environmental catastrophe and that alternative ways of living can be more enjoyable than consumerism, seems relevant to a movement like Slow Design that focuses on the balance between tradition and innovation as well as between technology and classic craftsmanship.

One example of a Slow Design company that I love and Mizzi

**Studio**, a multidisciplinary practice specialising in Bio architecture and Biophilic design and dedicated to achieving a resilient and sustainable future. They aim to slow design down and reconnect humanity with nature, focusing on projects which embrace experimentation and innovation, yet consistently look back at heritage and craft as they believe that learning from the past is the best way to eliminate wasteful processes and build the most sustainable future possible.

However, despite some interesting examples for the 'against' argument that covered a variety of design disciplines, I ultimately took from the debate that designers haven't fully understood how fundamental their role is in changing the current environmental crisis. One point that was raised for the 'for' argument that I completely agreed with is the intentional ignorance of designers about their role in the environmental crisis. The economic pressures of consumerism mean that many companies choose to design for trends and the short-term gain of profit, entirely disregarding sustainable design practices. Catering to trends leads to mass overconsumption and waste both of which are having a lasting impact on the planet, something I would argue most designers are aware of but choose to ignore.

Though there was no overall conclusion to this week's debate the discussion was definitely essential and needs to continue to be had amongst designers in order to combat our current complicity, and naiivity around the environmental crisis. The debate gave me a lot of ground for thought and has sparked an excitement to continue exploring ways designers can reform their practises to work towards a more sustainable and better future.

# Designer of the week...

Mizzi Studio- an example of their design work that I felt was particularly inspiring and aligns well with slow design is

their design for Kew Gardens eating space which acts not only functionally but is an example of entirely sustainable design which also provides education on the natural world. It is entirely powered by the energy of an LED sun wall, and all the sculptures are made by independent sustainable craftsmen.

#### https://www.mizzi.co



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# week 2: understanding the relationship between the environment and design



# What are the real intentions of the design industry?

This week's lecture and reading have made me question if the intentions of the design industry currently align with my values. Throughout history, designers have been motivated almost entirely by consumerism, providing short-term solutions to minor day-to-day problems, with complete disregard the the larger scale environmental issues that they are creating and the long-term implications of what they are doing to the world around us. To me, it seems that designers have been the driving force behind the capitalist society of mass consumption that we now face. The design industry has spent years causing considerable amounts of damage to the environment, participating in the mass extraction of resources and causing huge amounts of waste and pollution through manufacturing. All the while disguising these irresponsible choices by providing superficial design solutions that claim to transform lifestyles. Particularly within Western societies, it seems we are completely brainwashed...

### Overcoming dualism

I have learnt this week that as a society we tend to think of self and world as two separate things. Only now, in our mess of an environmental crisis, are we beginning to realise that we are in fact completely intertwined with our environment. Particularly within Western society, nature is viewed as something dismissive and passive which we have repeatedly felt it was our right to exploit. In my opinion, the key to change is acknowledging our interdependence with the environment, as if we continue to act against it it will only destroy us both. I do truly believe that in the early days of the industry, designers did not realize how limited natural resources were, and how damaging the design and manufacturing process can actually be. However, I do think as the industry became more aware of its negative environmental impacts, it chose to ignore it in pursuit of the development of technology, resulting in mass consumption and therefore financial gain.

# Fallan and Jorgensen: Environmental Histories of Design

This weeks reading helped me to understand the importance of designers in changing our current environmental state. Fallan and Jorgensen argue that designers place in the contemporary environment is unclear, and there are various opinions on the impact of designers on the environment. On one hand, they think that designers 'can easily be blamed for causing environmental problems but may also be said to possess some of the competences that could help solve those problems' (Fallan and Jorgensen, 2018).

One case study in this article that particularly interested me was looking at the Arts and Crafts movement, and more specifically William Morris. Morris's work was heavily inspired by nature and he was very openly against

industrialisation and held an ideal that everything should be designed and hand-made in small workshops. However, this was neither economical nor practical and therefore a highly unrealistic outlook. Even Morris himself mass-produced wallpaper which was dyed its iconic green colour using arsenic (a chemical that is highly dangerous and extremely harmful to humans). I felt this was a perfect example of how ironic the concept of separation between humans and nature actually is, and though I am a big fan of Morris's work I had never looked at it in this way before.



Morris's 'Acanthus' wallpaper

Though designers can easily be blamed for contributing to our current environmental issues, the design industry may also hold the most potential for actually solving those problems. This is unarguably a huge responsibility but does give me hope that some good can come from the next generation of designers, and has made me curious as to what I can personally do to contribute to this change.

#### Designer of the week...

This weeks lecture touched on **Friedensreich Hundertwasser**, a designer that I was already very interested in and whose work is a great example of environmental awareness within design.

Friedensreich Hundertwasser was an artist and architect from Austria who is well know in the field of environmental protection. Last year I went to visit one of his most well known pieces of architecture in Vienna, Hundertwasserhaus. When visiting the Hundertwasser museum I found it very interesting to find out about his commitment to not only design but environmental protection and he spread his ecological and socio-critical opinions through numerous manifestos, artworks, speeches and public demonstrations. I particularly liked his designed posters that supported the protection of nature. These environmental posters were printed and all money made was donated to environmental initiatives and environmental organizations.

'You are a guest of nature-behave' (Hundertwasser, 1980)

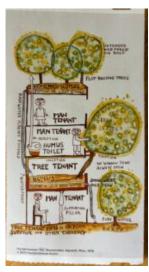
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