Week-11

This semester’s study has made a great difference in my view of environmental design. Overall, I enjoyed this course very much. The debate course enabled me to look at some opinions dialectically, it is a way of learning that I enjoyed during the course, I learned about relevant materials from many aspects, and made me tried to to look at the same thing from multiple aspects, which helped It allows me to think critically, and in future studies I can also think about: If I were the For/Against side of a debate, what views would I put forward?

Under the guidance of the reading group, I was also able to think deeply about some questions that I had never thought about (especially in the reading group of Vibrant Matter, we led to a question about naming things, which I still think about from time to time, it was a such great experience!).

Through weekly lectures, I understood that environmental design is not just a subject that only focuses on design. It is a comprehensive subject that includes everyone’s thoughts, philosophy, culture, sociology and future design. This requires a lot of cooperations in various fields and the accumulation of time, the integration of disciplines will be the inevitable result.

I really enjoyed Cradle to Cradle and Vibrant Matter and I will finish reading them in the future. The book Cradle and Cradle not only taught me how to think about sustainable design and circular economy as a designer, but also helped me develop greener living habits, such as reducing the purchase of disposable goods or recycling the product. The book Vibrant Matter was very difficult for me to understand at first, but in the reading group, the concept of ‘interactive environment’ hit me, that is, every substance in this world is an environment, and substances interact and influencing with each

other. Thus forming the environment and space that we live. The book made me rethink the relationship between matter, humans and the environment from a more interesting perspective. I think many of the ideas mentioned can be used as topics for my illustration creation.

In summary, this course has subverted my perception of the environment, ecology and environmental protection. I have also gained a lot of inspiration from it(for life and for my study). I will start a greener life style from myself, and I hoping to see a truly green and equal society in the future.

Week-10

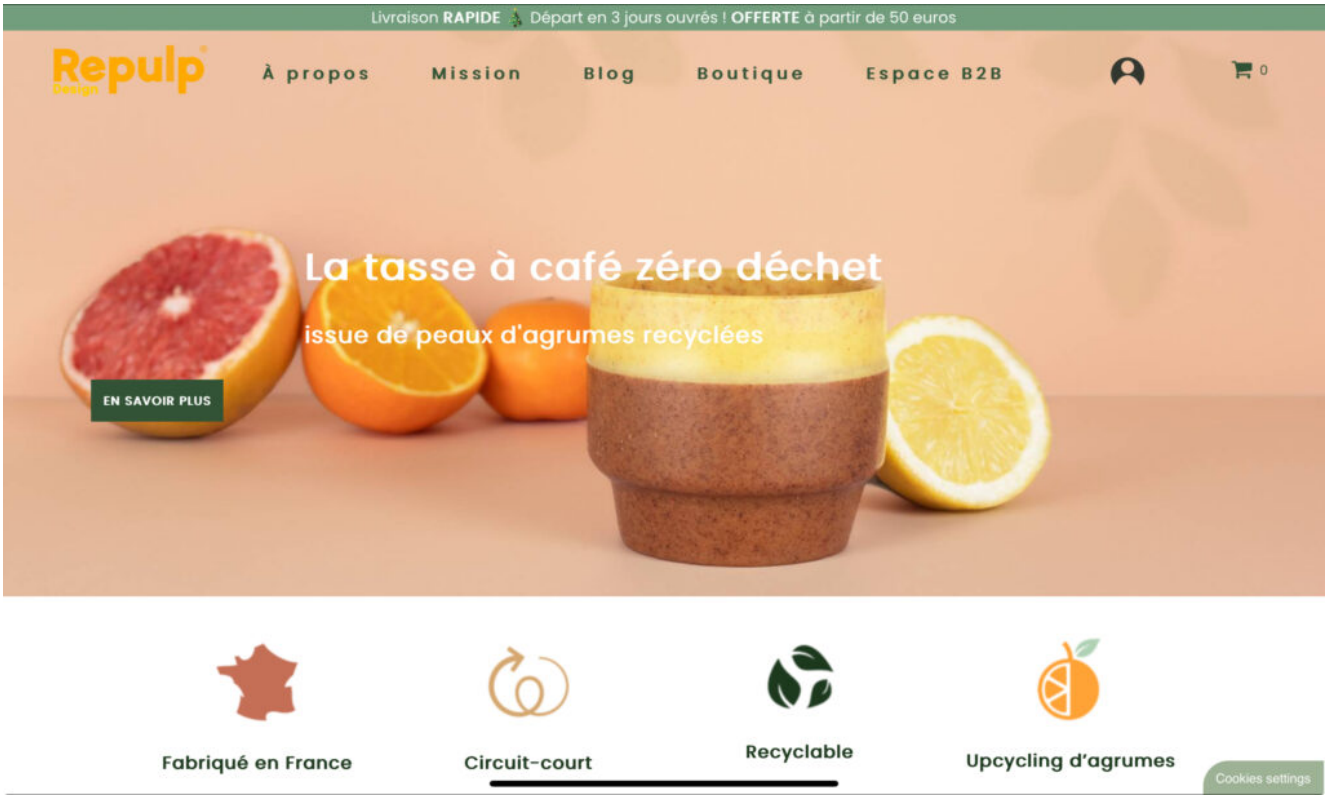
After today’s lecture, I was impressed by the new material part talking about the project which make fungi into a boat, and then I searched about this material, and it was fascinating because some people can make fungal material items like furniture through 3D printing. I continued looking for biomaterials, and I found that some studios that are using citrus peels to make new materials, and 3D printing technology can also be supported.
The ecological material of citrus is a sustainable material that is usually made from the peel and pulp of discarded citrus fruits (such as oranges, lemons, grapefruits, etc.) through special treatment and processing include threshing, compaction, blended cornstarch epoxies, and homemade cornstarch bioplastics. Through these treatments, discarded citrus fruits aretransformed into new materials with special hardness and texture, and can be used to manufacture lamps, furniture and other products.
These materials not only have good plasticity and strength, but also have the unique smell and color of fruits. For me I

think these materials have a wide range of potential applications in areas such as creative design, manufacturing and construction. Since the distribution of citrus is usually produced in large quantities, the production of citrus ecological materials is also beneficial to reducing environmental pollution and resource waste.

But on the other hand, I would be cautious about adding epoxy resin as a step in the manufacturing process mentioned above. Epoxy resin itself is generally not considered a completely environmentally friendly material, as there may be some chemicals and energy consumption involved in its production and processing. It is a very strong and durable material, so

it lasts longer and needs to be replaced less frequently. However, the traditional thermosetting epoxy resin is difficult to recycle directly because once hardened, its molecular structure becomes more stable and difficult to reverse. This is unlike thermoplastics, which can soften and solidify multiple times after being heated. (Although there has been research in recent years to develop environmentally friendly epoxy resins, which include some sustainable, degradable or recyclable variants. These new epoxies are designed to be more environmentally friendly, making them easier to use under certain conditions like recycling or degradation.) In the previous example, in order to make the orange peel material stronger and waterproof, people had to add epoxy resin during the production process. In my opinion, most environmentally friendly biomaterials currently face the problem of waterproofing. Therefore, it remains to be verified whether the performance, waterproofness and durability of environmentally friendly products on the market or in some examples can be comparable to traditional materials.

Since some biomaterials are not waterproof, it may be possible to use them to replace disposable plastic products. And I found that also about citrus, Repulp is a bio-sustainable project of orange waste. The orange peels are finally made into cups and have been sold. This is a bioplastic containing orange peels made from vegetables and fungi. The material uses a large amount of orange peels obtained from juice manufacturers. Use a press to remove all remaining water and juice. After turning the material into particles, polylactic acid is used as a binding material and is produced through 3D printing. Made from citrus waste, these cups can be used to replace plastic cups and can be composted when they are no longer useful.



Fabriqué en France

Circuit-court

Recyclable

Upcycling d'agrumes

Here, the creators replaced the previous epoxy material with

polylactic acid and made the entire product naturally degradable, but since it is not as strong as plastic, this material is designed to be used on products for one or more uses. and can also achieve mass production.
These two examples remind me of the Hannover Principles mentioned in the workshop. In the eighth suggestion, we recognize that people should respect nature and the properties of the material itself in design. The products we live in always have limitations, but maybe we should make use of the characteristics of natural materials instead of forcibly changing the properties of the materials themselves for the convenience of design and processing.

Reference
Eliaz, N. et al. (2018) Microbial degradation of epoxy, Materials (Basel, Switzerland). Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6267298/ (Accessed: 24 November 2023).
MaterialDriven (2018) The potential in an industry byproduct—the PEEL project by Venn Reactor, MaterialDriven. Available at: https://www.materialdriven.com/blog/2018/1/19/the-potential-in-an-industry-byproductthe-peel-project-by-venn-reactor (Accessed: 24 November 2023).
Repulp design – collection d'objets issue des agrumes (2023) Repulp. Available at: https://repulp.fr/ (Accessed: 24 November 2023).

Week-9

In this weeks's lecture, we bring the word 'ANTHROPOCENE' again□I learned that anthropocene represents the embodiment of human creativity and technological progress, but it also has

negative impacts on ecological balance, including climate change, resource depletion, biodiversity loss, and pollution.

Speaking of the various impacts of human activities on the earth system, It reminds me of Eduardo Kac‘s artworks. He is known for his interdisciplinary experiments, often involving genetic technology and life sciences. One of his famous works is ‘Alba’ the rabbit, a genetically modified white rabbit, a project that sparked discussions about bioethics and the ethics of technology. Overall, his work often deals with the relationship between technology, life and society.
Some of Eduardo Kac’s works can be linked to the concept of Anthropocene.

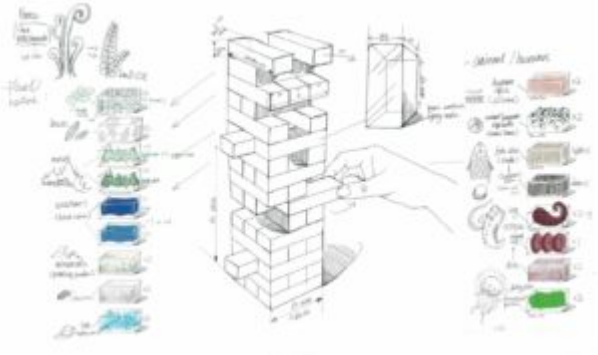
Anthropocene describes the profound impact of human activities on earth systems, and Kac’s bioart pieces involve biotechnology and genetic engineering, reflecting the impact humans have had on changing life forms.Through his work, Kac often explores human intervention in nature and how technology shapes our relationship with the environment. This echoes Anthropocene’s core idea that human activity is shaping the future of the planet. Therefore, his work can be seen as an artistic response to the impact of human activities in the Anthropocene era.

His ‘Alba’ aims to explore human intervention in genes and changes in life forms. After this lecture, I think it reflects the control and modification of genes by humans in the field of biotechnology in the context of the Anthropocene, and involves whether humans should have the right to modify the genes of other organisms, and whether this the change is sustainable and reversible. Therefore, it can be seen as an artistic expression of the attempt to dominate life in the genetic realm in the Anthropocene, inspiring profound thinking about technology, ethics, and life.

The artwork ‘GENESIS’ by Kac form https://www.ekac.org/

Eduardo Kac introduced the term ‘transgenic art’ in 1998, and in the following three years, he created the ‘transgenic trilogy’.In his work ‘Genesis’, he expressed the domination of human beings over nature, and genes are also a language to some extent, it can be written and modified, and this language is somehow able to manipulate life itself. In my opinion, Katz’s work using genetic art is undoubtedly an irony of what we consider our glorious civilization (or what we done under the Anthropocene). Due to human ignorance, we have destroyed the earth’s ecological environment. This should attract attention and reflection and make more people wake up to consider the concerns of human beings dominating nature and understand nature from a new perspective.

Several years ago, I had a experimental art idea which related to this topic, it is a Jenga game, players can randomly extract and build blocks that symbolize a certain species or a resources in our nature/ecosystems, and player can continue to stack up at the top(to make the whole tower ‘taller’). As each block is continuously drawn and stacked, in the end, whether the whole block will rise or collapse, it will all happen randomly.



This game involves extraction, stacking action and inevitable collapse, a game where there is human subjectivity, the randomness of extraction and the inevitability of collapse, which I will use to suggest the consequences of human beings ‘playing’ with the ecosystem and nature at will.

Reference

(No date) Genesis. Available at: https://www.ekac.org/geninfo.html (Accessed: 17 November 2023).
(No date a) GFP bunny. Available at: https://www.ekac.org/gfpbunny.html (Accessed: 17 November 2023).
Kac, E. (2003) GFP bunny, Leonardo. Available at: https://muse.jhu.edu/article/41743/summary (Accessed: 17 November 2023).
Transgenic art (no date) Encyclopædia Britannica. Available at: https://www.britannica.com/art/transgenic-art (Accessed: 17 November 2023).

Week-8

Based on the lecture this week, I watched a documentary called 'The Story of Plastic'. It explores the production, use and disposal of plastics and reveals the danger to oceans, wildlife and human health. Plastics are widely used in packaging, daily necessities, building materials and other fields, in part because of their lightweight, durable and cheap properties. Among them, the documentary mentioned the ideas related to today's overconsumption and consumerism.
Consumerism tends to drive large-scale production and consumption, resulting in a large demand for plastic products, especially single-use plastic products. This consumption behavior intensifies the production, use and disposal of plastics, causing significant environmental impacts.
At the same time, the widespread presence of plastic products and consumerist means such as advertising have affected people's shopping decisions, prompting them to buy and use plastic products more frequently. This reinforces dependence on plastic, creating a vicious cycle that accelerates the

plastic crisis.

The book‘The Consumer Society‘ points out that the tonsumerism is essentially a tool of exploitation, but what is different from ancient slavery is that consumerism can make people feel that they are not slaves, but people striving for a better life. After the Industrial Revolution, productivity was greatly improved, and a large number of goods flooded into the market to meet people’s growing needs. However, these goods also brought about class conflicts (for example, goods that were once only owned by some nobles are now available to everyone). Some rulers have discovered that if ordinary people can buy some high-end products, they will have the illusion of being on equal footing with the nobles, and will no longer resist the existing social order and work for the rulers with peace of mind. On the other hand, consumerism is the pursuit of respectability, treating desires as needs, and enjoying material things without restraint.

The most obvious example is fashion and fast fashion merchandise. The Industrial Revolution in the 18th centuries brought about the mechanization of the textile industry and enabled the mass production of ready-made garments. Fashion has changed from a work of art for nobles to a product that everyone can afford.

Fast fashion as imitations of famous designer brands, crazily copies high-end brand products and sells them to the world at ultra-low prices. Such high-end fashion products and low prices stimulate consumers’ desire to consume. The New York Times once reported that Zara’s annual output is as high as 840 million pieces. By 2014, the global fashion industry produced 100 billion pieces of clothing, and by 2030, it will reach 100 million tons of clothing.

This is an extremely resource-intensive product, producing large quantities of cheap clothing, causing consumers to throw away old clothing more frequently. These garments often contain difficult-to-degrade materials such as synthetic fibers, making them more difficult to process and recycle. According to statistics, 87% of the textiles used to make clothing around the world end up in landfills and incineration. At the same time, in order to maintain low costs, they often rely on cheap labor, resulting in poor labor conditions and low wages in some areas. This business model and production method has a significant negative impact on the environment and society.

REFERENCE:

The Story Of Plastic (2019). Available at: https://tv.apple.com/gb/show/the-story-of-plastic/umc.cmc.4b0i1yero9f4v61uic4e4zbo5 (Accessed: 2019).

Baudrillard, J. (1998) The Consumer Society: Myths and Structures. London: Sage.

Hanbury, M. (no date) Zara and forever 21 have a dirty little secret, Business Insider. Available at: https://www.businessinsider.com/zara-forever-21-fast-fashion-full-of-copycats-2018-3?r=US&IR=T (Accessed: 16 November 2023).

Hansen, S. (2012) How Zara grew into the world's largest fashion retailer, The New York Times. Available at:

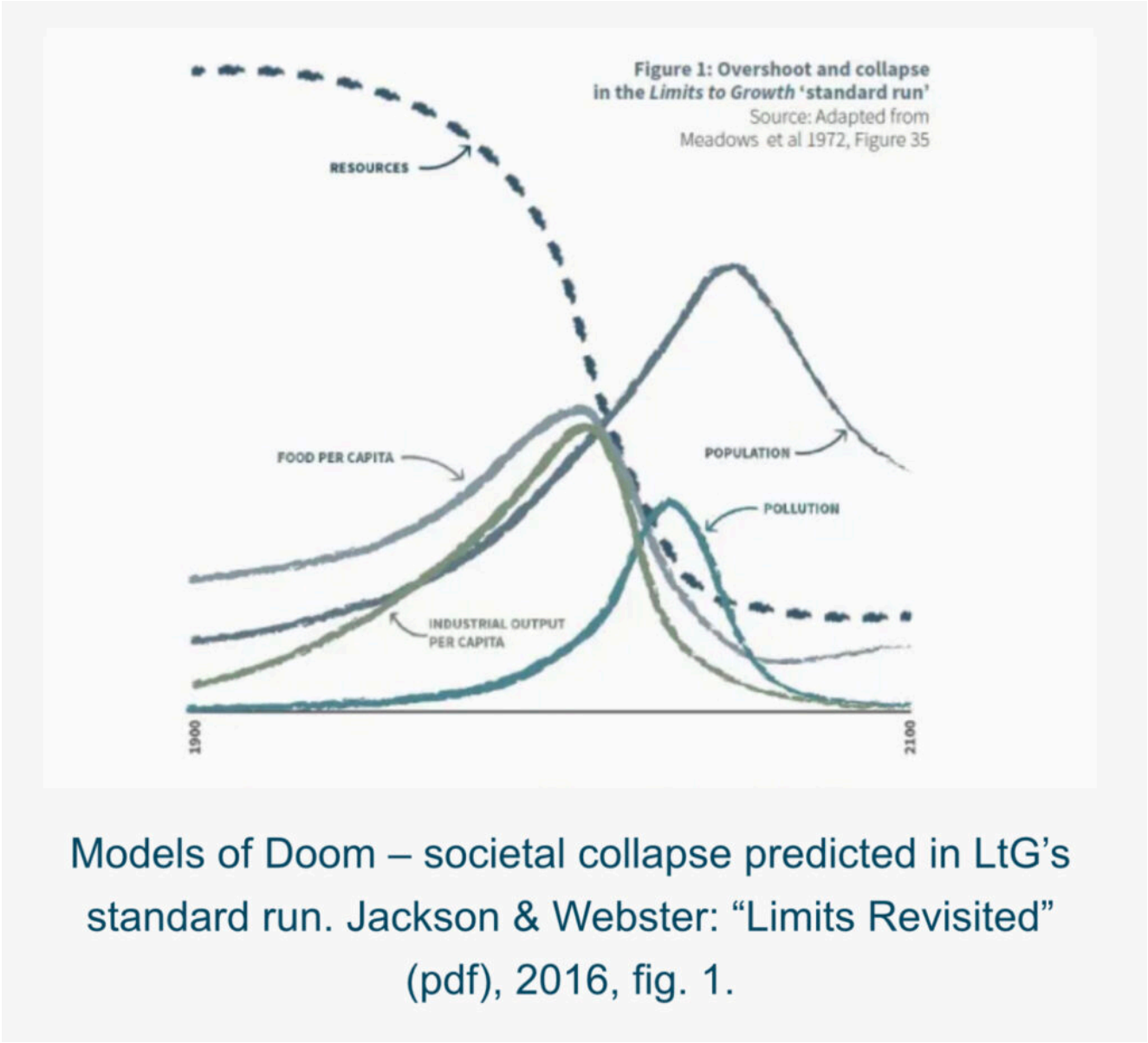
https://www.nytimes.com/2012/11/11/magazine/how-zara-grew-into-the-worlds-largest-fashion-retailer.html (Accessed: 16 November 2023).

What is fast fashion and why is it so bad? (2023) Good On You. Available at: https://goodonyou.eco/what-is-fast-fashion/ (Accessed: 16 November 2023).

Week-7

This week we held a debate about we would enforce a circular economy, as in team FOR, I prepared some notes I may contribute for the team.

1. our resources are limited,so facing increasing population and limited resources, we should use them more efficiently by recycling,so this is the main reason we have to enforce a circular economy.
Research has found that the biggest problems after 2020 are food crisis and population. Civilization may collapse in 2040. The book ‘The Limits To Growth’ points out the limitations of the earth’s resources. With the growing population, no matter how science and technology develops, it cannot change the food and population problems.



Models of Doom – societal collapse predicted in LtG's standard run. Jackson & Webster: "Limits Revisited" (pdf), 2016, fig. 1.

2. Traditional linearity economically will lead to energy depletion and environmental pollution.
From the previous lecture, we all know that this model causes damage to the environment because a large amount of resources are mined, processed, and eventually become waste, leading to resource depletion, increased energy consumption and environmental pollution. Circular economy advocates the effective use and recycling of resources, helping to reduce environmental burdens.One estimate by the global consultancy Accenture in 2015 suggested that US$4.5 trillion of extra value could be unlocked by creating products using waste as a resource.

3. Circular economy can create new business opportunities like

waste recycling and waste regeneration businesses, and it could also contribute to economic growth and creating new field.

But At the end of the debate, I think there is a lot of work that needs to be done to make the circular economy truly a reality, and we need to change the way we think about resources and build economic activity around them. However, achieving a circular economy is not idealistic, but a feasible goal. The circular economy emphasizes the sustainable use and recycling of resources, achieved by reducing waste, improving resource efficiency, and designing more sustainable products and production processes. Some countries and companies have taken measures to promote the development of circular economy and achieved some success.

Since the late 2000s, China has embraced circular economy policies. The current circular economy action plan, effective until 2025, establishes ambitious goals for the utilization of scrap steel and construction waste, among other discarded materials. The 2018 ban on importing plastic and other waste has compelled nations to reconsider their waste management strategies.

In Denmark’s Kalundborg, an eco-industrial park showcases a successful circular economy model, where businesses collaborate in material, energy, and information integration. Starting with four enterprises, the park’s innovative approach, including using steam for city heating, has grown to 23 projects. This industrial symbiosis system enables closed-loop circulation of various emissions and energy types among businesses. Through resource sharing, the park annually saves over €80 million, conserves water, reduces CO2 emissions, and recycles solid materials. Since 2015, CO2 emissions have dropped by 80%. Denmark’s commitment to the circular economy is evident in a 2018 strategy, investing €16 million in 15 measures to promote material and product recycling. The “National Waste Prevention and Management Plan 2020-2032”

further quantitatively manages waste in impactful areas like biofuels, construction, and plastics. Collaborative efforts are showing clear results in advancing the circular economy.

I can see that many countries are already starting to implement circular economy step by step. However, challenges still remain, and it requires governments, businesses and society to work together to promote wider implementation of circular economy concepts.

References:

Meadows, D.H. (1982) The limits to growth: A report for the Club of Rome's project on the predicament of Mankind. New York: Universe Books.

'To get serious on the circular economy, upend how Global Business Works' (2022) Nature, 612(7939), pp. 190–190. doi:10.1038/d41586-022-04330-y.

Eco-industrial park case study (no date) ENGIE Impact. Available at: https://www.engieimpact.com/insights/eco-industrial-park-case-study-kalundborg (Accessed: 15 November 2023).

Annotated Bibliography

This week I read some books about innovative design in the context of environmental protection, including biological design, innovative materials, urban design and picture book.

-Myers, W. and Antonelli, P. (2014) Bio design: Nature, science, creativity. London: Thames and Hudson.

This book reveals that humans and nature have always had a

symbiotic relationship, but with the development of technology, the symbiotic relationship has become increasingly unbalanced. Biodesign is the intersection of life science fields (such as biology, anatomy, bioengineering, neurology) and art and design is an organic design.
As an interdisciplinary subject, biodesign has always paid attention to and discussed important issues such as the harmonious coexistence of human and nature as well as the sustainable development.
This book contains some very interesting bio-design cases, such as tree house manufacturing (CNC scaffolding), streets with genetically modified glowing trees and semi-living lights (luminous jellyfish and other luminous organisms), future Venice (metabolism of primitive cells, using light energy fixes carbon and constructs a structure similar to a coral reef), bio-concrete (bacteria repair cracks), bio-encryption (bacterial DNA stores data), blood lamp (creative design).
I also learned about some biological materials such as fungi, yeast, algae, bacterial culture genes which have renewable properties.
In the future, our designers may be able to draw on life science research and use organisms or ecosystems as basic components to apply them to the design of structures, objects, and processes.

-Books, C. (2022) ‘Plump and pliant’:, Living Matter: The Preservation of Biological Materials in Contemporary Art, pp. 64–73. doi:10.2307/jj.5274094.10.

This book presents a proposal for using cellular cellulose to achieve longer functionality as wearable, performance-ready textiles. This technology could be used for future collaborations in the development of biomaterials as well as clothing design and experimental art. This new biomaterial is affordable, non-hazardous and non-toxic, making it wearable and functional as a textile.

-Noronha, P. (2011) ‘Yeast biopaintings: Biofilms as an

artistic instrument', Leonardo, 44(1), pp. 38–42. doi:10.1162/leon_a_00091.

The author creates yeast biopaintings by controlling the growth of yeast cells on paper, using microorganisms that produce colorful natural pigments. By controlling the growth of yeast cells and the formation of biofilms, artists can observe and experiment with the evolving yeast biofilm patterns for artistic creation. This work provides a new methods for artists.

-Lee, M. (2020) Plastic Island . Seoul: Lee Myung-ae.

This is a picture book suitable for both adults and children. It is a work that can make people think about ecology, animals and plastic waste.
It tells the story of a plastic island formed by circulation in the sea through the perspective of a seagull. The cover and lining of this book are mainly black and white, and then gradually begin to appear more and more colorful plastic products as the story develops. People come and clean up the island, but it quickly filled up again.
The outer cover of this picture book is also made of recycled paper, echoing the environmental theme of the entire book. As an illustration major student, I can also consider to bring more environmentally friendly options in book materials, binding, and craftsmanship.

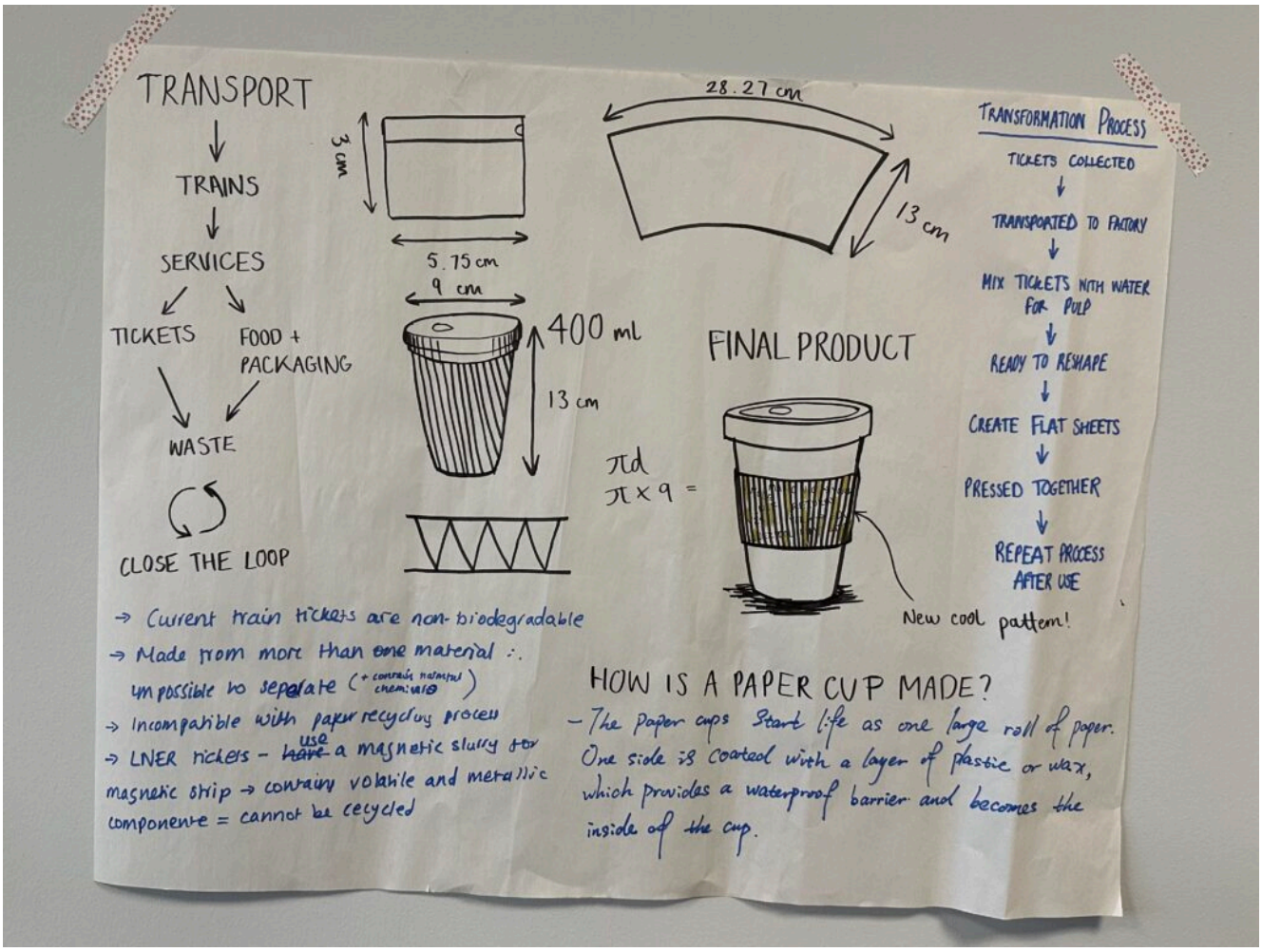
Week-5

In the fifth week, I read the book "Cradle to Cradle", from which I learned that at the end of today's industrial design system, some products are not effectively reused, and it becomes a one-way cradle-to-grave model, a fundamental flaw in

design itself that began with the Industrial Revolution.

Cradle to Cradle(C2C) for Design is not just about reducing waste, but about converting waste into other useful recycled materials or product. As designers, we should integrate ecological design into the product so that the entire life cycle of the product is sustainable (3R principle), and break the traditional production model, and improve energy efficiency and resource utilization in the production process.

Since then, at the workshop this week, we did a redesign about the coffee cups in train stations, we discussed about We the issue of paper tickets in train stations and proposed that the tickets be recycled and roughly processed into paper pulp and designed into a paper coffee cup for use at the station.



It was a really interesting idea for the workshop, and paper is one of the most recycled products in the world. But for me

as an product design base student, I still think there are so much to improve.

First, The step of collecting tickets into pulp cannot be completed at the station. This requires collecting and transporting them to the factory. Does the transportation process also consume energy and generate waste? (In our previous Circular card activities, we placed lorry followed by waste cards at each production link), which means that transportation will inevitably generate waste.

Secondly, although paper is one of the materials with the highest recycling rate, it will also have a considerable impact during its production process. Papermaking and pulping processes require a large amount of water and also produce chemicals such as benzene that can pollute water bodies such as formaldehyde, chloride, etc.

And last, the papermaking industry requires a large amount of energy supply, burns fossil fuels and produces a large amount of harmful gases, causing pollution, and the hot pressing technology that is indispensable in the paper cups we design will also produce carbon emissions.

Despite this, I still think this is a very meaningful workshop that makes me think. It also makes me realize that there are still many problems that need to be solved in the modern production model.

Reference

Braungart, M. and McDonough, W. (2019) Cradle to cradle: Remaking the way we make things. London.

AllroundWeb (2023) Paper sustainability: Is paper eco friendly?, PaperWise. Available at: https://paperwise.eu/en/paper-sustainability/ (Accessed: 25 October 2023).

Week-4

This week we held a debate on the topic of whether designers have innovated their design under conditions of environmental crisis. Through this debate, from both team I learned that designers are responding to environmental crises and changes. Various innovations and new attempts are being carried out to try to create new more environmentally friendly and sustainable materials and products.
This is worth us designers to learn from. However, However, there are still many designers and manufacturers carrying out projects that have a negative image on the environment., this involves relevant politics and institutions, and it is also deeply connected with consumerism.

As a member of team against, I will share some points I prepared.
□general points□
1- Designers and manufacturers are making products of better

quality and more durable than before.
This means that users can use a product longer and more efficiently than before, so frequent replacements and discards are no longer needed. Frequent replacements of lower-quality products may require more frequent transportation of goods, contributing to higher greenhouse gas emissions. Durable products reduce the need for frequent transportation of replacements.
High-quality items often have longer lifecycles, which means they stay in use for a more extended period.

2-Service Design-The Sharing Economy
The platforms of sharing often promote the more efficient use of resources. For instance, ride-sharing services can reduce the number of private cars on the road, leading to less resource-intensive manufacturing, fuel consumption, and maintenance. Sharing models encourage the sharing and maintenance of products rather than single ownership and disposal. This can extend the lifecycle of products, reducing resource consumption.
Also, The sharing economy can promote a shift in consumer behavior from ownership to access, encouraging a more sustainable mindset. (When team FOR talks about consumerism, perhaps we can mention here the point about the sharing economy, as it has contributed to the shift in consumer behavior from buying ‘an item’ to ‘renting an item’).

□specific point (an example□□
□Conceptos Plasticos□

UNICEF partnered with a Colombian social enterprise that aims to turn plastic waste into sustainable solutions. They transform plastic into modular plastic bricks, which are easy to assemble, durable and low-cost, and used to

build temporary classrooms for local children.

The bricks are made from 100% plastic, and they are fire-resistant and 40% cheaper than traditional building materials. They are highly waterproof and insulating and can withstand strong winds.
Not only does Conceptoes Plasticos approach help reduce the negative impact of plastic waste on the environment, it also solves housing problems in some areas, while it also provide some families with an additional income. (This example can be used to respond to the opinions about plastic waste cannot be recycled and causes pollution)
https://conceptosplasticos.com/

Week-3

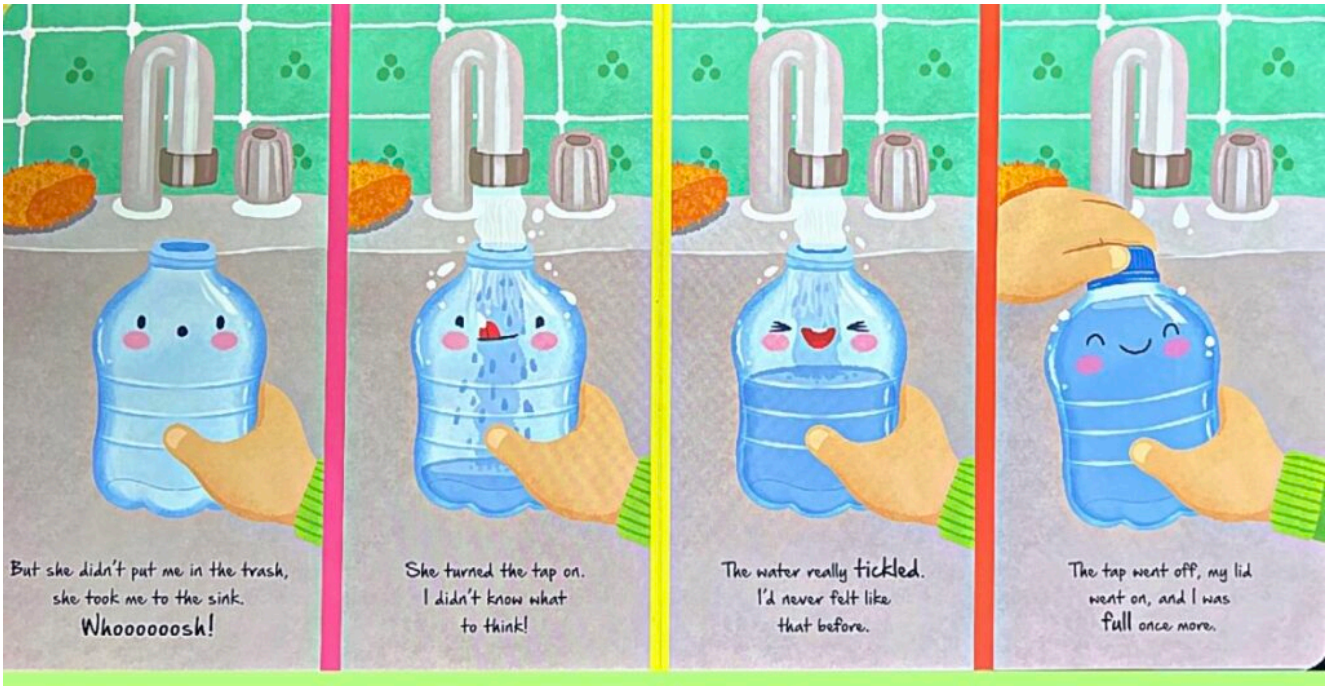
In the third week of lectures, I learned that the consumer's values and the benefit of some groups are related to the problems that design should solves. Since I was also attended product design courses in my undergraduate study, this also caused me to think more deeply.

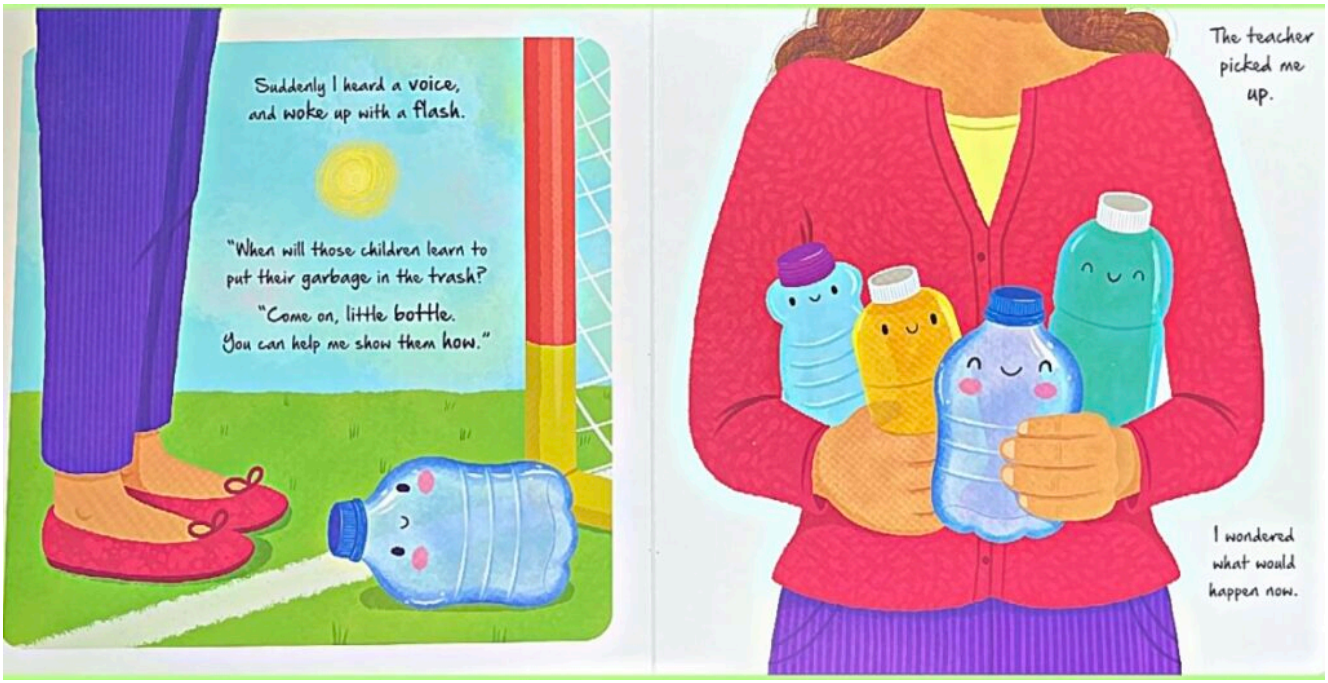
As a product designer, I only thought about how to improve the service life of products, more green-friendly materials and other design issues, but now putting aside of the product designers, from the perspective of consumers and the market, changing the market and consumers' consumption concepts, lifestyles or values may also be a more interesting perspective.

As mentioned in the course , if people want to change your lifestyle, they can try to stay away from consumerism (or avoid low-quality and low-priced commodities) and try to get fun from green, thereby rebuilding a greener lifestyle and

urban form, culture , publicity and the media can play a very big role here.

Suzanne Fossey's children's picture book 'the plastic bottle' starts from the perspective of a plastic bottle and illustrates the story of how to dispose of the plastic bottle after use and finally recycle it. As student in illustration, I think an interesting picture book story can be more touching children to help them establish a greener life concept and continue this lifestyle.


But she didn't put me in the trash, she took me to the sink. Whoooooosh!
She turned the tap on. I didn't know what to think!
The water really tickled. I'd never felt like that before.
The tap went off, my lid went on, and I was full once more.


Suddenly I heard a voice, and woke up with a flash.
"When will those children learn to put their garbage in the trash?
"Come on, little bottle. You can help me show them how."
The teacher picked me up.
I wondered what would happen now.

After reading this book, I was very curious about how plastic bottles are recycled and reused in factories? I looked up for some information, and found out that after the plastic bottles are collected, they undergo a sorting process at recycling facilities. This sorting is crucial to separate different types of plastics because various plastics have distinct properties and recycling requirements. Common types include PET (polyethylene terephthalate) and HDPE (high-density polyethylene).

Once sorted, the bottles go through a cleaning process to remove labels, caps, and any remaining contaminants. This enhances the quality of the recycled material. The cleaned plastic bottles are then shredded into small pieces.

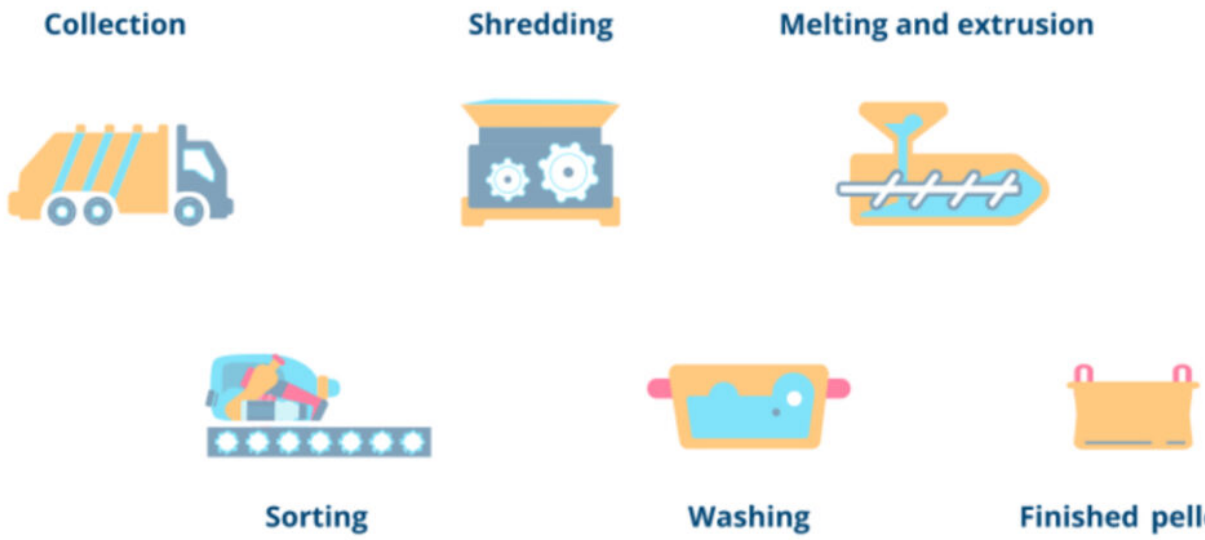
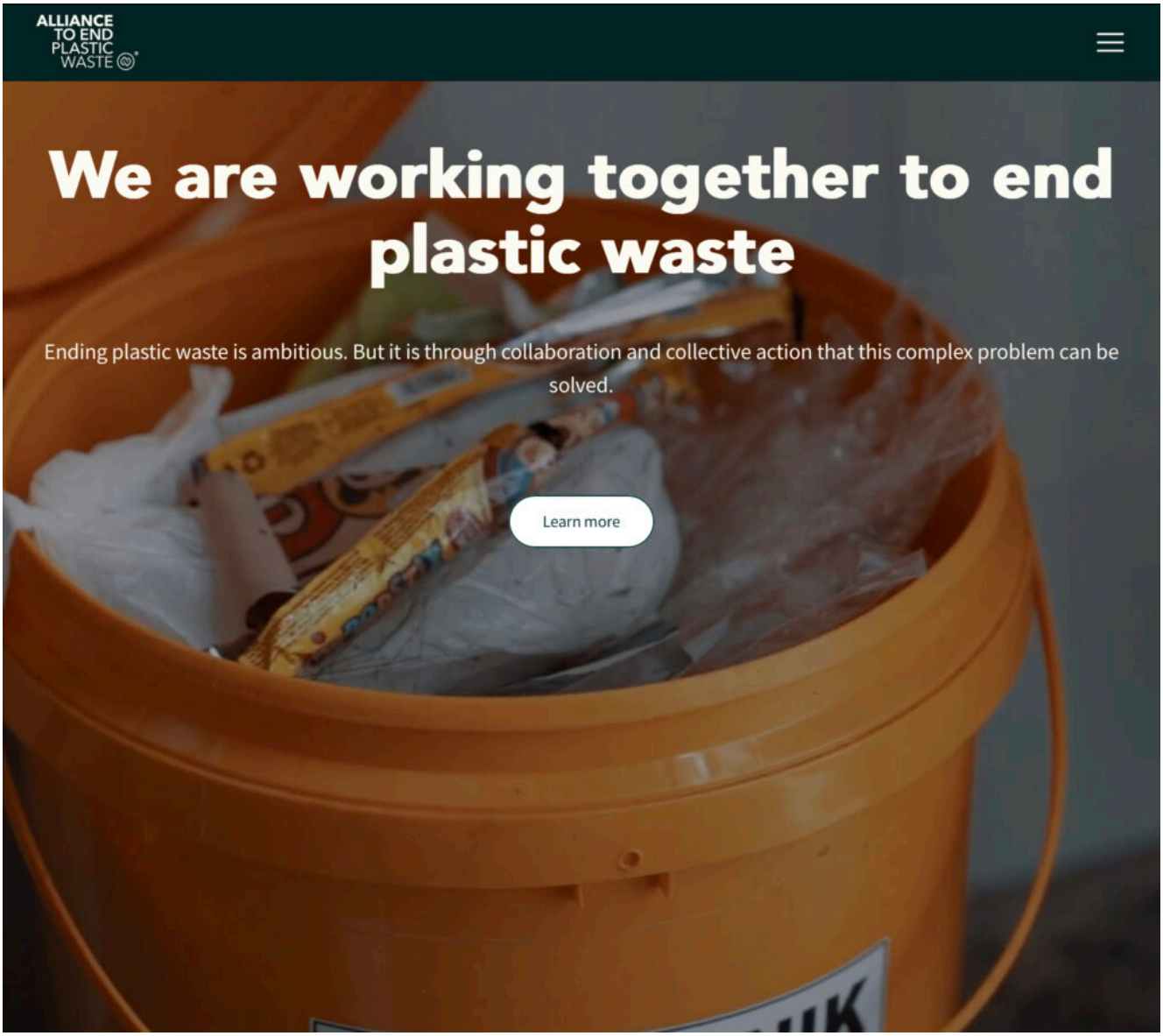


Illustration on recycling plastics on https://www.bpf.co.uk/plastipedia/sustainability/how-is-plastic-recycled-a-step-by-step-guide-to-recycling.aspx

The shredded plastic undergoes a melting process to transform it into molten plastic. This molten plastic is then formed into small pellets. These pellets serve as raw material for manufacturing new plastic products, such as bottles, containers, or other plastic items.

There are also some organizations are concentrate dealing with the nowadays plastic issues, such as EndPlasticWaste.org, This non-governmental organization is working to eliminate plastic waste and collaborate with other environmental foundations to provide more solutions for the plastic products, they are trying some more possibilities at the plastic recycling field.



Recycling plastic bottles helps conserve resources, reduce energy consumption compared to producing new plastic, and minimizes the environmental impact associated with plastic waste. Public participation in recycling programs is crucial for the success of this sustainable practice.

Reference:

Fossey, S. and Bohórquez, G. (2020) The life of a little plastic bottle. Cottage Farm, NN, UK: Autumn Publishing.

British Plastics Federation (no date) How is plastic recycled? A step by step guide to recycling, British Plastics Federation. Available at: https://www.bpf.co.uk/plastipedia/sustainability/how-is-plasti

c-recycled-a-step-by-step-guide-to-recycling.aspx (Accessed: 02 November 2023).

(No date) About – end plastic waste. Available at: https://endplasticwaste.org/about/ (Accessed: 24 October 2023).

Week-2

According to the lectures and preliminary readings from Fallan and Jørgensen in the second week, here are some of my thoughts. I will further supplement them after the reading group if I got some new ideas form others.

The Anthropocene marks a period in which humans have begun to have significant impacts on natural ecosystems and related areas, such as the greenhouse emissions, the rising sea levels, the extinction of some species, and the degradation of the natural environment. This suggests that humans may have become the dominant force in the Earth's ecosystem (perhaps even beyond the scope of the Earth in the future?). This word reminds me of a concept proposed during the Xi Zhou period in China, where scholars put forward the idea of "man can conquer the sky" or "man overcomes nature," indicating the belief that human power can overcome natural obstacles and transform the environment because humans are intelligent beings and will ultimately prevail over the nature.

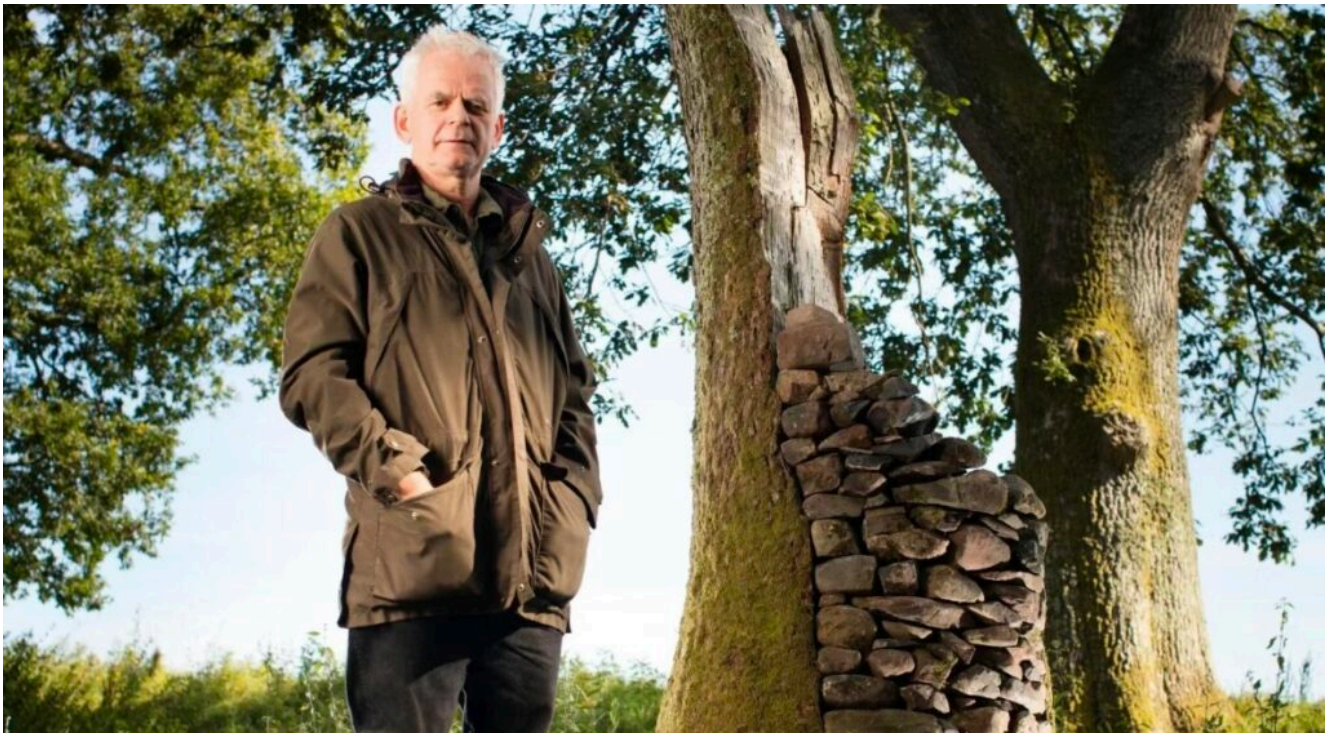
This also reminds me of the dualism between man and nature in the Western world mentioned in class. However, as far as mainstream traditional Chinese thought is concerned, people are more convinced that humans and nature are a together as one and we are all obeying a 'law', this 'law' travels through the past and present, constantly operating and changing. It is

so large that it can even reach far away, but it naturally returns to the original state. This reminds me of the statement mentioned in the lecture in the second week that the environment is an organism. It is constantly being rebuilt. As long as life exists, it will never die.

Perhaps the system of the environment is like the ‘law’, It exists in the past, present and future. Its breadth ranges from the molecules in our bodies to the outside of the atmosphere, and back to the cells of living things. They are all in a cycle, which also makes me realize the importance of environmental design, because we are a link in this cycle that cannot be ignored.

The example of the plastic flamingo reminds me of the recent discovery of trace amounts of plastic in human blood clots. As an artificial material, plastic has been integrated into the environment as a whole from the moment it was born.

Just as plastic products that cannot be broken down are thrown into the ocean, eaten by marine life, and decomposed in the body, the plastic becomes a molecular-sized presence in fish. And after humans eat fish contaminated by plastic, the microplastics smaller than 10um have also been found in the blood. (In some studies, plastic particles have also been extracted from human feces, so some plastics will still be excreted into the outside world and exist in the form of particles in soil and other substances?) This once again supports the statement of natural cycles. In my opinion, things in this cycle are constantly integrating. It can penetrate into cells and affect various biological systems.



Andy Goldsworthy with his artwork

I also discovered an artist who illustrates the integration of nature and culture, Andy Goldsworthy uses original elements of nature, such as fallen leaves, branches, ice, stones, rivers, wild fruits to create works. The works are integrated with the surrounding environment, like a part of nature, and the shape of the works is in harmony with the surrounding environment. The naturally contrasting colors and lines seem to violate the laws of nature. Combining art and nature to create natural 'sculptures', and explore the relationship between civilization and environment.

Reference:

Jørgensen et al. (no date) Environmental histories of design,Environment and history, 2015, Vol.21 (4).

Carrington, D. (2022) 'Microplastics found in human blood for first time', The Guardian .

Laozi et al. (2023) Tao Te Ching. Barcelona: Alma Editorial.