

REFLECTION

I believe that the person I was prior to studying environmental design is significantly different from the person I am today. Although I was very invested and interested in environmental and social activism, I have never realised the alarming rate and need for urgent change, and the magnitude of the issues we are facing today. Whilst learning about the issue, I was also introduced to so many solutions and alternative ways of researching topics in depth. In the lectures which inspired me as a designer, especially the concept of cradle to cradle, as graphic design, by nature is quite a wasteful practice, I never realised that with slight confederation and research, I will be able to produce in a more eco-friendly manner. It has even inspired me to incorporate recycled materials to my other projects and work on developing sustainable methods of energy extraction such as the sustainable garden design that I worked on for Alpassion institute below.

THE ELEMENTS

HOW DOES IT WORK?

The first factor of educational aspect is the Sadu trail that has a deep connection with the history of Kuwait. The special element of the Sadu trail is the Piezoelectric mats that generate electricity to light the lamps in the park at night.

THE SADU TRAIL



THE ELEMENTS

HOW DOES IT WORK?

KUWAITI MUSICAL STAIRS



The second educational element is the musical stairs but instead of a piano, it will sound Kuwaiti musical instruments that were played during the pearl diving era.

PLANT EDUCATIONAL SYSTEM



The third factor is the plant education element which includes local flowers and trees grown in a section of the park with QR codes about the usage of the plant as well as its specifications. Children can also scan the QR code and obtain a sketch of the plant which they can color in, this also promotes paperless creativity methods which are more environmentally friendly.

Furthermore I found the debates to be extremely exciting and informative, I enjoyed learning about new aspects of environmental topics and have gained immense knowledge of my peers, especially ones who have worked in recycling sectors. I have found it to be difficult at the beginning working with students from different backgrounds, but after the reading groups, I found exchanging knowledge from different majors to be very resourceful. I also enjoyed the array of topics presented in the lectures, I felt it expanded my knowledge and gave me freedom to write about different interesting topics and touch points, which allowed me to combine my knowledge from my practice alongside the new findings in readings and material. I enjoyed the workshops, I believe the most useful aspect was definitely working under a time constraint, although it was intimidating at first, I found that a lot can be done, as an example, I enjoyed redesigning the postage services to a more eco-friendly approach, with good teamwork, we were able to think of redesigning a whole system in under an hour, which opened my eyes to bigger opportunities of what can be achieved with more time if one had the determination and drive. I've also enjoyed the recycling workshop and the use of minimal material, having hands on experience of materials we've analysed thoroughly throughout this term was very eye opening, interrogating the reality of recycling in contrast to the theory of recycling, and the waste produced and the difficulties in the making process were aspects I

haven't considered before. Furthermore, I have noticed an improvement in my writing as the weeks progressed, with my growing knowledge of different themes, my favourite theme was materiality. I have found it to be interesting and filled with endless possibilities of environmental change. To conclude, I believe this module has inspired me and expanded my horizon, I truly believe I have gained a bank of knowledge that will serve me in instilling change in the future as a designer, and as a person who cares about the future of our planet.

4B BLOG

IMAGINING FUTURES

Is there still hope?

Whilst every idea of the future may defer from one person to another, we witnessed a surge of post apocalyptic and dystopian future depiction in the media. "Eco-disaster media" by *London Film Academy* (2021) mostly plays on the theme of humans having to survive after an environmental disaster by reverting back to primitive methods of surviving or sometimes, the technological creations outliving humans.





London Film Academy (2021)

London



Film Academy (2021)

London Film

Academy (2021)

Whilst this isn't an accurate depiction, yet the stepping stone it provides is something to consider, instead of waiting for a life changing event, the change can start now, by creating solutions and technology that would serve future generations, perhaps returning to primitive methods of survival is quite an extreme ideology. Nonetheless, it is not valid for us to disregard the benefits of circular and sustainable practices conducted in the primitive era.

According to Artland magazine, the term sustainable architecture is a moderately new term to describe designing and building in methods that limit damaging impact on the environment (Campbell, 2020), yet there are cultures and civilisations that have been building and designing sustainably throughout history. Prior to the Iraqi invasion of Kuwait in 1990, most houses were built with mud.



(Campbell, 2020)

Mud being one of the most sustainable materials, the mud bricks being baked in the hot sun instead of a kiln, creating a low energy sustainable method utilising the hot, dry climate in the Middle East. Within recent years, the architect Revathi Kamath introduced the material as a luxurious alternative (Campbell, 2020), which has been widely favoured in recent years in sustainable modern architecture.



(Marsh, 2023)

Meanwhile Copenhagen and Amsterdam are upscaling the initiative to a higher degree, by utilising earth as a vessel and using whole structures from discarded materials to build new homes, such as shipping containers (Campbell, 2020).



Environment (2012).

Whilst these initiatives are truly eye opening to the extent of what can be achieved in the future in terms of sustainability and ecological design, more in-depth solutions such as utilising water as an energy source are imperative, the use of hydropower, a renewable source of energy that uses the natural flow of moving water to generate electricity.



(Tarroja, 2022)

Whilst this sounds like a very modern and current initiative, it has been one of the most ancient methods that go back to early humans generating power (Engergy.gov, 2019). The ordinary perspective of the future can be imagined as sombre and obscure. However, all it takes to shift the perspective of the future into a tangible and perhaps hopeful view, is the recognition of interconnectedness of the future and the past,

by acknowledging the fact that all the answers needed for a sustainable future, already exist.

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3B BLOG

Recycling and Materiality

-Jewellery making

Recycling a water bottle,

For this workshop, I've decided to recycle a water bottle into a piece of jewellery as I've always enjoyed the process of jewellery making with crystals such as the rose quartz earrings portrayed in this picture, the resin earrings, and rings. Although I thoroughly enjoy the process of creating jewellery, I've noticed that in the past, before I was aware of the environmental impact of certain materials and the ways of decomposition, I've always used either raw materials or harmful materials such as resin which is extremely hard to biodegrade, yet I've never thought about the process of making jewellery with recyclable materials, especially plastic. After the immense knowledge I've gained while studying environmental design and my newly found interest in the environment, the idea of making jewellery with recyclable material has peaked my interest.



Rose quartz



Resin

My inspiration came from the fact that I've been a fan of small sustainable businesses that experiment with recycled materials, such as Designer FRANKA, from Glasgow, who dabbles with recycled plastic and up-cycled fabric, often sharing the

process on social media platforms.

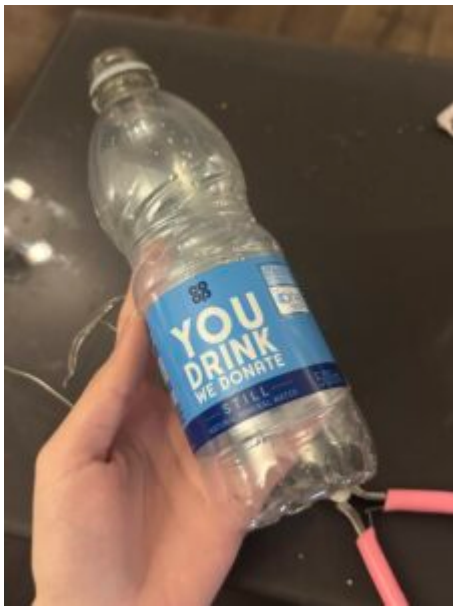


Jewellery , F. (2023)

Her use of recycled bottle caps to make earrings was a favourite of mind. I've owned multiple pairs of recycled jewellery from the shop.

The Process

The materials I will be using alongside the plastic are paint, and metal.



I've drawn the shape I needed on the plastic bottle and cut it



out.



Afterwards, I cut out 3 varieties of sizes.



I burned out the edges to create an interesting shape, and made sure they fit inside each other. My inspiration is an oyster so I was looking for a more organic shapes.



Miller, S. (2024)



I then painted the plastic.



Then pierced and threaded it with a small pearl





The final result.

Reflection

This is my first time recycling plastic. I found the material to be interesting to work with. Some areas were easy such as cutting it out and burning it to shape, the only difficulty was that I could not really decide what shape it takes once it's melted, so that was the push back with the material. When I came to pierce it, I thought it was going to be a lot more easier to pierce through but was very hard and tough to pierce into which was a surprise. I will definitely try this again with other materials in terms of jewellery-making and maybe take the other approaches of cutting up, mixing and reusing but I didn't want to use too much heat since it's my first time working with plastics. I didn't leave a lot of waste and it was pretty easy to make. I found the process of jewellery-making to be the same with other materials, but with plastic it was easier to use than when I'm using crystals or some other materials due to needing to use more wire and a lot more materials to bind, but it was pretty easy to make this piece of jewellery with the use of only two materials.

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3A BLOG

CREATIVE REUSE- REINVENTING BIOMATERIALS

In recent years, the emphasis on recycling and upcycling materials have heavily focused on the conscious consumption mindset which is consume less, rewear, and upcycle. Although any change of mindset is still considered an improvement, the dominant emphasis of recycling is on manmade materials, and unnatural resources such as plastic, fabrics, and concrete. It is an excellent initiative, but there is not as much focus on the the natural resources that have been polluted by humans. A question arises that is the restoration ecosystems possible?

Yes,

but is it possible to reuse or upcycle the harmful materials

that caused the pollution?

I have stumbled upon a remarkable project to prove that it is possible. "Paint from Pollution",



Hager-Suart , T. (2018)

an innovation by John Sabraw, a professor of Art and Guy Riefler, a civil engineering professor to develop a mechanism which filters iron pigments from toxic wastewater from abandoned coal mines. The professors created an acrylic paint, the proceeds from the paint are then used to clean up more toxic streams.



Lipton, A. (2019)

Rivers are Life (2023)

“From acid to art”: a sustainable solution to water pollution, rivers in Ohio are extremely polluted that when kindergarten kids are asked to draw a river landscape, they immediately reached for an orange or red crayon. If similar mindsets and mechanisms are developed, future generations might have the chance to grow up with an accurate view on nature and ecosystems, and not the distorted outlook that is currently being forced upon them. Another instance of using biomaterial, in the field of bio design, Fabula



Lynch, F. (2023)

which is an edible biodegradable concrete solution which

tackles the immense carbon footprint of concrete alongside the issue of poorly disposed food waste, creating a material stronger than concrete by adding coffee grounds and vacuum dried fruit peels at high temperatures mixed with water. Designers have developed garments from algae, spiderwebs and mushrooms, replacing the use of finite resources and creating garments that are eco-friendly which can easily decompose and return to nature. This can diminish the concept of fast fashion which affects the environment negatively. Such examples highlight the possibility of reinvention of toxic materials and the shift to a circular more sustainable economy, with the integration of our practices as designers alongside the research and understating of such problems, it will inevitably cultivate an environment of problem solving that could potentially lead to an extreme positive change to the polluted and destructed ecosystems and environment

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2B BLOG

EXPLOITATION – STORIES OF LABOUR, ENVIRONMENT AND ROLE OF DESIGNERS.

Humans have been consumers, builders, and inventors. Humans have actively left their marks, from the prehistoric humans' marks in the beginning of time to our growing carbon footprint in recent years. Humans claimed the resources of our planet as means of accommodation, believing them to be infinite, setting the rules to labour and often exploiting the environment and hiding the negative impact. It is important to shed light on the importance of social justice, awareness, and design activism. The impact of the growth of social justice through protest and design campaigns has been evident, and the word "change" and the urgency of it has been plastered on posters all over cities, and while some have been successful , such as the call to end fossil fuel with "the fossil fuel proliferation treaty"



Campaign materials, (N.D)

that I personally participated in with the collaboration of D&AD New Blood projects. There is no denying that the need for and importance of social justice has been imperative for years. The effects of exploitation in the past have been far more jarring and destructive than in recent years. With the emerge of activism, for example, the unfortunate story of the Radium Girls.



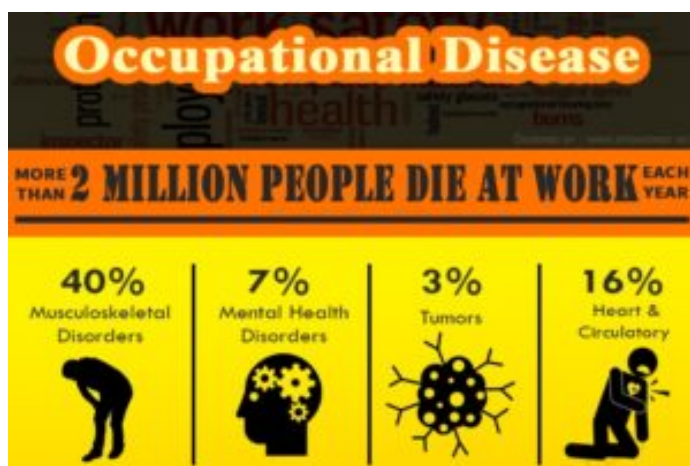
MA, (2019)

In 1917, Female factory workers who suffered from radiation poisoning, from painting radium dials with self luminous

paints, to cut cost and maximise efficiency. The watch company refused provide rags or water rinse the brushes in order to use less materials. The watch company told the workers to repoint the brushes using their lips to give them a fine tip. After being told that the paint was harmless, five women were diagnosed with occupational disease which means that “any disease caused primarily by exposure at work to a physical, organisational, chemical or biological risk factor or to a combination of these factors.” Skrzypczak, A,(2020)

The women who were diagnosed later sued their employers and put an end to the destruction of more lives and the unfair labour conditions.

In our day and age, more than 2 million people still die at work each year.



Occupational Disease,(2019)

Humans have not completely shifted their mindsets and are still functioning in the manner of the linear economy, prioritising profit over the environment and the well-being of the workers. This highlights the role of designers and change-makers to raise awareness and lead societies to a more just and aware society by identifying past mistakes and learning from them. This method is more suitable for the future, as the damages inflicted to our planet is no longer reversible, but we could reduce further damages from occurring.

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According to the European Environmental Agency, textiles products are ranked 5th on negatively affecting the environment and climate change due to its life cycle. Textiles products include clothing, footwear, and household textiles. The recommendation to tackle on the issue is implementing textile circular design. Due to the textile production requiring raw materials, water, and land as well as emitting greenhouse gases, it is crucial to design a structure that can reduce its impact on climate change. The Environmental Protection Agency suggest longevity and durability for textile products, alternative resources and materials, collecting and reuse, and lastly recycling. In order to implement circular design model, it requires technical, social, innovative business ideas, policy changes, and raising awareness through education.

Leach, M. et al. (2018) 'Equity and sustainability in the Anthropocene: a social-ecological systems perspective on their intertwined futures', *Global Sustainability*, 1, p. e13. doi:10.1017/sus.2018.12.

The author states that due to the complexity of Anthropocene, it is now more than ever the need to integrate the notions of sustainability and equity to produce a refined solutions. The author states that there is now a benefit by combining the efforts of social sciences, humanities, and natural sciences to combat (un)sustainability and inequity. The Anthropocene put aside the linear cause-effect analysis of equity and sustainability and shed light on the necessity to interlink

equity and sustainability as well as combine the efforts of multiple disciplines that require further analyses. The author states that capitalism is one of the main drivers for unsustainability and inequity for the reasons of profit-oriented behaviours and unregulated markets. In order to combat the capitalist dynamic, the author states that “It will require active political choice and challenge, design and intent, combining regulatory and policy intervention, with the promotion of alternative sustainable and equitable economic models, including the scaling-up of community experiments.”

Ozbay, G. et al. (2021). “Design and Operation of Effective Landfills with Minimal Effects on the Environment and Human Health”, Journal of Environmental and Public Health, 2021, 6921607, 13 pages, 2021. <https://doi.org/10.1155/2021/6921607>

As the population of the world increases, our waste increases. There are many methods of the waste disposal, but this article mainly focuses on landfills. There are four designs for landfills which are open dump landfills, controlled landfills, engineered landfills, and sustainable landfills. There are two types of sustainable landfills that are anarobic and aerobic which work as biocells. Anarobic landfills restrict air circulation and produce methane gas which can be refined and sold while aerobic landfills include air circulation and produce carbon dioxide as well as maximise the rate of decomposition. Landfills such as open dump landfills can be a hazard to the environment and public health due to air pollution and waterborne diseases. Landfill gases can cause air pollution and health issues such as low birth weight, fetal and infant mortality, and birth defects. Waterborne diseases are caused from leachate infiltration of groundwater resources. The leachate is the liquid that is produced beneath the landfills that seeps into the soil. The author concludes the article with ways to protect the environment and reduce waste:

“(1) respect the planet and all of its living and nonliving components, (2) rethink our consumption needs and avoid spending money on unnecessary things, (3) reduce wastage and waste accumulation, and (4) reuse and recycle products when possible”

LEE, M. S. W., & AHN, C. S. Y. (2016). Anti-Consumption, Materialism, and Consumer Well-Being. *The Journal of Consumer Affairs*, 50(1), 18–47. <http://www.jstor.org/stable/44154717>

The author investigates the relationship between materialism and anti-consumption and the effects on consumer well-being. The author starts the article with the speculation on if being overly obsessed with materials makes an individual unhappy, how does being anti-consumer effects the person. The author states that anti-consumption can be driven by environmental concerns where an individual rejects certain products that do not align with environmental concerns. Some people adopt anti-consumption to live a simpler life and reject being a part of the materialistic lifestyle. The author argues that to have a house garden requires a lot of materials to produce vegetables, but by being driven to have a house garden is partially due to anti consumption of rejecting processed foods and genetically modified crops. The author urges for an expansion on the research in regards to materialism and anti consumption and their effects to consumer well-being and concludes with affirming that by being an anti consumer, it can make you happy through the collection of qualitative data.

Fleischmann, Katja. (2020). Designers as change agents in the Circular Economy Designers as change agents in the Circular Economy. *Discern*. 1.

The author states that designers are the required tools and the boost needed to make a circular economy achievable. The author points out that designers are the people who listen to consumers to design for their needs through interviews and

observations. The author highlights a design-led innovation which is Design Thinking. Design Thinking creates an atmosphere of revolutionary innovations and competitive advantages that leads to a change of behaviour of business cultures. The author states that designers have a method of rapidly producing ideas which can be put into action easily. The author concludes the research with emphasising the role of the designer as a catalyst for change and their ability and responsibility to facilitate the circular economy to strive for a more sustainable future.

Workshop No.2



linear vs circular economy exercise



the group had the theme communication and we decided to do a redesign of the postage services to a more conscious and eco

friendly service.



Final poster

