

Question 4: Outline a current environmental, political or social issue that requires redesign. Explain how you will solve this issue over the duration of your future design career. Underline the tools and approaches you will use and discuss how and why.

Elisha Williams

P Number: 1901315

Programme of Study: Surface Pattern Design

Module: ADAD5003

Word Count: 2272

Tutor's Name: Julia Lockheart

This essay will highlight the ongoing environmental problem of material waste, exploring the tools and approaches needed in order to find a solution. I will discuss ideas from looking at Pen Huston who is a designer for Surviving the Streets charity, the high-street brand of H&M, thinkers such as Donald Norman and myself.

Waste comes in various forms, ranging from food waste to textile waste. Material waste from textiles and packaging is having a significant impact on the environment. As of 2013, 'The amount of discarded textiles in the European Union (EU) is estimated to be 5.8 million tonnes per year; 25% of the textile waste is collected by charity organizations or industry enterprises with the purpose of reusing or recycling. The rest, 4.3 million tonnes, is sent to landfills or municipal waste incinerators.' (Zamani, B. 2015) A vast amount of unwanted materials are being sent to the landfill, in which the planet can no longer keep up with. It is interesting to suggest that the 25% of donated textiles might not be of much use and is therefore also being wasted. This means that the amount of textile waste is potentially higher than 75%.

In the modern way of living, clothing is becoming more accessible and affordable, resulting in more waste. This is also happening with other materials such as plastic used for packaging. 'The rising standard of living has allowed people in low resource, remote communities to buy more single-use plastic items than they could before.' (Phelan, A. 2020) Designers need to become more conscious about what materials they use in their practice and also how they produce it. Likewise, consumers and people in general need to be aware of their unethical actions due to consumerism. Do people really need the latest fashion piece that is currently on trend? Is it completely necessary for a particular item to be wrapped in so much plastic? We are living in a world that consumes without considering the consequences. 'We are buying 60% more than we were in 2000. Each garment is worn less before being disposed of and this shorter lifespan means higher relative manufacturing emissions.' (Macmillan Publishers Limited. 2017). A high volume of materials are being wasted yearly, now more than ever. People are indulging in new clothes more often and are therefore throwing away clothes that are perfectly fine. People are consistently buying new clothing due to trends rapidly changing, resulting in high demand for clothes. As a society, we have forgotten to value what we already own and make the most of what we have. It has become too easy to quickly replace a piece of clothing instead of even considering other alternatives.

The effect waste is having on our planet is catastrophic, it has and will continue to cause climate change. Due to incineration and the manufacturing process of goods, greenhouse

gases are emitted which heats up the planet. These manmade materials ‘use natural resources such as water, fuel, metal, timber in their production and this results in the emission of greenhouse gases.’ (Apia, S. 2009) It is interesting to note how it is not the manmade material itself that is causing global warming, but it is the natural products that are used in order to make these goods. Food waste for example is completely natural, however the release of carbon dioxide in the air through decomposition of the organic matter, results in global warming.

Climate change is a massive issue which has been rapidly increasing since the Industrial Revolution began in the 18th century. This was where various materials and pollutants were being increasingly used. Over time, humans can see the devastating impacts this has as we continue to destroy the planet through old ways of working. The effects of global warming include sea levels rising, extreme weather conditions, drastic change in temperatures and much more. Redesign is necessary now more than ever.

The fashion industry in particular is worryingly ‘the second largest polluter in the world’ (Sustain your Style, 2018). As a designer this statement is so important and should not be ignored. This industry hides too much from consumers and produces waste that is beyond unimaginable. For example, ‘85 % of the daily needs in water of the entire population of India would be covered by the water used to grow cotton in the country. 100 million people in India do not have access to drinking water.’ (Sustain Your Style, 2018). The devastating impact that sourcing materials for fashion items is only getting worse. Cotton is often glorified as being completely pure and great for the environment, however there is nothing pure about the mass demand for water in such a selfish nature. The water being used to make cotton could be going towards these less economically developed communities, who desperately need clean water to survive. Although cotton is deemed essential, as it is used to produce so many products, reusing what we already have on the planet first would be the most respectful decision.

The design industry is flawed. Designers need to be more aware of the consequences that their actions hold and consider the changes that need to be made. There are ways of being resourceful, fashion and sustainability should live happily alongside each other, not against. The following figures document the positive changes that have been made by designers from different areas of interest. These examples include, making use out of materials by upcycling, reusing materials and mending damaged items.



Figure 1

Pen Huston decided to make incredible use out of waste that most humans contribute to regularly, this particular waste is food packaging. Huston uses crisp packets, binding them together with an iron to make sleeping bags for the homeless. From being a volunteer at Surviving the Streets charity, she realised that she had to come up with a solution to the lack of sleeping bags they held at the charity. This is where she had the innovative idea to make use out of waste, giving a purpose to non-recyclable crisp packets. It takes up to 150 crisp packets to make a full-length sleeping bag, these 150 packets would have just ended up in landfill so it is uplifting to know that waste can have a new purpose. “This was about making something out of nothing” (Huston, P. 2019). The ‘something’ being the sleeping bag and the ‘nothing’ being the crisp packet. Design companies should take this statement forward and use more of what we already have on earth.

Not only is this an act of kindness towards homeless people, but it is an act of kindness towards the planet also. Think of how much less waste we would be sending to landfill if we were to reuse most unrecyclable packaging. This would have an enormous positive impact on the planet, less product being incinerated meaning less carbon emissions. Not only could this work for crisp packets, but other packaging with a foil base, such as chocolate wrappers. The foil acts as insulation to warm the bodies of people who are using the sleeping bags. Coats could even be made out of the packaging, or even pillows if they were filled with soft material waste. So many items could be produced for a good cause and such little cost is made to produce these products out of waste. Companies have no excuse.



Figure 2

H&M are a well-known high-street fashion brand who contribute to the fast fashion industry. However, they have recently as of 2020, brought out a whole new conscious fashion range. This includes fashion pieces that are made from sustainable sources, using packaging, left over material and other sources of waste. The processes that they are using to make these products use up less water and carbon emissions, making this beneficial for the earth. These processes include SpinDye and Agraloop. SpinDye is an environmentally friendly dye process that has its focus on the colour of the original material waste, which is then forced to fibre and spun by yarn. Agraloop is a process that transforms the crop waste of oilseed hemp into Hemp Biofibre. This is a strong natural fibre that is continuously used in their conscious range.

From looking at H&M's website this particular range appears to be slightly glorified featuring beautiful pictures of plants and happy faces. It is also disappointing to see that they have sub-headed sustainability, so it is not directly included amongst the clothes in the rest of the website. If they were to include this range on the rest of the website, it would be more likely to be seen. Also, people would be buying the items without even realising that they are sustainable.

It is interesting how H&M are still continuing to sell clothing that are completely unsustainable but claim that waste should be "purposefully transformed into treasures to be loved and valued" (H&M, 2020). This is a step in the right direction which is positive to see from a fast fashion brand, but they should make all of their clothing items completely sustainable. However, if H&M can produce a conscious range that clearly shows that all brands can make a change. The key to change is using waste materials. Hopefully this conscious range has great exposure and encourages other high-street companies to follow in their footsteps.



Figure 3

This is an example of where I decided to mend a piece of clothing, instead of putting it to waste. I had quite a large hole in the sleeve of one of my favourite knitted jumpers, so I hand stitched it using thick embroidery thread. Although it is so easy to quickly replace something, I did not want to let go of it and it would have been a shame for it to go to waste. I, as a designer made a conscious decision to restore an item of clothing, which only took up 5 minutes of my time, from finding my sewing kit, to the process of stitching and finishing it.

More people need to take care of their belongings. I have owned this particular jumper for an estimated 4 years and will continue to hold on to it for another 4 years, if not more. The fact that I stitched into it gives it more of a sentimental value, creating character. It is interesting how no one owns anything like this as it has my own personal touch. It would have been fascinating to use different stitch colours even fabric offcuts to produce a patchwork. These are ways of how you can cover up a flaw, by making them unique. This adds value to a belonging, making it be worth more emotionally.

The topic of value is vital for change, in terms of waste. From having an emotional attachment to clothes, increases the value. If you take away that emotion, the clothes have less value and are therefore more likely to be sent to landfill. Donald Norman talks about the emotions that humans hold and how they assign value. 'Emotion assigns value. It is the emotional system that determines whether something is desirable or not.' (Norman, D. 2013) This suggests that if you hold emotional attachments to belongings before and during the time of owning them, they will be kept for longer. The human mind is sentimental, some minds more than others. People should consider why they bought these items in the first place. Items should only be bought if you know they are going to be valued, so it is important to talk about waste prevention.

The tools and approaches needed for tackling waste as highlighted previously are restore and repair, upcycling and becoming more conscious. Additional solutions include slowing down the mass production and shopping more sustainable. An example of sustainable shopping would be supporting charity shops. Not only are you contributing to less waste, but you are donating to people in aid. Over recent years, it has become a trend to thrift items, why is this? Vintage and retro have come back into fashion, as like the relaxed bohemian look for interiors. Also, due to the rise in fast fashion, clothing that is currently seen in high-street stores are ending up in charity shops rapidly. The cause of this is how cheap these products are so they are being thrown away quicker.

The process of slowing down the use of mass production on the other hand, is something that designers need to take into consideration. Whether this is for clothing, packaging or other products that are produced in mass amounts, volume should be considered. A lot of the time, too much material is produced, having an effect on the overall cost, as well as the planet. 'hundreds of tons of garments manufactured every day, and nearly the same amount of both finished product and raw materials.' (Taitler, R) Though by producing at mass, it usually works out cheaper for companies, there are so many offcuts and waste left over. Taking this into consideration, surely long-term it would not make that much of a difference cost-wise.

The key point of this essay is to value everything you own and be more conscious about what you buy into. If something is beyond restorable, maybe it could be used for something else. The last resort should be sending it off to landfill. Waste is created, primarily from designers, but also from consumers. If both, designers and consumers strive to reduce their waste, the planet would benefit immensely. By being educated and becoming more aware, sustainability and fashion should not be a problem.

Figures

Fig.1: Mercury Press & Media. (2019) *Pen Demonstrating the Sleeping Bags* [Photograph] East Sussex

Fig 2: H&M. (2020) Conscious Collection [Photograph]

Fig 3: Williams, Elisha. (2020) Jumper [Photograph]

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