

Amber Dodd

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Research in context ADAD5003

Surface Pattern Design

Julia Lockheart

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.

Word count: 2463

I am looking at the impact fast fashion has on the world and, as designers, what can be done to reduce our output. Fast fashion is the rapid production of clothing which are on trend, new, inexpensive clothing. It is responsible for high carbon emissions, water waste production and a very large amount of landfill waste. Article by '7Billion for 7Seas' declares *"fast fashion is second only to oil as the world's largest polluter"* considering 116,000 tonnes of oil in 2018 alone was spilt, fast fashion pollutes a great deal.

I will be looking at what is already being done about the pollution and negative impact it has on our environment and what more can be done. I'll study Japanese philosophy and how it can be applied to my practise and many other peoples. Fast fashion is something that isn't going to stop soon and is forever growing, and social media is a big part of how it works and why it's expanding. Through social media, trends are shared constantly but what aren't shared are the detrimental effects it has on the environment. If social media was used in a positive way to make people more conscious of what clothes they're buying and what impact they have on the environment, this would then lead people to make informed decisions.

In this essay I will explain how I will incorporate methods of sustainability into my practise to reduce any environmental impact I may have as a designer. I will do this by looking at sustainable materials and ways of practise using such materials and researching companies which are tackling their negative impacts design and fashion can have on the environment and how they do this.

Non-biodegradable clothing is manufactured synthetic textiles, which can take anything between 20 to 200 years to biodegrade. These include fibres such as polyester, spandex, acrylic and nylon, which are materials used in many everyday clothes. Edge fashion intelligence website, edgexpo, look at conscious and sustainable fashion, specifically at textiles which are more environmentally friendly. Biodegradable textiles take much less time to decompose. 100% cotton for example can biodegrade in a compost in as little as a week, but in most cases takes roughly 5 months. Other fabrics which are highly biodegradable include wool, linen, bamboo, and silk. Less biodegradable fibres and blends are far more accessible and much cheaper, there for they're more commonly used in fast fashion, this then allows for a cheaper retail price.

In Andrew Brooks, 'Clothing Poverty' he speaks of Fast fashion promoting a "throw away culture", this then causes a problem when clothes are tossed aside when these clothes take decades even centuries to biodegrade. Brooks states how the use of synthetic fibres are linked to some of the many ocean's plastic pollution. The pollution comes from microscopic textile fibres which is causing irreversible damage to the ocean's sea life and marine creatures.

Brooks then goes on to say "Material and garment construction standards have declined as budget fashion items are only destined to lead short lives", this then goes to show that the lower the price the less quality you receive, although you'll pay less and the lives are short lived in terms of how long they are wearable or even wanted to be worn in the forever changing fashion trends, they will live long lives on earth due to their slow biodegradable fibres.

Although materials and fibres such as cotton are a better option when making garments due to its highly biodegradable quality, it still has its negative effects on the environment.

In E.M. Kalliala and Pertti Nousiainen's study of the environmental profile of cotton and polyester they found that growing cotton consumes 40% less energy than polyester fibres.

However, it does require huge amounts of water, it varies from 7 to 29 tons of water to grow 1 kilogram of raw cotton. To boost production of cotton, fertiliser is increased, this then pollutes both surface and ground water. Organic cotton however doesn't use fertiliser but could take twice as long to grow, so even though cotton may be a better choice than other slower degradable synthetic fibres, growing cotton still has a negative impact on the environment.

In my practise as a surface pattern designer, I use a lot of fabrics, whether it be creating samples, exploring processes or designing garments. After conducting research on the sustainability of certain fibres I can now make a more informed decision on what fibres to use. I will definitely be using less synthetic fibres so the work I produce will have a lower impact on the environment.

Clothing retail company H&M released a collection in 2018 called 'conscious', this collection is said to contain more garments with more sustainable materials. For the garments to be considered 'conscious' they must contain at least 50% sustainable materials, such as organic cotton or recycled polyester as stated on their website. As a company, to encourage recycling they offer 15% off purchases at their store when a bag of garments of any shape and condition is donated, these are then possibly used for their future garments and to promote recycling. This shows that H&M have started being more environmentally aware as a company of their impacts on the world and their pollution.

On their website 'H&Mgroup', they address the world's climate crisis and have set themselves the goal of becoming 'climate positive'. They aim to be a circular business, meaning to maximise resources and minimise waste. See figure 4 for their circular business approach, it demonstrates that although the cycle of fashion; design, use, and discard. It can be done knowingly of the environment.

H&M as a company have made an extremely positive change to their company, but I argue, is it enough? Although they've released a new 'conscious' line, it can contain as little as 50% biodegradable material. In the case of using recycled cotton on a small 20% is used. Yes, it is an improvement from a garment containing less than 50% even none but only half of the material would biodegrade in less than 20 years, so it still has an opportunity to have an effect on the environment. Not only this but not all of their clothes are 'conscious', less than 40% are 'conscious' and they are still producing products which negatively affect the environment. If they were to strip all synthetic garments, or those that take longer periods of time to degrade, and to only produce those of 50% or more sustainable materials in the clothes, their impact would be much larger.

This notion then plays on William Mconoughs and Michael Braungart theory of "'Less bad" is no good' they speak of recycling, reuse and that "reduction in any of these areas does not halt depletion and destruction—it only slows them down,". This therefor meaning the damage to the environment hasn't stopped but only been postponed. So a company like H&M are only slowing down their part of destruction of the planet.

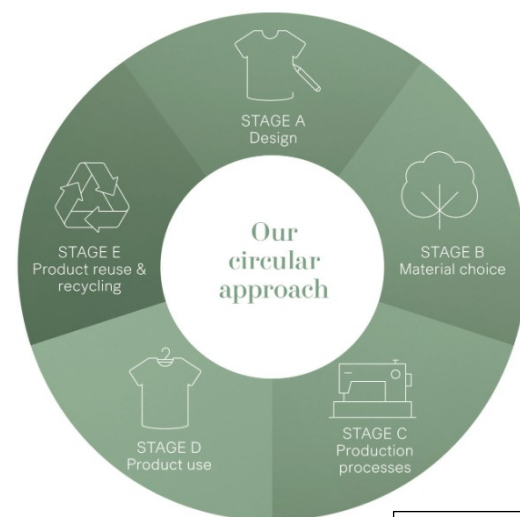


Figure 4

That being said I am highly admirable of them as a company as they are currently aware of our environment's status and are making a change, but I argue that they have the power to make more. They are still fuelling fast fashion by producing the on-trend clothing for their customers but at a cheap price and using unsustainable materials.

H&M's efforts have been positive, and much more valuable than many other retail companies. For example, Primark is well known for its absurdly cheap prices and quality that most likely not to last. The fabrics they use are cheaply made and are of lower quality unsustainable fabrics. Although H&M's clothing may be more expensive than Primark's the quality is also higher, as well as the quantity of sustainable fibres.

I think H&M have set a very good example and are one to follow. It is easier to begin to include more sustainable materials in clothing and design, rather than going straight to 100% biodegradable. By using 100% sustainable materials it can limit your possibilities in processes in design so there can be a limit in what you choose to do. This being said I will be more conscious in my practise. H&M's circular approach is one I plan to include in my design process, and I begin to question what can be reused and recycled, and my material choice.

Clothes are now so easily accessible, and many places sell them unrealistically cheap, so when clothes are damaged or torn, they can be easily replaced, even though they can be repaired. I think its imperative that repair should be reinforced as this would reduce the output of clothes in the fashion industry. If clothes were repaired whenever they were damaged their lifespan would be much longer, and the number of garments being disposed of would be fewer.

Wabi-sabi is a way of living in which imperfections and flaws aren't seen as a negative but beauty is found within and is accepted as the natural cycle of life, it is finding beauty in imperfection. In Leonard Koren's book *'Wabi-sabi for Artists, Designers, Poets and Philosophers'* he speaks of wabi-sabi "in its fullest expression be a way of life." This Japanese philosophy welcomes imperfections and makes use of them. This then to be applied specifically to a designer's life would be eye opening, instead of when things go wrong or things break but to welcome it, to see the imperfection as part of it and use it as it is only a cycle of life.



Figure 1

Kintsugi "golden joinery" is the method of repairing broken objects with golden glue, typically broken pottery. See figure 1 for an example of Kintsugi. This is also a method of finding beauty in imperfections and embracing its flaws. Objects with kintsugi are seen to have high value in Japanese aesthetics and is believed that although damage has occurred, that the life and purpose of the object shouldn't end there. In the Japanese philosophy it's said that the marks of wear of an object are said to add to an object's story.

The Japanese philosophy has also been brought to garments and fabrics. Like Kintsugi, Sashiko is a Japanese method of repair, particularly of clothes aesthetically. Sashiko is translated to 'little stabs' 'little pierce'. It is the method of decoratively reinforcing garments at points of wear or to repair with patches. Sashiko has the same principle to prolong the life of clothes but could be done by stitching worn out clothes to make new ones. It was even used to make clothes warmer in the winter months by



Figure 2

stitching garments together, this was done decoratively using running stitches and geometric patterns, see figure 2 for an example of this.



Figure 3

Boro is a Japanese class of textiles which have been mended or patched together, much like Kintsugi and Sashiko the textile's flaws or tears were repaired and were seen as beautiful imperfections and the life of the textile has been extended. See figure 3 for an example of what Boro may look like. The term Boro originated from Japanese Boroboro, meaning something which is tattered or repaired. Unfortunately, many boro textiles which weren't passed down through families were thrown away, this began as the Meiji period ended and living standards

increased in Japan. Boro were then seen as a reminder of poverty to working class so they were then discarded. This as a great shame, throughout families textiles were sewn together to create garments, this can be seen as having your family with you and a story on your back. Why should taking something and making it into something else to be worn, that has story and character to it, be a bad thing. With the effect clothing has on the environment and the decades it can take for them to decompose, using clothing from your family and previous garments and creating new clothing would be a positive change to reinforce.

Angela Maddock is an artist and lecturer whom is currently 'maker in residence' with the staff and students of the Florence Nightingale Faculty of Nursing, Midwifery and Palliative Care at King's College London, where she created with the students and staff, a piece inspired by the tradition of the quilting bee. The piece 'Being intimate' (see figure 4) is the



Figure 4

deconstruction, piecing and stitching together their own worn underwear. Maddock on her own website angela-maddock.com speaks of herself being "fond of quilts made from cloth that is worn and usually discarded" which includes the pieced 'boro' textiles from Japan. She has created a whole piece with other women that took inspiration from the Japanese tradition 'Boro'. 'Being intimate' holds many stories of those whose underwear was used as well as the experience of creating it, and to me this piece is powerful and inspiring.

I am very interested in the idea of the Japanese philosophy of repairing and reinforcing garments and clothing. In a world full of fast fashion this is a concept that could easily and cheaply be taken aboard.



Figure 5

Hikaru Noguchi is a designer who believes in the art of repair and that their products should last a lifetime, which is why they offer free mending to their items (figure 5 is an example of this), as well as selling mushroom kits which are for traditional visible and invisible mending. Hikaru, when mending damaged garments, asks the owner the story of the damage and why they want it repaired, which helps them gain a better understanding of the relationship between owner

and garment, which contributes to her creativity and designs.

I agree with the beauty of imperfections in the Japanese philosophy and is something I want to incorporate in my practise. The repair of an item I believe can add to its beauty, especially using sashiko. Using sashiko,

garments can be visibly repaired, and even patterns can be added whilst doing so, this could even transform a plain looking torn item of clothing into a repaired, reinforced, patterned one. If flaws and tears in clothing were seen more as repairable rather than replaceable, clothes would last longer and the need to replace would deteriorate.

There are many ways as a designer that my output into the environment can be reduced, before writing and researching the effect fast fashion and textiles has on the environment, I was ignorant. The research I have conducted will change the way I design and what materials I use and even the way I shop and dispose of clothes beyond repair. Fast fashion is having a detrimental effect on the environment and isn't spoken about enough. Many people see an item of clothing at a cheap price and think nothing of it, ignorance is **not** bliss. Ignorance is killing our environment rapidly.

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