<u>Report -</u>
<u>"How can Eco-Collective build a community facilitating access to sustainable materials, within the graphic design industry?"</u>

Introduction
On closer inspection of my overflowing recycling bag contents, I realised that the majority of items I thought were recyclable are not *actually* recyclable at my weekly house collection point. In fact, despite there being a large recycling symbol on packets, it only means half is recyclable or only to be dropped off 'with bags at large supermarket'. There was even packaging which had no information whatsoever on how to sustainably dispose of it, which is concerning as we are more aware than ever about our planet and the problems with pollution. As a graphic designer, I am curious as to why brands have opted for designed packaging which is environmentally damaging, and to investigate how much sustainable input graphic designers have within a project. From speaking with various industry experts I hope to get a sense of the real issue in the design industry and how I can create a solution.

Design industry operations
Print
Considerations for eco friendly typefaces that use less ink:
• Kerning needs to be small
• Weight needs to be thin/lightweight
• Sans-serif uses less ink – actually this makes me question Ryman Eco! That's Serif. Why?
• Size needs to be considered in terms of how much paper is used for printing
"Century Gothic is often cited as one of the most efficient regular fonts; because of its thin print lines it uses 30% less ink on average than Arial. However, Century Gothic is a large, broad and wide set font so whilst it uses less ink, it uses more paper when comparing fonts like-for-like at the same point size. Using a smaller point size can reduce this negative impact; Century Gothic can accommodate this without losing legibility because of its wide-set nature." (Leap, 2020). The quote above explains whilst a typeface may have a thinner weight, it's wide on a page and therefore uses more paper. The challenge for a sustainable typeface it to consider the carbon footprint of the printed material; not just the ink. A typeface that uses more pages uses more paper, therefore more space, more fuel for transporting and energy, power, time etc. and therefore it has a really big impact.

Materials
You will have heard of the three R's - reducing, recycling and reusing. This is a great motto but it will only get us halfway there in terms of saving our planet. We are now at the point of no return - it's no secret that our planet is drowning in plastic and it's predicted by 2050 there will be more microplastics in the ocean than fish (Ellen MacArthur Foundation, 2016). This instantly tells me that those three R's are simply not enough to transform our industry and the way we generate materials. Resources such as ink, paper and plastic that are sprinkled at customers to resonate a brand/company need not be wasteful. There are clever ways to promote a brand sustainably which can be just as effective, and bio-materials play a large role in this. There has been a huge shift in the last few years with awareness around sustainable alternatives. For instance in the design industry there have been many start-up companies generating their own bio-materials from vegetables and organic matter. Here are some examples:
• Botanical Inks studio are demonstrating a variety of ink techniques on fabric, paper and printing by using flowers and natural dyes from nature. From wrapping up the flowers within the fabric and leaving them to stain, to diluting them in water and using as tie-dyes and ink, there are so many different ways to use them (Babs Behan, 2018).
• Cleancult addresses concerns around sustainable materials not being appropriate for perishable goods and have developed paper based packaging for milk cartons. This demonstrates how it can be possible to keep perishables fresh and sustainable at the same time (Cleancult, 2021)
• Wise by Patagonia have also reassured consumers that sustainable materials can protect and preserve cosmetic goods by creating sustainable paper pulp packaging that is FSC forest certified (Dieline, 2018).
• The entirely dissolvable packaging developed by Mi Zhou demonstrates that the afterlife of a packaged product need not exist. At the same time, Zhou is also challenging the aesthetic boundaries of sustainable design as Soapack can be treasured as an ornament (Dezeen, 2019).

- Colour and texture has been successfully displayed throughout all of Elena Amato's work, proving that material made from bacterial cellulose in fruit and vegetables can be colourful, practical and look visually appealing for branding (Hitti, 2019).
- The fashion industry could take notes from Elissa Brunato's Bio Iridescent Sequin, which has been created using 'wood's ability to form structures that refract light' (Brunato, 2019).
- Additionally, designers such as Suzanne Lee, Ross Lovegrove, and Neri Oxman have all delivered inspirational lectures around advances within the bio material field and have shown that switching from manufactured synthetic material to organic bio material is logical and futuristic (Lee, 2020; Lovegrove, 2005; Oxman, 2015).

So this has me wondering, why are we not seeing these innovative inventions above in the design industry? Are biodegradable materials really as good as they are made out to be - or potentially there is an issue affecting these sustainable material developers? To understand this I need to research the current methodologies and processes within the design industry further:

Getting to the root of the problem -
Sustainable material developers/start-ups

Graphic designers and responsibilities
When considering the whole process of design, consider Life Cycle Design (LCD), the umbrella terminology for the stages of a product's life cycle (Kusz, n.d).

Data

Behind the scenes issues which we don't see
Pricing barriers (touch on poor countries/child labour/why China is able to produce so cheap by poor staff pay etc.)

In the name of exclusivity (burning products)

Carbon footprint
We've all heard of carbon footprint but what about carbon toe-prints? Author Mike Berners-Lee explains how important fundamental information is regarding sustainability; how companies need to consider the bigger picture (the entire footprint) of their business, instead of just the basic things like print, packaging, using less electricity etc. (the toe-prints). What I have learnt so far in my research (particularly from doing a brand archive) is that there are a lot of companies who only think about the toe-prints and then when the entire footprint is investigated, they get into trouble. This includes but is not limited to: importing illegal materials (IKEA - timber), releasing eco-conscious garments but burning millions £'s of stock (H&M, Burberry etc.) and drivers making 3 separate deliveries to a customer in 3 days, when they could take 3 items in one trip after 48 hours (Amazon Prime).

Looking to other means of inspiration i.e legislation
Countries such as Germany, Switzerland, the bottle bill, why can't this be implemented in UK?

Service design/customer journey mapping
Currently the industry is flawed and disjointed - with clients exploring sustainable packaging manufacturers sometimes years in advance before approaching graphic designers. I want to challenge this and ultimately create Eco-Collective as a consultancy which enables collaboration from the get go so all can be involved at the same time.

Summary
Can graphic designers do more?
Is it really down to designers or sustainable manufacturers - or both?

My project outcome and continual review - 500 words

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