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Dissertation Proposal - Movement, Respect, and Influence

I am choosing to direct this essay towards the key points movement, respect, and influence. I will delve into the root causes and psychological factors of fast-fashion, one-use plastics, and excessive buying and how products should be respected and not discarded after few or one use. Furthermore, how trends and movements are so important and enable growth within the design and material industry. Additionally, how social media, adverts and other influences are creating a bias and false reality within the design industry and how this effects the designer and consumers mindset. I will explore different philosophies and designers such as the cradle-to-cradle concept and designers such as Ray and Charles Eames. A reoccurring theme linking these keywords together seems to be nature which I aim to explore in detail.

Movement

There are multiple ways in which the word ‘movement’ can be used and understood. A few definitions include ‘a group of people who share the same ideas’, ‘progress, especially in a particular task’ and ‘a slow steady change in what people in society do or think’ (Oxford University, 2021). These definitions combined should be applied within designing as movement is fundamental within the design process. If research is carried through correctly then multiple iterations of designs and prototypes should be produced, analysed with corrections and changes made accordingly. This process led me to the philosopher Neri Oxman, a successful female within a very male-dominated field.

Oxman believes that post the Industrial Revolution, design has been dominated and moved by mass production and the inflexibilities of manufacturing. ‘Assembly lines have dictated a world where designers have been taught to think of their product in terms of assemblies of parts’ (Dvir, 2019). The manufacturing side of product design is often limiting designers and their products as we are taught to believe that it cannot be manufactured or made if it is not made from separate components each having a predetermined function. However, Oxman encourages combining and integrating ‘structure and skin’. She has inspired huge amounts with her innovative biological driven designs.

Oxman has created amazing movements as she is always thinking on how her designs will impact the future. Materials are a speciality of hers as she combines engineering and biology to create never seen before biomaterials. She believes that ‘the augmentation of objects and buildings with biological materials that can adapt, respond, and potentially interact with their surroundings’ (Dvir, 2019). This is the legacy she is carrying through her designs from Zaha Hadid which is also known as ‘material ecology’.

She is the associate professor of media arts and sciences at the Massachusetts Institute of Technology’s Media Lab. As the research they carry through involves material ecology, the institution built 3D printers capable of printing biological matter such as glass. This enhanced technology with these capabilities will change the way designers think about their design and manufacturing process and create a movement for positive change.



(Luong, 2019)

A horseshoe crab was analysed due to its complex internal structure whilst remaining weightless. The skeleton is made from chitin which is also the second most abundant biopolymer. The material was examined to discover that the chitin was chemically composed to generate stiffer and softer areas around the crab's body. From this information, Oxman and her team explored how to apply chitin to products and architecture. The team built a 3D printer that was able to print the chitosan at a resolution of 20 microns. As 20 microns is the average thickness of human hair, the possibilities of use of this material became limitless.

(Stevens, 2015) states that a design or art movement is created when 'Influential forward thinkers find that they share a common philosophy that is at odds with contemporary thinking, a productive outcome can be the start of a new direction'. I do believe biomaterials and biological structures and looking towards nature to sustain our world is a new movement and route many designers are following originating from Zaha Hadid.

Respect

Respect is so important and should be reflected within the whole design process especially the end-of-life cycle of the product. If consumers have respect to their possessions, then the discarding of the item should be less of ease. There is a major issue with the throw away mentality today and I argue that it boils down to consumers mindset of lack of gratitude and

respect for their possessions. I also argue that there are changes that urgently need to occur within modern day designers and their designs.

“If we want users to like our software, we should design it to behave like a likeable person: respectful, generous and helpful.” Software designer, Cooper, expressed that the most successful software should resemble a respectful person. This remains true with product design as if the designers aim is for the product to always respect the user and fulfil the problem it is being designed for then it should always be a successful product.

Respect should also be thought about for the whole product life cycle. Products and furniture should be designed to last and serve their purpose for lengthy amounts of time in particular furniture. One-use plastic products such as cotton buds, drinking cups, shopping bags, drinking bottles and many more are well known to be having a growing terrible effect on the environment that both designers and individuals chose to ignore.

‘Cradle-to-cradle’ is a concept originally derived from the philosophers William McDonough and Dr Michael Braungart. It is broken down into three main parts, innovation, quality, and beneficial design. The term ‘cradle to cradle’ encourages safe and possibly infinite circulation of materials in cycles. Constituents are not chemically harmful or toxic and should be recyclable within this concept. Nature is taken as the main inspiration as the philosophy states ‘there is no waste, no shortages and no limitations’ and that there is an ‘unlimited reuse of raw material as waste is seen as food’. ‘The goal is to have a positive impact on society, the economy and our planet’ (Mosa, 2021).

Certified Cradle to Cradle™ and Cradle to Cradle Certified™ are registered marks of MBDC, LLC used under license by the Cradle-to-Cradle Products Innovation Institute (EPEA, 2021). The idea was turned into a manifesto by the two philosophers detailing how to achieve their Cradle-to-Cradle Design model. This positive concept is what the more of the world and designers need to follow to save nature's processes. This positive notion has been turned into a certification. This would have the effect of encouraging designers and companies to design with better intentions for the environment with this concept at heart as it monitored and will have to be earned through correct design thinking.

Mosa is a tiling company which takes this concept as one of their core values. It takes responsibility for production processes and the materials used and is the world's first ceramic tile company to gain full cradle to cradle silver certification. The certifications range from basic to bronze to silver to gold to platinum. The reason they have earned this certificate starts within their materials. They use the raw materials that have always been present in nature, clay, and sand. The tiles exclude any toxic ingredients such as mercury or lead and as raw materials are used, the product is suitable for recycling. A larger project in the Netherlands contained ‘a wall of tiles with 34% of consumer recycled content with the floor tiles containing up to 45%’ (Mosa, 2021). The ingredients that make up the tiles is examined to the parts per million level resulting in extremely high-quality tiles of raw and recycled materials. Mosa are always striving to improve their ways with this philosophy always at mind as they reduced their carbon dioxide emissions by 48% over the last 10 years and continue to do so as they are now searching for a different source for the natural gas to heat the kilns.



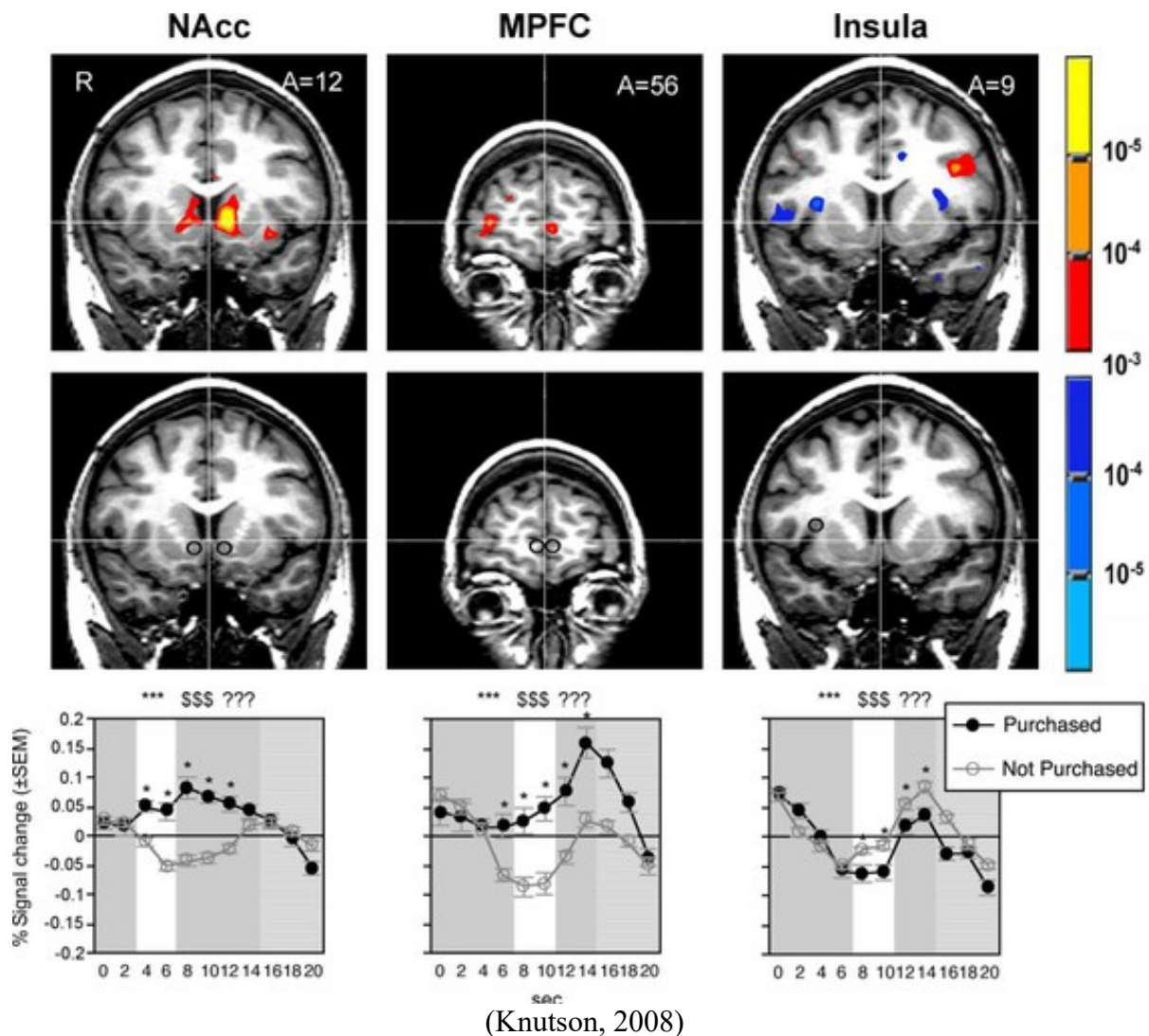
(Mosa, 2021)

Innovation hasn't been limited with this concept but instead improved as the product μ , beautifully holds different hues within one surface and as light changes, the tiles do too. Different colours which reflect different lights upon these sleek and timeless tiles would create such a unique space wherever they are used.

Influence

(Oxford University, 2021) describes the definition of an influence as 'the effect that somebody/something has on the way a person thinks or behaves or on the way that something works or develops'. This can also be related to the psychology of individuals with an influence over both the consumers and designer's mindset.

A team of researchers from Stanford, MIT, and Carnegie, Mellon, observed brains using fMRI technology, whilst individuals were deciding and buying clothes. 'The pleasure centre, nucleus ambens, in the subjects' brain (Knutson, 2008) lit up continuously the more the individual wanted after the item. Once the price was shown, the 'medial prefrontal cortex weighed the decision, as the insula, which processes pain, reacted to the cost' (Knutson, 2008)



The findings proved that high emotions of both pleasure and pain are found when purchasing items. An individual is filled with pleasure through the desiring stage but followed by pain soon after purchasing which results to the addiction of always wanting more. Understanding high pleasure emotions are quickly followed by pain in the short time frame it occurs in, it is easy to see how individuals can become addicted to the act of purchasing goods. Continuously having a sensation of wanting an item only intensifies the pleasure and pain experiences.

‘It seemed to be responsive not necessarily to price alone, or how much I like it, but that comparison of the two: how much I like it compared to what you charge me for it’ (Knutson, 2008). The highest point of pleasure is reached when the price isn’t expensive for a sought after item. This weaker pain resulting from lower prices is what is used in a lot of industries to continue customer purchasing their goods but ultimately comes with consequences such as underpaying employees in dangerous working environments. It is easy to see the chemistry of the brain gives the perfect formula for the fast fashion and product industry.

Adverts are plastered everywhere we go and through all forms of technology and products we use daily. The yearn and hunger for new products and clothes only intensifies as individuals are repeatedly shown desirable products. Furthermore, technology has advanced so that specific adverts which people will talk about or search on the internet for is directly shown to those individuals. Social media has never been as influential as it is in today’s society. With celebrities

such as Kylie Jenner, 23, the highest earning Instagram influencer with paid posts of around ‘\$1.2million/£86700 per post’ (BBC, 2019). The influence celebrities can have on individuals in particular the younger generation is incredibly worrying especially when products for weight loss is widely shared.

Furthermore, designers and consumers are influenced by everything in life without the need of adverts specifically designed to trigger human emotions. However, I find it is vital designers continue to encourage positive inspiration and to influence others. Philosophers such as Charles Eames and Ray Eames have left behind a legacy that some designers still follow today. They created a manifesto with one main goal which was to positively impact people’s lives and environments. They created some of the most influential chairs such as some shown below.



(Miller, 1961)

Exploring these three keywords has made me discover and want to delve further into further sub-questions that came to mind. The correlation between the chosen keywords of movement, respect and influence stemmed from my working question of ‘how can designers create or follow movements, in particular nature, whilst maintaining value to their designs to pass a positive influence on other designers and society?’ To have a successful design, one must have respect for the problem or concept to in order come to a successful solution. They must pass on a positive and follow advantageous influences that will influence the world for the better. My research has led me to multiple sub questions such as ‘can nature influences such as biological structures and biomaterials transform the design world positively?’, ‘ why

are products designed with manufacturing as the main influence factor?', 'what biomaterials can replace the most damaging materials and plastics to this earth and why aren't we using them?', 'will 3-D printing and other advanced technology change the design industry for the better or worse?', 'the correlation between a consumers psychological mindset on fast fashion and one use plastics', 'are women always respected as designers?', 'is there always a need for gender biased products?', 'why isn't the cradle-to-cradle concept used amongst all designs?' and lastly 'why do many designers continue to ignore the detrimental effects their designs and manufacturing processes can have upon the world?'. The concepts of sexism, biomaterials, cradle-to-cradle, advanced technology, nature, psychological impacts, consumerism vs consumption have been considered for further exploration under my working question for the next year.

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