

What is the role of the designer/maker in the 21st Century and how might this role change in the next 10 years?

Student number: 1701524

BA Course: Surface Pattern Design and Textiles

Word count: 2355

Lecturer: Julia Lockheart

During this essay I would like to research what roles designers have had in past years, what purposes designers have in the modern day, how designers have affected our society and will do so in years to come. Researching practitioners, I will explore the work of two 21st century designers and the importance of their roles. As a designer myself I view the area of work ahead of me in the now very relevant and perceive the industry as important as any other. The way I see it, every job has a role, essentially is a cog in the works and each cog is part of the bigger picture.

“economic parts of the biotic clock will function without the uneconomic parts”

(Beatley, 2004)

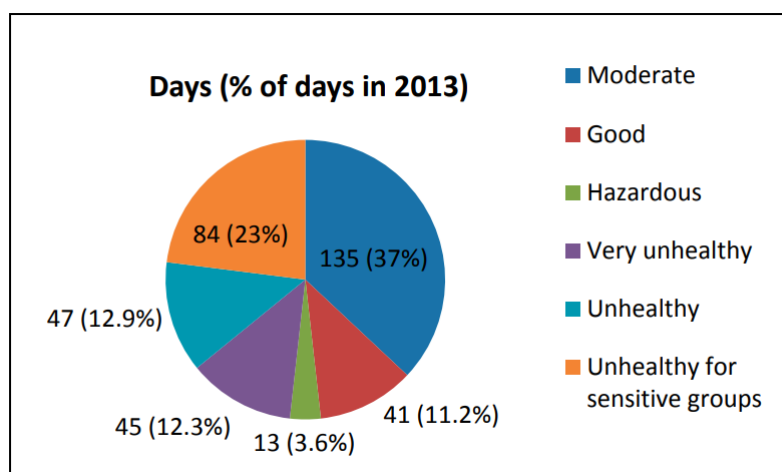
As an image a cog is a being, a business or even an inexistence source only which can be acted upon. For example, an artist, has the same drive as any other being, except the artist only became an artist because he has acted, and influenced himself to be so, peaked his interest so to say. As an economy, it must keep on going and for an economy to grow, expand every cog must coexist and work together. Aldo Leopold's book, *Aldo Leopold and the Ecological Imaginary: The Balance, the Pyramid and the Round River* gives insight fundamentally speaking as to how we are being perceived as evolutionary pillars. Also, to where humans stand in the ecosystem and what factors humans present towards our world. Firstly, where do we as humans stand and what significance does this mean in the role of a designer? As people we thrive from the land, creating resources for our benefit, building our knowledge of understanding concepts, ideas, and many skilful qualities useful to us.

“Life is not determined by consciousness, but consciousness by life”

(Engels, 1974)

So how do we as humans taking from the land encourage stability amongst our ecosystems? Well regarding the food chain as in a whole we can be neither seen amongst it or not. According to

Leopold, *'humans are omnivores located in the pyramid's middle layer, alongside the "bears, raccoons, and squirrels which eat both meat and vegetables" (215). He subsequently observes, however, that our situation is not quite as simple as this image suggests, for the "invention of tools" has radically altered our relation to the rest of the biotic community'* (Dicks, 2014). This radical investment into the further creation of tools, the imagination that our species processed information has been the profound explanatorily, evolutionary difference, Pro founding our knowledge of understanding today. This being so, there are factors to which humans have altered our food chain, in drastic cases such as extinction of an animal species. As humans, we invent we create, we think "What if?" But in doing so, so many inventions require harvesting our land and recourses being taken and rebuilt into something new that require equilibrium. From reading further into *'The Balance, the Pyramid and the Round River'*, our world is forever changing due to global warming. Global warming has continued to expand holding more greenhouse gases, increasing the temperature of our planet, and holding gases which can be pollutant to our world. What this means is that conditions around the world change, glaciers melt, land becomes too warm for wildlife and becomes inhabitant. As designers we think about what can be done, what can be changed for the better good. As an economy we think towards what needs improvement. Regarding the year 1952, "The Great Smog" London had stopped, the country stood still as this killer smog became the death of 12,000 unexpected deaths. After the implications of this pandemic, China are suffering from high levels of smog, air pollution. Some call it the" Airpocalypse" (Dongyong Zhang, 2014). After some research, the results in the year 2013 showed the percentage of days of what the air pollution accumulated to their people's health.



(Dongyong Zhang, 2014)

Just from this pie chart alone, the good days in comparison to the worse of days are disreputable. The actions China implemented towards these figures are quite hard to apply straight away, as it seems that to clean the atmosphere it will take till 2030. So, in the meantime China have been resourceful. The international school of Beijing have had to make two large domes for their students to facilitate for purposes such as exercise to be able to do “outdoor” activities without the harmful polluted gases. (Dongyong Zhang, 2014)

What comes to mind when thinking about the role of a designer is creative thinking. This is a way of working which thought processes help social problems, producing solutions, a way which a non-designer would not have thought processed. Tim Brown discusses creative thinking to why industries could start adapting to thinking like a designer in an article called ‘*Change by Design*.’ He discusses how designers play a more active role within companies and how designers are becoming a more attraction within higher company meetings. Brown claims, “*As a thought process, design has begun to move upstream. We call this ‘design thinking’*” (Brown, 2011). So how does “design thinking” expand change? Firstly, more people need to think like a designer. Why? Because as a designer, there are stages to which we think, and these thought processes can be inspirational development. Having research is the first and foremost importance when been given a task. Secondly upon having done research is the development process, ensuring that the image makes sense, each part works in coordination and the aesthetics of the image which makes it pleasing to the eye upon being perceived. And lastly, bringing the product forward. The selling point is the final part of a designer’s thoughts, the goal being praised on the work and that everything up till this final process works (Brown, 2011).

From discussing design thinking, how do we perceive the way a designer thinks? Who first decided that when placing a hand onto a wall and then blowing paint around your hand will leave a stencil of your hand? In my view someone of a “design thinker” would have thought of doing this. The

cave paintings of Lascaux are true representations that designers have been here always developing and always enhancing from 17,000 years ago, till today and our ever-growing future. The site of the paintings at Lascaux was open to the public in 1948, further into that year “Picasso visited the site and stated, ‘we have invented nothing’ ” (Green, 2018). Regarding what Picasso had stated during his visit I would like to think he was referring to the art and not the revolution to which mankind has accomplished thus far. The fact that even back then the focus of our hands as representatives of artwork is the way we are enabled to create art and is the embodiment of how we create our work. Without our hands where would we be today? As designers we have been able to prehensile our ideas of being creative as we have developed over many decades. To me, our hands are the highest standard of technological engineering if that. Over centuries our species have used our hands to invent and in doing so has achieved much greatness.

At present our world is very much undergoing a technological change. Take Japan for example, they have, and most would say are the worlds leading country in the world of robotics and how they can help improve our lives. Robots in Japan have began to rapidly increase from the 1960’s, helping with their economic growth and then improvement within their lives. From the textbook *Japanese Robot Culture*, the Japanese have been Designer thinkers as to,

“in the new millennium, the Japanese government and the robotics industry turned to addressing a labour shortage due to the country’s shrinking and rapidly ageing population. To that end, the prototypes of the new robots, designed to work in places other than factories, such as hospitals, the office, and the home, were developed and showcased in large corporate and government exhibitions in the 2000’s” (Sone, 2017).

To create, have an imagination we need to think, to imagine our designs and in doing so we are using the most powerful computer known to us, our brain. In the *‘The Artist in the Machine: The World of AI-Powered Creativity’*, Miller talks through our thought processes and what makes humans undeniably unique, he talks about our thoughts to rational thinking and how technology in practice

could potentially replicate our practices (Miller, 2019). Within Miller's work he acknowledges the work of 'Margaret Boden', whose work *'The Creative Mind: Myths & Mechanisms'* a well-read book further insights Millers ideology of his research. Boden "Defines creativity as to come up with products-ideas or artifacts-that are new, surprising, and of value". Also then leading on to, "A creative idea must be useful, illuminating or challenging in some way" (Miller, 2019). Our thoughts are very much our own and our personalities represent who we are and what we believe in, it is our thoughts which we process which recognises to how we perceive art. To have a machine, technology powerful enough to replicate our imagination, thought processes and our individuality is undeniably terrifying. When does it become too much and how can humans and robotic engineering co-exists? Enough so that machinery itself does not take over our lives, jobs, homes and *our thought processes* (Miller, 2019).

Practitioners who recognise the application companionship robotic technology can give us are designer thinkers such as, 'Sougwen Chung'. Chung has developed her art alongside her companion D.O.U.G, an artificial mechanical robotic arm who helps alongside Chung with drawings. D.O.U.G, uses memory and senses, to which it follows the flow of Chung's pencil lines. Although Chung had drawn out images her replication from D.O.U.G was not quite the same as her own. Does this mean that there is a technical fault, most likely? But due to the faultiness D.O.U.G's pencil line drew, this robotic arm had its own design flaw and gave itself personality (Chung, 2019). The remarkable accidental response from D.O.U.G, tells us that behind the design, behind the programming, you have a human programmer, a design thinker. We each to our own have flaws and can all improve in different ways. Chung explains this during her 'TED' talk, how improvements where needed to be made and further development to her robots needed more attention. She also explains "my robot D.O.U.G became a real-time interactive reflection of the work I'd done through the course of my life. The data was personal, but the results were powerful" (Chung, 2019). This is a powerful message, Chung's artwork, her lines can be replicated, and she had noticed. Could our future bring more enhancement towards robotic technology? And can it be relied upon?



(Nair, 2020)

Another artist different in comparison to the drawn cultured art, is 'Huaung Yi'. Dancing as his art, he choreographed a duet between a human and a robot. Purely fascinating, the dance came across mesmerising and in sync throughout (Yi, 2017). "the very crafts, arts or practices that our bodies and minds have afforded us to be or to become over the past million or so years are at the very core of humanity and what it means to be human" (Tamminen, 2017). The choreograph 'Huaung Yi' had produced showed how fluent the robotic arm was able to manoeuvre, keep in sync with Yi, and even at some parts during the duet, had character to the technology. Behind the façade Yi was selling, there lied a powerful message behind the performance. Humans and robotic technology can help nurture our development, our assessment of technology will always be reliant, and the more reliant people are on technology the further humanity can develop its relationship with it (Tamminen, 2017). However, the challenges of relying on technology can be asked with one simple question, can technology be trusted? Others have opposed technology development as 'Stephen Hawking' once said, "The development of full artificial intelligence could spell the end of the human race" (cellan-Jones, 2014). Hawking's recognises the potential AI could bring usefulness to humankind and has done

so far with the help from computers and smartphones, but however our increasing knowledge of smart AI devices, the more worrying it may seem that “it would take off on its own, and re-design itself at an ever increasing rate” (cellan-Jones, 2014). Other factors which could possibly may include superiority towards AI are, “Humans, who are limited by slow biological evolution, couldn’t compete, and would be superseded” (cellan-Jones, 2014).

Through this study the idea that the role of the 21st century designer is going to change and will change has been present throughout my research. After reading about background knowledge our ancestors had, the artwork they produced even 17,000 years ago, designer thinking has been passed down through generations till today. As of today, we continue to preserve, teach, pass down knowledge to future generations. This knowledge is given, entrusted that it will continue to be passed on, developed and for more generations to learn. After having researched our thoughts, the processes of our thoughts, how individuality makes us who we are, robotics and mechanisms which could take our places peaked my interest and realised that in 10 years to come we could all see further development in our societies, our work places and within our homes. Take japan for example, they are steps ahead, looking into development of technology and how we all can benefit from it. But how far can we take technology? When is too much, too much? If we are to use technology then it should be for our greater good, to use it to improve our well-being, the work life enabling our jobs to be made easier and to be used for purposes within education. Just as how ‘*Sougwen Chung*’ uses the companionship of her robot D.O.U.G to draw at the same time, as well as ‘*Huang Yi*’ performed a duet with his partnered robotic arm, we should use technology as a companion. Not in the sense of equals, but companionship to help our knowledge as ‘Design Thinkers’.

Bibliography

- Beatley, S. M. W. a. T., 2004. *The Sustainable Urban Development Reader*. New York: Routledge .
- Brown, T., 2011. Change by Design. *Journal of Product Innovation Management*, 28(3), pp. p381-383.
- cellan-Jones, R., 2014. Stephen Hawking warns artificial intelligence could end mankind. *BBC News*, 1(1), p. 1.
- Chung, S., 2019. *Why I Draw with Robots*. [Sound Recording] (TED@BCG Mumbai).
- Dicks, H., 2014. Aldo Leopold and the Ecological Imaginary: The Balance, the Pyramid, and the Round River. *Philosophy Documentation Center*, pp. 178 - 188.
- Dongyong Zhang, J. L. B. L., 2014. Tackling Air Pollution in China—What do We Learn from the Great Smog of 1950s in LONDON. *Sustainability* , pp. 2-4.
- Engels, K. M. a. F., 1974. Camera Obscure. *Lawrence and Wishart*, p. 2:3.
- Green, J., 2018. *Lascaux Paintings and the Taco Bell Breakfast Menu*. [Sound Recording] (WNYC Studios).
- Miller, A., 2019. *The Artist in the Machine: The World of AI-Powered Creativity*. 1 ed. s.l.:The Massachusetts Institute of Technology.
- Miller, A. I., 2019. *The Artist in the Machine: The World of AI-Powered Creativity*. 1 ed. s.l.:The Massachusetts Institute of Technology.
- Nair, S., 2020. *Stirworld*. [Online]
Available at: <https://www.stirworld.com/see-features-sougwen-chung-talks-about-her-robot-collaborator-d-o-u-g-and-the-future-of-ai>
[Accessed 3 12 2020].
- Sone, Y., 2017. Japanese Robot Culture: Performance, Imagination, and Modernity. In: *Japanese Robot Culture: Performance, Imagination, and Modernity*. Sydney: Springer Nature, pp. 1-2.
- Tamminen, S., 2017. Have We Lost Our Anthropological Imagination. *Epic* , 1(1), p. 1.
- Yi, H., 2017. *A Human-robot dance duet*. s.l.: TED.