

Question 1: What is the role of the designer/maker in the 21st Century and how might this role change in the next 10 years? Discuss your ideas with reference to two of the practitioners or thinkers discussed in your lecture strand.

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The role of the designer has always been one of perpetual change. In any era, society is constantly faced with challenges and adversities to overcome, and it has always been the designer's role to generate solutions. Similar to the “axe makers” from which we derived our pragmatic processes of logic and thought (Burke and Ornstein, 1977, p.16), modern-day designers are constantly searching for new tools and approaches needed to meet societal and consumer demands. Rapid technological advancements, multiplying environmental challenges and shifting consumer demands are just a few examples of the considerations today's designers are required to consider. So to answer the question of the the designer's role in the 21st century, let alone predict the future outcome of modern design, we must consider; what is the purpose of design in the 21st century?

In the technological era, design has more reach and influence than ever before, being shared and channelled through social media sources and having economic and ethical influences. Designers must now be multifaceted machines, requiring efficient and consistent output to remain relevant. Modern design is “always about synthesis”, whether that be of “market needs, technology needs and business needs” according to Wicks, (2006, cited by Kolko, 2010), or the synthesis of a diverse skill set and personal experience into a designer's methodology. In tandem with this, 21st-century design now walks a fine tightrope when considering ethical responsibility against the pull of technological innovation, such as newly developed AI flourishing as such a double-edged sword, or consumerism's constant need for product obsolescence and the next trend to capture the market.

To ascertain exactly how design has evolved to this point, and how it might further develop, we must consider base philosophies and methodologies underpinning all designers' thought processes. One such idea is hylomorphism, introduced by Aristotle as the concept that all objects are made up of two principles: *hyle* (matter) and *morphe* (form). Hylomorphism underscores the relationship between physical substance and the intent that shapes it—a foundational idea in understanding design's technical and creative nature (Simpson, 2023, p4).



Fig 1

For a designer, this concept can provide a lens through which to balance the physical makeup of an object against an abstract form of your creation and purpose. Dieter Rams' minimalist Braun designs are examples of such an idea implemented in modern design, with the iconic seamless blend of material precision and highly clarified function through an intricately

intentional form, with one such example being the Braun TP1 portable radio (fig 1) that despite being produced in 1959, was a far before it's time and went on to influence further modern design icons such as the sony walkman. Braun designs often epitomise a perfect harmony of carefully designed components, formed to serve the user's needs with minimal waste and distraction. In Dieter Rams' words "good design is as little design as possible" (cited by The Design Museum, 2017), an increasingly important ideal for modern designers as environmental concerns grow and waste becomes a high-priority problem.

However, the nature of interpreting hylomorphism today has changed from the more personal nature of handcraft. Today, we commonly use computer-aided design, or CAD, to synthesise form and matter. CAD allows for conceiving form within digital space rather than in a physical capacity. It is the modern era's evolution of hylomorphism and, in many ways, reduces the limitations and constraints on finding an intended form in the real world. Computer-aided design and manufacture today "make it possible to easily manufacture shapes with geometric complexity that is unattainable by other methods" (Bickle et al, 2018, p1), and has been a key component of the design industry for decades, will surely only evolve further as virtual/augmented reality technology and artificial intelligence see further, bolder developments.

On the other hand, these forms of mass-produced and easily replicated design are largely only available to companies who can afford them, who in turn are presently playing the largest roles in shaping modern design. The ability to perfectly replicate forms at a minimal cost and effort is pushing design toward a paradigm, mass or batch production is slowly becoming the default, even for more complex objects. While this represents a significant evolution in the synthesis of form and matter, it also raises questions and concerns about homogenisation in design.



Fig 2

CAD places the uniqueness traditionally associated with craftsmanship in a position of being overshadowed by the efficiency of digital manufacturing, and the preservation of individuality in design may develop to be an issue in the foreseeable future, but may also even see significant pushback in the coming years. This is an aspect we can already see developing in the clothing industry, with the growing popularity of vintage, second-hand clothing and highly personalised outfits that boast "intricate details, unique fabrics, or embellishments" (Syte, 2024), which has, in

turn, led to modern products taking inspiration and attempting to convey elements of uniqueness to mass-produced products, with one such example being the Carhartt reworked jackets (fig 2), each boasting a uniquely coloured patchwork pattern. In the next decade, we may see a U-turn in design, with more complex manufacturing systems allowing for further personalisation in the manufacturing process, combatting the uniformity of a majority of modern designs, and potentially allowing future designers more individual creative control over each product.

Another crucial capability of a designer is that of abductive thinking, to be an innate problem solver or troubleshooter. And this ability too has been evolved to suit the challenges of modern designers, moving away from the heuristic techniques often employed when facing wicked problems, especially throughout history, into more permanent solutions that are more considerate to future generations, beyond simply 10 years from now. In the 21st century, designing optimally and ethically is crucial to creating “normality out of chaos” (Veen, 2001, p74) rather than generating further issues down the line. Designers are now being tasked with reimagining systems, products, architecture, infrastructure and materials from the ground up in some cases to mitigate, and potentially reverse environmental harm.

The war against unnecessary goods has begun, and a total ban on planned obsolescence comes to mind—a practice that exacerbates the environmental degradation and depletion of finite resources. Whether or not this will succeed in the coming years is up to speculation and within some doubt, given modern societies' deep ingrained reliance on consumerism and the commercial bodies that exist to exploit it. Given that the commercial arm of design is reliant on “persuading people to buy things they don't need, with money they don't have, in order to impress others who don't care” (Papnek, 1985, p14) there is a direct conflict between the interests of society's future wellbeing and large corporate entities in their business practices.

The development of circular economy models, regenerative materials research, and heavy business legislation are all hopefully going to play large factors in designers' considerations in the coming years. Even presently, we are seeing far more modular products, recyclable components, and cradle-to-cradle methodologies, all of which embody the kind of abductive leaps being used to address environmental challenges at their core.

However, despite current solutions being implemented, design as a whole needs to move away from fast-paced trends and consumerist reliance to truly drive future change, something that designers so far in the 21st century have had very little luck, or interest, in changing.

Lacan's concept of “little objects of desire” or “objet petit a” provides a critical lens through which we can analyze the relationship between design and consumption. Our “objects of desire” are not merely functional but are imbued with symbolic value (Lacan, according to Buchanan, 2018, p25), driving insatiable consumer demand, constantly, until the consumer moves on to the next, and the last gathers dust or goes to landfill. This perpetual cycle of waste generation will continue as long as companies and their designers continue to create products in a fashion that makes the reclamation or recycling of finite materials within them difficult. This responsibility for recycling and carbon neutrality is often shifted onto consumers, with terms like “carbon footprint” coined by advertising firms, such as those working for BP, to suggest that

everyday actions like “going to work, buying food, and travelling” are the main culprits behind global warming and waste generation. In reality, the practices and methodologies of manufacturers, and in some cases the designers, bear the greatest responsibility for these issues (Kaufman, as cited by Solnit, 2021).

This misdirection of responsibility has been a recurring historical issue within society and one that we still see today, and without immediate change, in future. Advertising not only frequently shifts blame onto the consumer but also, encourages individuals to view consumption as a moral or even aspirational act. Even products marketed as “eco-friendly” or “sustainable” can often serve only to divert guilt, and in some cases be an outright lie, created through deliberate manipulation of facts or statistics to deflect accusation rather than address the systemic practices of manufacturers that perpetuate environmental harm.



Fig 3

One extreme example of modern consumerism’s deliberate negligence is the Volkswagen emission scandal in 2015. A total of 482,000 supposedly low-emission vehicles, such as the Passat (fig 3) were found to contain a “defeat device” that could detect if a car was being tested and dramatically reduce its emissions while doing so (Hotten, 2015). Design practices and business decisions such as this counteract all valuable solutions and systems currently being developed and allow environmental issues to persist and worsen. Best said by Victor Papanek, “There are professions more harmful than industrial design, but only a very few of them.” (Papanek, 1985, p14), a warning towards all designers and manufacturers in the 21st century, especially those that persist in deliberately deceiving and advertising in doublespeak for short-term monetary gain.

Papanek himself is an ideal example of a designer who championed moral responsibility in the field. His work emphasized that design must transcend mere superficial aesthetics and commercial interests, advocating instead for a discipline rooted in ethics and sustainability. Papanek’s writings pioneered some early views on design morality, speaking of how a designer’s responsibility does not end at “the way the products he designs are received at the market-place”, and that “His social and moral judgement” first must be considered before his

designs have touched the paper (Papnek, 1985, p66). This idea of a designer's moral responsibility to society, separate from their responsibility to an employer is an important notion to bear today. It is the responsibility of each and every designer, present and future, to stand against commercial deceptions and scandals, and to bear the responsibility of reeducating others in their field in such a manner. In the coming decade, if moral and ethical practices aren't increasingly valued by manufacturers and businesses, the role of the designer will turn to that of damage control rather than safeguarding, a role design is increasingly directed towards as wicked problems grow far more complex and numerous. Papnek illustrated this fact quite clearly, stating:

“As socially and morally involved designers, we must address ourselves to the needs of a world with its back to the wall while the hands on the clock point perpetually to one minute before twelve” (Papnek, 1985, p19)

The role of modern designers however should be no longer to stave off the countdown to midnight but to reverse it, to keep designing with individuality and creativity whilst avoiding the wastefulness of the past. Consumerism is a practice society guiltily enjoys, people have ingrained and wasteful habits, the role of the designer within the next 10 years will be to transition these comforts, both the necessary commodities and luxury objects of desire into sustainable forms, aiming at long-term feasibility rather than immediate sales and profiteering. Designers today and tomorrow will need to “reflect more deeply on how they bring about forms of change” (Wood, 2022, p41), considering the entire lifespan of a product, and the consequences generated, during and as a result of its production.

This, however, links to the dilemma AI demonstrates in the role of the designer. AI has become a pressing issue in recent years, gaining increasingly impressive capabilities in the fields of software engineering, graphics, and animation. This capability may soon cross into the entire field of design and engineering via proficiency in CAD and CAM use.



Fig 4



Fig 5

In its present state, AI is used as a tool for designers, in forms such as generative designs that create forms using present information to generate structures that are optimal in material and strength, with its main current use being in the automotive industry to create custom, lightweight parts for racing cars (fig 4). However, AI has developed further capabilities, now being able to

factor in a multitude of design considerations into its generative designs, such as fuel and intake, thermodynamically efficient structure and fuel intake to create a rocket engine (fig 5), stepping closer to the human capability of abductive thinking. In doing this, AI has simplified a task that was previously a matter of months, possibly years, into minutes using countless simulated iterations (The University of Sheffield, 2024). While revolutionary, the dilemma AI presents is one of morality and ethics; of which AI has none of its own besides that which it is told. Should AI become a more prominent and widespread tool than it already is, businesses and manufacturers may have a firmer hand in the design process, making the individual designer's role of moral responsibility more difficult to maintain. Along with its exorbitantly high energy cost, AI will likely play a centre-stage role in the growing list of wicked problems designers may need to tackle in the next decade, an incredible boon if used properly, or an enormous hindrance if used irresponsibly.

In summary, the designer's role in the 21st century is at a critical crossroads, converging on technological innovation, ethical responsibility, sustainability, and constant consumer demand for originality. As pioneers and arbiters in this era of change, designers may have little choice but to embrace the sweeping current of new technology, fully grasp all aspects of digital design and evolve it further, possibly in synthesis with more traditional design practices. CAD, AI, social media and additive manufacturing techniques are just a few of the newly available tools in the toolbox for 21st-century designers, each of which may be viewed as another method to streamline past the designer's expertise by manufacturers if used improperly. In design "there has never been a time of greater promise or potential peril" (Schwab, 2017, p8), not only must we constantly adapt and acclimatise to a changing work environment, but we are now tasked with fighting against its misuse in the constant Sisyphean battle against global warming and rampant consumerism. This onerous task is our responsibility, as designers and collectively as passengers on "spaceship earth", the call to action now is necessary before society as a collective is "overwhelmed with the unexpected costs brought about by our shortsightedness" (Richard Buckminster Fuller, 1969, p3).

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Figure list

Fig 1 - Rams, D. TP1 transistorised portable radio, 1959, Available at:

<https://www.dezeen.com/2021/08/17/braun-home-electronics-simple-useful-built-to-last/>.

Fig 2 - Carhartt, Reworked Jacket, 2023, Available at:

https://www.depop.com/products/jordan_numaru-carhartt-detroit-jacket-reworked-size/

Fig 3 - Volkswagon, Passat, 2012, Available at:

<https://www.cnet.com/roadshow/pictures/2012-volkswagen-passat-photos/>

Fig 4 - Techniplas, generatively designed car component, 2019, Available at:

<https://www.digitalengineering247.com/article/techniplas-combining-additive-manufacturing-am-and-generative-design-to-explore-new-possibilities>

Fig 5 - University of Sheffield, 'AI designed' rocket engine, 2024, Available at:

<https://www.sheffield.ac.uk/mac/news/university-sheffield-test-fire-world-first-ai-designed-rocket-engine>