

---

How Yee Teng (U1830693E)

Profs. Serena Pang, Desmond Pang, Ash Y.S. Yeo

DD3016 History of Design

IV. What ideals, principles, motto and design qualities might you use to describe and define the next emergent design trend valid over the next 5 years, current to your practices? What name would you give to the design movement?

---

### The E-co Movement

Product design was once only about form and function but as society progressed, we started looking at the meaning of the product and the user's experiences and emotions. (Bürdek 9; Jordan 229) As with other art forms, product design is largely influenced by people and society. In this essay, I would like to talk about the current advancements and problems of the society and how they will influence product design over the next 5 years.

With so many technological advancements coming our way, it is impossible to separate interactive media from product design. As we learnt in history of interactive media, many interactive works nowadays incorporate technologies like extended reality and artificial intelligence (AI), and this applies to product design as well. Currently, there are many virtual reality (VR) products such as the Oculus Rift and HTC Vive, and augmented reality (AR) products like Google Glass. As VR and AR have many applications in areas such as "gaming, military training, architectural design, education, learning and social skills training, simulations of surgical procedures, assistance to the elderly or psychological treatments" (Cipresso et al, "The Past, Present, and Future of Virtual and Augmented Reality Research: A Network and Cluster Analysis of the Literature."), I believe this is a field that can be further developed in the next few years, both in the area of user experience and product improvements. As for AI, there have been products such as Google Home and Amazon Echo that incorporate voice recognition. (Guo et al, "Review on the Application of Artificial Intelligence in Smart Homes.") As Guo et al mentioned, there is an increase in the application fields of AI every year and smart homes that utilise AI will be developed to ensure a more personalised user experience in the future. These are just two areas where technology will influence product design in the next few years and I believe it is where we're heading with the increase in research in these areas.

As we make use of these new innovations in design, we also need to address the issue of resource depletion and environmental damage. In design and manufacturing, a lot of raw materials are used and damage is caused to the environment through emission of toxic fumes and generation of waste. (Ryan, "The Environment and Technology") In order to reduce the environmental footprint of products, there has been a greater focus on sustainable design in recent years and there have been approaches like "design for environment, design for life cycle and life cycle assessment." (Afshari et al, "Reducing Effects of Design Uncertainties on Product

Sustainability.") As Ang mentioned in his article, some examples of sustainable products are Desso's AirMaster carpet which is made from recycled materials and Kloter's RepAir t-shirt which absorbs toxic gases and is said to be "able to offset the emissions of two cars." ("10 Sustainable Products You Need in Your Life.") There is definitely more we can do for the environment with product design so the design trends in the next few years will probably include sustainable design.

As the design trend in the next 5 years will be mainly design for the user and the environment with the help of technology, I would name this movement the E-co movement where E stands for electronic. E-co is a style that is simple and minimalistic, thus requiring lesser materials to reduce the environmental footprint. Products will also be designed to be recycled or to last longer so that it won't be replaced so easily. Instead of the aesthetics, designers will focus on the function and user experience, and also personalisation through technology. E-co will make use of the technological advancements like VR, AR and AI to maximise the potential of simple products and even allow them to be linked to perform more functions with ease. In conclusion, E-co is a movement that integrates technology into sustainable design so that we can enjoy the benefits of technology yet reduce the damage to the environment.

### Bibliography

Afshari, Hamid, et al. "Reducing Effects of Design Uncertainties on Product Sustainability." *Taylor & Francis*, <https://www.tandfonline.com/doi/full/10.1080/23311916.2016.1231388>.

Ang, Zach. "10 Sustainable Products You Need in Your Life." *Eco-Business*, 2 July 2018, <https://www.eco-business.com/news/10-sustainable-products-you-need-in-your-life/>.

Bürdek Bernhard E. *Design: History, Theory and Practice of Product Design*. Birkhäuser, 2015, [https://issuu.com/birkhauser.ch/docs/design.\\_history\\_\\_theory\\_and\\_practic](https://issuu.com/birkhauser.ch/docs/design._history__theory_and_practic).

Cipresso, Pietro, et al. "The Past, Present, and Future of Virtual and Augmented Reality Research: A Network and Cluster Analysis of the Literature." *Frontiers in Psychology*, Frontiers Media S.A., 6 Nov. 2018, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6232426/>.

Guo, et al. "Review on the Application of Artificial Intelligence in Smart Homes." *MDPI*, Multidisciplinary Digital Publishing Institute, 2 Aug. 2019, <https://doi.org/10.3390/smartcities2030025>.

Jordan, Patrick W. "Kansei Engineering and Design." *Human Factors In Product Design: Current Practice and Future Trends*. Edited by W. Green and Patrick W. Jordan, CRC PRESS, 1999, 229-233, <http://www.taylorfrancis.com/remotexs.ntu.edu.sg/books/9780429188565>.

Ryan, V. *The Environment and Technology*, <http://www.technologystudent.com/designpro/envir1.htm>.