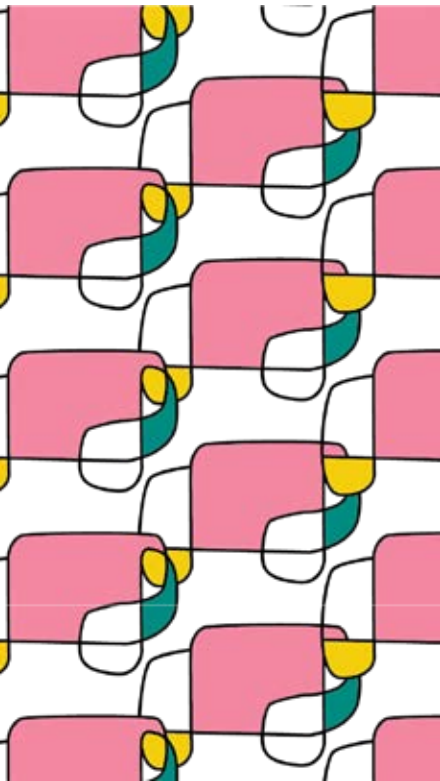


Posavec, S. (2021) *Updating Happiness*.

This is one of several pieces in an exhibition focusing on emotions, particularly joy during the COVID-19 pandemic. Posavec (2021) created an original questionnaire based on questions asked by the Office for National Statistics (ONS) to measure well-being and developed different designs based on the responses. I created a visual system that generates various designs depending on the answers. This work influenced me, and I attempted to create patterns to visualize emotions based on the questionnaire. I asked participants to choose a pattern and a colour associated with each emotion and represent it visually. However, my intention was not data visualization but rather to challenge the idea of whether design can be utilized for communication, as argued by Suga (2021). When I saw *Updating Happiness*, I did not have any personal reaction beyond “observe and enjoy”. That’s why I opted for a wearable medium capable of facilitating interactive communication.

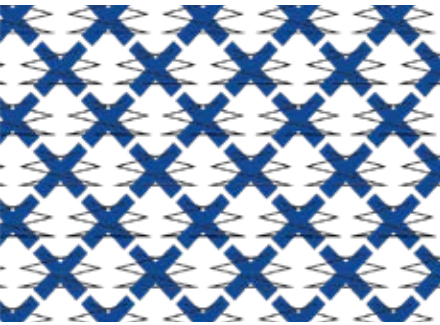


MAMIMU (2021) MAMIMU x Dr Tara Swart for ITV Creates.

MAMIMU, an artist and tutor at the London College of Communication, has made it her mission to spread 'optimism' through her designs. MAMIMU (2021) collaborated with neuroscientist Dr Tara Swart to visualise which colours and movements make humans more optimistic. While it was a learning experience for me in terms of using science to visualise emotions, I questioned whether the work made me feel optimistic. Certainly, the bright colours and movements were enjoyable to look at, and if I could have been in the space of this work, I would have enjoyed myself. However, I realised that simply looking at it through a digital screen was not enough. This realisation led me to decide to incorporate a physical experience and tactile perspective into the project. Based on this realisation, I chose to use non-digital media after realising through further experimentation that the sensations received are very different when a pattern is printed on paper compared to when it is printed on fabric or a 3D object.



Suge, S. (2021) *Cognitive design: Can behavioural and decision cues be designed?*



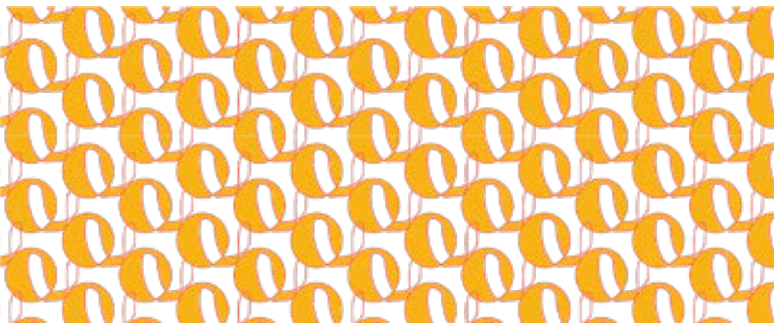
In a lecture at Tama Design University, Suge argues that what we designers are doing is not merely creating posters or other productions, but rather that designers are attempting to design cues that generate information, such as actions and decisions, through their creations. This concept forms the foundation of my entire project. My intention was not solely to entertain the viewer by creating patterns that satisfied me, nor was it to use patterns for data visualizations or to merely raise issues through my work, as is often the case in graduate school. This is because I firmly believe that simply raising issues does not solve them. Moreover, I believe that designers should play an active and central role in initiating and encouraging action, rather than remaining on the sidelines.

Hence, I aimed to use patterns as design cues to prompt the audience to take action, with the ultimate goal of fostering communication through my designs. The final outcome was not only the creation of patterns that visualized emotions, but also the establishment of new forms of communication between individuals through the wearable patterns I designed. This project challenged me to go beyond mere visualization and transform them into effective communication tools.

**Adams, E. and Van Gorp, T. (2012) *Design for Emotion*.
Oxford: Morgan Kaufmann.**

The book focuses on the influence that design has on people's emotions and has helped deepen my understanding of designing to provoke emotion. As stated, 'Emotion can be an effective tool for persuading us to shift our attention and change our behaviours' (pp. 137), behaviours and emotions are closely intertwined. I realized that during the first phase of the experiment, I had attempted to change behaviour but had overlooked the crucial aspect of "emotion", which was a preliminary step. With this realization, I decided to shift the focus of the latter process in my project towards design and the emotional perspective.

While the authors described design strategies to influence people's emotions, I had doubts about the existence of a unified set of values, as emotions when viewing design are subjective and diverse. Certainly, colours such as red and orange can create a warm impression, but does this apply to everyone? That is why, similar to *Updating Happiness* by Posavec (2021), I endeavoured to realize different values for different individuals using patterns.

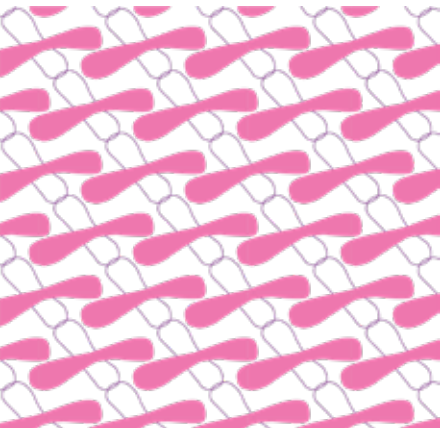


Blauvelt, A. (1994), *An Opening: Graphic Design's Discursive Spaces, Visible Language*, Vol. 28, pp.205-218

Blauvelt states that it is important to critically and actively examine the "limits" of graphic design because the activity of graphic design is historically relative and ever-changing (pp. 216, 1994). The "limits" to graphic design that I have experienced since coming to the UK are that many designers' work has gone beyond simply conveying information or offering a critical perspective to their audiences. While design can indeed encourage people to view issues critically and visualise them, I wondered if that alone was sufficient.

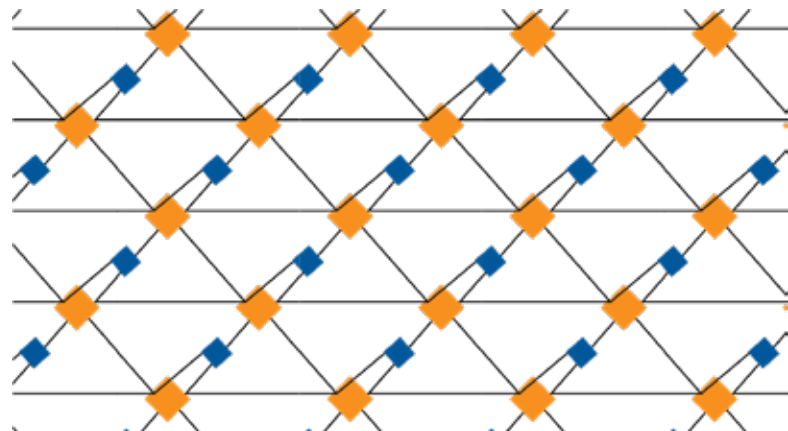
When I attended the graduation exhibition at the Royal College of Art last year, I found the concepts to be noble and well-researched. However, I questioned how many people would truly understand and incorporate these concepts into their lives. My experience during postgraduate studies has made me realise that we exist in an affluent and restricted environment, where we have the financial resources to pay high tuition fees and access to education. In this context, we often overlook the existence and perspectives of approximately half of the world's population (UNESCO, 2022) who do not pursue university education.

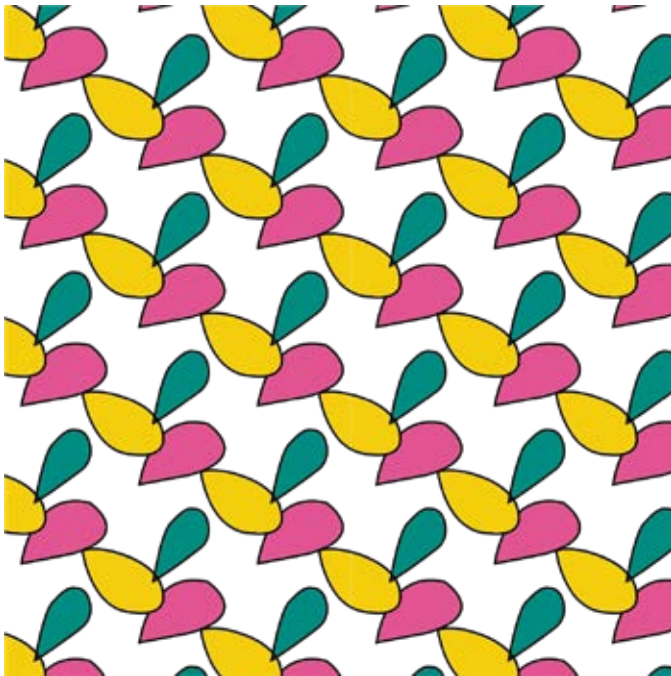
Therefore, I aimed to consider how we can closely link this project to people's lives and even to "action", rather than it being a project driven by self-satisfaction.



Reinfurt, D. (2019), *A new program for graphic design*. New York, NY, USA: Inventory Press.

Gestalt theory is an important and fundamental concept in graphic design. However, reading this book once again prompted me to question the relationship between pattern form and psychology, applying the methods of *Conditional Design Workbook* (Edo et al., 2013). My pattern designs, similar to Daniel Buren's patterns, do not inherently possess meaning within the form itself. Hence, I became interested in the impression that the pattern would create on the viewer. Through my experiments, I observed that altering the size and shape of the pattern influenced the viewer's perception of the pattern. This realization led me to understand that gestalt changes in accordance with purpose, which Reinfurt (2019) referred to as "organic development". Moreover, it made me recognize that gestalt should be transformed based on the desired function of the audience, just as the form changes when the function changes. From that point, I made the decision to approach the project not solely from a subjective standpoint, but to also incorporate an objective perspective.



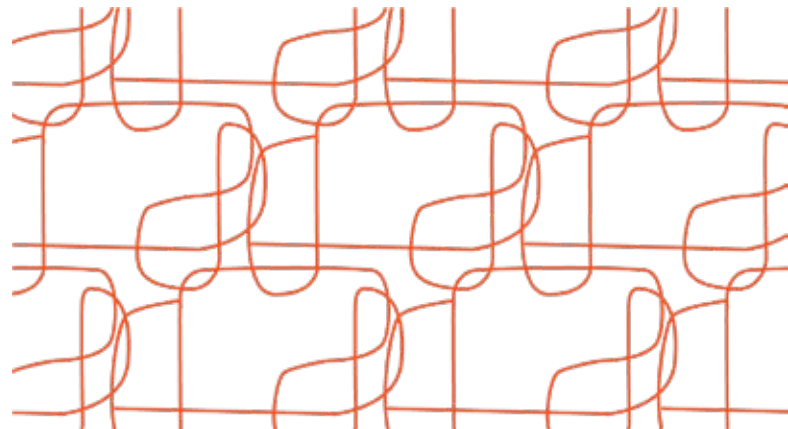
Posavec, S. (2021) *Updating Happiness*.

Posavec is a designer and artist who takes an experimental approach to using data, aiming to make it more accessible to audiences of all ages. Her method of expression goes beyond mere visualizing data; it also focuses on creating visually pleasing representations using colourful shapes, patterns, illustrations, and even 3D objects like necklaces. For instance, her project *Dear Data* (2014), done in collaboration with information designer Giorgia Lupi, utilizes the analogue medium of letters to gather and visualize data about their lives. This approach stands in stark contrast to the data visualizations of historical figures such as William Playfair, who employed techniques like line, bar, and pie charts to visualize economic data in the 18th century, or John Snow, who used maps to identify the sources of cholera outbreaks in the 19th century. In fact, the clever use of colour and form in Posavec's visuals is somewhat reminiscent of the aesthetic appeal found in Nightingale's "coxcomb" colour graphs, which visualized causes of deaths from the Crimean War in the 19th century. The amalgamation of ideas in Posavec's work, dealing with digital data but employing analogue mediums like letters, along with her visually and aesthetically pleasing approach, sets her work apart from other data visualizations. While data visualization is often associated with reports presenting vast amounts of data, Posavec tackles subjects that are relevant to people's lives, such as happiness. It is precisely because these subjects are relatable that she utilizes pop and accessible visuals to communicate them effectively to audiences of "all ages."

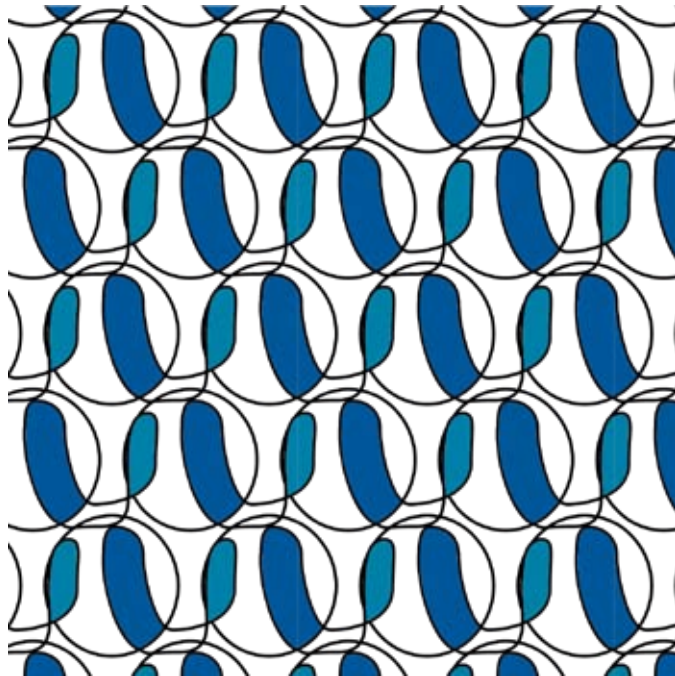
In an interview with *Design Week* (2015), Posavec reveals that during her postgraduate studies at Central Saint Martins College of Art and Design, she was inspired by fellow students to develop an interest in creating visual rules, similar to the work of John Maeda. This is likely why her work exhibits an inherent “organic” quality in its design, as she herself designs the rules governing the visuals, as described in *Conditional Desig Workbook* (Edo et al., 2013). However, unlike John Maeda, Posavec does not come from a scientific background. She also possesses a deep understanding of literature, as exemplified by her project *Writing Without Words* (2009), which visualized the text of Jack Kerouac’s *On The Road*, demonstrating her ability to reflect a story through visualized data. The combination of her storytelling skills and her design of systems for creating visuals establishes her design style as truly unique.

Posavec states that she uses quantitative representations rather than relying on typography or images in her work to maintain objectivity. However, can it be argued that the visuals she chooses, including the colours, shapes, and typography, to represent the data are not subjective? To what extent can data visualizations truly be objective? This perspective led me to challenge myself to refrain from designing the data myself based on the participants’ responses, as it would reflect my subjective interpretation. Instead, I devised a process in which I presented design

options and allowed the participants to choose, although subjectivity could not be completely eliminated. Another distinction between Posavec and myself is that my goal is not solely data visualization but rather focused on communication through data visualization. While her work is enjoyable to look at and learn from, I questioned how to effectively communicate with it. This led to the emergence of my Line of Inquiry: “Can we use patterns to visualize emotions and create cues for effective communication?”



Suge, S. (2021) *Cognitive design: Can behavioural and decision cues be designed?*



Suge, who teaches as an associate professor in the Department of Integrated Design at Tama Art University, specializes in designing for the realms of action and will through the concept of “Cognitive design” based on human perceptual abilities. The research explores the design of constraints to bring out human creativity. For example, in Suge’s *Designing the Gaze* (2023), icons reminiscent of human faces are placed on each object to guide the viewer’s gaze. Why are people guided by the gaze? This is probably because the direction of gaze is revealed by the positional relationship between the iris and the white part of the eye, which is also a human characteristic. Additionally, when people see a line drawn in an interrupted manner, they try to imagine the destination of the undrawn line. This is an example of the successful use of *Gestalt theory*, which states that the psychophysical forces caused by visual patterns, as well as any stimuli, modify space, rebalancing or derailing it (Reinfurt, 2019, pp126). Suge consistently designs cues that generate information, such as people’s actions and judgments.

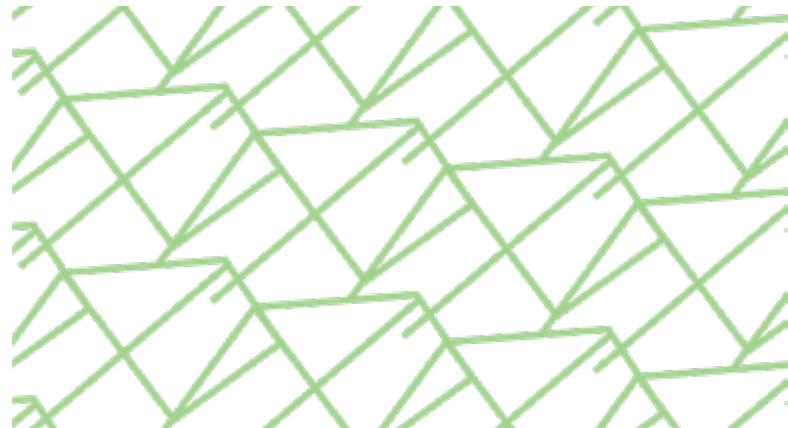
It can be seen that Suge has been heavily influenced by Sato, as he was a student in the laboratory of media creator Masahiko Sato, who is a professor at the Tokyo University of the Arts. Sato is known in Japan for producing many hit commercials in the 1990s, notably for supervising the NHK educational program *Pythagoras Switch*, which offers viewers a new “way of thinking.” There are two main points

relating to both Sato and Suge. The first is the analogue or Lo-fi nature of the method. Japan transitioned to terrestrial digital broadcasting in 2003, which made it possible to have more video and audio information at once, resulting in higher quality television images and higher sound quality. On the other hand, this educational program is expressed mainly through simple visual information with almost no narration. This minimalist way of expression is also strongly expressed in Suge's work. Design is not just about using difficult software to create something complex. The second commonality is the focus on "observing everyday life," visualizing the sense of difference found in it, and leading people to new perspectives and ways of thinking. This largely reflects the practice of observation (2017), a method that Suge argues is a key element of his work. We take in a lot of visual information every day, discard it, and pick up only the information that seems important to us. However, by practicing "observation," we can focus on small discrepancies in the visual information that has been unconsciously let go of in our brains.

I am now working on my own project. Therefore, let me "observe" the small discomfort I felt with Suge's project. When the audience sees Suge's design, the judgment is given to the audience. One could say that there is no clear goal there: what does Suge want the audience to feel, discover, and make decisions about? In my project, I want

to examine whether it can provide clues to communication beyond that. Or is it conceited of me as a designer to try to influence human behaviour and even communication? Indeed, "if designers attempt to persuade audiences through visual messages without properly understanding who they are designing for, inappropriate outcomes can result" (Forlizzi and Lebbon, 2002). However, challenging this difficulty is what Blauvelt describes as actively examining the "limits" of graphic design (pp. 216, 1994).

How can I design the clues that lead people to help them think and communicate further?



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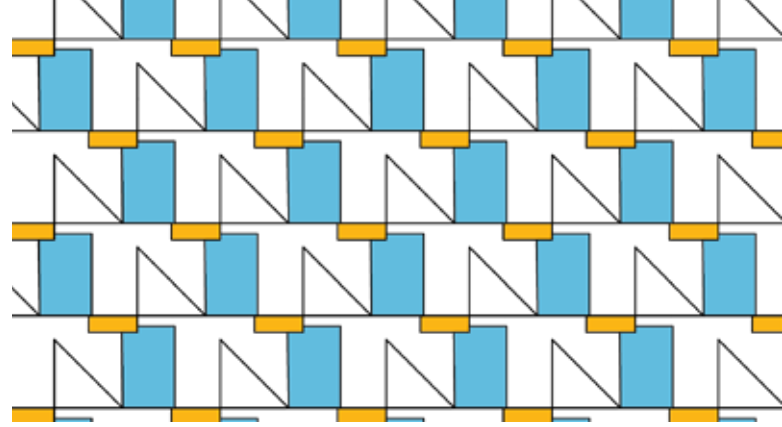
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