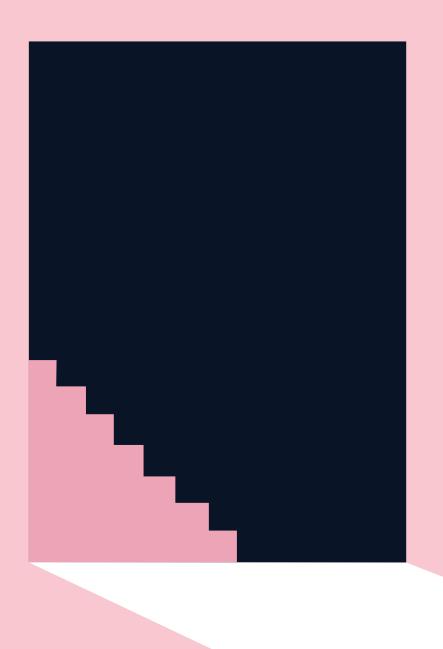
Problem Solving & Design Thinking.



Lina Castaneda. 33490956 Business of Design MA in Creative and Cultural Entrepreneurship Goldsmiths University of London.

Table of contents.

1. Introduction1
2. Design thinking as a problem solving approach3
3. What if6
4. Experimentation and Change in Education9
5. References11
6. Appendices

Introduction.

As a Designer, I have been interested in multiple disciplines apart from design such as history, art, sociology and psychology. The combination of those disciplines has given me the vision and the aim of a better world allowing myself to wonder and dream about new realities and infinitive possibilities. I have also be amazed by the human capacity to create, or pursue goals, of love and overcome problems. Furthermore, I have been interested in the understanding of human behaviour as well as the human perception of the world.

Among the things that I admire of human been the capacity to solve problems and to evolve is the one that impresses me the more, no just as a designer but also as a woman and as a dreamer.

During my journey as a designer, I have come to the conclusion that calling yourself or someone else as a creator is probably too ambiguous, and I mean this not at the surface level. I think about this it in multiple levels where although I am aware that all human beings have the potential to create something; the ability to make a good impact for the world out of that creation is different and requires particular solutions and approaches such as the ones addressed by the creative thinking.

This paper is part of a reflective report where I will address my opinions towards design thinking as well as the outcomes that I have learned during the Business of Design module at Goldsmiths University where experts from the creative industries shared with all the students their experiences and knowledge. Been problem solving and design thinking the topics that I found more interesting to discuss.

"Design problems are never a clear cut, black and white, but invariably shades of grey"

(Kimbel, 1982)

Design thinking as a problem solving approach.

Although during my short experience I have admired and used the design thinking methodologies actively to approach the challenges that I have as a designer; I have sometimes struggled to keep it real an usable. I have also reached a point where I think is me the one who does not know how to implement the methodology correctly. However, lately, I have started to discover people that also critics the use of the design thinking process to some of the problems that a company is trying to solve such as Pentagrams partner Natasha Jen.

In the discussions started by Jen, she critiques the use of the Design thinking process in "real life problems" argue that even the attempt of giving everyone five steps route into Design (Figure 1) has the potential of being "extremely dangerous" (2017). With this Jen is opening a conversation for designers to think beyond the process and tools, to allow themselves to explore and to critic, and to realise that there is no such thing as a formula for solving problems.

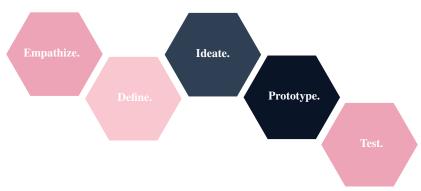


Figure 1: Design thinking process Source Brown, T., & Katz, B. (2009)

Explained in other words, Ideo's process promises the business to find the solution by learning about their audience, find and ask fundamental questions that need to be answered, find an answer, build the answer and make it a solution and then test that solution with the audience and repeat as many times as is necessary. Despite being an good solution for no designers, I think these methodologies are not enough.

The reason why I think is not enough is because I genuinely believe that exploration and experimentations are critical parts of any creative process especially if the primary objective is to have new ideas. The design thinking process is full of pre-assumptions such as the abilities of the people involved in the process that for me will be assuming that going through those five phases are as simple as acquiring or buying physical objects like the ones that are showed in Figure 2.

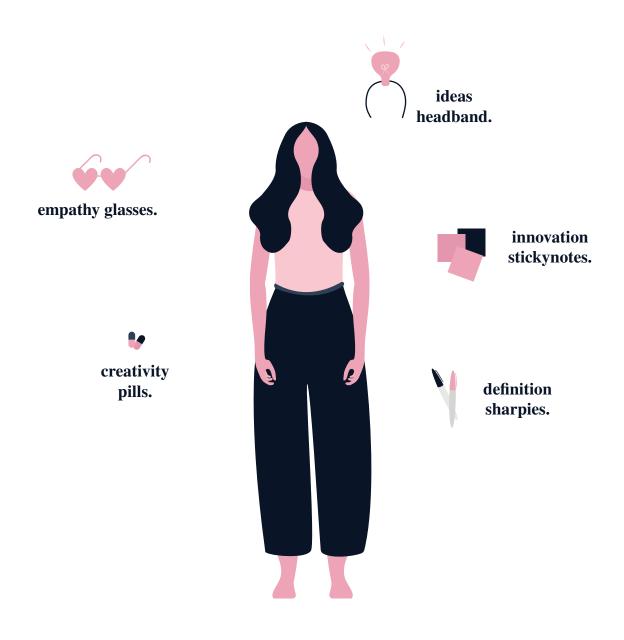


Figure 2: The ultimate tools for Design thinking

Things take time.

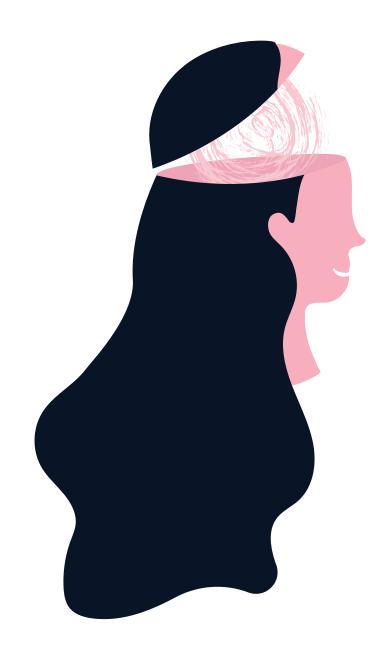
What if

What I think is that in extreme situations is where the human beauty comes to the surface and allows us to move beyond our expectations. And by extreme conditions I don't mean catastrophes, I expect problems, but for sure not any problem. And to clarify, let's define a problem for the sake of this paper as social issues such as corruption, hungriness, intolerance, inequality etc. Business issues should not be called problems; they are more like to be opportunities to make money and survive to the difficulties of the world. So I will argue that in order to go beyond our expectations we need to experiment, we need to allow us to wonder.

I am aware of the ambiguity that wondering may involve, but I agree with Damian Kulash. He is the lead vocals and guitar of Ok go a music band that has been recognised and admired for their availability to innovate, not just regarding music but also in their videos and in the way they communicate their statements, ideas and thoughts. In the TED talk "How to find a wonderful idea." Kulash explains the music band process behind its excellent videos as a result of experimentation, as a result of connecting all kind of opportunities that are out there to create something different. He states that they don't think the ideas, they find ideas and the way they find ideas is through experimentation, exploration and action. (2017)

Another example of how having a plan is not enough and how experimentation and the ability to wonder are great for ideas is one of the companies that was invited to the Business of Design module, Heatherwick Studio. In his talk, Niel Hubbard one of the team leaders at this company mentioned the importance of experiment and to not create limits for the design addressing opportunities always in different ways and still with an open mind to create new connections and find new answers to their clients. Hubbard also mentions the importance of having a great team, and he also remarked on the relevance that diversity has when it comes to creating new ideas. (2018)

In a conversation with one of the team members at Heatherwick, Silvia Rueda, I found out that the culture of the company has that freedom of allowing their members to experiment, to play with materials, always to ask themselves "What if". I found this extremely relevant as I can see the evidence of that thinking in Heatherwick's projects. And here is where Jen's critic to the design thinking process connects. Jen states that having proof of the results of any creative process is what allows any company or designer to be a self-critic and therefore to be genuinely original; to have the capacity to reflect in previous results and experiments in order to keep improving and keep reinventing itself. See Appendix 1



Design takes Experimentation.

Experimentation and Change in Education.

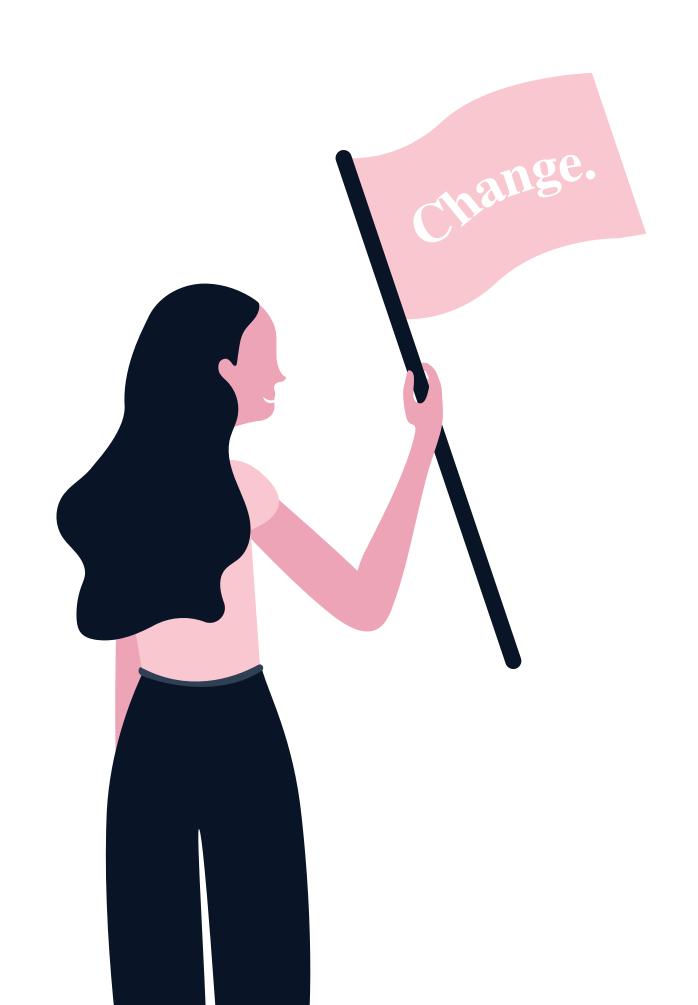
From the premise that change requires experimentation I will like to point out my perspective on education and in the importance that it has when comes to teach design. At the academy we learn how to break and change paradigms, to avoid stereotypes, to observe to not fall into prejudgements we learn the processes and the methodologies. However, I think learning those requires both, learning and practicing because is easy to fall into the stereotypes that we are hardly trying to avoid.

These stereotypes from my point of view also have a place in education. Often I found myself wondering how much those design process and methodologies have been applied to education programs, and also if they have actually being applied why is not evident. However, I understand the limits of education and the lack of flexibility for experimentation and rapid reaction towards change, and I recognise the efforts of professors and teachers to inject in their students as much knowledge as they can, hoping that one-day those lessons become fruitful.

Ultimately educators carry a responsibility even more significant than any designer or company attempting to solve problems. From my point of view, they also have the responsibility to avoid shaping massive productions of designers in series for the sake of education business. On the contrary to empower students and generate the change in them, to inspire them and to encourage them to think that "What if" is a good start point but beyond that change is actually possible. They already have the evidence of past students that have served as experiments for future generations.

For my future career, I will like to be a change agent, and I am not worried about being erudite or going big, I am concerned about using my skills or talent to contribute to what I admire the most, the capacity of evolving. I am grateful to my teachers, and I admire for their ability to inspire all of us as students and professionals but moreover for iterate in us and for always trying their best.

To conclude, I consider that design is not a career or a profession, and I think to design a vehicle for a mindset and a journey where change is the driver. Ultimately, what I expect for my future is to have enough courage to believe combine my interests and passions for a better world. I see myself experimenting and exploring, never stop of being curious. I hope, in ten years I can read this report and notice who much I have evolved and grew as a designer and as human been, having learned from my mistakes and being proud of my values and my desire to be the best version of me for the world.



References.

Armstrong, B. (2013) It's Time To Bring Design Thinking Down From On High Licentiate thesis, Forbes. Available

from:https://www.forbes.com/sites/barbaraarmstrong/2013/08/15/its-time-to-bring-design-thinking-down-from-on-high/#1c73e1cc5d52 (Accessed 21 June 2018).

Baynes, K., & Norman, E. (2013). Design education: A vision for the future.

Brown, T., & Katz, B. (2009). Change by design: How design thinking transforms organizations and inspires innovation. New York]: Harper Business.

Bruner, J. (1996). The culture of education. Cambridge, Mass; London: Harvard University Press.

Castaneda, L. and Rueda, S. (2018). Problem solving and creative practices. Us the creatives. London

Fraser, W. (1995). Learning from experience: Empowerment or incorporation. Leicester: National Institute of Adult Continuing Education.

Green, P. (1974). Design education: Problem solving and visual experience. London: Batsford.

Howkins, J. (2013) The creative economy. Second edition. Penguin Press, England

Hubbard, N. (2018) Talk for Business of Design Module, Goldsmiths University

Jen, N. Barron, K. Han, J. and Yun, E. (2018) Can design thinking help us understand design thinking? from: http://pentadev.com/mb_clients/NJen/DesignThinking.pdf (Accessed 15 June 2018).

Jen, N. (2018) Design thinking is bulshit. Printed Pages Magazine. Is nice that. Summer edition.

Jen, N. (2018) Design thinking is bulshit. from: hhttps://www.youtube.com/watch?v=_raleGrTdUg (Accessed 15 June 2018).

Kulash, D. (2017) How to find a wonderful idea from:https://www.ted.com/talks/ok_go_how_to_find_a_wonderful_idea (Accessed 10 June 2018).

Malbon, T. (2013) The Problem with Design Thinking. Available from:https://medium.com/the-many/the-problem-with-design-thinking-988b88f1d696 (Accessed 21 June 2018).

Wilczek, F. (2015). A beautiful question. Penguin Press, Great Britain

Piotrowski, C. (2011). Problem solving and critical thinking for designers. Hoboken, N.J.: Wiley.



Research ethics consent form for Podcast Interview

Title of research:

Business of Design - Problem solving and creative practices

How research findings will be presented:

The interview will be submitted as a 5 minutes Podcast and as part of a writing report which will analyse and reflect on design thinking and problem-solving in different approaches.

This is part of an assignment for the module Business of Design in the MA in Creative and Cultural Entrepreneurship at the Goldsmiths University of London.

Interviewer:

Lina Castaneda Cardenas Student number: 33490956

Interviewee:

Silvia Rueda, Designer Architect at Heatherwick Studio

By signing this form I agree that;

- 1. I am voluntarily taking part in this project. I understand that I don't have to take part, and I can stop the interview at any time;
- 2. The transcribed interview or extracts from it may be used as described above;
- 3. I have read the Information sheet;
- 4. I don't expect to receive any benefit or payment for my participation;
- 5. I can request a copy of the transcript of my interview and may make edits I feel necessary to ensure the effectiveness of any agreement made about confidentiality;
- 6. I have been able to ask any questions I might have, and I understand that I am free to contact the researcher with any questions I may have in the future.

Silvia Rueda Wellar

Problem Finding & Exploration.

