Inspiration Mining: exploring Design research(ers) strategies

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Abstract. The article describes and presents the results of an atypical process of Design research strategy, tested in a Master in Design Course. It is intended that students explore ideas, concepts and themes - Inspiration Mining - taking as a starting point a set of 32 (30+2) reference titles, with the objective of discovering, through the establishment of more or less (im)probable relationships, possible points of interception, enhancers of new ideas. The objectives of the proposed work focus on the development of research and critical reflection in a collaborative environment of exploring the [apparently] unknown, in search of new meanings. During the process, the intersection of inspiring ideas leading to the transforming a set of existing ideas into new ones.

Keywords: Inspiration Mining \cdot Design Research Strategies \cdot Critical Reflection \cdot Collaborative Environment \cdot Intersection of Inspiring Concepts \cdot Literature Review

1 Introduction

We know the difficulties inherent to the discovery of a timely research topic, capable of becoming a significant contribution to knowledge and science in Design. The starting point is the exploration of concepts, ideas and themes - Inspiration Mining^a - starting with a proposal for curation of reference titles, with the purpose of discovering, through the establishment of relations more or less (im)probable, relationships and conceptual

² The Inspiration Mining work was developed in the curricular unit Theory and Criticism of Design (Master in Design, Universidade de Évora) in the academic years 2019-2020 and 2020-2021 under Paulo Maldonado supervision.

leaps and flashes of inspiration through the ideas with the greatest potential (first in a perspective of divergence and expansion, then in a perspective of convergence and concentration), possible points of interception, new (disruptive) concepts, ideas and unexpected themes inspirers for the individual research project, going through the IDEO itinerary [1]: discovery > interpretation > ideation > experimentation > transformation.

The research environment is an incubator of possible futures for design research, testing innovation through content curation, collaboration and connectivity. Rapid prototyping of possible ideas for research topics among participants (inspired cultural provocateurs) coach, prepares and transforms educated thinkers into highly educated thinkers to be innovation.



1.1 Interdisciplinary Design Process by Ana Ricardo

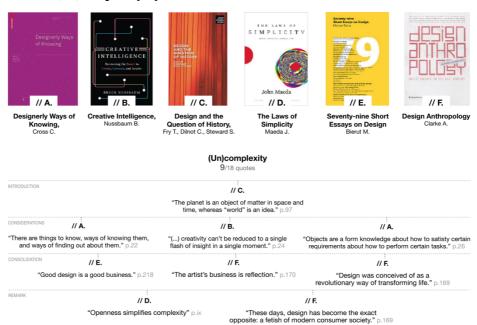
Fig. 1. Interdisciplinary Design Process: synthetic scheme about books, selection and visual narrative.

The selection and analysis of the nine most interesting concepts gave rise to the visual narrative (Fig. 1). The results of these "intersections of thinking" [2] transport us to the notion that design process is interdisciplinary.

Design is not an isolated activity and so "it emerges from a wider field of relationships" [3] and connections, which converge with each other to inspire us. This exercise of intersection knowledges also helps us "understanding user needs" [3], prioritize function and not necessarily aesthetics, because "design's only contemporary purpose is to create new things out of nothing" [3]. The key aspect for this conduct of

thinking is to "be open to the ideas and language of people who have different backgrounds and ideas about the world" [2]. This notion establishes the connection with the "Design Ethnography" [4], where the empathy and the insight are the motto. This means that to "be willing to change the way we think about the world and what we do" [2] is a fundamental research skill. The act of "observation requires attentive looking and systematic recording of phenomena – including people, artifacts, environments, events, behaviors and interactions" [4], in fact, we can record and prioritize the ideas and inspirations using the visual methodological process of "mind mapping" [4]. However, in the concept "Design (as) research" [2], we understand the importance of interpretation. Throughout the interdisciplinary process, from the ideation to the implementation, the "research is only good as its interpretation" [2].

Design is a challenging process where human, social and empathic skills are tested. To do our project based on an interdisciplinary design process is necessary to articulate questions and take conclusions and that is why "critical reflection is a necessary component of a design research practice" [2].



1.2 (Un)complexity by Ana Almeida

Fig. 2. (Un)complexity: books selection and textual structure.

"The planet is an object of matter in space and time, whereas 'world' is an idea" [5]. In perspective, this concept is valid in the scope of design because it represents a world of "ideas", thought and rethought, under the various constraints of space and time. Design is a fundamental part of the universe we cohabit.

Design must be methodological and disciplined. From the start it is important to be aware that "there are things to know, ways to know, ways of knowing them, and ways of finding out about them" [6]. For this to be possible, it is necessary to adapt and define the best approach strategy to the type of product and target for which one intends to work. "Creativity can't be reduced to a single flash of insight in a single moment". [7] It is imperative to explore the theme to the maximum, in order to open the field of hypotheses and thus stimulate the designer's creativity. Observation is also a fundamental part, since "objects are a form knowledge about how to satisfy certain requirements about how to perform certain tasks" [6]. When this process is executed successfully all the capacities are gathered to develop a good design, and therefore a good business [8]. "The artist's business is reflection" [3] and "design was conceived of as a revolutionary way of transforming life" [3] and it is in this sense that it should be understood.

The process may seem complex, however, "openness simplifies complexity" [9]. Therefore, nowadays, design has become "a fetish of modern consumer society" [3] that only sees potential in business models, neglecting the necessary design process. It is up to us, designers, to counteract this trend.



Fig. 3. The 21st Century Consumer: selection of books, 9 of 18 concepts and visual planning of text structure.

1.3 The 21st Century Consumer by Inês Gonçalino

"There is all around us today a kind of fantastic conspicuousness of consumption and abundance" [10]. It becomes increasingly evident that, this man-made need for exuberance, who lives to assert himself before society based on what he owns, rooted on the inconsistent idea that having more is also "being more".

Consumption is an activity that arises from the needs of the human being. Just as there are essential and superfluous needs, consumption can also be essential or superfluous. As a rule, essential consumption corresponds to primary needs, that is, the purchase and use of goods indispensable for survival. Superfluous consumption, on the other hand, correspond to superfluous needs that are met with the acquisition and use of goods that are dispensable in our lives, but that for many is a priority. Whether the needs that motivate the act of consumption are essential or superfluous, this must happen based on previous evaluations of what the market offers as a response to said need, and the act of purchase previously calculated. "The vast majority of the population, however, consumes and shops with their mind and their heart, or if you prefer, their emotions" [11], often proceeding to an impulsive act that is not always the best response to the need that motivated the consumption. This being the reality by which the consumer is governed, it's necessary for a brand that is seeking success in the market to "stop racing after every new fad and focus on making consistent, emotional connections with consumers" [11]. Building customer loyalty and maintaining a long-lasting relationship with them is an important step to ensure that with each new product or service launched on the market, there is a greater probability of sales. The connections established are then extremely important, and their success, dictates the success of the brand. This is the important work of the marketing and design teams (which ironically are often undervalued) that with the necessary tools and knowledge, know how to reach the target audience, turning potential consumers into actual consumers. The perception of a brand is achieved through various means (such as its logo, packaging, communication elements, etc.). "All elements of a visual language should be intentionally designed to advance the brand strategy" [12] and it is proven that "using clear language consistently to communicate about products and services helps the customer" [12]. It is therefore, up to marketeers and designers to create communication media and, in a coherent way, "you have to deliver the information the way people absorb it, a bit at a time, a layer at a time, and in the proper sequence" [13]. It follows that the way "how a brand is perceived affects its success" [12].

In short, the success of brands is fundamental in the contribution to consumer activity, which in turn is fundamental to the growth of the global economy. The success of a brand positively affects society in general, since it generates more jobs and "the system needs people as workers, as savers, but increasingly it needs them as consumers" [10]. In any case, it's important that every consumer is aware of the impact of the consumer industry on the environment. Without conditions and environmental quality, there is no consumption that can save us. And just as today's consumption is evidenced on unnecessary grounds, so is its impact, because "nature was never glorified quite so much before it was everywhere laid waste" [10]. It is unfortunate, that this exaltation, occurs in greater measures than the remedial responses in the face of the damage. It is necessary to understand that consumption is fundamental but, it must be a conscious act at all levels inherent to it.

1.4 Emerging cultural landscapes by Raquel Gouveia

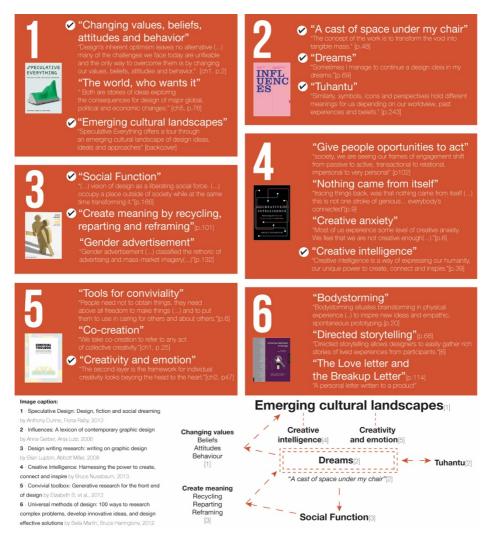


Fig. 4. Emerging cultural landscapes: books, concepts and visual narrative.

"Emerging cultural landscapes" [14] present two topics of interest: "creative intelligence" [7] and "creativity and emotion" [17]. "Dreams" [15] result from them, the individual "cast of space under my chair" [15], with a "social function" [16]. The use of this "social function" [16] with the "creation of meaning" [16] or with the intention of creating it, trough "recycling, sharing and reframing" [16]; influences "dreams" [15] in a second way. These "dreams" [15], if submitted to an individual perspective, that is, to a philosophy called "Tuhantu (symbols, icons and personalities have different meanings depending on world view, experiences and beliefs)" [15], allow to the individual the ability, after a "change in values, beliefs, attitudes and behaviours" [14], to fit in and help shape a new "emerging cultural landscape" [14].

1.5 The manifest of the mind by Sara Condeça

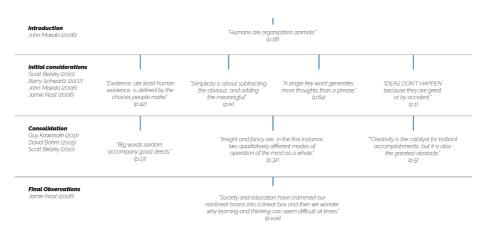


Fig. 5. The manifest of the mind: construction of the visual narrative with the final selection of authors and concepts/ideas

The human mind was once a great mystery and sometimes difficult to decipher. Today, its complexity is closer to being understood. The patterns in our mind adapt to the complexity of our lives, and it's up to people, us, to organize those patterns, as John Maeda states in his book *The Laws of Simplicity* – "humans are organization animals" [9]. So, unconsciously, we are always creating habits and ways to stay organized. These habits arise from new ideas – "ideas don't happen because they are great or by accident" [18], they happen when we move to achieve them.

"Existence, at least human existence, is defined by the choices people make" [19]. The human being is defined by more or less complex choices. However, "simplicity is about subtracting the obvious and adding the meaningful" [9]. If our choices are not meaningful, are they the right ones? Perhaps the best way to make decisions, to have ideas, to create habits and make choices, involves choosing the route of simplicity. Often, "a single keyword generates more thoughts than a phrase" [20] and, with this, the route of simplicity may end up bringing the best ideas.

However, "big words seldom accompany good deeds" [21] and we must be in control of what are the possible and impossible strategies to achieve, "insight and fancy are, in the first instance, two qualitatively different modes of operation of the mind as a whole" [22]. By establishing relationships between the mind, the organization, the habits, the ideas and all their simplicity, we can conclude that everything is born from the creativity of the mind and the decisions we made – "creativity is the catalyst for brilliant accomplishments, but it is also the greatest obstacle" [18]. It is important to be able to be creative in the way of thinking and living, since the understanding of our mind develops as we experience life.

"Society and education have cramed our non-linear brains in a linear box and then we wonder why learning and thinking can seem difficult at times" [20]. However, it does not have to be, and this is a decision that only we can make.

2. Inspiration Mining research strategy

Starting with a curation of 30 printed reference titles (some of the titles may be lateral to the scientific area of study) plus 2 key titles, the students selected and used (for 120 minutes) 6 reference titles of their choice, identifying and registering, under the form of a mental map and on paper (A3), 18 concepts, ideas and themes (3 per title). They then elaborate an analytical index of the 18 ideas and depart to relate and discuss 9 of the 18 ideas. The process culminates in the construction of a distinctive narrative originating in the 9 ideas (in the form of text and ideographic).

Acknowledgments. Centro de Investigação em Arquitetura, Urbanismo e Design, Faculdade de Arquitetura, Universidade de Lisboa, Portugal; Centro de História de Arte e Investigação Avançada da Universidade de Évora, Évora, Portugal.

References

- 1. IDEO .: Design Thinking for educators, http:// designthinkingforeducators.com/ (2012)
- 2. Laurel, Brenda.: Design Research. MIT Press, Mass. (2003)
- 3. Clarke, A. J.: Design Anthropology. Springer, Vienna (2011)
- 4. Martin, B., & Hanington, B.: Universal Methods of Design. Rockport Publishers, Beverly (2012)
- Fry, T., Dilnot, C., Stewart S. C.: Design and the Question of History. Bloomsburry Academic, London (2015)
- 6. Cross, N.: Designerly Ways of Knowing. Spinger, London (2006).
- 7. Nussbaum, B.: Creative Intelligence. Harper Collins Publisher, New York (2013)
- Bierut, M.: Seventy-Nine Short Essays on Design. Princeton Architectual Press, New York (2007)
- 9. Maeda, J.: The Laws of Simplicity. MIT, Cambridge, Mass. (2006)
- Baudrillard, J.: The Consumer Society: Myths and Structurs. SAGE Publications, London (1970)
- 11. Roberts, K.: Lovemarks: The Future Beyond. PowerHouse Books, New York (2007)
- 12. Wheeler, A.: Designing Brand Identity. John Wiley, Hoboken, New Jersey (2010)
- 13. Underhill, P.: Why We Buy. Simon & Schuster Paperbacks, (2000).
- 14. Dunne, A., Raby, F.: Speculative Everything. MIT Press, Cambridge, Mass. (2013)
- 15. Gerber, A., & Lutz, A.: Influences. Die Gestalten Verlag, Berlin (2006)
- 16. Lupton, E., Miller, A.: Design Writing Research. Phaidon, London (2008)
- 17. Sanders, L., Stappers, P. J.: Convivial Toolbox. HarperCollins, New York (2013)
- 18. Belsky, S.: Making Ideas Happen. Portfolio Penguin, London (2011)
- 19. Schwartz, B.: The Paradox of Choice. HarperCollins e-books, New York (2007).
- 20. Nast, J.: Idea Mapping. John Wiley, Hoboken, New Jersey (2006)
- 21. Kawasaki, G.: Enchantment. Portfolio Penguin, London (2011)
- 22. Bohm, D.: On Criativity. Routledge, New York (2005)