

Inspiration Mining: exploring Design research(ers) strategies #2

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Abstract. The article describes and presents the results of an atypical process of Design research strategy, tested for the third time 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. This article replicates the title of the article published in 2021 (indicating as a differentiating element the number #2 of the series of papers intended to be published on this research strategy) and consists of the process and results of the work carried out in the academic year 2021-2022. By comparing the articles published and to be published in the future it may be interesting to analyze how each author or title can be inspiring to researchers according to their personal interests.

Keywords: Inspiration Mining · Design Research Strategies · Critical Reflection · Inspired · Collaborative Environment · Intersection of Inspiring Concepts · 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 Mining¹ – 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 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. 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.

2 Inspiration Mining examples

2.1 Design: Translate the abstract by Alice Merkens

A Designer's Art Paul Rand (1968)	Design Anthropology Alison J. Clarke (2017)	Seventy-nine shorts essays on Design Michael Bierut (2007)	The art of critical making Hermano & Somerson (2013)	Laws of simplicity John Maeda (2006)	Thoughts on Design Paul Rand & Michael Bierut (2014)
"Some designers fill in their educational gaps as they go along; some just fake it. But most of the mediocre design today comes from designers who are faithfully doing as they were taught in school ; they worship at the altar of the visual." (Bierut, 2007)	"According to Kant, man's knowledge is realized in the act of comparing, examining, relating, distinguishing, abstracting, deducing, demonstrating: all of which are forms of active intellectual effort." (Rand, 1968)	"Psychologists and behavioral scientists agree that creativity is a complex combination of attributes , including but not restricted to knowledge, personality type, and environment , and that it manifests differently depending on one's motivation." (Hermano & Somerson, 2013)	"Simplicity is about subtracting the obvious, and adding the meaningful." (Maeda, 2006)		
INTRODUCTION					
		"The problem is not simple: its very complexity virtually dictates the solution that is, the discovery of an image universally comprehensible, one which translates abstract ideas into visual forms. " (Rand & Bierut, 2014)	"To function creatively the artist must have the courage to fight for what he believes." (Rand, 1968)		
STRUCTURE					
"Graphic design which evokes the symmetry of Vitruvius, the dynamic symmetry of Mondrian; which is a good gestalt, generated by intuition or by computer, by invention or by a system of coordinates: is not a good design if it does not communicate. " (Rand, 1968)		"Simplicity and complexity need each other." (Maeda, 2006)	"The human brain has not yet evolved into an organ that can understand fully without sensory perception." (Hermano & Somerson, 2013)		
CONCLUSION					

Fig. 1. Design: Translate the abstract. Books selection and visual narrative

¹ 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, 2020-2021 and 2021-2022 under Paulo Maldonado supervision.

Based on intuition, the designer can decipher thoughts and ideas by translating them into visual and material forms. This intuition is born “from the act of comparing, examining, reporting, distinguishing, abstracting, deducing, and demonstrating.” [1] which gives each person different perceptions according to their experiences. For someone who has the ambition to be a successful designer, doing only what you are taught in school, limits your freedom of expression as well as confidence in what they do in your work. In other words, someone who simply fulfills briefings without first questioning himself and without allowing himself to wander and get lost in his thoughts, will not be able to achieve the best of his ideas. Trusting the work, we do and knowing what we are capable of is halfway to defining what we want and do not want, and distinguishing the good from the bad, thus defining our personality as professionals. [2]. Transforming the abstract (imagination), is for me one of the definitions of what it is to be a designer. Conceiving an idea involves creativity and visualization, and for us it is easy to immediately imagine a solution to x problems - that is the abstract moment. The conception of the idea or thought is the translation into a language understandable to everyone [3]. With this, Design is directly linked to Art, both express what is abstract and reflect emotions, sensations, intentions and solutions: “Artists and Designers are creators who put ideas into the material world. In the studio we think about things. We think around and through things.” [2]. They both intend to create new experiences and impacts on society. Thus, what distinguishes them? The artist creates art as an extension of himself, be it ideals or emotions. The designer intends to solve or find an answer to a problem. Above all what distinguishes them, is the artist or designer as a way of being (values and goals) and the client they work for: “Clients are the difference between design and art.” [4]. The designer is more rational, while the artist is more philosophical. It is hard to define what each are, they complement each other, but they are different and have different roles in the world. Art complements and helps the designer. It develops a lyrical and philosophical sense, making the designer more human and closer to society, which is fundamental to solve problems in the community, countries or continents: they create a positive impact. Art also helps in the capacity of expression and communication - “Design evokes the symmetry of Vitruvius the dynamic symmetry of Mondrian; that it is a good gestalt, generated by intuition or by computer, by invention or by a coordinate system, is not good design if it does not communicate.” [1]. It is important in Design to know how to simplify while still maintaining the complexity and value that a project should have [5], leaving only what is really important. So, this reflection serves to conclude that Design is very complex and goes beyond what the common sense knows. Design is research, is to understand about several areas, is to define problems and find solutions, is to transform sensations, emotions, and intentions into something tangible and real, is to imagine without limits but with feet on the ground. Design is also learning, what one wants and doesn't want by creating personality and, what distinguishes each professional? Intuition. Intuition is something so personal that makes each designer unique. For a good designer is guided by his knowledge, ideas, and perception, letting himself be influenced, without copying something existing. Design is not a status or profession, it's a way of life. We designers are here to transform the abstract into visual and material forms, because “The human

brain has not yet evolved into an organ that can fully comprehend without sensory perception.” [2]. We are the intermediary of ideas because Design is a language that not everyone can perceive.

2.2 Design(er) in (de)construction by Rodrigo Balhana

Against Method Outline of an Anar- chistic Theory of	Design Anthropology Object Culture in the 21st Century	Design, when everybody designs: an introduction to design for social	Emotional Design Why We Love (Or Hate) Everyday Things	Engineering design methods: Strategies for product design	Exploring materials: creative design for everyday objects
Paul Feyerabend (1989)	Alison Clarke (2010)	Ezio Manzini (2015)	Donald Norman (2005)	Nigel Cross (1995)	Ellen Lupton (2010)
“People’s behavior cannot be designed. However, it is possible to create conditions that make some ways of being and doing things more probable” (Manzini, E. 2015)		“If you want a golden rule that will fit everybody, this is it: Have nothing in your houses that you do not know to be useful, or believe to be beautiful.” (Donald, A. 2005)		“If customers do not buy it, then the product, however well-designed it may be, will be a commercial failure.” (Cross, N. 1995)	
“People have always designed” (Cross, N. 1995)		“An important first step in designing therefore is to try to clarify the design objectives.” (Cross, N. 1995)		“There is no guarantee that scientists will solve every problem and replace every theory that has been refuted with a successor satisfying the formal” (Feyerabend, P. 1989)	
“However, ‘design thinking’ is a nebulous term and it seems necessary to devote some space, in this concluding section, to exploring what design thinking might mean exactly.” (Clarke A. 2010)		“Design itself has been (and still is) a fertile ground for social innovation. Indeed it is one of the most dynamic.” (Manzini, E. 2015)		“The best way to learn is by doing.” (Lupton, E. 2010)	

Fig. 2 Design(er) in (de)construction: books selection and textual structure

Designer, is a word with such importance that I still can’t understand, is perhaps much more than a “simple” profession. It is not an exact science and even following the many interpretations of “design thinking”, we have no guarantee that the project will be a success. It is something that we think we have mastered, but in reality we don’t have control over, all this for the simple fact “[that] people’s behavior cannot be designed, [but] it is however possible to create conditions that make those people do things in a more predictable way.” [6]. Perhaps this is the point of the question, what makes us designers? do we think that our solutions will change people, or is it people who will change our solutions? In case you are still looking for “a golden rule that fits everyone, it will go something like this: don’t have anything in the house that you believe isn’t useful or you think is pretty.” [7]. We always work for the “others”, we base all our research on the “others”, we choose colors with the “others” in mind. But no matter how good our design processes are, “if the customers don’t buy, then that product, although well designed can be, and will be a commercial failure” [8]. This phrase is applicable in all areas of design, no matter how well intentioned and developed the project is, the outcome will always depend on “others”. On the other hand “people have always created” [8], it is in our DNA and no matter how much we want to we will never please everyone. “an important step is to try to clarify the objectives” [8], thus restricting our area of action. As designers we must take advantage of the research process as a form of journey through information, developing critical thinking skills as we seek to gain as much knowledge as possible. “There is no guarantee that scientists will solve all problems and subsist all theories that have been refuted with others that satisfy the formal conditions.” [9]. The important thing is the journey, not the

destination, because in the end what remains (beyond a final product) is the technical/cultural enrichment. So is this the solution to understand “design thinking”? I honestly don’t know and even knowing all this information we still have many doubts, “However, design thinking is a vague term and it takes some space and time to understand what it really means.” [10]. We can conclude that “Design itself has been (still is) a fertile ground for social innovations. In fact it is one of the most dynamic” [6], for this reason we should take advantage of all possible sources of information to achieve a relevant result for the project. Obviously it will not always go as we expected, but “the best way to learn is by doing” [11].

2.3 (Un)complicate by Raquel Farinha

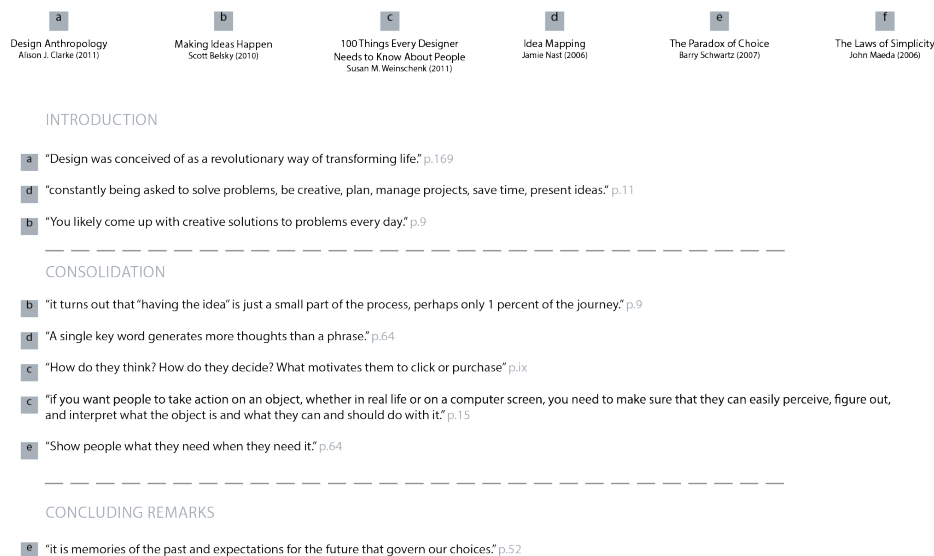


Fig. 4 (Un)complicate. Selection of books/ concepts and visual planning of text narrative

A designer’s duties go far beyond creating something new. For the purpose of solving society’s problems, “Design was conceived of as a revolutionary way of transforming life.” [10]. Both in an academic setting and in a professional setting, is usual to be “constantly being asked to solve problems, be creative, plan, manage projects, save complex by putting pressure on ourselves, even more so if we do not know how to reconcile the factors mention above. All this pressure can affect our performance and consequently cause existential crises. These crises are a result of forcing our mind into permanent reflection. These high stress moments are difficult to control, but as hard as it may seem, “you likely come up with creative solutions to problems every day.” [13]. A designer’s daily reflection is processed by a constant search for new solutions regardless of the adversities that come our way. Therefore, the question is: How can we uncomplicate what seems to be complicated? The creation of a project turns out to be a long process, consisting of a number of phases that we have to complete before we can give the work as completed. Most of the time, we may believe that having the idea is

the most important and complex phase of the whole process, but “it turns out that “having the idea” is just a small part of the process, perhaps only one percent of the journey.” [13]. It may seem complicated because this is the phase where we push the limits of our creativity. Each of us adapts our own methodologies to our ideation process. It happens that as time passes and we approach the deadline, stress can lead to the blockage becoming worse. By default, we tend to complicate this process, but if we stop to reflect, we are able to arrive at a theme or idea through “a single key word [which] generates more thoughts than a phrase.” [12]. Knowing our customer is a good starting point for the idea to become successful. It’s fundamental to ask ourselves “How do they think? How do they decide? What motivates them to click or purchase” [14]. These questions are crucial, “if you want people to take action on an object, whether in real life or on a computer screen, you need to make sure that they can easily perceive, figure out, and interpret what the object is and what they can and should do with it.” [14] In reality, the key is to “Show people what they need when they need it.” [14] Creative blocks do happen and can cause a feeling of frustration or even worry, but by uncomplicating these thoughts, we will get further since “it is memories of the past and expectations for the future that govern our choices.”[15] In other words, the experiences we gain throughout life have an influence on our ideas, since we have different positions from others, by doing this we uncomplicate the process.

2.4 Design, Designers and Culture by Inês Palma

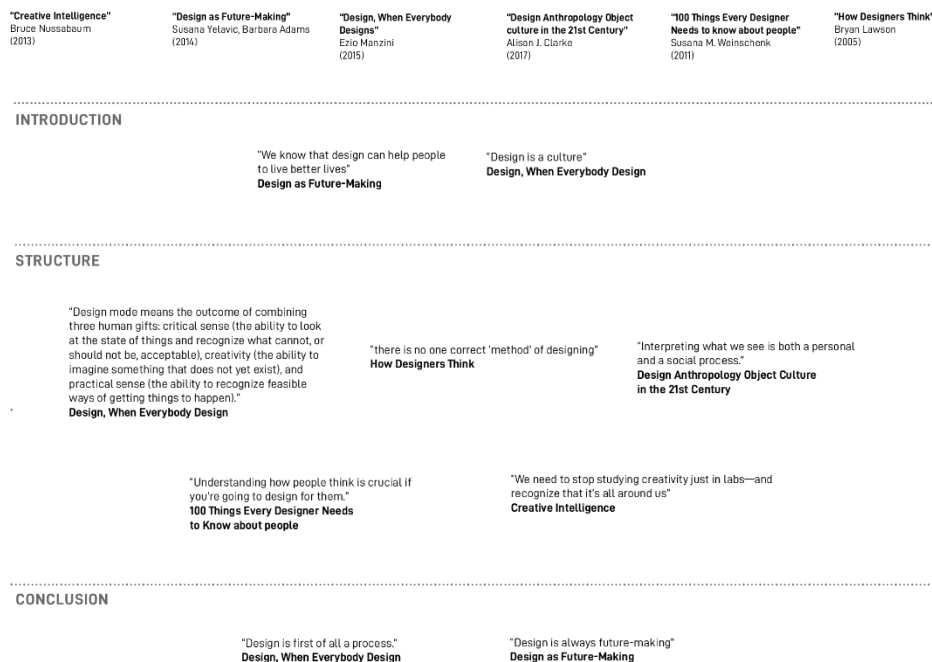


Fig. 3 Design, Designers and Culture: books selection and textual structure

“Design creates culture. Culture shapes values. Values determine the future” [16], said Robert Peters, in a sentence managed to express in its entirety what for many might be a good definition of design, what design can develop for the sake of the future, and how culture and values are striking in social development and innovation. "We know that design can help people live better lives" [17]. Design is a culture [6], and the designer acts as a cultural agent, where he spreads values through designing a project, including services, objects, and everything that can involve us. Designers have enough authority to stipulate what can or cannot be done, and how to be done, be it for any area of design. Being recognized as cultural agents, we realize that design has more and more impact present in society. Design is never culturally neutral - it always carries sociocultural values. "Design means the result of combining three human gifts: critical sense (the ability to look at the state of things and recognize what cannot, or should not, be acceptable), creativity (the ability to imagine something that does not yet exist), and practical sense (the ability to recognize feasible ways to make things happen) [17]. In design practice there are diverse methodologies and ways of designing, in fact "there is no one correct 'method' of designing" [18], but nevertheless it is necessary to individually define the best methods. Each designer designs differently and "interpreting what we see is a personal and social process" [10], it is important to explore the process of creativity and "understanding how people think is crucial if we are going to create design for them" [14]. Creativity is highly dependent on what we collect through what we observe. "We need to stop studying creativity only in labs - and recognize that it is all around us" [19], it must be delved into as deeply as possible to get better results. "Design is first and foremost a process" [6], and alternatively, it acts as a tool for the modernization and increase of products on the market, as of new values and practices in the future, we consequently determine that "design always creates for the future" [17].

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

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