Lucia Trias

History-through design. Reflections on design collective documentation.

1.Introduction

Within design there are different ways of expression concerning both personal interests and social mindsets. However, when it comes to design knowing, they all share methodologies, experiences and theoretical references. This paper seeks to give a first approach on how we could achieve a future history-through design narrative, by introducing documentation to the core structure of the design discipline.

Based on the hypothesis that: by creating a collaborative open source database, we can recognize relations in terms of design processes and methodologies between different designers. This research aims to answer the following question: can we benefit from these collaborations without losing self-expression?

Starting by introducing the value of documentation for building up a future history through design narrative. It introduces the design research scenario proposed by T. Faste and H. Faste and combines it with Donal A.Schön's experiences with researching the implications of tacit knowing in the design process.

Finally, by combining these ideas with historical patterns in documentation I will briefly propose what I consider to be the foundations for implementing a future design-knowing data-base.

2.History-through design, the acceptance of reliable historical practice-based design.

History is an intrinsic part of research, not because of the narration of past key events, but because of the knowledge generated through past processes. Moreover, for Foucault (2009) knowledge is what allows history to exist. Hence, without knowing -knowing as an agreement on a certain code- there is no history.

T. Faste and H. Faste (2019) argue on their paper 'Demystifying "Design Research": Design is Not Research, Research is Design ', that design differs from other research disciplines:

> *'A designer doesn't really want to become an anthropologist (and go into situations with no hypothesis), or a historian (and go to the original source material while keeping hands of the present), or a sociologist. Design research is really about the design of design' (T.Faste, H. Faste, 2019)*

This idea of designing the design-discipline, led me to consider the research and historical potential of the practice of design, for development a future collaborative design narrative.

Design is mostly practice-based and even when not, it involves practical knowledge (Donald A. Schön,1992, Mareis, 2012). Therefore, research through design is from my perspective of most significance in the discussion on design documentation.

Nonetheless, for Mareis (2012) this requires a big first step: to accept practice-based design knowing as an epistemic valid practice. That is to say, to accept design-practice as academically valid.

For Buchanan (2001) design schools tend to transmit the rather opposite idea to future designers. Encompassing students in an educational scenario that fosters 'uncertainty about whether there is such a thing as design knowledge that merits serious attention'.

In line, and based on my experiences as a former design student, I would argue that from the very beginning of our career, we learn how to document our "own" design process as a way of improving a personal way of working, but not as a "trustworthy document".

This constellation leads to the question: Can documentation influence the perception of design students towards their possible commitment with the discipline?

The Design Research Society-DRS stated in 2016 that a new way of understanding design research was necessary. They claim that

we should “include practice methods, research, writing and divers collaborations across academic colleagues from various disciplinary enclaves” (Atkinson&Oppenheimer, 2016). This is intended to show how documentation can have different expressions and purposes.

Moreover, design as discipline has been making the transition towards an expansion of its methodologies. Widening its capacities of relation to other disciplines many times even opposed to itself (Atkinson&Oppenheimer, 2016, Sanders&Stappers, 2008).

In this sense, research through design documentation can be seen as aiming for collaboratively preserving information. Hence, allowing to generate a collaborative research-based design narrative.

In turn, design is currently to be found on multidisciplinary projectual structures. Allowing to presume that collaboration is intrinsic to design. However, how can design learn to collaborate with other disciplines, without first collaborating within itself?

As aforementioned, for this research it is considered that the greatest potential of design discipline lies in the practice of design. When thinking of it as a source of knowledge, it strongly relates to Michael Polanyi’s (2009) statement that ‘We can know more, than we can tell’. It is important to keep this in mind, when thinking about design practice documentation. In order to accept that we will never be capable of gathering all knowledge, but rather what we are able to externalise.

In a very similar argument, Donal A.Schön (1992:22) claims that it is through reflection that we are capable of decoding tacit knowledge. After performing a series of exercise with students, he demonstrated that no matter the design task to solve one could find a common design process: seeing-drawing-seeing. Meaning that designers think of an idea, then they do, and then they think on what they have done. Consequently, he defines “designing as a reflective conversation” (Schön 1992:133).

With this design constellation on the importance of practice for the creation of an epistemological narrative of design through research. Thinking of the benefits of a collaborative design narrative. It turns necessary, to dive in the notion of archive, as structure for the documentation process.

2.b.Archive: Its historical potential for a possible modern documentation process

An archive can never be completed in the sense of having all the information on a subject. Therefore, Foucault acknowledges that its function is not that of protecting the existence of content, but of being its operating system[1]. It is the situation of organizing by means of fragments, regions and levels[2] which generates a particular code of understanding a certain content (Foucault 1979:215-223).

[1]Translated from Spanish: ‘Sistema de funcionamiento’

[2]Translated from Spanish: ‘fragmentos, regiones y niveles’

Markus Krajewski (2011), in his book “Paper Machines: about Cards&Catalogs, 1548-1929’’, gives us a detailed description of the history of the archive, its social and historical implications. He argues on the importance of the *arrangement* in the history of archiving. Not only when it comes to a common-format but also as a facilitator -if not a necessary condition- on the process of adding knowing.

The librarian cards developed by Rozier serve as a good example of it, as they work for “transferring titles onto one side of a piece of paper”. These cards -though obsolete nowadays- are the structural foundation to most of the documentation’s methods still in use. As they established the importance of using a common format and the necessity for independent components (Krajewski, 2011).

Second, the importance of collaboration as means to success. Collaboration enables people to open their perspectives, not just to listen to new ideas, but to truly understand them.

Otto von Busch’s (2017) tackles the lack of sensitivity design schools foster on the idea of collaboration. Arguing that they “educate designers to become grown big egos”. In other words, design schools use the notion of

authenticity as means of creating once own personality. Hence, sidelining the strength of sharing and collaborating.

In this scheme, collaboration can be seen as seeking to stop specification through the fusion of different technical knowledge, as well as, of different theoretical perspectives.

Coming back to Krajewski's (2011) reflexionon the archive. Its construction and maintenance require collaboration. Moreover, this depends on a common working process. The example of the Josephinian Catalog summarizes it quite well:

> *"I assume at least that each of us knows how to note down book titles, yet the differences in how they might be written even if each was itself without error, in the end would produce an inconsistency on the whole that would make the catalog if not unclear, then at least deprived of adornment and the proper appearance, being designed for one purpose, from one point of view, and according to one system only" (G. van Swieten on Krajewski 2011: 40)*

G. van Swieten knew already in 1780 that it was neither possible to orally pass the knowing on documenting, nor to orally explain the detailed process of it. If we are to trace a parallelism between this catalogue and the current use of guidelines on collaborative projects. This lead to the assumption that, one of the first collaboration systems in the history of archive. Was already based on the idea of collective work, or at least on the certainty that documentation is not a one-person process. Therefore, documentation requires pre-conceived knowledge on the topic at hand as well as trust.

3.Personal reflections on the implementation of a collaborative design knowledge database.

There are certainly several aspects to take into account when designing a database. In the following sections I will briefly introduce the foundations of a future collaborative design-knowing data-base. Addressing the need for its social commitment as well as a possible technical solution.

The social importance of open knowledge

Documentation has historically been connected to power, and based on the idea of private property (Foucault 1979). Thus, has until now remained a privilege and sovereignty of some.

Foucault (1979) unfolds the political threads around knowledge. Arguing on how the theft and subsequent privatization of cultural knowledge has been since colonial times, a process that formed the basis of what we now handle as academic knowledge. In other words, politically and economically powerful nations that obtain knowledge through force. Then, deny access to it, to the so-called third world, using private property as a shield.

Krajewski (2011) shows how controlling documentation not only concerns the access to it, but multiple layers which are "guided by the differentiation not between forbidden and permitted, but between valuable and worthless". That is to say, it concerns the power to define what to document withal who, is given a space to participate in the documentation process.

From a decolonial stance, modern design discourses can be seen as committed opening access information, but not equally committed to the idea of opening participation in the knowledge development process.

Nonetheless, there are some important exceptions like the digital platform Decolonizing Design (2017), which relates design's *narrowness of horizons* with "the larger socio-political systems that design is institutionally integrated into". That is to say, in order to reach a change it is needed to de-corporatize education by means of creating a collaboration-based design discipline that works beyond the academic structure (Ahmed *et*. al. 2017).

Richard Stallman (2017) wrote when referring to the importance of Free Software that:

> *'If the users don't control the program, the program controls the users. With proprietary software, there is always some entity, the developer or "owner" of*

the program, that controls the program—and through it, exercises power over its users. A nonfree program is a yoke, an instrument of unjust power'.

Understanding property as a means of power, leads to the awareness of abolishing property on knowledge. Hence, results defensible to think on the necessity of open knowledge when implementing a disciplinary database which aims to reach a genuinely inclusive narrative.

Adaptability

Thinking of an *open knowledge* project, leads me to the notion of adaptability. For the research at hand, two main reasons will be discussed.

First, adaptability can be seen in virtue of create a horizontal human process, in which every collaborator has the opportunity to design the workflow. Thus, by creating a feedback based-process, mistakes can be detected in short time and methodologies can be constantly improve.

Second, through an open exchange between different collaborators, it would allow technologies up-dating. Which is something a digital database cannot skip nowadays.

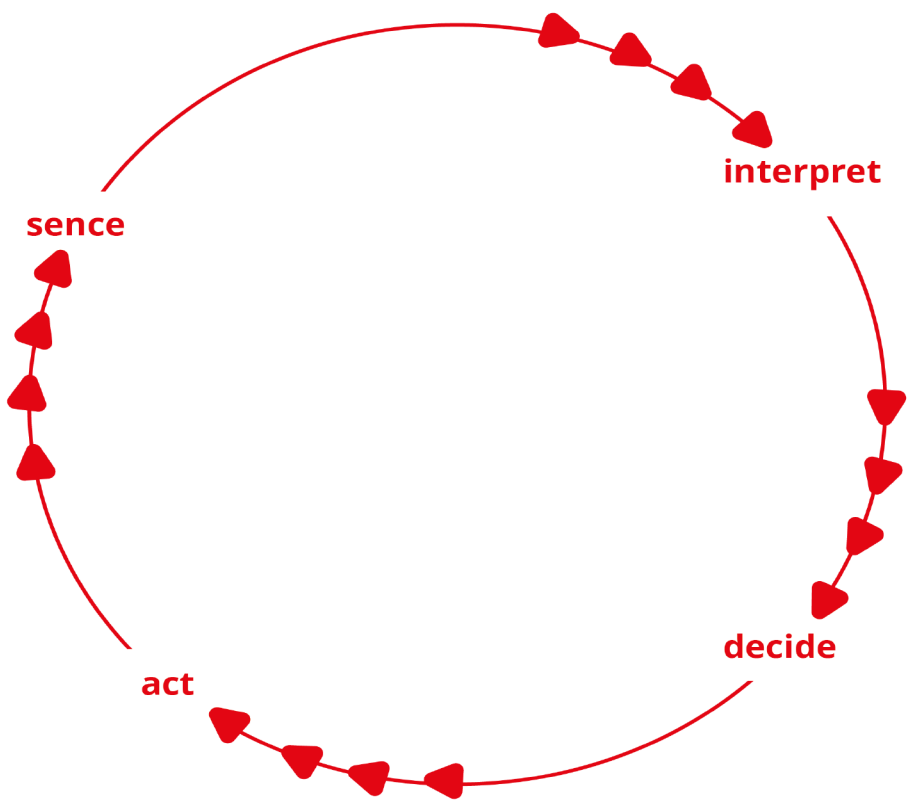

Figure 1 Adaptability loop by Stephan H. Haeckel. The idea of such process is that of continuous adaptability. This process is especially good in process improvement as allowing the implementation of small changes in a transitional way.

Graph-database

Theoretically, we still use historical reasoning in relation to documentation as exemplified by the Josephinian cards. We continue to consider the importance of a common structure, both for the content and for its presentation.

Nonetheless, the level of complexity on methods has increased thanks to the use of technologies. We do not longer work with the idea of folders or tables, but with the idea of relations. In the contemporary digital version of

archives its components can be found under diverse searching. One way of accomplishing this is through the use of graph-database.

Graph-database are currently used for diverse types of projects, such as social networks, machine-learning or contract databases. Its structural adaptability and its visual organization bares its potential for a design data-base.

A graph-data is made of connected nodes. Each node is of a defined type and can carry meta-data, so-called parameters. Any node in the database can be connected to any other node through relations, which can be as well defined by meta data.

A group of nodes with high density of interconnection automatically assembles to a *cluster* (Robinson, Webber&Eifrem 2015:20-24).

Thinking of a collaborative database, the use of graph-database provides an organizational structure that allows us to add either information to already existing nodes as well as new ones. When adding information, the structure of the graph-database could serve as a process on how to link the new content. The contributor, would just need to select between the different inter-connections already presented in the graph so far. Another advantage is the facility to edit.

Since it is based on relations, content can be modify without actually moving data (Robinson, Webber&Eifrem 2015:20-24). Thus, significantly reducing the risk of loss.

Figure 2 Left "Brexnet: an exploration of links in UK's Brexit campaign." This a good example of how can we organize complex human relations / information into a one visual piece, which results interactive and easy to use.

Figure 2 Right Snapshot of the visualization of relations while using a data-graph. We can obtain a select view of a cluster by clicking on one node

4.Conclusion

With Schön's idea of reflection in mind. I would like to conclude that, by observing relations between different design process, designers will be able to find patterns. Thus, to surface their tacit knowledge. Reflection would not only occur when finding similarities, but also when detecting differences. This will allow us to find personal patterns that strengthen our understanding of our own expression. Additionally, the possibility of having a record of things that were done before, will prevent us from repeating others' mistakes. Thus, gaining more time for the drawing of our design process, by first seeing at the historical record of design.

By looking Krajewski's argument on the need of a common working process. I acknowledge the importance of letting control go when it comes to collaborative work. Creating a working environment in which all collaborators involved are not being controlled by a power figured (e.g. designer), but are rather trusted of following the projects requirements.

Moreover, if we consider the notion of adaptability, collaborators will be consider capable of improving the documentation process. Hence, of directly influencing the archive itself.

Thinking on the design process as the richest source of design knowledge. It is possible to thinking of a fluid, but above all, personalized exchange of the design process.

What if we start documenting relations? What if by creating a collaborative map of the relations between the use of methodologies/processes and design projects, we start finding similarities that can be of great use for future design narratives?

References

Atkinson, H. and Oppenheimer, M. R. (2016) "Design Research - History, theory, practice: histories for future-focused thinking", in Proceedings DRS 2016. Design + Research +Society - Future-Focused Thinking, Brighton: P. Lloyd & E. Bohemia, pp. 285–292.

Ansari Ahmed, Abdulla Danah, Canli Ece, Keshavarz Mahmoud, Kiem Matthew, Oliveira Pedro, Prado Luiza, Schultz Tristan, (2017), "Editorial Statement", https://www.decolonisingdesign.com/statements/2016/editorial/, last edition: *15.11.2017*

Buchanan, Richard (2001), "Design Research and the New Learning." *Design Issues* 17, no. 4 (2001): 3-23. http://www.jstor.org/stable/1511916.

Dubberly Hugh (2004) "How do you design? A compendium of models", Dubberly Design Office, 2105 Harrison Street #7, San Francisco, CA 94110.

Faste, T. and Faste, H. (2012) "Demystifying "Design Research": Design is Not Research, Research is Design", in Industrial Designers Society of America. IDSA Education Symposium, Industrial Designers Society of America.

Foucault Michel (1979), "La Arqueología Del Saber", Siglo Veintiuno Editores s.a., Madrid.

KrajewskiMarkus (2011), "Paper Machines: About Cards & Catalogs", 1548-1929, The MIT Press, Cambridge, Massachusetts.

Mareis Claudia (2012), "The Epistemology of the Unspoken: On the Concept of Tacit Knowledge in Contemporary Design Research", Massachusetts Institute of Technology, Design Issues: Volume 28, Number 2, spring 2012.

Polanyi Michael (2009), "The Tacit Dimension", The University of Chicago Press, Chicago 60637.

Robinson Ian, Webber Jim, Eifrem Emil (2015) "Graph Databases, Neo Technology", O'Reilly Media, Inc., United States of America.

Sanders, Elizabeth & Stappers, Pieter. (2008), "Co-creation and the New Landscapes of Design", CoDesign. 4. 5-18. 10.1080/15710880701875068.

Schön Donald A. (1992), "Designing as Reflective Conversation with the Materials of a Design Situation", Massachusetts Institute of Technology, Springer-Verlag, New York.

Stallman Richard (2018), 'The injustice of Propietariness', https://www.gnu.org/philosophy/free-software-even-more-important.en.html, last edition: 15.12.2018/14:02:38