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# Analyzing Design Process - Reflection on 25 Years of Professional Practice

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**Abstract.** As the ahead of a design studio based in Lisbon from December 1992 to December 2017. From then the author founded a new company. Starting from zero again gave he the the opportunity to rationalize and adjust business practice to new goals and also my design practice to be able to design new brand. How do we design and what value do we add in relationship to other designers so we can put it on a brand? This paper is reflection and an analysis of the overall design process, and how we arrive to conclusions. It's an attempt to describe in practical terms the different stages of the creative process that leads into a design solution and the way it can be applied in academic context

**Keywords:** Design practice · Design teaching · Communication design

## 1 Introduction

In 1992, the author and two other university colleagues started a communication design company in Lisbon. “*ideia designers*”, the company was a player recognized by peers and it integrated some exhibitions as well as books about Portuguese design.

My professional practice led me to know different designers and different approaches to problem solving in a design process. This text is a reflexional effort about the design process (based solely in my experience). Along 25 years the author tried - without success - to look for a personal roadmap to design process. There were many roadmaps and as soon as the author addressed them in guidelines, a new client or work made it change. The author recognize that is part of me, instead of just following a path the author tend to try a new one just to see if it is not better. Several designers were enrolled in my company showed me different design approaches and all of these differences enriched mine (or seemed inaccessible: there are those designers extremely intuitive, where solution just seem to pop up miraculously after some time. These were always a mystery). The aim of this paper, that accounts for 25 years of professional practice in a communication design company, is to help academics to better understand the way design work is done.

## 2 When There Is No Work, the Work Is Finding Work

There is no point in talking about the creative process if we don't talk about the work that has to be done in order to be able to exert this creative process. Most professions have a professional ethics and a professional code that was taught in the university and also a professional pricing that is somehow pre-defined by an organization that unites these professionals. In design we have none of that; in some countries there is a vague table of fee's that you can apply – or not. Academies should address subjects like fee's, deontology, ethics, commercial practice, everyday administration, management, selling. If we want to form designers that can proceed as professionals, business information is mandatory: how to make a simple business plan, how to calculate the cost of an assignment, how to talk money, how to read a client's economic profile, how to identify your potential market, and so on. It is quite different to be a design professional, one that works everyday in design and earns his money from everyday design practicing than to be a teacher that does some design work as an income surplus or for pleasure. The word is the same – designer – but in fact we're talking about two different things. There are doctors that are self-employed, that have their own practice office, that receive different kinds of patients, they listen to it and enquire in search of possible causes, they diagnose with the help of their experience, skills, knowledge, and exams, and they make a medical intervention to solve the health issues. There are others that at the end of a console of a public hospital making scans. Both are doctors, but their professional practice is quite different. There are even others that teach medicine, and sometimes are asked to go into the console and make a scan of a friend or family member. Sociology makes the distinction between profession and occupation: “however, in general, it does not seem important to draw a rigid separation between The professions and other specialized occupations “ [1]. The question here is important in pedagogical terms. In the process of institutionalization of design, it seems to have forgotten of what it is and where did it came from, and that might be particular clear in nowadays where the professionalization of designer is very frequently seen as the universities preparing students to serve as private companies employees. The designer must think of himself as a part of a process for the solution of communication problems and not only as a piece of a productive system: “For the most part, it's a hard-working service field that sees itself more occupied with translating speech into visual language than speaking. Many of its corporate-client practitioners are instructed to provide order and to clarity, to give their clients' companies the look, sheen, and promise of a clean new world. It's a fairly neurotic expectation, since designers can't really clean — they just cover, wrap, accent, or put into a clean envelope some messy realities”. [3]

## 3 Meeting the Client: Much More than a Briefing Session

The communication designer does not design by addiction, pleasure or need, but because someone needs his services and is available to pay for them. The history of communication design is therefore associated with the one of the commissioning and

with the appearance (in the 15th Century) of a social class that consumed communication. We can admit without much of a polemic that, in order to have design, we need to have a commission, even knowing that the definition of commission is not narrow and that, nowadays, the designer is also sometimes a consultant to the client, trying to understand and to propose commissions for his future clients. Design is not free creation; it is dedicated creation. A commissioning is a request of a project for something new. When we think about the commissioner of visual communication we need to keep in mind that this is a figure that emerges in the 15th Century, in Italy ([4–9], [10]), and that it will definitively leave his mark in the production of images, because after the Renaissance we witness a revolution in the nature of the negotiation between clients and producers. The commissioning client not only provides the money to fund the work and materials, as he actively contributes to the end result. Before the era when the idea of the artist's creative freedom became generally accepted, the need for self-promotion and the affirmation of social status by the commissioning class imposed severe constraints to creation, as an example, Gombrich talks about the style of the architecture of Cosimo de Medici arguing that his ideas were mediated by those of the "artist" (my quotation marks): "It is hardly fanciful to feel something of Cosimo's spirit in the buildings he founded, something of his reticence and lucidity, his seriousness and his restraint... the work of art is the donor's." (Gombrich, 1966). Having this said we have the first obvious thing that is not always obvious in academia: it's not the designer that designs. It's the designer, the commissioner and a context where the three (designer, commissioner and intended ways of the communication) live.

The meeting with the client is often called as a "briefing" session. "Briefing" is a bad expression, born from marketeers, to designate what is in fact the understanding of a communication problem and the building of trust. The first meeting is an opportunity to receive information, but also to go deeper in the information received, ask questions, build trust. A client tells he needs a leaflet; your first task is to ask: to do what. Leaflet is the medium the client knows, but he is not an expert in communication and the designer needs to establish himself as one. So instead of accepting the "brief" passively the designer need to ask why.

As a teacher the author think is important to maintain this dialogue, to make sure the student never puts himself in a place where he receives a briefing, a task, but one in where the future designer has always to question his task. This is mostly done in opposite direction, where the teacher asks him a lot of questions before even he sees any kind of graphics: to whom, where, how are the typical receivers of the communication, what's the main sentence we're trying to say, which is the secondary and tertiaries sentences, etc. By helping the students with this kind of behavior, before any kind of visual solution, we're training them to ask questions before they design, to feel that they can participate in the building of a communication process in equal position and not merely as a service provider.

## 4 Structuring the Problem: “Opening” the Problem at Hands

After receiving all the information the next step is quite solitary: the designer has to try to see the problem posed by the commissioner and to put it into a territory. This territory is a place where one tries to define the problem in the best way we can and find where intended destinations are, how they behave, what do they think, how they dress, where to they go, and what can the author tell them, in their context and environment that might interest them, other works being done, other players communicating. There is also the need to get information about all this environment in a way that can be done in a short time and translated into operational intelligence.

As a teacher one has to try to convince the students that they have to leave the computer. They have to put themselves in other people shoes and go a full day into a garden and see how people walk the dogs or go into a contemporary dance show. We know that our students believe that their cell phone have all the information in the world they need. We have to propose them jobs where there is no information in the cell phones. Stimulate empathy. We have been working in Faculdade de Arquitectura with participatory budgets or City Hall programs or they have to choose a very small business in their district that they know well and where they can spend an afternoon observing people. Other curricular units might help to teach students on how to get information, hot to treat it into useful knowledge.

## 5 Starting the Design Process

There are the intuitive designers. They see things, they copy, and somehow it just makes sense and its original. These ones can only help by adjusting the message and refusing everything if it's very out of focus and make them start again. But there's the others, those who think in order to create a solution. In this case we have to start with words...

THE AUTHOR've never “saw things”, which means THE AUTHOR was never able to think of images or to “see” images in my mind. Experience just made it worst. The author see things after. In the beginning is always a very blurred vision full of words and ideas. Not images. Knowing that there are colleagues of mine that have this faculty. Paula Scher in an interview says that she can see things in meetings. So the rest of the text is for those of us who don't have this super-power. As she explains, seeing things comes with the moment plus the experience.

We, the non-seeing designers have to build ideas into images. Designers choose Arts in the secondary school because they like it and they are not very good with sciences, math and language. But they have to be confronted with a sad reality: words are the raw material for thought and for communication, so if they want to create an image they have to – first – know what to say.

The affirmation “I will bring you a beer” might receive the answer: “awesome”. But these expression don't work when one is designing. “Awesome” or “spectacular” is Austrian skydiver Felix Baumgartner, on 14 October 2012, flying 39 km into the stratosphere over New Mexico in a helium balloon and then free falling in a pressure suit and parachuting to Earth. That was awesome. If one has to have somethings to say

that are not just mumble jumble bad marketing talk one has to be careful about words. Every product wants to be original, dynamic; every company wants to be trustable and young (and dynamic) so if we work with these common-sense lingos, one cannot design. Everything will come out generic.

Generating ideas is a mysterious task. Everyone ends up knowing what works best for them. Sometimes brainstorming's are productive others don't work. It has to do with the references designers have, culture, readings, lateral thinking, and lot's of work. But one cannot do it from nothing. They need to have a basis, a sense of direction, a purpose. They need to have something to say and the better it is the most it will bring forms and colors with it.

As a teacher one has to explain students the importance of having an interesting thing to say about what they are designing for. Debating and talking is key at this stage and pushing them to go beyond the first, second, third idea. Make students come with better sentences, better things to say. Explain them how to think with words thru debate. Make them realize that the word "spectacular" comes with stars but the "tremendous" has some tremble and might end with a bang!. Making students realize the importance of having something interesting to say about the work in hands is crucial.

## **6 Getting Inputs from Other Designers: The Turning Points of a Design Development**

In professional practice is common to make short meetings for evaluation of the work. Being "inside" a job might make one focus too much in one thing and loose the feeling of other possible lectures of the job. So, asking our peers to evaluate our ideas is fundamental to avoid problems in client meetings. Other designers, that are not directly involved with the job can have a designer's perspective on it and sometimes add or make it turn.

So in class putting students discussing work with others is a healthy practice. They have to be able to give a very short introduction to objectives and to what is being designed (what is being said and to whom) and receive criticism from colleagues and filter that criticism.

## **7 Getting the Job Done: Deadlines and the Myth of Procrastination**

Once a design job gets into a company it's divided and quantified. If the budget is  $x$  this means that creative time is  $x-y$ . Deliver jobs on time is crucial at this point of the business practice, and so it's very important to organize timetables. One thing a company does is to establish deadlines for each part of the job. Time is counted backwards and (in a company) with money. If the delivery is on  $x$ , one has to count backwards  $x-2$  days for mockups and presentation,  $x-2-5$  days to creativity,  $x-2-5-3$  days do establish the message,  $x-2-5-3-3$  days to research (in a company, as the creative tasks are in development, some parallel undertakings are going on like production



budget and other financial and organization duties). Mockups need to be done very fast till one knows how the final product will be.

As a teacher is also our job to try to help students to organize the development of the design work. In the 5 days to elaboration of the image and communication one knows that he will have to make a proposal in 1,5 days; present it to the team. Revise it or start again, and again, and again.

## 8 Conclusion

Academy is closing itself in university work and enrolling professionals only as a way to add prestige and some professional practice into the academic environment. There are a lot of universities where there is not one teacher who had professional practice. It's a world of difference to have the know-how to layout a book or to solve a communication problem. When designing a book, the text is written, the images are photographed. One can do a wonderful job, but the design work starts at the middle of the process. Another scenario quite different is when you ask someone: why do you want to produce a book to communicate this? Don't you think we can produce a party and have the job done more efficiently? That's when design work happens, when you add significant value to yourself by solving a client's communication needs. One professional designer colleague once told that he often considered himself more of a movie director. He chooses teams and makes them work together to tell a story... a story that he wrote. And there's a huge difference in design formation between universities like mine that form designers that know how to do design and think as a designer – that write and director movies - and others that just do the first part, forming good actors.

## References

1. Evetts, J.: Sociological analysis of the new professionalism: knowledge and expertise in organizations. *Grupos Profissionais, Profissionalismo e Sociedade Do Conhecimento, Textos/96*, pp. 13–27. Edições Afrontamento, Lisboa (2011)
2. Lavin, M.: *Clean new world: culture, politics and graphic design*, 1a. ed. he. MIT Press, Massachusetts (2001)
3. Burke, J.: *Changing Patrons: Social Identity and the Visual Arts in Renaissance Florence*. The Pennsylvania State University Press, Pennsylvania (2004)
4. Gilbert, C.: What did the renaissance patron buy. *Renaiss. Q.* **51**, 392–450 (1998)
5. Gombrich, E.H.: *The renaissance conception of artistic progress and its consequences. Norm & Form, Studies in the Art of the Renaissance*, pp. 1–10. Phaidon Press, London (1966)
6. Haskell, F.: *Patrons and Painters: A Study in the Relations between Italian Art and Society in the Age of the Baroque*, Revised and enlarged edition, 2a (rev). ed. Yale University Press, New Haven (1980)

7. Tatarkiewicz, W.: Historia de seis ideias: Arte, beleza, forma, criatividade, mimesis, experiencia estetica, 6a ed. coleccion metropolis. Tecnos, Madrid (2001)
8. Wackernagel, M.: The World of the Florentine Renaissance Artist: Projects and Patrons, Workshop and Art Market, 1a inglesa ed. Princeton University Press, New Jersey (1938)
9. Wittkower, M.: Born Under Saturn: The Character and Conduct of Artists. W.W.Norton & Company Inc, New York (1969)