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Drawing: the active desire of design. A case of designing architecture.

Abstract

We aim to discuss that which generally refers to the contribution of drawing in the understanding of the design project, and particularly in relation to architecture. From a heuristic perspective, it is accepted that drawing recreates 'ways of seeing' which facilitate the project. Throughout the project, drawing contributes in supporting and stimulating the idea's development in accordance with the stratified process of design.

We present a case study of the project drawings by considering the work of the architect Bernardo Rodrigues (Ponta Delgada, Azores, Portugal, 1972). He got a degree in Architecture from FAUP, Oporto University, 1996. Their architectural projects are spread across USA, China, Japan, Dubai, and of course Portugal. His work, focused on sensory perception and matter, has been the subject of national and internationally thoughts.

According to Bernardo Rodrigues architecture discipline must returns closely back to nature, therefore, supports the idea of sustainability through ethics projected in architectural shape through the material building and its environment. "The twenty-first century should be the return to the classic and timeless categories of social planning and then urban", the architect said. The experimental nature of the projects leads to its fair recognition that is according to the original essence of architecture while thought about the human being on earth. The Bernardo Rodrigues work stands out through sustainability using materials that replying the energy yield but also to poetic dwelling the world.

Thus, drawing is more than the heuristic representation of the project of architecture. The character of representation is contaminated by all that is marginal to design project is disseminated through it ethically and materially, joining opposites and differences through a poetic desire expressed on the drawing.

The architectural images of Bernardo Rodrigues design results from a multiple methodological contemporary process which derives an architecture freed from traditional instrumental constraints and thus becomes an object that questions whether the world and their representations. Thus, the subject of representation goes beyond the functional consideration of the design, because the different instrumental drawings influences the perception of the subject and the author.

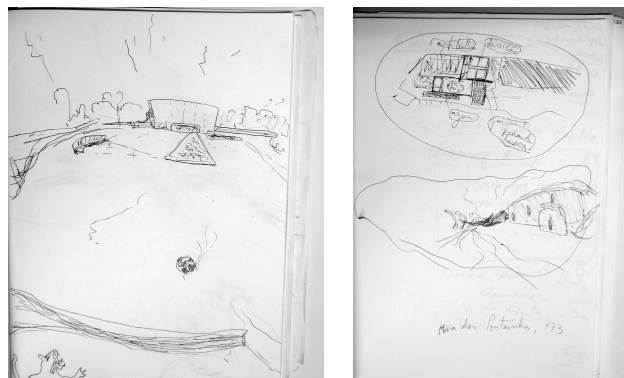
The analysis seeks to contribute to a critical and multidisciplinary discussion between drawing and architecture through the drawing practice and designing in order to stimulate the interdisciplinary understanding in generating ideas and solutions that the architectural design should provide.

Keywords: drawing, project, architecture, designing

1. Introduction

The present case study aims to contribute towards architectural theory, based on the analysis and interpretation of drawing in the scope of the author' project. Targeting its development as

a discipline, architecture uses neighboring and converging disciplinary fields that more or less remotely in fact contribute to establish a well-defined autonomous theoretical frame. It is intended to demonstrate the importance of drawing in its structuring condition behind the act of designing. Therefore, drawings, and images in general, are an important material for the development of a designed object. We think about project representation through the drawing skills as a critical issue of the design project. The progress of the projectual idea is leading by the level of clarification provided by drawing. The 'efficiency' of drawing images depends on the selection of meanings and on what the author is able to do with them.



The project drawing meanings allow to stem from signs, through which they are embodied, to be read through the interpretation of culturally disseminated codes (rules). It means that all project drawings happen within a context to which they belong. In this case, it concerns the Bernardo Rodrigues architectural project.

Considering images a metaphorical representation of reality, the value of drawings lays on their interpretation. The sense of possibility overrides the sense of predictability. The discussion on the object provided by the drawing overrides the limited value of programmatic project definition. On the Bernardo Rodrigues work the metaphor suggests a structural understanding that seeks to interpret the new possibilities of design project. "The syntax of metaphor is predicated on polyvalence of meaning to which it contributes with multiple determinations." (Boehm in Pinotti, 2009: 56)¹.



¹ Translated from the Italian original.

To 'see' and to analyze the project's images of this author involves visual interceptions, fusions and reverberations that are unexpected and surprising meanings. Looking ahead to the debate from the design drawing it found the wide value for the author project's through the interpretation of the history of architecture in which it participate.

According to Didi-Huberman, such drawings, "are a challenge to reflect about the heuristic aspects of experience: that is, to question the "evidences of the method" when exceptions multiply, the "symptoms", the cases that should be illegitimate and yet reveal fertile." (Didi-Huberman, 2000: 23)². The example of Bernardo Rodrigues drawings discloses the 'symptoms' of each drawing reveals as translation of the author's experience.

2. Conceptual context

The architectural design represents the commitment of the artificial with nature – the artefact as symbolic cultural representation as the skills of drawing as renewed desire it transforming the world. Therefore, drawing is the material of design idea as medium of the representation, such as technical and interpretive expression of the author's imagination from an external program (brief).

Hence, we propose drawing as a path performed by author's desire that symbolically reveals the subject of design in a specific level. The architectural object as primordial income for the conceptual design process comes out of the drawing tools as cultural representation of the authorship. The drawing becomes technical tool and critical instruction for the designing project as subject matter of architecture.

We hypothesized that cultural and symbolic features result according to the artefact's identity. We consider that the pattern of drawing results different according to the project features, and so we seek to justify the hypothesis analysing the matter of drawing in the architectural project.

The creative and symbolic understanding of the design subject is reflected in the drawing as a design tool but mostly as poetic field. It means that we attach to drawing the capability to understand, imagine and communicate design artifacts. We recognize that designing is not making the object³; however, the assessment of the designed object will be leading by the possibilities of the project representation. We consider that the performance of the design thinking through drawing is able to raise the understanding and imagination of the object.

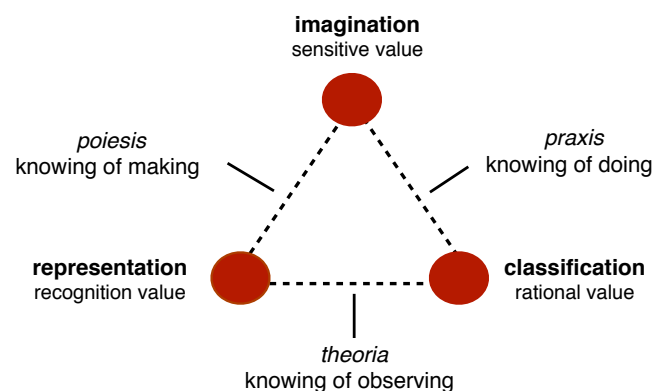
² Translated from the French original.

³ Although these two ways of doing are traditionally dissociated, its association is acknowledged in certain examples of contemporary design.

The practice of drawing is founded in the draughtman's freedom necessarily 'deep-rooted' to the project activity, which is connected with the world. In this hypothesis drawing 'incorporate' the project idea through a procedural way of making.

3. Interpretative context

In our analysis drawing (pre) exists as multidisciplinary function through the triangular representation of *classification – representation – imagination*⁴ (Partenope 1984-1990: 36). In this case, project drawing may be defined as recognition value according to representation, sensitive value according to imagination and the rational value according to classification. Drawing the project implies a thinking scope attending to the understanding of the subject and an imagistic scope testing the imagination about it.

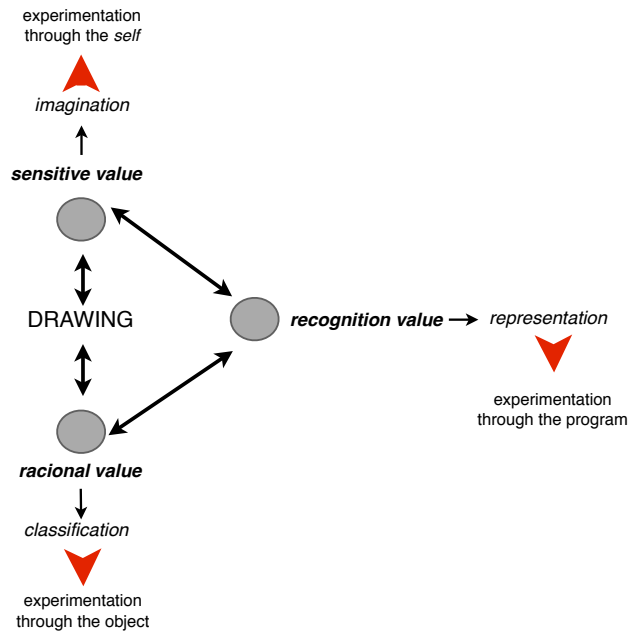


The images evaluation follows from the relationship of them in the author's vision. Images come together according to forthcoming and withdrawal in its perpetual motion. Each image search for the next to appease the desire of knowing and calls for freedom in discarding the previous.

However, the purpose of project's drawing is not the accordance between imagination and knowing through the expression of models. From the intentionality, there is a leading possibility of the drawing's irresolution to proceed with the project. The tricky drawing doing by designer's hand, the internal imbalance between resolution and tools, and external between desire and being is also the true sign of the representation.

The productivity will depend on the experimentation that drawing is able to provide about the design object, on the degree of experimentation itself, on how it relates to other disciplines and how it allows its own uncertainties and irresolution's toward design process.

⁴ *Representation* means to make visible the intention of the project. *Classification* means attribution of meaning in the world of objects. *Imagination* means to proceed with the intention.



The project stems from a polysemic set of drawings evolving throughout the process onto a level that raises the appearance of the object. Drawings, however, are the author's expression and way of knowing.

From the formal point of view, the drawing's project results from the action of thoughts by particular technical tools. Drawing is able to stir up the imagination and the understanding concerning the object, which the idea is implicated in the body action raised by the projectual problem.

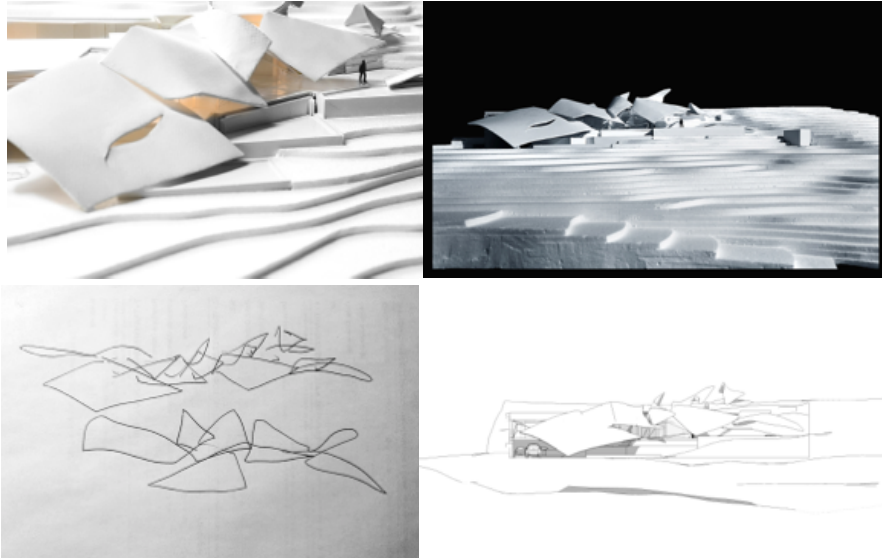
From a gnoseologic point of view, drawing enhances the author's experience to revert into the project. The experimental use of drawing is thus expressed constructively in the design project. These are the traces that reveal the usefulness of drawing corresponding to a particular mode *of execution* that pronounced the progress of the idea. As a consequence, the *productive capacity* depends on the different sorts and levels of drawing's experience regardless of the use of more or less canonical approaches.

From the communicate point of view, the importance of the projectual problem is revealed in the drawing, which assumes through form a rhetoric function underlying the operative system. Therefore, project representation is to make visible the idea but also to makes it legible (meaning) which means to give them *figure-ability*. The visible as image (ikonos) plus the legible of the idea as means (logos) it presents as figurability (iconology). By drawing there are many experimentations of the design object involved in a trial through gestures of the author. Drawings are therefore the author's expression and form of knowledge.

4. Case Study: drawings by the arch. Bernardo Rodrigues (19 -)

Bernardo Rodrigues questions the drawing as a limited resolution of architecture's project. The author argues that is necessary to forget (unlearn) via an understanding that represents

formal and conceptually the architecture. For him, drawing needs to find itself the major cleaning mechanisms of a creative mind, looking and seeing things “by other side”, so drawing could be, primarily, a thought’s vehicle. It means reasoning and rationalize it due the use of intuition.

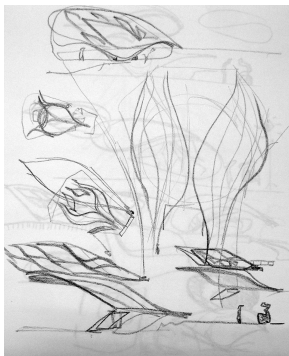


BR refers the “years of grudge against the drawing” when this one was for him, just an imposition or style, unlike the drawing as a possibility to establish experiences “admitting traces that can allow a come back”. “To come back” on drawing means keeping faithful to a tracing, recuperate the thought’s vitality, rein scribing the project. Through the drawing, establish the vitality of the events and the world. He explains: *“For example feeling, in the Samoa Islands, the pleasure of drawing”. To draw trees, people, goat lings, drawing established that. So, what is needed is travel!*” The author refers the act of traveling as an

extensive experience that leads to knowledge.

In the process, the distance between the drawing and project is minimal. Drawing emerges from the project in the most different forms, many times with residual feature. Drawing appears free. It is only connected to its own laconic existence. It happens because it springs from a need. Very often, it looks signed since its first appearing. Checked in a form observed “from within”.

Such understanding can only be observed without fear. Drawing exposed as a purpose. Used with all the resources that are available to the author. BR refers to the possibility of drawing to be practiced with the new tools (computers, software), ceasing to be understood, unequivocally, as a required use, settled as instrumental utility. Today drawing is far beyond the instrumental utility. *“I believe that Frank Lloyd Wright, Mies van der Rohe, Le Corbusier, if they lived in this time, they would be using the most realistic videos to show what was inside their brains and what could be done. The technique is the technique and never removes or decreases the creativity. Everyone should arm itself with all the possible weapons, with all training mechanisms, in order to succeed and to produce better what is inside his head. To give a better answer.”*



To this author to draw is the representation of the project’s experience. In other words, a practical tool envisaged dream’s experience. The draw pursues the “phatos” as the experience of something that remains, referred in the drawing as surfaces that fold by

itself, and a “logos” that searches the place’s knowledge.

Therefore, drawing is a global experience related to the knowledge of the everyday existence. The drawing’s subject is the architecture but they always talk about the “thing” hidden by the architecture. In other words, what is being treated it’s the condition by which the architect will give memory worldwide, the architectural work as historical element, the emergency of the meaning. That is why the BR’s drawing develops empathically within the knowledge of the author’ world.

To BR, representation is a minimal feature. Short notes; simple, stripped, direct spellings, in a way of searching the contact with the object, without outdoor mediations except the representation itself. He refers his own working process as follows: *“There is the draw, the draw itself.” Sketching the idea. As a matter of fact, the 3D is a technical tool where the drawing process doesn’t stay registered.”*

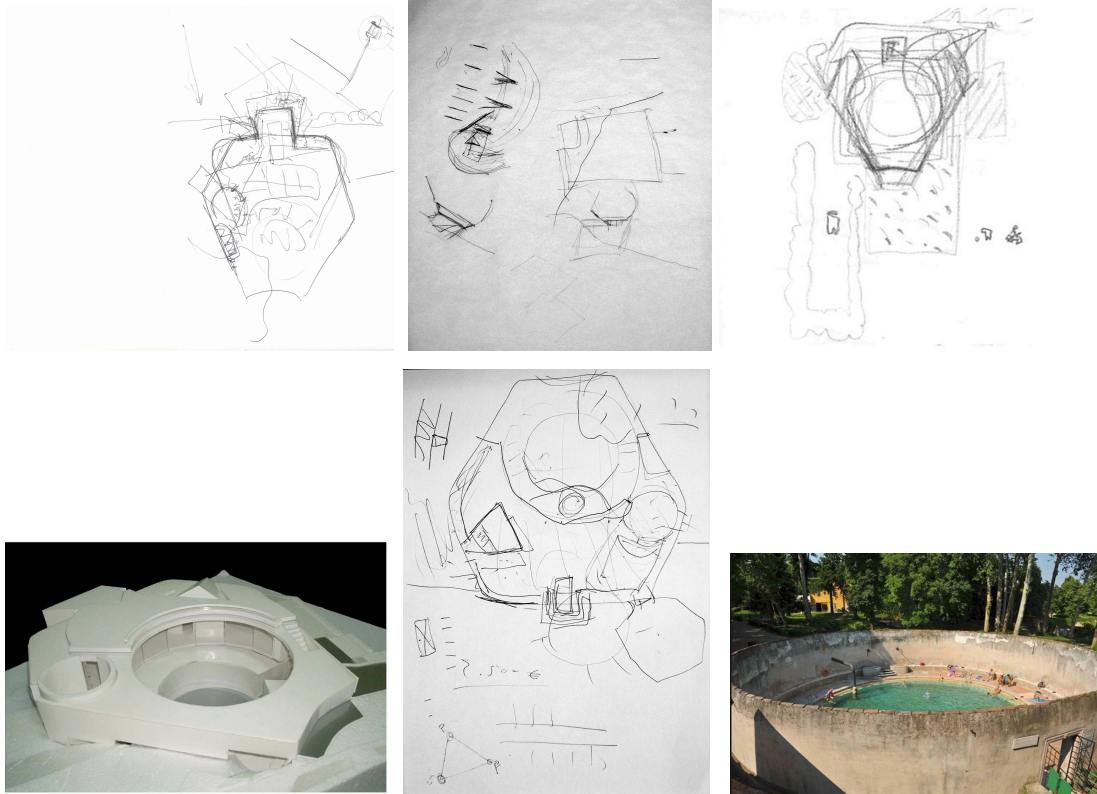
In computer the drawing layers on the support, which is the “classic” form of project’s drawings, didn’t remain visible. Although, these records didn’t stop existing, *“only they are not visible anymore, looking for them on the computer.”* The perception features changes. The author’s relationship with the project isn’t anymore the individual’s body gesture over the drawing board, but more about brain order.

“The architect’s notebook is now my file”. It contains all the instructions, to cut, to plan. Then, it’s all done with conversations with the team members and the 3D images, which is nothing different from the method that considered the sketch in first place, and then the technical drawings, and after the three-dimensional models...; it will only be faster and more intuitive. We see immediately the signs in 3D and we can implement the change in real-time. My “file” is the computer’s sketching, with colorful lines that contrast plans, plant sections, elevations. Then, when needed to talk with the team members, I sit and I make a “briefing”.

The work develops in team, in a hierarchical way. He says: "About my authorship, I talk to no one. There isn't any external intimacy. Whatever it arrives as an idea, an intuition. Then, the draw becomes another thing and I lose absolute control. After the creative and lonely work, I contact permanently with people that can help me with the material and technological resolution. Then, enter the engineers. Engineering is present by intuition. Therefore, the value of the structure is significant in the act of designing architecture. The structure is very important. Everything is structure. Designing is pure structure."

To Bernardo Rodrigues the pleasure is the structure design solving. Design structures is vital, it reinforces successively. "I start by form's intuition to the structure's draw. The structural challenge is what makes me wake up in the morning and come to work. The structural resolution passes by geometry and drawing, it's all about drawing and idea. It's about an intuition that searches for a visual harmony. That's why symmetry and axes work as much as the loads' physical reality. I mean, drawing the harmony. To me, architecture's pleasure is involved in drawing the harmony and then build it." The design project results from the structure thinking in pragmatic sense. And this one is represented by the draw's form. The

draw is then used with aesthetic and tectonic sense.



5. Conclusion

The draw is vital in the problem resolution, materialized in the assumption of the architectural form, which is derived from reality acting as "creative memory". The architectural form's emergency results from the history as material reality, able to determine the creative practice. Drawing's intuition is the liberating way of reality experience as survival model. The BR's work exists as formal memories, repeated gestures that transversely cross time. The author moves by desire in relation to the design subject "free from the cautious draw's danger, made with attention in relation to the aesthetic judgment." Evoking originality as inaugural form, the drawing surrender the imitation, keeping faithful to the singularity. Returning to the founding moment of the draw, starting to deal with elements that compose it from the ground zero of the drawing it means making visible the architectural form. As he says: "It's all about creating a space that can give answers to contemporary problems, searching for the aesthetic evolution and aware to not reply what was made or what I have been making." The drawing as helpful tool to the design project is contingent in relation to the author's professional course, that leave the technical-instrumental determination "recovers" the drawing as personal history's event, re-proposing it as a particular action. What results as primordial in Bernardo Rodrigues' draws it's the intentional character of the images. It is important its procedural intentionality in its methods, its matters and supports. The "return to the drawing"

determines the intention of the author (and the team) for the formal structural representation that refers new proposals.

It's all about the maximum intentionality of drawing which uses the technique to achieve the object of architecture. The drawing presents itself close to its original roots, as structural discipline, support and guarantee of the architectural form mediated by the author's body. Therefore, many times, the first draw, the one that marks the synthetic idea, represents closely the final designing object that will be building. Additional will be the travel diaries, as a more systematic practice of drawing by its relation with the personal history and its corroboration as experience. What all of these drawings tell it's a personal fascination with the world's knowledge. The formal's repetition reveals the demand for world's visibility which is expressed in the "symptomatic" quality of the drawing. Drawing as encounter in the perpetual pleasure of discovery. In the drawing we see folding, twist, links. Many times, forms "adjust" themselves as drapery; through author's memory they appear, disappear, reappear as the author see and "imagine", and so present in the author's own history. Forms autonomous, maybe remote ones, transformed by author's vision into real architectural appearance.

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