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ABSTRACT

The purpose of this work is to explore a tabu: the gap between the disciplinary realm of architectural practice and the lived dimension of a construction, that is to say the inconsistency between architecture as a conceptual and intellectual enterprise and reality.

The case study project is a reconversion of a former rundown infrastructure that once played a relevant role in the social and urban context of the city of Tomar in Portugal. The project achieved recognition among peers, won several architecture awards, was proposed for the Mies Van der Rohe award 2009, and is one of the forty buildings selected to represent the Portuguese contemporary heritage. Without disclaiming the validity of those interpretations, we took this opportunity to review our own project with the introduction of external forces of reality [namely human, social and political] into the “processes” and “products” of architectural practice. Our aim is to use this ontological problematic [objectivity vs. Subjectivity] to see if the conceptual intentions of the project could withstand [or not] the engagement with the complex reality of everyday life – people, time and function. And more important, what kind of new spatial possibilities it opened.

This research, more than the production of a systematic inquiry, will help towards a meta-reflection about architectural practice, in order to unveil and clarify aspects considered as implicit, with the purpose of identifying the limits of our profession and to improve the meaning of our production, which, after all it's the meaning of our own lives.

Keywords: Knowing (by expanding the field of) Designing; Architecture; Practice; Space; Body; Critical practice.

“The man who witnesses his own research, that is to say his own inner disorder.”

Maurice Merleaut-Ponty (1963)

INCEPTION

Once upon a time is not the purpose of this argument. Nevertheless we have to begin by remembering that architecture was, is, and, whether we like it or not, will continue to be a central issue of everyday life. Most human activities are mediated through spatial artifacts. Indeed, that was the genetic origin of architecture: the need for a shelter that embraces the body. Beyond that primary need, architectural design creates and articulates the experiences of being in a place, in a territory, or in a society. As Pallasmaa notes, it “articulates the experiences of being-in-the-world and it strengthens the sense of reality and self. It frames and structures experiences, and projects a specific horizon of perception and meaning” (2005). Such experiences of the body in space have a great impact on our lives. The spatial organization of our homes, and of our working spaces, classrooms, hospitals and communities, influences the way we interact with our family, friends, colleagues and neighbors, as well as our productivity, our well-being and our sense of belonging to a place and to a specific culture. By this we are not claiming a leading role for architecture as a necessary and sufficient condition for betterment, but rather as an important background for life.

Thus we could argue that architecture should be a process of research concerning individuals and their relationship with the physical world, which is revealed through an empathetic experience, established in a three-dimensional entity – space – as a result of an intellectual operation – idea. In this sense, architectural design is more about the experience that individuals have and less about aesthetic formalisms or technical aspects. The body is the final goal, space is the device where life takes place, and the idea ensures that that space carries a meaning. This approach consists of a triangle, similar to the model proposed by Jeremy Till for profound architectural research [and thus for the production of valuable

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architectural knowledge]; on one vertex we have the processes, on another we have the products, and on the last one we have the performance (Till 2008).

However, to assert that architectural design should be the interaction between those three vertices is to contradict not only the contemporary discourse on architecture, but architectural discourse as a whole, since we clearly recognize that the axis between processes [the conceived experience] and performance [the lived experience] is almost forgotten.

Architecture is romantic¹

A glance at the history of architecture alerts us to the fact that the role of the user has been increasingly taken for granted, as a kind of implicit variable in the whole architectural process, especially since the architectural discourse was established on the basis of the relationship between the resolution of problems and the expression of authorship. This fundamental change was introduced in the fifteenth century with the rise of drawing as an intellectual and individual activity, which was essential to architectural practice and distant from the previous process of collective manual labour. Architecture was no longer the result of an “accumulated Knowledge of a team of anonymous craftsman working together on a construction site” Hill (2007), but rather that of an “artistic creation of an individual architect in charge of drawing who designs a building as a whole at a distance from the construction”² Hill (2007).

As a result of that, both architectural process and theory have defined the user as an atomized being, reduced to a measurable, neutral, abstract and ancillary entity. This first happened with the renaissance treatises and compositional exercises [of geometry and proportion] which illustrated a symbolic reinterpretation of classic antiquity.

Later on, the modern movement and its machines for living reflected the heroic and paternalistic vision of a restricted elite of clients, entrepreneurs, land owners, critics, connoisseurs, and architects (De Carlo 1969).

More recently the digital arguments, with the help of software for defining rules and parameters, gave material form to mathematical criteria.

However, if “mathematics embodies the relations of things in conditions of ideal simplicity” Bernard (1865), architecture, on the other hand, embodies the relations of things in conditions of real complexity (Tainha 2008). That is to say that architecture is a consequence of life, and this is an issue that architects tend to neglect, building a discourse set apart from the complex reality of everyday life. Robert Gutman’s essay on Louis Kahn Richards Research Laboratories brilliantly explores this ambiguity. The

Building was completed in 1960 and rapidly became a reference of post-war architecture, and it was one of the few buildings to be given a solo exhibition by the Museum of Modern Art in New York. Nevertheless, the building presented notorious inadequacies for its users to develop their daily activities, and therefore was subject to several changes, mostly against Louis Kahn’s will, since some of those changes questioned the concepts and features idealized for this building: concepts and features which Kahn described and presented whenever he gave lectures about the building, despite knowing that they did not correspond to the true reality of the space. Meanwhile the whole architectural community continued to express their admiration for the project, reaffirming the brilliance of the ideas, which were directly responsible for the building’s failure. Vincent Scully’s³ monograph about Kahn included several drawings and photographs of the Richards building before the changes, praising it for an achievement that was not there (Gutman 2010). As Giancarlo de Carlo notes, “it is as if architecture is merely a potential space and not an actual space” De Carlo (1969), therefore producing a knowledge base structured by means of manipulation.

Furthermore, the rise of participatory processes seems to legitimize that same practice only by means of complementary fields, distancing architecture and individuals from the real processes of spatial production. Architects can only exist if they are socially useful: that is inescapable. However, by taking advantage of the disillusionment of the masses, and engaging people with a total lack of knowledge and who are dealing with these matters for the first time, architects run the risk of creating buildings that are “bodiless and experientially rather empty” Cruz (2009), thus empowering the development of a populist culture.

To further expand on the role of the architect, we may state that “The key social, and, thus, ethical responsibility of the architect lies not in the refinement of the building as a static visual commodity,” and on direct satisfaction of people’s tastes, “but as a contributor to the creation of empowering spatial, and, hence, social, relationships in the name of others” Till (2008).

The example of Louis Kahn, the romantic theoretical approaches to the discipline, and the [usually] populist and pamphletary manifestations are not exceptions to but, rather, the rule of the whole of architectural discourse over the last few centuries. Thus we can recognize a pervasive loss of “an active connection to the human body” in both architectural practice and theory, as Sennett (1994) illustrated, and one could argue that, due to self-defined notions of perfection, architectural knowledge has been regularly built upon a fiction. One could say that architectural discourse usually goes from conception to deception.

1 This title refers to the title of a paper by Peter Galison -Objectivity is Romantic- where he shows that scientific objectivity has been built through processes of manipulation (Galison 1999).

2 When Andrea Palladio depicts projects such as Villa Rotunda or the loggias of the Palazzo della Ragione in his treatise, “The four books of Architecture”, he does not represent the buildings in the way that they exist as built entities, but rather in an idealized way.

3 It is worth mentioning that Vincent Scully is Sterling professor emeritus of the history of art in architecture at Yale University, and one of the most influential contemporary architectural teachers.

But let us be clear. We are not questioning the inestimable value of these architects and theoreticians, and we are not saying that during these periods extraordinary, body-conscious spatial experiences were not witnessed: quite the contrary. Many of those referenced in this paper are also romantic, but that does not detract from our argument, which we consider to be accurate. One thing is sure: despite being a twentieth-century monument, Villa Savoye was never a home.

*Errare humanum est*⁴

“To err is human”. This is probably the one of the most frequently quoted proverbs, however few would know that it is just the first part of a longer citation, of which the second, and probably the most relevant, part is - “*sed in errare perseverare diabolicum*” [but to persist in error, out of pride, is diabolical]. So, to recapitulate “To err is human, but to persist in error, out of pride, is diabolical”, and it is precisely this, that those in the architectural community tend to forget, by establishing a narcissistic approach towards the discipline. As Gutman pointed out, “the main thrust of architectural endeavour, the subject matter of architectural Theory [and architectural practice], has been architectural form itself” (2010). This autocratic, self-referential and hermetic view of architecture excludes wider forces of reality [namely human, social and political activities] from the whole architectural process, therefore establishing only criterions of certainty - the certainty of architects. Only in an authoritarian state do people not fail, nor have doubts, and only then is everything pure and perfect. However, architecture does not take place in a idealized and objective world as the hyperrealist tradition assumes: architectural design gives [im]material form to possibilities that are fulfilled in different aspects, and in this world of possibilities, most of the time, there are no certainties: Knowledge is produced through processes of trial and error. Erring is fundamental for the construction of knowledge, and dealing with error means dealing with our own defects and having a critical awareness which refers to an evaluative stance; it means having a human perspective.

We only commit the same mistakes because we are not paying attention or because we only choose to observe what suits our efforts.

It is necessary to start seeing beyond the reflection on the surface and perceive the darkness of the depths, and develop a well defined consciousness of the relationship between architectural design and validation processes: this relationship is not made of predictions and certainties but rather of doubts, of errancies and of paths. The awareness that most of these errors can contribute towards the production of new things and new and valuable knowledge, as Jeremy Till puts it, is “knowledge as *erkenntnis* [a human, conditioned, evolving, force of understanding] rather than knowledge as *wissenschaft* [professional, authoritative, fixity]” (2005).

Knowing by [Expanding the field of] Designing

Manuel Tainha tells us that although it is by nature an eminently conclusive act, architectural design is always contingent (Tainha 2008). To which we add that architectural design is a terminal moment, and yet it is also initial, corresponding to the lived experience of the built environment. Thus, one could argue that the creative cycle of architectural design must only end with a critical reading of the building in use, rather than resting solely on *a priori* propositions. One must unravel what is often taken for granted, rather than just looking for a thesis confirmation, in order to develop knowledge that is beyond the typical disciplinary comfort zone, where the dwelling experiences tend to be rather conceptualized and simplified, and where architectural artifacts are usually studied as objects and presented through a reductionist lens.

We should seize the opportunity to explore this problematic [the inconsistency between the disciplinary realm of architectural practice and the lived dimension of a construction: reality] by expanding the field and reviewing our own production with the introduction of the external forces of reality [political, social, atmospheric and human] into the architectural process. This self-critical reflection aims to examine the impact of the design process over the experience phenomena, and inquire whether or not the ideas suggested by, and the conceptual intentions of, the project were achieved, and, more importantly, what kind of new spatial possibilities it created.

The research refers to a public project that opened in 2008, located in a small city in the centre of Portugal – Tomar. During the last five years, we have been regularly visiting the building and witnessing its growth, deficiencies and assets. We are not interested in any kind of evaluation in terms of definition of standards. What we can truly draw from this project is an understanding of how to improve our own production and, we hope, the lives of residents.

Conception⁵

Tomar Environmental Monitoring and Interpretation offices [EMIO]

In the year 2000 the Portuguese government initiated a nationwide project with the purpose to modernize the whole national urban system. The strategy was to energize the rehabilitation several city centers. One of the instruments for this revival was the implementation of EMIO buildings. The EMIO are public facilities for exhibitions and other cultural events, concerning environmental, educational and regional subjects comprising several functional areas: multipurpose space for events and exhibitions; a store; a cafeteria; a monitoring room; a storage room; an administrative room; offices rooms; lecture rooms; and an area for artistic residences with bedrooms, kitchen and working areas.

5 It is important to mention the intention behind this statement is to establish a link between the defining of new intentions for spaces and the evaluation of such plans. To this end it reflects a very particular moment, a glimpse, corresponding to our concerns and to the experiences we are trying to suggest.

4 Attributed to Lucius Annaeus Seneca

The Polis Program framework calls for the reuse of pre-existing rundown facilities. Thus the project demanded the conversion of an infrastructure located at the entrance to Tomar's historical centre. The history of the building is marked by successive abandonments. It was built in the first half of the nineteenth century as a storehouse for cereals, adapted into an industrial storage facility, then into a bank institution and, finally, it was adapted into offices belonging to the city hall. Consequently it has been subjected to several changes over the years, finding itself threatened by some decay, even though the building was protected under historic preservation ordinances.

Since the last decade of the twentieth century, it has been usual, in Portugal, for the government to commission projects demanding the conservation, renovation and conversion of historic buildings of the most diverse typologies and cultural matrices. Nevertheless this preservation syndrome sometimes leads to an overvaluation of the building structures. Age is not a guarantee of architectural quality: on the contrary, it is a natural process of selection. The process of converting buildings for new and contemporary programs can be extremely liable to error. If, in certain cases, the potential for conversion is tied into the spatial identity of the building, in others the building proves to be unsuitable for its new use, leading to a dysfunctional and meaningless operation. Our project questions these approaches, which, most of the time, only are driven purely by feelings of nostalgia.

Despite playing a relevant role in the social and urban context of the city, the existing building presented a strong lack of architectural quality, and the preservation of the existing spatial matrix would not enhance the development of the new activities. In our opinion, architecture should only work with memory in terms of "spatial affection"

Therefore the option was to maintain the entire external perimeter and remove the whole interior of the old building, and establish a new anatomy capable of re-organizing the old structure in order to fit its new purpose.

A critical reading of the brief defined two distinct main areas: an open, informal area for all the activities directly related with the social and cultural life of the city, and a more private area consisting of lecture rooms and accommodation for the artistic residencies. These private areas are volumetrically defined within – and are in the upper part of – the new anatomy, and they are optimized for inhabitability, each with its own access, atmosphere, shape, use and dimension. The artists' residences are located in the quietest area of the building, and are characterized by an intimate atmosphere. This area is defined by three autonomous sleeping spaces and a common living area. The sleeping spaces present a more domestic scale, with views facing the riverfront, and take advantage of the morning and south -direct light. The living area is strongly informed by the pre-existing building configuration and establishes the direct relation with the upper area of the structure. This interior

terrace results from the relation between the new anatomical structure and the pre-existing roof. Taking advantage of a diffuse zenithal natural light, this kind of attic atmosphere aims to provide multiple working and living spaces for the artists in residence.

Although physically connected, the lecture area is placed opposite the artistic residences, facing the city centre. This area is defined by two classrooms with totally different configurations and light intensities, allowing different appropriations. This operation is the result of the spatial compatibility between the new organism and the pre-existing limits.

Both areas have independent and direct exterior access in order to provide flexibility in terms of timetables when using the building.

The social life takes place on the ground floor in the interstitial spaces around the new anatomy, as an extension of the city. The main concern was to avoid design by naming functions and fixing uses. Rather than having enclosed functional areas, all the different activities are assembled throughout the space, and are characterized and organized by the programmatic events defined by the enclosed private spaces, i.e. the matter that shapes the intimate experience of the space is the same one that articulates the public experience, however with different materiality: the existing building acquires a new interior reading, being reconfigured and transformed into a unitary space with the use of white mate paint and mate epoxy resin coating. For the organism that contaminates the interior, a kind of skin was created and developed: a materiality intended to be simultaneously both abstract and expressionistic. Through some kind of alchemy, a substance was developed – a recipe – by conjoining some "ingredients": dark pigment, acrylic resin and reflective glass spheres usually used in crosswalks. The entrails of the structure – the more intimate areas – were painted with glossy white paint and with glossy epoxy resin coating. The aim here is to produce spatial density and different ambiances, using a minimum of elements. It is worth mentioning that the entire project cost 452,599.99 Euros [461.00 € per square meter]

The intention was to create a kind of inner urban system, an environment of great informality capable of bringing some city issues to the interior of the building, such as multiple scales and entrances, different passageways and gradations of light, alleys, squares, houses and terraces: places where life could happen.

Therefore the project relates to the existing site, with the social ambition to create an urban event and a landmark in the city, providing a space where people can enter into contact with information and other members of the community in an informal fashion. We imagine visitors and citizens taking a shortcut in the city, walking freely through all the building, seeing an exhibition, having a drink, listening to some music, seeing artists working and taking the opportunity to learn and look at their own culture through a spatial, tactile and visual experience.

Perception

Casa dos Cubos⁶

In the end of 2006, a few months before the project was completed, and after some skepticism, the client - Tomar municipality - began questioning – as they started to have a physical relation with the project – the effectiveness of the program features as a means for revitalizing the building and, thus, the life of the city. Despite the investment and the spatial and aesthetical quality they claim the building had achieved, it was considered that the sporadic use of some spaces, such as the artists' residences and the lecture rooms, would not enrich the daily base experience of inhabiting the building.

Therefore it was decided to introduce some changes to the previous program. The building would become the new home for the city hall's cultural division and also the embryo for the Senior Citizens' University. As a result of that, the artistic residence area was transformed into the cultural division offices, and the lecture rooms, while preserving their initial function, would become the university classrooms.

This political aftermath also had an impact on the more public areas. And so, the building opened to the public, in March 2007, as the host for the cultural activities of the city: a space – a headquarters of the cultural division – for exhibitions, café-concerts, and also for small theatrical productions. It also came to include an area dedicated to environmental subjects – without a monitoring room, however.

6 House of cubes.

Figure 1: Tomar Environmental Monitoring and Interpretation Offices, general view from the upper floor working space.



These changes were not only programmatic, but also onomastic. The client decided to change the name of the building to Casa dos Cubos, a designation inspired by a compound of granaries known as the cubes, which existed in the area, and were demolished in the beginning of the twentieth century.

People moved into the building in the spring of 2007 and since then, the Casa dos Cubos has been in a near-constant state of transformation, as kind of use-in-progress, not only according to needs, but also according to preconceived customs and habits that are mentally carried.

Regarding the private areas, the two bedrooms which benefitted from the best views and light were adapted into individual offices [for the management and administration] and the other one was transformed into a meeting room. All the former bedroom toilets became archives and storage spaces. The living area was maintained as the common area for meals and socialization of the workers, and the upper area was occupied as a common working area. Some circulation spaces became extensions of the office rooms with the presence of common equipment such as the plotters.

The arrival of winter was crucial, as people became reluctant to use the upper area as a working place. First, the decrease of the space temperature was not favorable for staying at a desk in front of a computer. Besides that, some of the occupants were concerned with safety issues. The balcony barriers provoked a dizzying sensation and there was a perceived risk that objects would fall into the exhibition areas. As a consequence, people move downstairs to the living area and the common space has disappeared. The top level has given way to a more conventional space appropriation – a type of grandmother's attic where old

Figure 2: Casa dos Cubos, general view from the upper floor storage space.





Figure 3: Tomar Environmental Monitoring and Interpretation Offices, Lecture Room



Figure 4: Casa dos Cubos, Laboratory

items are kept: remains of former exhibitions, archives and obsolete furniture. However, some of the workers were keen on developing their activities in this atmosphere, and started to appropriate the space according to the seasonal climatic conditions, initiating a migration process from downstairs [in the winter] to upstairs [in the summer]. The safety issue was solved with the use of furniture as a second handrail barrier.

What started, due to budget constraints, as a problem of building physics became an impulse for those involved to experience and develop their working activities in a new and less sedentary manner.

As we have noted before, the building was the incubation space for a university for the elderly, and, due to their success, the city hall had to transfer those activities to larger installations, and these spaces were once again open to new possibilities. During a four-year period the classrooms were used on a daily basis, and were one of the spaces subject to intervention: the major classroom, due to its spatial configuration, produced an unpredictable echo which enabled an ideal teaching environment. In order to solve the problem, the sound technician of the municipality decided to introduce a kind of acoustic sculpture. Rather peculiar, but functional.

Taking advantage of the vacancy of the space, and benefiting from an EU fund, a monitoring area was finally created, and for that purpose, the major classroom has been transformed into a laboratory. Unlike the aforementioned case of Louis Khan Richards' Laboratory, this one is a success. The engineer in charge is very pleased in carrying out her technical and pedagogical activities, and the workshops are booked until the end of the summer.

With these massive changes – bedrooms into offices and lecture rooms into laboratories – adaptations began to emerge, not in terms of spatial, but rather in terms of technical issues. The lack of an existing electrical system to fulfill all the new requisites and power different appliances and devices gave rise to the appearance of trunking systems a little bit everywhere.

There are five ways to enter and exit the building. The one that was conceived exclusively for accessing the artistic residence area, and which presently serves the office area, is rarely used. The workers prefer to move inside the building and use the accesses which are farthest from their working areas, but which at the same time are better connected to the city centre. In accordance with what was proposed, people use the main public accesses during opening hours and the independent access to the classrooms when the building is closed to the general public.

The ground floor is usually used for all kinds of temporary, entrance-free exhibitions, since the Tomar municipality openly invites anyone to present their projects to society. Since the implementation of the laboratory, an area for children's activities has been open on a permanent basis. Besides that, and simultaneous with the other activities, the space occasionally receives conferences, concerts and small theatrical plays.

The appropriation and organization of the ground floor space has been carried out in an extremely informal manner. The workers were extremely open to the proposed scheme, and established their activities without reducing the potential variety of events occurring simultaneously. One can attend an architectural conference, see some works made by children, discover the work developed by a local fashion designer and have a drink in the bar. However, the public user is, most of the time, a reluctant user. Although it is possible to walk



Figure 5: Tomar Environmental Monitoring and Interpretation Offices., ground floor, un-programmed space.



Figure 6: Casa dos Cubos, ground floor, children activities space.

freely through the space [there are no restricted areas on the ground floor] and experience the building as part of the city's urban system, we have observed that people usually repeat preconceived actions: They enter the building, achieve what they set out to do, and, most of the time, leave from the same place they had entered, without exploring the building and discovering other events and other possibilities of proceeding with their route through the city.

Reflection

As we suggested before, and as can be seen in the case demonstrated above, architecture is an impure process. It is impure because the action does not take place in a sterile environment, but is rather contaminated by the interaction of multiple actors, and it is a process precisely because it is an action. This may seem redundant, but it is not. We accept that a clear and static moment of pureness could exist, but such a moment does not come on the day of the photo shoot: it is much earlier and corresponds to the origin of the project as a mental concept. After that, comes a journey consisting of an extended sequence of steps distorted from the point of departure. This erratic journey, this process of translation from conception to construction to perception, expands into unpredictable directions, and, despite certain immovable features, space is in a near-constant state of physical and social transformation.

Therefore, through this extremely residual work, more than producing a systematic inquiry, we intend to stimulate a debate about architectural practice, in order to unveil aspects considered as tacit. We do this to identify the limits of our profession and challenge our professional community to improve the meaning of our production: not simply by conceiving it anew, but by

proposing retrofits that can enhance the appropriation of space.

Rather than calling for the development of a working methodology [Meta- "after" + Hodos -"a way"] we argue for practical work to be done and for research built upon a "Hodology": a wandering; a searching for..

"In the middle of the journey of our life I found myself astray in a dark wood where the straight way was lost."

Dante Alighieri (1963)

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