# THE LEGITIMIZATION OF INNOVATIVE IDEAS IN THE PROCESS OF ARCHITECTURAL DESIGN

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### ABSTRACT

In the architectural practice, the correct ideas - being property of all - are naturally assimilated and its validation is guaranteed by the evidence of the facts in the building. This way, the good ideas result in good practice, decoding a *"modus faciendi"* inherent to the discipline of architecture, where the passage of time does lead to its own tradition. But when the craving of innovative and different ideas, absurd ideas arise, what legitimacy has the architect to persuade the client, or even being persuaded by the client, to effective them? What methodological tools are available to measure and avoid incongruous and even counterproductive actions and effects for the sake of good architecture?

When Aires Mateus Architects chose a sandbox to consolidate the floor of the living room in the weekend house "Casas na Areia" (2010, Comporta\_Portugal), appealing to the particular characteristics of this material, read mostly through a sensitive and poetic context, characterizes an absurd idea when read from a functional and operational perspective, taking into account the values contained in the concept of home. Therefore this example will be the motto for the development of this reflection.

To sum up, this paper aims to make visible the importance of values in architecture, in defense of a professional practice that aims to go beyond the charming and pleasing design or the blind will to innovate, gauging the role of architecture in our contemporary society.

Keywords: Architectural Practice; Values; Innovation; Criticism;

#### INTRODUCTION

The **role of architecture** in our society is grounded on its most basic purposes, as long as, most of all, the architecture serves life. And if, according to Hannah Arendt (1958), every human activity is conditioned by the fact that men live in society, then the role of architecture aims, above all, to understand the reality where it belongs, interpreting the lifestyle of the society to which it is intrinsically linked - and inevitably in constant transformation - to provide a better quality of life.

In this sense, perhaps the true social responsibility of architecture does not entail the conformation of standard spaces, according to legitimated technical principles, or "formatted" by current and assimilated practices, but instead, to provide "new" ways of life (of its epoch) with

suitable spaces, materialized and organized around the contemporary life, more precisely around a certain idea of what can be a life "of today". Therefore, one of the main goals of architecture is to reflect on the values that relate to life – that we cannot dissociate - which interfere with the spacial conformation of its receptacle. That is, architecture read as "the art of building" must serve life not only in a practical way but also in a spiritual manner, and should build a support of ideas that affects the whole existence of mankind. Between these domains of values and interpretations, we find the real and crucial problems that architecture should be concerned with.

Being, Architecture, **thought and construction**, its effectiveness goes through the built work (the building), overtaking the framework of the social sciences and introducing, in its practice, a complex interdisciplinary that is related to the materialization of the ideas, and all the issues inherent in its construction. So, professional practice is supervised by rules and laws which are subject to appraisals, sustained on concepts and assumptions that vary, depending on the epoch, culture, region or country, aiming to optimize and guarantee its maximum efficiency. Even from an ethic point of view, the architect shall adopt solutions that ensure the quality of construction, the welfare and safety of people, including safeguarding the economy and efficiency of the construction process, for the sake of good architecture.

However, if architecture provides men with the possibility of gauging its relationship with the world, it must be persistent and practiced in freedom. For that, its viability must be constantly checked out, questioning particular standards and rules that, for some reason, stopped making sense, to be able to evolve efficiently, taking into account its task to society, instilling its transformer character which is also claimed. In fact, if the legislation is too imposing it may reduce architecture to standardized, homogeneous and formatted spaces, undermining "the difference", the innovative and creative ideas, the experimentation or even the accomplishment of a "legitimate desire". And this is even more accurate if what is at stake is the house. So, first of all, we shall ask: How far is it correct to impose rules and regulations that interfere with the settings of domestic space, being the space that ensures the right of men's privacy, the privacy of the "family", in their freedom of expression, in their home, their domicile, their residence? Rather than defining strict rules that impose, namely, particular dimensions (minimum and maximum), should we consolidate values, principles, and goals to be achieved, allowing greater elasticity in the design solutions? If, as it is clear, the definition of laws and rules, by itself, does not inhibit the appearance of absurd solutions, or hinder "bad" architecture, what methodological tools are available to measure and avoid incongruous and even counterproductive actions and effects for the sake of good architecture?

When in 1998, located on Cap Ferrat in the bay of Arcachon, in the Mediterranean coast of France, Lacaton &Vassal built a *"weekend house"* between the trees, letting them enter into the house, on the assumption of harmonizing nature and man, putting in dialogue the life of the trees with life in the house, it may be said that it was a creative and bold idea, because it was

implicit to abandon certain canonical principles that are defined through the consideration of the inside/outside space. But if we cannot point out any negative aspects, from the concretization of this idea, can it be considered absurd?

But when Aires Mateus Architects chose a sandbox to consolidate the floor of the living room in the *"weekend house"* (Comporta\_Portugal, 2010), appealing to the particular characteristics of this material, read mostly through a sensitive and poetic context, characterizes an absurd idea when read from a functional and operational perspective, taking into account the values contained in the concept of home. In this sense, we wonder: what should be managed and granted in a housing design?



Fig.1\_Living room of the *weekend house* (Comporta\_Portugal, 2010), Aires Mateus Architects. Photo by: N. Garrido, A. Manso & B. Touillon, in http://casasnaareia.com

### 1. Values and concepts.

That "weekend house" in Comporta is situated three kilometres away from the beach, confining 180 squares meters of constructed area, divided into four individual buildings, where the distribution is made by an outside wooden platform laid on the sand (connecting it all). The living room, with a kitchen, occupies the largest building, while the bedrooms (with bathrooms) were distributed along the remaining three buildings. This way, the Aires Mateus Architects regained the pre-existing buildings, made in wood and masonry, unifying the set with a thatched roof, emphasizing and preserving its "genius loci". The building system was based on the technique used in the construction of the old fishermen's houses, where the walls and roofs are built with

layers of rice straw, stabilized by wooden planks. However, sand was used to consolidate the floor of the social area, appealing to its own characteristics, instilling a particular imprint on this material.

If we analyze the sand floor of this room, just from an emotional (beauty) point of view, it is easy to be surrendered by the charm that it implies, to its aesthetic quality, the smooth texture, the golden color, the dragging and slowing down of the daily ordinary functions (imposing a leisurelier rhythm); all of this emphasizes the romantic inspiration that leads to a delightful and peaceful summer day by the beach. Seen from this perspective, this idea carries the poetic and sublime version of this architecture. But if we recall that summer is only one season along the year, and if we want to analyze this same house from a functional (useful) point of view, we realize that the sand also induces a sense of discomfort, taking into account the ordinary and daily habits of a domestic life. In fact this material implies "walking barefoot", which can be disturbing, or even imposing, removing "qualities of habitability" to that home. Moreover, if we want to analyze it from a technical (reason) point of view, we find out that it was necessary to use an expensive technical resource (developing an innovative project of radiant electric heating, installed under the sand) in order to provide reasonable temperature on the cold winter nights. So can this solution be considered unnatural or misleading, calling into question the veracity of the above values assigned, in regard to the sensitive magnitude of this material (sand)?

Probably the **design values** in question here are mostly tangential to the long debate between "rationalism" and "romanticism", discussed within the scope of the discipline of architecture. It is true that architecture stands within these two domains: technical (reason) and aesthetics (emotion), and as Ernesto Nathan Rogers said: *«by definition, an architect is whom who has by profession to create a synthesis between the world of the useful and the world of the beauty: any partial accent in one of these terms diverts him from its goal»* [1]

It is obvious that the decisions of the architect, in the act of designing, are directly dependent on the values assumed to justify them, moving in any aesthetic, ethical, social, anthropological, technical, economic or even political perspective, imbuing behavioral, cultural, artistic, or self-expression interpretations. Ivar Holm (2006) in *«Ideas and Beliefs in Architecture and Industrial design: How attitudes, orientations, and underlying assumptions shape the built environment»* [2], mapping and ranking all these interferences, which designates "values", highlights the vital importance that those values plays in the professional practice of architecture, mainly because they support most of the options taken in the act of conception, justifying the design solutions, whether from a formal or functional point of view, i.e. consolidating *"the world of the useful"* and *"the world of the beauty"*. We believe that the collective consciousness of these values is crucial in the whole process for allowing the substantiation of the less consensual solutions.

In the architectural practice, the archetypes, the canonical forms, the correct ideas - being property of all - are naturally assimilated and its validation is guaranteed by the evidence of the facts in the building. This way, the good ideas result in good practice, decoding a *"modus faciendi"* inherent to the discipline of architecture, where the passage of time does lead to its own tradition. This way, **vocabulary, concepts and methods** are consolidated, assuming a direct transmission of knowledge from school to school, from generation to generation, justifying the vast majority of design options. However, if the house is a support for the needs of the life which hosts; a "new lifestyle" may imply a "new need" requiring an "innovative idea"; or an "innovative idea" can be requested simply to satisfy a need that derives from a legitimate "desire". Curiously this fact may jeopardize certain concepts, which reveal themselves obsoletes, demanding alternative solutions, even without being properly justified in the two realms mentioned above (reason or emotion).

The question of **durability**, for example, is raised by Hannah Arendt (1958) assuming that: *«in our need to replace faster and faster the worldly things that surrounds us, we can no longer afford the luxury of using them, respecting and preserving its inherent durability; we have to consume, to devour, so to speak, our homes, our furniture, our cars, like they were 'good things' of nature which deteriorate if they were not immediately brought to the endless cycle of the human metabolism with nature.»*[3] This way of perceiving the world of today can undermine certain particular values that were consolidated in the practice of architecture. It is already obvious that there is a discrepancy in the relationship between the durability of the material (the matter) in comparison with the durability of the idea (put to use). I.e., due to the technological developments and new economic realities, the speed with which nowadays "a world of new things" are solicited, makes it hard to tell de difference between real need for "innovative ideas" (creative), that really aim to improve our quality of life; or the need for "innovation" (speculative), which simply replace "things" for the simple desire to change, discard, consume, fuelling the economy of a world that never stops spinning.

In the design process, the architect not only has to shape the space, taking into account all the elements that defines and outlines it (like light, scale, proportion, visual relationships, etc.), but also has to choose the materials that confine and materialize it. From these choices depends its outcome, its qualification ("good" or "bad" architecture). However, during the search for new effective and relevant materials, for example, we may despise the issue of durability, if what is in question is trying something that hadn't enough time to ascertain their unintended consequences. Indeed, the issue of **innovation** is important, or even vital, as it responds to the experimental nature of the practice of architecture, legitimized by a procedural and methodological perspective.

#### 2. Innovative ideas

«Grand ideas, you know, we keep high in the air when we are working. We don't want them to come down. Often we are ourselves surprised with what comes out of it. I collect the facts. All the facts, as much as I can get. I study these facts and then I act accordingly (...)»,[4] said Mies van der Rohe, wondering about the question «will new materials greatly change the style of ours times?» Establishing the emphasis in an architectural approach which exploits the materials from the point of view of its structural potential, looking for the correct way to be used instead of exalting the formal and aesthetic reasons, Mies called for the **creativity** of the architect as a design process. In stressing the need to invest in creativity, which implies "innovative ideas" as a methodological instrument, questioning its load capability, it reminds us that "innovation" in architecture does not rely exclusively on the use of new technologies, new construction materials or new processes.

Innovative ideas are directly related to the creative ideas that are required at the designing act, introducing the "difference", being able to relate with either the form, or the function. In other words, an innovative idea can be a "sensitive idea", an "idea of spatiality", or only the way a given material will be applied. Above all, it is crucial to objectify the interest of the idea, its purpose, scrutinizing the meaning of the project itself. Surely, these ideas are closely related to the "skills" of the architect, who must assume its control (taking into account its flaws and qualities), forewarning any perverse or undesirable effects. Therefore, it is important and essential to strict the dialogue between the architect and the client (or the inhabitant), so that the solutions can be properly argued, setting a consensual result. And this is even more relevant when dealing with bold experimental solutions, which may be at risk of failure.

Manuel and Francisco Aires Mateus acknowledge that: *«having the right to error is entitled to research. We are sure that each project becomes more interesting when it supposes some risk or an investigation through things that we don't control. It's like establishing a problem then, during the search for a resolution, we solve the specific question posed at the beginning. It is important to assert the possibility of error. If we don't have it, the possibility of freedom does not arise.» [5] And if we believe that a genuine research in architecture relies exactly on the consistent meditation of the architectural design processes, exploring it through the built work (the building), then the need for "freedom of action" is more than evident, aiming to ensure mainly the artistic condition that leads to creativity, i.e. emerging creative and innovative ideas.* 

However, in their eagerness to evolve, not to be repeated, or to bring to light new ideas that result in "good architecture", sometimes arises the "panic of being exhausted", that is, of failing the arising of innovative ideas. In this anguish, it is easy to fall into a blind temptation to "innovate", pursuing absurd ideas. Can the sand floor in the living room of the *weekend house* 

in Comporta be considered a creative idea that simply came out absurd? How can the limit of the architect's action be defined?

If we assume that the **experimental nature** of the architectural practice is unquestionable, it does not seem possible to define with precision the limits of the architect's action. For instance, if in a research the emphasis is given to the *"living experience of architecture"*, then the sense of "beauty" can mean "useful", so in this case "the idea" should be analyzed with additional "filters", ensuring its rightfulness. And if the achievement of architecture involves matters (its materialization), the exploration of new materials, accounting sustainability issues, consolidates one of the domains where is required the most innovative character, especially when it is expected that environmental-friendly alternative materials may replace some traditional ones, namely those which cause the rapid consumption of our natural resources. In *«How to build the future with limited and finite resources?»* Huygen, Sieffert & Daudon suggests as a process of architectural research, an education and practice of architecture that leans on the recycling of materials, assuming that *«only ingenuity and creativity as well as common sense are necessary.»*[6] Once again, the architectural proposals resulting from this process should be considered and analyzed within its parameters of evaluation, where the consideration of an "absurd idea" (as nonsense, foolishness or impertinence) should not be so relevant.

Perhaps the **constraining factors** inherent in each architectural design are the only limits that we can objectify more clearly. Therefore, we can say that in architecture, the validity, legitimacy and the measurement of innovative ideas can only be appreciated through the ability to respond to the problem that has been placed. In this sense, an idea is revealed absurd when it does not solve the problem, or when to solve it raises many others. Probably this is the ultimate limit.

#### 3. Outcomes

Reflecting objectively implies studying the essential characteristics, evaluating its capabilities, strengths, limitations or bias, criticizing its assumptions and implications, realizing how the chosen solution responds effectively to the problem raised. For this, it is necessary to use certain methods in the analysis of the design process, seeking for impartiality in the approach, pointing out problems, looking for the causes and consequences of its gaps, which are often tied to the immaturity of the ideas, or to the normative impositions. To maximize great ideas, calling for innovation and creativity implies, above all, **common sense**.

Maybe the ability for discussion and meditation of "ideas" should be instructed in the **training** of an architect, right from the beginning. The Schools of Architecture must induce habits of brainwork and methods of deeper analysis, aiming to go beyond charming and appealing designs, or the blind will to innovate, in order to keep the quality of architecture.

We believe that the creative potential is fuelled by experience, so it takes **time**. Thus, it is urgent to vindicate time for the practice of architecture. Hannah Arendt (1958) pointed out that the introduction of "machines" in our everyday life, induces *«to an infinitely faster rhythm of repetition rather than prescribed by the cycle of the natural processes»*[7], so it is imperative to be aware that this wild rhythm, which nowadays is imposed, is unnatural to mankind. It seems evident that the assumed acceleration of the procedures of conception and concretization, of today, restraints "conditions" to the practice of architecture. We truly believe that the maturity of ideas, its viability, and its own confrontation to reality, only time can measure.

To the question: what methodological tools are available to measure and avoid incongruous and even counterproductive actions and effects for the sake of good architecture? We do not have a proper or definitive answer. Probably the **solution** results from all the issues and actions that were here elucidated, namely by revealing the importance of the values of architecture, believing, however, that these values (like the values of life) are much more appealing when we realize that they are not absolute. And if, in this paper, we are really interested in discussing it all, for the sake of "good architecture", we wonder: Isn't the quality of architecture that generates Architecture?

#### REFERENCES

[1] Ernesto Nathan Rogers. *Experiencia de la Arquitectura*. Ediciones Nueva Visión, Buenos Aires, pp.191-192, 1965

[2] Ivar Holm. Ideas and Beliefs in Architecture and Industrial design: How attitudes, orientations, and underlying assumptions shape the built environment. Oslo School of Architecture and Design, ISBN 82-547-0174-1, 2006.

[3] Hannah Arendt. A Condição Humana (original version: The Human Condition, 1958, The University of Chicago Press), Relógio D'Água Editores, Lisboa, p.151, 2001.

[4] Mies van der Rohe, *The Oral History of Modern Architecture* (Jonh Peter, ed.), Harry N. Abrams, New York, 1994, pp.159-160.

[5] Aires Mateus. «*Manuel e Francisco Mateus conversam com José Adrião e Ricardo Carvalho*», JA- Jornal Arquitectos, (Scientific Architectural Journal quarterly published by the Architects Association of Portugal), Portugal, nº226, pp. 66-79, 2007.

[6] Y. Sieffert & D. Daudon & J.-M. Huygen. *«How to build the future with limited and finite resources?».* Second International Conference on Structures and Architecture. *«Structure and Architecture: Concepts, Applications and Challenges»,* Portugal, ISBN 978-0-415-66195-9, pp. 633-34, 2013.

[7] Hannah Arendt. A Condição Humana, Op.cit, p.150.