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Architectural Detail or the End of the Virtual

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Abstract

Architectural tectonics have become the central resistance, in the discipline of architecture, against the virtual simulations of reality that dominate our cultural landscape. Within that discussion, the study and critique of the architectural detail as a central aspect of architecture needs to be re-considered today, simply because it relates directly with materiality, physical materiality, of architecture.

The enormous social-cultural transformations, since the turn of the century, triggered by the electronical and then digital innovations, have permitted the appearance of a virtual world that is competing with the physical role and subsequent meaning of the discipline of architecture.

Alvin Tofler's *The Third Wave*, Castells' *The Rise of the Network Society*, Nicholas Negroponte's *Being Digital*, all reflected the changes that are now a consummated fact: we have become more and more dependent on the non-physical, on the non-material aspects of technology. Paraphrasing Negroponte, it is the shift from atoms (material and mass) to bits (digital).

The construction of a virtual, nonphysical world, as the late phenomenon of the metaverse, the NFTs, or non-fungible tokens, confirm this tendency in the development of a nonphysical world.

The challenge presented to architecture, as the discipline of the construction of meaningful physical environments, is that it cannot exist only in appearance.

It needs to have existence, physical existence and permanence.

The role of the architectural detail, present since the dawning of the discipline, needs to be re-discussed:

The meaning of architecture, as it has always been, can be revealed within the understanding of the construction detail. The joint and the construction detail have evolved through history, from symbolic representations of nature, to metaphors of structural elements, to glimpses of the way buildings are put together.

The advent of the digital revolution, and the changes of the architectural process, the appearance of the possibility of the "fold"¹, and other algorithm processes of designing, triggered the disappearance of the edge and the joint, and detail has become surpassed, forgotten in praise of the seamless extension of the perfected architectural surface.

To understand the role of architecture today is, to a large extent, to understand the meaning of the architectural detail.

1.The end of the Physical

"Internet based social networks have become the platform of everything...at the nucleus of every human activity there is a digital platform" (Castells, M., conference Universidade de Cataluna, 2021)

"Detailing is, surely, one of the more revealing components of changing architectural language" (Gregotti, V., Casabella n 492, 1983)

Most of our cultural and social experiences have become transformed by the character of electronic and digital platforms and their subsequent underling technologies.



Figure.1: Martin Parr, from Grand Paris, 2014.

We still live within physical structures and socialize with other human beings and other living creatures, occupying the physical spaces that we have built, but most of our social activities have become intermediated by electronical and digital platforms. The Metaverse, the IoT, Artificial Intelligence, Crypto currencies, all represent the presence of a nonphysical reality that has transformed our daily lives (Fig. 1 and 2).

¹ Greg Lynn Folding in Architecture, 1993.



Figure.2: Still from the movie Blade Runner, 1982.

Architecture is deeply influenced by this phenomenon, since its cultural role is only fully achieved in the construction of physical space. We can recall Aldo Van Eyck advise: "What you should try to accomplish is **built meaning**. So, get close to the meaning **and build.**" (Aldo Van Eyck, Team 10 Primer, p.7).

Many have already written about this transformation and what it could mean for the development of the discipline. In one moment, Peter Eisenman has argued that the transformation from the physical to the electronic would deeply affect architecture since it would prioritize **appearance over essence**.

"The electronic paradigm directs a powerful challenge to architecture because it defines reality in terms of media and simulation; it values appearance over existence, what **can be seen over what is**".

(Eisenman, 1988)

2. The construction of physical space

Throughout the history of architecture, the constructional detail has maintained a central reference, while changing its role and emphasis, but we can argue that it always referred back to the aspect of construction and tectonics, but also to the meaning of architecture itself (fig 4 and 5) Since we argue that architecture is construction, we need to admit that the inners aspects of construction and its language of the joint, the assemblage, the detail are important.



Figure.3: Caryatides, Acropole, Greece. Figure.4: Figure of the Primitive Hut, from Laugier's Essai sur l'architecture, 1753

Nevertheless, most of architecture today is equated with media itself, tri dimensional realistic images, movie representations, computer generated perspectives and tridimensional images have become part of the architectural process., and in some cases, have been the central aspect of that process.

Kenneth Frampton has argued similarly, calling attention to the fact that architecture needs to concentrate on the aspects of construction in an effort to fight the scenographic aspect of architecture and the proliferation of virtual constructions and simulations of the architectural object.

In his article *Rappel à L'ordre: the case for the Tectonic*, in AD magazine, 1990, Frampton refers that:

"The beginnings of the Modern, dating back at least two centuries, and the much more recent advent of the Postmodern, are inextricably bound up with the ambiguities introduced into western architecture by the primacy given to the scenographic...However, building remains essentially tectonic, rather than scenographic in character..."

(Frampton, K. 1990).

Frampton then goes on to argue that buildings shall be "ontological" rather than "representational", they should be the thing rather a "sign" of the thing. (fig.5,6 and 7,8).



Figure.5 and 6: Zaha Hadid, Centre Heydar Aliyev, Baku, Azerbaijan, 2013.

Either as a result of the bourgeois culture, the result of a global and mass-oriented society, or the ever more powerful virtualization of our worldly experience, we need to accept the fact that the aspect of the construction detail and the tectonic have become more and more forgotten, not only in their relationship with construction itself, but with the image and representation of the project itself.

No doubt we can agree that image and media have taken over the communication and the dissemination of architecture. And even the construction of architecture has been in many examples mediated by the final media representation of the work.

As Antoine Picon has pointed out, in many cases architecture has become part of an *event*, not a physical construction.

Politician's, entrepreneurs, high profile companies all seem to make use of architectural projects as merchandising products that are displayed, marketed and packaged as any other products.

We no longer want to know how it is built, how it relates to the context, how it addresses the topography, how it solves the problems it was built for. We simply discuss the result as a media content: we want more shadow, we want to test a new material, a new point of view.

The fact seems to be that architecture, until it gets built, has been pushed to become media, image. FORM and SURFACE has taken over the tectonic and the detail.

Tectonic and the construction detail have not such an easy task when it comes to represent or communicate. They are not so easily transformed into simulated images.



Figure.7 and 8 : Rafael Moneo, Kurshaal Centre and Auditorium, S. Sebastian, 1999.

One of the issues to discuss refers to the question of **how** can we represent the tectonic character of a building? And even more is there a **need and an interest** to do it? In a society absorbed and dominated by the power of the image where does the material quality and character of a building detail fits?

Construction detail refers to the way architectural concepts are **materialized**. Detail reveals, or it should reveal, the way architecture is constructed, while images, surface and form can represent realities that are independently from the actual structural logic of the building.

Eventually we are discussing the importance of the material aspect of architecture versus its virtual or simulated representation. And we can argue that the meaning of an architecture that does not want to reveal its structure, its tectonics, its detailing refers to a society that does not want to discuss t *How* architecture is made, it is only interested in *How* architecture looks.



Figure.6 and 7: Peter Behrens, AEG Turbine Factory 1909 Detail of steel structure and structural frame in construction.

CONCLUSION

Since most of our existence is mediated and oriented by digital consoles, simulated realities and virtual experiences, the practice of architecture has been challenged in its role that aims to be fulfilled in physical construction.

The primary role of architecture as protection, as worship, as spatial solution for humanity, is losing ground against the overwhelming presence of a simulated reality, a pristine, flawless immaculate world, that in many aspects does not correspond to physical reality.

A society that is infatuated with the perfect images of a virtual world does not care about the physical existence of buildings, of the way parts join in the construction project.

Architecture, with its unique role of creating physical spaces for the better living of human beings, needs to be materialized in physical existence. And in that process, one needs to discuss the architectural detail, the architectural joint, the connections of different materials. We need to see and discuss it in all its the imperfections, in its natural wearing out, texture and color transformation. Only then we can be faced with the real meaning and role of architecture in today's society.

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