

ICT as Generators of a New Paradigm in Architecture – Humanism and Scale

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Abstract. *Despite the global and universal characteristics of nowadays' society, the new information and communication technologies, seem, in paradox, to direct Architecture to growing individualism, shown in the nervous search for each one's form. This path seems to end up in cities filled up with iconic buildings with no respect neither for the consolidated built environment, nor for the human being. Known as an innovation tools, with huge power and able to make all the visionary and utopian projects become real seem to further Architecture away from its humanist basis. The architect, selfish and egocentric, dives deep into his own craziness, in an era where the new technologies allow everything. If boundaries are not established, a new architectural paradigm is anticipated, where all the individualisms live but that the individual cannot inhabit, and where the innovation seems to enter in conflict with built heritage.*

Keywords. *ICT, form, expressionism, individualism, humanism.*

Digital Expressionism

Have a glimpse at the horizon, open a magazine, an architecture book... what do you see? (Fig.1)



Figure 1. 'Architectures', multiplicity of design approaches

Cities filled up with iconic, complex, vainglorious buildings, that move, turn around, flick. 'Wow architectures' (Stanley, 2008), urban sculptures with function, or simply, as Mitchell (2005) refers to them, objects of an architectural fashion. They are plastic, fluid, innovative, outstanding, sensual and almost random, or in other words, simply expressive.

Kolarevic (2003), intentionally uses the plural 'Architectures' to represent the multiplicity of approaches brought out to the mainstream of architectural practice, through this digital revolution. These objects have found their expression on highly complex, curvilinear forms that denote a total absence of style and seem to closer architecture to a pure art, as they put the tonus on formal and individual expressiveness.

The search of form, seems, in fact, to be the modus operandi of these new digital architectures, in a time where the modernist doctrine 'form follows function' has never been so challenged and overruled.

Despite the formal differences, these digital design approaches have the use of ICT in their conception in common. The ICT, here seen as the tool architecture has always dreamed of, and being

obvious that there is a direct relationship between the tools used and the objects produced, seem to push architectural designs to a growing formal expressiveness. Why?

In a recent pre-digital era, architectural drawing (sketches, plans, sections and perspectives) was the only available tool for architects to think and communicate their ideas. It always constituted a fundamental tool for search and information registry, as well as a fantastic mean to invent and think architecturally. However, it would be quite restrictive and inflexible, as far as the representation of more complex ideas and spaces were concerned. The two dimensions, even with tricks to simulate the third and with the great gift of perspective, haven't always been enough to represent the reveries of the most brilliant minds. Rafael Moneo even speaks about forgotten geometries lost to us because of the difficulties of their representation. (Kolarevic (ed), 2003) Plans and sections are deterministic and only act as representations of the thought object, not positively contributing to its conceptual development. Furthermore, technical drawing is an elite language, not perceived by everyone and therefore a poor generic communicator. Adding to this we might bring the famous Mitchell (2001) sentence 'Architects build what they could draw' which clearly identifies that architecture had always been restricted to what could be represented from the mind to the hand, to what was possible to draw.

Despite the fact that the first CAD programs have already contributed enormously to the architectural processes, they could have been compared to electronic pens or sophisticated typewriters, working in the same way as the tradition drawing techniques, as mere representations of the thought object. (Schmitt, 1999)

The big innovation comes with programs that simulate the thought reality and were the architect can visualize his ideas and concepts in real time, instead of only serving to represent ideas previously thought with pen and paper. The architectural object is tested in 3D from the first minute.

In this way, the ICT, instead of being mere representative tools, introduce two new concepts to the traditional design process: simulation and manipulation

The possibility given by the ICT to concretize all these formal objects and its virtual existence on the screen, make the architect dive deep into his formal egocentrism. He becomes grander in his interventions, seduced by his image on the computer screen. Being the external limitations tenuous, the technological restrictions null, the architect, selfish, inebriated and seduced by his visual and aesthetic impulses, becomes slave of his own tests, intrigues and constant manipulations.

All the approaches are so different because they are individual, fact that translates itself into different architectures that come out only of the pure aesthetic judgment of the images they create.

Architecture today is image, and the images seduce on the screen, making architects fall in love with it, almost in an alienation and abstraction of the real.

As Leach (1999) defends, the screen and the images distance architects from the real as all the aesthetization keeps them anesthetized and kept in aesthetic cocoons.

These architectures are vain, mirror of a narcissistic architect, translated into seductive and complex images. The forms and images are fluid, appealing to the feeling and sensorial distraction. The spaces are complex, sometimes uncharacteristic and inhuman. They are architectures for architects, being the future inhabitants of the spaces the great absence in this problematic.

Leach even defends that the architectural design is being reduced to the superficial play of empty seductive forms, and, furthermore, that this art of imposition of architects towards the built environment might content fascist impulses. They do, in fact, impose (to the built environment and to the human being) their seductive, narcissistic objects, as if they were Gulliver. (Leach, 1999)

They assume an authoritarian position towards their digital model, only based on aesthetic judgments and then impose the result of their formal quest to the inhabitants of the spaces. The result? Cities filled up with iconic buildings, to be looked from the sky and not to be walked through, at a human scale. Instead of designing architectural qualified spaces that promote a rewarding and pleasant experience to the user, designers are making sculptural landmarks rise everywhere.

It is, in fact, a power game that architectures seem to be winning in favor of the other constraints like function, site, urban fabric or simply the needs of the human being.

For the future's sake, architects should remember that 'with great power comes great responsibility'. (Parker, 2001)

The social concern inherent to architecture seems to be incompatible with the world of ICT and complex images.

The comfort and the life if the characters that play in the built environment seem to have lost importance, being these forced to inhabit uncharacteristic and expressive spaces, that most of the times don't even accomplish the function, or in this case, the excuse, for which they were built.

Conclusion

Despite all the technological evolutions, the alterations in the daily life, the growing interactivity, mobility, globalization, leds and cell-phones, individuals are still individuals, and their needs haven't actually changed that much.

No one will want to dress metallic suits and feel sick on a round complex confusing building. No one should be forced to do so, since today's society doesn't allow fascisms, not even architectural ones.

If the baseline principles, intrinsic to the great art of architecture are forgotten, we might all ended up designing spaces for

computer games. Not because they are impossible to build, but because they are impossible to inhabit.

Architecture should continue to be an art, that through innovation responds to a specific problem, has a specific function and that arouses from a determined and unique concept and that reacts to a determined site.

Being a humanism discipline, it should continue to respect the life and the people that inhabit it, instead of only being a mere formal and personal exercise.

ICT's contributions to design are undeniable. Nevertheless, they shouldn't be the only goal and method of architecture as a humanist discipline. There is a lot more to it. Let's hope for the end of unlimited excesses.

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