Hybrid Art > Synthesized Architecture

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Abstract. *This paper investigates possible intersections between some contemporary artistic modalities and architectural practice. It observes the limits of looking at art as only 'inspiration' for architectural form and points to the necessity of surpassing this formal approach. It discusses then, the confluence of architecture, information and communication technologies. The architecture has historically mediated the way people interact, but this interaction now has been greatly changed by new technologies. Then, it analyses the hypothesis that the experiments with new media art can bring the field of architecture closer to information and communication technologies. An educational experience is presented, aiming to verify some points discussed on the text. Concluding with an exposition of the potentialities of some hybrid art modalities in qualifying architectural practices.*
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Art + architecture

Art has been a field of investigation for architects, in which they can experiment with formal and conceptual strategies similar to the ones found in architecture. This practice allows them more freedom in the creative process, because art does not have the technical, financial and functional restrictions of architecture, as Cabral Filho (2005) and Stéphane Huchet (2005) have pointed out. As an analogue practice of architecture, but free from its restrictions, art can be a field of creative experimentation, as literature and poetry are for philosophy.

Cabral Filho points out the direct impact of the use of art "on the professional practice of most of the greatest architects - from Le Corbusier to Oscar Niemeyer, From Daniel Libeskind to William Alsop." However, it is important to refine this approach for avoiding easy formal analogies between art and architecture. Sérgio Ferro (2006) comments on the problems of establishing relations between different fields without regard to their productive specificities: "the artisanal painting process is not equal to the manufactured practice of architecture nor to industrial design" (Ferro, 2006: 241). Ferro emphasizes this difference by studying Le Corbusier artistic and architectural practices and he points out some 'procedural deviations' in them: "Le Corbusier's work seems

to be oriented by a chiasmus. He creates spaces as a painter and, generally, makes paintings as an architect" (Ferro, 2006: 241). In architecture, which has a complex logic of construction, Le Corbusier works as if the materials were completely shaped, pure receptivity. In paintings, where this receptivity is possible, the artist Le Corbusier creates components that are incorporated 'scientifically' to the whole.

It becomes clear that this mélange occurs in virtue of a particular approach to the relationship art/architecture, which emphasizes formal coincidences between them instead of their specificities. This emphasis is in tune with the idea of architecture as "the skillful, correct and magnificent play of volumes assembled in light" (Corbusier, 1977:13). Tackling architecture as a "play of volumes" justifies similarities with painting and sculpture and their use as experimental fields. However, it can be said to be a restrictive approach, because architecture is not restricted to objective aspects. Architecture has an ethical function of articulating people's relationship with the world, which is one of its primary functions, as Wilson (1988) has investigated. Cabral Filho et al (1997) suggest that by changing the emphasis in architecture from the sculptural play of objects to the field of relationships, "we can paraphrase Le Corbusier and argue that architecture is the correct and magnificent play of the interaction of bodies immersed in spatiality."

Their proposition is to change architectural emphasis from the object to the event (from aesthetic to ethic) and for that Performance Art gains the place of Painting as architects' experimental field of practice. However, this opposition between ethics and aesthetics, event and object, needs to be more deeply understood. Alberto Pérez-Gomez (2006) investigates the coexistence of ethics and aesthetics in the history of architecture by studying the Greek divinities 'Eros' (the divinity of carnal love and seduction) and 'Philia' (the love of friendship). In his words, he tries to "uncover the deep connections between ethical and poetic values in the primary tradition of our discipline" (Pérez-Gomez, 2006: 4). It becomes clear

that ethics and aesthetics cannot be segregated as theoreticians and architects have been doing. The primary intention of architecture is ethical: to mediate people's relationships with others and with the world. But the instrument for doing so is aesthetic: the formal and poetical aspects of architecture. Pérez-Gomez also points out that architecture operates as language, what gives us further space for analysis: if, as Flusser (1998: 200) has pointed out, "two different sentences are two different thoughts", we can say that two different architectural forms are two different ethical articulations.

When we surpass the dichotomy between ethic and aesthetic, it is neither Painting nor Performance Art that constitute the experimental field for best investigating architectural matters: if the former emphasizes aesthetic aspects instead of ethical ones, the latter operates inversely. Performance Art emphasizes relational aspects but is not capable of formalizing them, something fundamental for ethical articulations in architecture. Having overcome this segregation, some contemporary art modalities (Installation art and its precursors) appear as potential fields for radical investigations in architecture. These modalities have some characteristics of Painting (they constitute forms of aesthetic formalization) but the intentions of Performance Art (to mediate people's relationships in space). They incorporate the aesthetic construction of the object, but they also have people's articulation as a primary finality. Is that not architecture's primary characteristic?

In this article, what interests me is how 'site specific' approaches conjoined with digital art allows architects to investigate and creatively develop architectural matters. If art can be a marginal way to explore architects' creativity, different art modalities will emphasize different aspects of architectural production, as we have seen above. Considering the growing presence of digital devices in architecture, I shall investigate how experiments with digital art can bring architects closer to this conjunction, opening to it a more creative approach.

Architecture + information and communication technologies

The confluence of architecture and information and communication technologies is not speculation, but something real that interferes directly upon us. Very commonly present in contemporary life, not only in the making of architecture (computer drawings and the modelling of extravagant buildings) nor in the 'automated rooms' of the millionaires' houses, televisions, telephones and computers leave our walls "with as many holes as a Swiss cheese", as Flusser (1999:83) has pointed out. Architecture has historically mediated the way people interact, but this interaction has now been greatly changed by new technologies: "on the roof there is the aerial, the telephone wire comes through the wall, the television takes the place of the window, and the door is replaced by the garage with the car" (Flusser, 1999:83).

It is very curious that Flusser was writing in the 80's. At that moment, computers, the internet, surveillance cameras and mobile phones still did not have the primary importance in people's life that they have today. It can be constructive to revisit Flusser's arguments after 20 years, in order to incorporate some changes into his analysis.

That author analyzes architecture from its fundamental elements: roof and walls, that are knocked by doors and windows. The roof has primary importance: 'homeless' and 'without a roof over one's head' are synonyms. The roof isolates people from the public sphere and creates a private space where the law is valid only up to a point. In a similar way, walls exist to protect individuals from others. They are made by two faces: the interior (secretive) and the exterior (political). However, it is common to knock holes in walls: windows and doors. Windows allow one to look outside from the inside. This means that windows allow one to see the world without experiencing it, what Greeks philosophers called 'Theory'. "Doors are holes on walls for going in and out. One goes out to experience the world, and there one loses oneself, and one returns home in order to find

oneself again" (Flusser, 1999: 81). This is, shortly, the philosophical analysis of architecture made by Vilém Flusser. He posits that roofs, walls, windows and doors do not fulfill their function anymore, and this is an evidence of crisis.

Nowadays it is even more difficult for these archaic elements to achieve their functions. Roofs do not create private spaces anymore. Surveillance cameras transform the 'under-the-roof' in a public space: other people can see what one does inside a building, even if one is in a private room. In this situation, how is a private space defined?

Windows are not the only (nor the best) way for seeing the world from a private place anymore. Television sets and computers connected to the internet allow for a much deeper and wider view of the world. In Brazil one can read about the Iraq war, one can see fresh pictures of a Chilean vulcan, and a simple widget provides realtime images of cities such as Venice, New York, Shanghai and so on. Talking with people from the window (a hybrid of political action and private distance) has been replaced by internet communication tools. These allow for powerful communication, changing an important aspect of political life: one can have a political action from a private and theoretical position.

The door functions also change radically. One no longer needs to pass through the door for acting in the world. It is possible to engage in the world without leaving the private space. Doors can also separate spaces and by doing so they mediate people's relationships in a specific way. Traditionally, a private room isolates from the rest of the world, and from outside the door one needs to ring the bell for getting in. Someone else will open the door and it will then be decided wether the person outside can get in or not. Nowadays, mobile phones allow for people to access any private room without passing through such protocol. Doors no longer fulfill the function of isolation and communication.

Are roofs, windows and doors becoming useless? Surely not, but their relevance in mediating people's relationships with others and with the

world is decreasing. As we have seen, other devices are taking some of their functions, radically changing architecture's dynamic.

Digital art + site specific > architecture + ICT

However, architecture can reassume the role of mediating people's relationships in a complete way. Roofs, walls, doors and windows can (and should) work conjoined with mobile phones, digital windows and surveillance cameras. These digital devices, incorporated into architectural dynamics, can enhance the function of mediating people in a given spatiality. Such hybrid architecture (one that is made by physical as well as digital elements) can reintegrate people's relationships in space and time in a rich way. But how is it possible to put these elements in architects' creative repertoire?

The main hypothesis of this paper is that experiments with new media art can bring the field of architecture closer to information and communication technologies. This confluence can only take form when architects raise questions about technology-based interaction and automation during their creative process, embodying these concepts into the repertoire of architecture. In this way, it will be possible to have a creative approach to its elements, opening to architecture a potential field of improvement.

As we have seen, experimenting with painting and sculpture allows architects to investigate formal aspects of architecture. However, we have also seen the problems of restricting architectural approaches to formal aspects. Experimenting with new media art allows architects to investigate some relational aspects of architecture, such as technology-based interaction. Architects can artistically experiment with cameras, with computers, with television sets, with electric systems, etc. This can help them to deal with these devices creatively. An artistic approach provides an important openness for dealing with a technology, which is fundamental to enhance its application in architecture.

Nevertheless, the hypothesis of this paper is not restricted to experiments with digital art. The paper intends to investigate how digital art together with the Site specific approach can constitute a field of experimentation for architects. In another work, I contrasted the 'site specific' approach with drawing, painting and sculpture, trying to uncover their differences as experimental fields for architects (Andrés, 2008). The main points of that work will be shortened here.

Firstly, it is remarkable how the universe of visual representation induces architects to a lot of deviations in their approach to architecture. It induces to a perception of the site as a homogeneous and passive space, constituted by three axes that originate at a similar point and remain infinitely perpendicular. Thus, one can have the fantasy that the site is a 'neutral' support, apt to receive one's ideas without interfering on them. This seems to me to be a platonic approach: the world of ideas can be directly translated into shapes. Unfortunately, materials do not have such passivity and the result of any making is inevitably different from the original idea. The world of objects offers resistance to ideas and art products are fruit of this apposition. Still, the universe of visual representation sustains the idea of the neutrality and passiveness of the world. In that universe, creativity is linked with "having original ideas", as Flusser (1999: 177) has shown.

The Site specific approach does not sustain such fantasy. Instead, it considers the site to be a dialogic support that inevitably participates in the work of art. Space is neither homogeneous nor passive. Its specificities interfere directly with the art and architecture placed in it. The Site specific approach assumes that different sites support different interventions. Thus, site analysis is no longer a step that antecedes the design process, but it is a fundamental tool for designing. This also changes the idea of creativity. It no longer is "to have original ideas", but to have 'singular' ideas: ideas that only exist in specific contexts.

Such changes in architects' approaches can advance architectural production. The platonic idea,

when applied to architecture, produces a false reciprocity. It can be argued that it is not possible to directly shape an idea because the world interferes a lot in any making. Experimenting with 'site specific' can help architects to surpass the platonic approach and really 'understand' the universe of architecture, as Flusser (1999:172) has pointed out.

The Conjunction of digital art with 'site specific' can constitute a hybrid place for architectural radical investigation: it allows to deal with technological devices and strategies and, on the other hand, it works with physical elements in an approach that considers the site a dialogic support to the work. Experimenting with this hybrid artistic practice can be an important step for helping architects to also create a potent and hybrid architecture.

An educational experience

An educational experience took place at UFMG's (Universidade Federal de Minas Gerais, Brazil) Architecture School in 2007. The first aim of the course was to experiment with contemporary artistic devices for dealing with architectural matters. It started by tracing some contours of the Installation category in art, by contrasting it with its historical antecedents: Environment, Ambientes, Site Specific and In Situ art. Then it was discussed how different Installation approaches can subsidize a contemporary architectural practice. Having had this basis, students

were asked to make Site specific interventions in the school's building, using physical and digital devices. Thirty students were divided into ten groups, and each group chose a place in the building for making their intervention.

The interventions approach derives from a sequential work developed by professor José Cabral Filho at a graphic lab in the same school (Cabral Filho, 2006). He developed an investigation of the confluence of architecture and information and communication technologies, applying it to some courses and research projects in which he encouraged students to create low-tech and interactive spaces. Departing from that background, we emphasized, in the experience that is presented in this paper, the artistic approach from both theoretical and practical perspectives, rather than the use of technological devices. Aiming at collaborating with the discussion, three works developed by students will be analyzed here.

Group 1 - Empty house
This group chose to intervene in an abandoned house close to the building of the School of Architecture. In this empty house, the windows had been blocked up with bricks. It seems that the owner wants to demolish the house for constructing a big building but that is not allowed by law. As a result of this conflict, the house rests as an unmoving and blind witness of the destruction of the architectural inheritance in the city of Belo Horizonte. This situation

Figure 1
Site specific intervention in an empty house. UFMG Architecture School, 2007.

attracted the attention of the group. Their first proposition was to cover the external walls with bands of different colors and textures. The only surface to be kept 'bare' would be the blocked windows. By doing so, they intended to emphasize the closed windows by contrasting it with the carnivalesque aspect of the whole.

However, the owner did not give them permission for intervening. He did not want to attract attention towards the house and therefore forbad any physical intervention in the building. This obliged the group to change their proposition: they decided to intervene in the house without touching it. The new proposition was to project a video made with images that suggested a house interior on one of the blocked windows. Thus, they made a video with the proportions of the blocked window, fitting it exactly on the contour of the hole. In the foreground of the video, a translucent curtain swung lightly. Behind, the silhouettes of people engaged in daily activities appeared. In the background, there was a large projection of Luis Buñuel's film 'El Angel Exterminador'. The actions in the interior become less quotidian: as people dance, chairs fall from the roof, and the curtain starts burning. The fire destroys the curtain and the house interior disappears. In an empty terrain, a man with his head covered carries a mannequin inside a wheelbarrow.

The entire narrative took place inside the blocked window. During that time, life was back to the building. People's presence in front of the window recalled an informal musical meeting, a social event of the kind that used to happen in Belo Horizonte when it was still a small city. Car lights projected shadows of the watching public on the house and blended it with the silhouettes in the video.

More than dealing with site specificities, this work explored social and political specificities. The narrative was linked with the questions concerned to the house. The students had a work process close to the Site specific approach, but in a singular way: instead of intervening in the shape of the house, they intervened in its 'content'.

Group 2 - A lake under construction
This group chose a small lake in the School's garden for intervening. Abandoned for years, the dry lake stocked leaves, twigs and other detritus. Aiming at criticizing this situation, the group proposed to create a 'junk path' from the lake to the School building, as if the waste proliferated by itself. However, 20 days before the exhibition the University restarted the lake's restoration. At that moment, the criticism of the abandon ceased making sense. As in the first case, this group had to change their proposition.

More than working with 'site specificities', they had to deal with 'time specificities', in the same sense as in Muntada's work. They had to consider site specificities in that specific time-frame: the restoration process. Thus, they made a new proposition, wich consisted in recording sounds of the construction during daytime and reproducing it at night. The sounds were distributed in 8 loudspeakers hidden in the lake. Sounds of hammers and drills occupied the dry lake during one evening, although there was no worker there.

The intervention consisted of a very simple operation: transferring one aspect of daytime construction to night time. This simple operation combines two ambivalent discourses: it creates the sensation of uninterruptedness of the construction and, on the other hand, it emphasizes the lack of results. Hammers are heard from everywhere, but nothing changes. This group expressed, very poetically, their impatience with an endlessly under-construction lake, by using invisible and useless hammerers.

Group 3 - School corridor
This group intervened in a corridor almost 30 meters long. They started investigating possibilities of projecting longitudinally onto the corridor, aiming at exploring the differences caused by the distance between the projector and the walls. Using an old transparency projector, they put a reticulated tissue in the place of the transparent paper. It resulted in a very expressive light projection, as an enormous spider web. Close to the projector the net had small
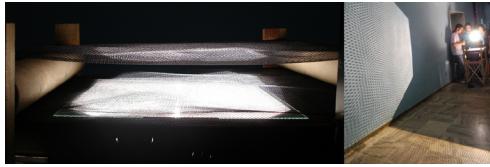
points and at the end of the corridor it made big circles. The group perceived that moving the tissue caused an impressive effect of depth: a moveable spider web seems to enclose people inside itself.

Their proposition was to construct a system for moving a tissue over an old projector and put it in the corridor. They worked hard to fabricate this apparatus, using a microwave oven engine linked to two tubes. A tissue was connected to the tubes, as a wake, and it moved slowly over the projector. This movement created a 'live' environment in the corridor, offering an unusual experience of it.

Discussion

These three works illustrate the course's line of approach and provide a practical view of the discussion that is undertaken in this paper. Firstly, it is important to contrast this approach with representational ones: instead of the neutral space of visual representation, the intervention approach obliges architects to deal with concrete reality and its unpredictability. Difficulties obliged the first two groups to alter their proposition. Despite that, their works were the most interesting of the entire course. It could be suggested that the fact of dealing creatively with real problems allowed them to improve their works. Instead of working in 'neutral spaces', architects should deal creatively with difficulties of concrete reality.

It is also important to notice that all groups were obliged to cope with the specificities of each site. They had to tackle the site as a singular place, assuming that the intervention would be different in a different site. Architecture must dialog with the site where it is placed, whilst the homogeneous space of visual representation can sustain a fantasy of the

neutrality and passiveness of the site. During their 'interventions', students were obliged to deal with site specificities as important elements for the design of their works.

The works presented here overcome the idea of 'distant visual contemplation'. Differently from Drawing, Painting and Sculpture, aesthetics was approached as something more than mainly vision. The body's immersion, sonority and interaction are some of the aspects explored by the students. Architecture's aesthetics involves much more than vision and contemplation. However, the traditional artistic approach considers the work of art as an object to be observed by "a pair of disembodied eyes that survey the work from a distance", as Bishop (2005: 6) has put. It is important that architects investigate other architectural aspects in order to be able to deal with them creatively.

Another point to be considered is that in the interventions, students have to consider the spectator as a user of the work. This means: in traditional art, people are isolated from the work of art by social convention. Touching a traditional work of art is forbidden, and painters do not need to deal with people's reaction. In interventions, things happen differently. Transforming the quotidian space, without isolation by frames or pedestals, these works accept the risk of being in contact with people's daily actions. This allows students to conceive of their work as being linked to people's actions, something very important for making relevant architectures.

Nevertheless, the main point to this discussion is the confluence of physical and digital elements in an architectural intervention. The hybrid works presented here intervened in the architectural dynamic by making use of digital devices in different ways. The work in the abandoned house literally created a window of possibilities juxtaposed to the blocked window. The group 'opened' the window by projecting light onto it. This operation configures a poetic discourse about the function of windows. The theoretical distance introduced by windows is nowadays a small one, in face of other 'screens'. The students

could explore the possibilities of using the house without producing any physical construction. This 'window' is much more powerful for approaching the world.

The work in the lake dislocates time and space. Also in a poetic way, it touches matters of presence and representation, adding to the space a phantasmagoric sonority linked to another time. The expressivity of the work is totally located in the sounds. This is a powerful exercise for architects, who have the habit of expressing themselves mainly through images. Sonority as an architectural element must be explored by architects and the artistic approach can be an important step for that.

The work in the corridor alters the walls. Transforming the textures of walls is almost the same as knocking in them big holes: the interior becomes a crazy environment that moves constantly. Different textures of tissues would create different environments. This work points at how a simple projector can transform spaces and how it can be rich to explore that in architectural design. By doing so, walls will work less and less as protections to become more and more screens.

These incipient exercises point to a powerful confluence of architecture and information and communication technologies. Achieving this confluence in a rich way must be a central matter for architects and theoreticians today. Only in this way can architecture be again the poetic tool for mediating people's relationships with others and with the world. There is little doubt that the experiments presented here are still distant from application in effective architectures. However, if art is a field for investigating the new aspects of culture, it can be a powerful tool for improving the confluence of architecture with new technologies.

Acknowledgements

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