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.

Key Words—Architecture, Digital art, Information and Communication Technologies, Site specific art.

I. 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.

It can be said that a considerable part of architects have a formal approach of art, emphasizing imagetical coincidences with architecture. This emphasis is in tune with Le Corbusier's idea of architecture as "the skillful, correct and magnificent play of volumes assembled in light". However, it is a restrictive approach, because architecture is not restricted to objective aspects. Architecture has a primary ethical function of articulating people's relationship with the world, as Wilson (1988) has investigated.

Cabral Filho et al (1997) propose 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. In a recent book, Alberto Pérez-Gomez "uncover the deep connections between ethical and poetic values in the primary tradition of our discipline". 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.

Having surpassed this dicothomy, 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. Therefore, some contemporary art modalities (specially the hybrid ones) 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).

If art can be a marginal way to explore architects’ creativity, different art modalities will induce different emphasis in architectural production.
II. ARCHITECTURE + ICT

The confluence of architecture and information and communication technologies is very 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 has pointed. Architecture has historically mediated the way people interact, but this interaction has now been greatly changed by new technologies.

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.

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. Talking with people from the window 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. Doors separate and connect 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. 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 other devices are taking some of their functions, radically changing architecture’s dynamic.

III. DIGITAL ART + SITE SPECIFIC > ARCHITECTURE + ICT

However, architecture can resume 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. Such hybrid architecture 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 text is that experimenting with new media art can bring architects closer to this universe. 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.

Nevertheless, the paper intends to investigate how digital art together with the Site specific approach can constitute a field of experimentation for architects. At this moment, it is important to contrast the 'site specific' approach with drawing, painting and sculpture.

It is remarkable how the universe of visual representation 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.

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. If applied in architects’ approaches, Site Specific can advance architectural production.

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.

IV. AN EDUCATIONAL EXPERIENCE

An educational experience took place at UFMG’s Architecture School, Brazil, in 2007. The first aim of the course was to experiment with contemporary artistic devices for dealing with architectural matters. Having had a theoretical basis, students were asked to make Site specific interventions in the school’s building, using physical and digital devices. Aiming at collaborating with the discussion, three works developed by students will be analyzed here.

Group 1 - Empty house

They chose to intervene in an abandoned house in which the windows had been blocked up with bricks. Firstly, the group proposed to cover the external walls with bands of different colors, intending to emphasize the closed windows by contrasting it with the carnivalesque aspect of the whole.
However, the owner did not want to attract attention towards the house and therefore forbade any physical intervention in the building.

This obliged them to change their proposition: they decided to intervene in the house without touching it, by projecting a video that suggested a house interior on one of the blocked windows. It showed the silhouettes of people engaged in daily activities behind of a translucent curtain. At the end, as people dance, chairs fall from the roof, and the curtain starts burning. It is destroyed by the fire and the house interior disappears. In an empty terrain, a man with his head covered carries a mannequin inside a wheelbarrow.

This work explored social and political questions concerned to the house, as the possibilities of appropriation and demolition. 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 intervened in a dry lake. Abandoned for years, it stocked leaves, twigs and other detritus. Aiming at criticizing this situation, they proposed to create a 'junk path' from the lake to the School building. However, 20 days before the exhibition the University restarted the lake's restoration. The criticism of the abandon ceased making sense, and they had to change of proposition.

They had to consider site specificities in that specific time-frame: the restoration process. The new proposition consisted in recording sounds of the construction during daytime and reproducing it at night, 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.

This simple operation creates the sensation of uninterruptedness of the construction and, on the other hand, it emphasizes the lack of results. This group expressed, very poetically, their impatience with an endlessly under-construction lake, by using invisible and useless hammerers.

**Group 3 - School corridor**

They intervened in a corridor almost 30 meters long. They proposed 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.

**V. 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 an 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 window. The theoretical distance introduced by 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.

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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.

ACKNOWLEDGMENT

I thank CNPQ for providing a two-year scholarship for my Master's degree, throughout which the basis of this article was constructed. I also would like to thank NPGAU UFMG and Professors Stéphane Huchet and José Cabral Filho.

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