We all agree that digital technologies have been completely accepted in architecture. In spite of this, most people consider these as simple representative tools not related to the design process. Some people have discovered its enormous potential as a creation tool of new forms and relationships.

The work of Sonia Cillari proposes a step forward, the development of architecture as a real-time medium, more fluid, that allows interaction with its contents. We are not talking about architecture anymore. We talk about augmented reality, hybrid spaces and interactive spaces.

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—— The architecture that you design is understood as a generative discipline, according to your words. This concept is detached from the traditional way of practicing architecture. Could you explain what this generative condition is about and what does it bring to your work?

—— I would say that interactive architecture is absolutely not related to traditional architecture rules. My goals are to stimulate and research the implications of spacial experience. I do not understand the space as a receptive, extern, homo-

geneous and inert environment, but as a perception generator.

Against the rationalist idea of the objetive and represented space, my purpose is to find out how the human beings experience the space and perceive its environment. The goal is to disclose the identification process required to perceive the interaction between human being and environment.

For this reason my work explores dynamic and real-time system applications, and also focuses on evolutive and interactive strategies, non-linear behaviour, movement process and algorithm events.

An architecture that is a communicative structure, which causes different experiences and discloses emotional states. This architecture uses the participation in communicative spaces as a continuous mutation of the initial conditions, removing the concept of the architecture of invariables.

As Maturana and Varela have written: 'living systems are cogni-

tive systems, and living as a process is a cognition process'.

Enriching our perception with a different spacial sensibility is so important because after all we can not identify the outer world as it really is; an organic, fluid, and center of probabilistic waves. But only in a way that allows us to recognize it.

Where everything is scheme dynamics, as well as the universe and the human beings, these fields of probabilistic waves interfere with each other.

—— An architect, who uses evolutive models and interactive environments is working in a different way than the production ways related to the architecture of the historic hierarchy. This is due to several circumstances, such as many of the classic intermediaries between the architecture and its execution which tend to disappear. What is the path followed by an interactive environment, from its conception until an operative character is acquired?

—— In the digital space, the action of formal projection is free from physical constrictions. It does not exist a single three-dimensionality, but infinitive three-dimensionalties exist in its inside. The used parameters are transformation vectors, flow, movement, transition, interference…

These parameters are not critical, they are selected in accordance with intuitive criterions. These parameters face the opposition between form and void in a non-critical way. This way removes the memory of the hierarchy architectural organization from the project process.

My strategy to research the spacial complexities is based on the following concept: the movement goes before the space, which constitutes spatiality.

Mind does not inject forms into space likewise absolute void is not motionless and only recieved it. If it be so, each thinking being and each form would exist in its own perfection, completely independ-

Vain in transit: digital creature, 2005. EFS technology multiuser installaton. V2_, Institute for the unstable media, Rotterdam.

ent of the space. This conception is in Descartes' duality mind/body and gets operative character in the representation of reality.

Against the actual physics, the space and time are mental structures. Consequently, the architecture is a catalytic event of dynamic models.

For this reason, I am interested in creating interactive and sensible environments where the participants —or the audience in the case of performances— can play with different media and be immersed in images aroused by sensations of emotional experiences.

The developing process is deeply related to how these mental images are graphically expressed inside our inner space.

The experimentation on dynamic systems results in sets of interrelated movements, as well as transformative additions and qualified evolutions which are developed by direct and expressive interfaces. It is at this stage that the searching of sensor devices

and the interaction design are very relevant. In an interactive environment, the relationship between all the elements is what determines the environment alteration, so people can believe, perceive and/or feel that something is true, when it is not.

—— **This last comment raises the** issue of an interface as a vehicle. This interface allows the setting of a feedback between the user and the environments that you have designed and programmed, specially in three of your last works, *Vain in transit: digital creature*, *Conscious space* and *GATC/life*.

From the perspective of the machine and software field, the user is inside the environment through the understanding of several sensors of physical pulses —basically those that measures presence and movement, single or multiple—. From the user perspective, the physical contribution to the environment gives as a result all the reactive process. How do you face the

challenge of joining together both substrates in this interface? and which of those, machine or user, does your work start from?

—— **My work focuses on the rela**tion of Body to Space —on the way they relate each other— and on the relation Body to Body —on the way we relate each other—. That's why the body experience becomes critical for the design of invisible and intuitive interfaces.

During the last years I have been investigating EFS —electric field sensing— technology and developing new works strictly related: the results are architectural environments performed on devices which in real-time evaluate a range of human performer's body signals, to generate and deliver the accompanying mutations of initial conditions. Architectures created by the conscious observers, both in physical and digital environments. The purpose is to enhance and intensify human experiences as to explore the design of dynamic and

real-time systems for 'Performance Space Expression'.

In particular I'm very interested in revealing the emotional experience of presence, proximity and touch as to investigate a knowledge that is sensory and kinesthetic.

This approach doesn't deal with the dualisms object-subject and presence-absence, but it concerns with the user learning that the boundaries of self are defined less by the skin than by the feedback loops involving body and simulation in a techno-bio circuit. Our body doesn't end at our skin. There is just the illusion of boundary between our inside and the outside.

That's why the installation site becomes an immersive environment build on an interactivity that can recognize, understand and express non-rational states such as emotions or intentions.

Referring to the new experiences of embodiment, they always interact with codes of visualization to generate new kinds of worlds. And the patterns of signification,

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Is there love in the telematic embrace?, 1989

bodily experience and visualization are in constant feedback and feedforward loops with the others. They are connected.

That's why the design of the interface needs to be conceived to stimulate the user's sensory system into a direct feedback loop with the computer —in virtual reality for example the idea is to create the illusion that the user is inside the computer—.

I'm interested in technology because I want to investigate which patterns the user can discover through interaction with other humans and complex systems.

Technology extends present, as Peter Weibel said: the use of technology 'frees us from instances of reality'.

—— **You have mentioned an** emotional point of view, which is a key factor and gives the qualitative identity sign to the feedback we were talking about before. Even Roy Ascott talks in one of his books about one of the conditions under which the telematic embrace occurs.[1] In your work, the scenario of the emotion tries to move from the image-movement to the space-movement guided by the user interaction. From this perspective, do you think that your works are or can be a permeable container of the emotions of each user? Is this one of your goals?

—— **I will say that emotional ex**periences stand as primary intentions in my works. And this is not because I believe that in our daily reality we don't experience emotional states, but because I like to enhance the enjoyment of living different modes of being. That's why I try to seduce the vision of the users with my images, so they can be completely immersed in what they are experiencing as different spatial dimensions and therefore feel surprised, attracted, embodied, curious and so on, all ways of transcending the local event.

Lately my experimentation is focused on multi-users experiences, and this is more fun and grateful to do. The idea that people are sharing altered emotional states which they need to communicate each other is something very appealing to me.

—— **Finally, I would like you to** comment how important are the meaning arrangements for your work, which can be defined as its politic layer. Can it be that the interfaces become a presence so immense that who proposes —the artist or the architect— and who offers —the user— end with an irrelevant role? When you make your proposal, What kind of conscience are you starting from: citizen, artistic, architectural?

—— **This is one of the topic ques**tions for somebody that works in my field: performative and immersive spaces. The investigation on the 'virtualization of the reality' already implies a clear position in our culture and in the way we should approach the world as an interface.

The artistic fascination seems to me the only way to demolish the reality conceived as what exists objectively and in fact.

The obsession to reveal our existence as a potential attractor and container of interconnected events refuses any simple stable alignments of vision and hearing, such as any social, spatial or aesthetic linear organizations.

And here it comes the technological issue. Or better to say the use of 'computer simulation', because the computer only 'simulates' my thoughts. But I take very seriously in account the aesthetic dimension of the computer, which is until now the spatial extent more helpful to me to experiment how to increase our perception of complex visions and embodiment in human experiences. We are part of a world which we can only perceive from the inside as observers. From our lonely subjective position we should try to gain access to undiscovered imaginative shared phenomena.