



Vision de un Espacio Urbano que Integra Arquitectura dentro de una Sociedad Informada
Envisioning an Urban Space that Integrates Architecture into an information oriented Society

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Visualizando un Espacios Negativo

Asumiendo que la arquitectura nos puede proveer de un espacio diseñado para alojar un paisaje artificial usando imágenes digitales a través de tecnología sin cables. Este es un ideal basado en la percepción de un espacio virtual, donde la distancia es minimizada a través de un continuo proceso que rompe con las barreras de los planos no visibles. Estos son dominios manejados por la imaginación en el cual, el objeto se hace real por selección individual. Este espacio es concebido en el plano virtual o también llamado espacio cibernético. El arquitecto Marcos Novak lo describe como: “espacio creado como hábitat para nuestra imaginación”.

La aproximación al tema es elaborada tratando de establecer una conexión entre las fronteras del espacio virtual y el espacio real a través de un espacio arquitectónico.

Estos son los objetivos de mi investigación:

- 1) Exploración de una forma arquitectónica representada en un medio irreal para ser localizada en un espacio negativo.
- 2) Definición de tecnologías que marcan el inicio de un espacio virtual accesible para todo tipo de usuarios; proponiendo la idea de socialización a través de la arquitectura y revitalizando los espacios negativos entendidos como espacios de valor.
- 3) Identificando y representando tecnología de telecomunicaciones diseñadas para un espacio limitado. Arquitectura representada a través de un prototipo experimental (plataforma de comunicación) con espacio cibernético, imágenes digitales, información instantánea, y aplicaciones accesibles de internet, extranets, y fuentes audiovisuales.

Visualizing a Negative Space

Definition: Mobile structure designed to house a global interactive communications system.

There is an assumption that architecture can provide an evocative vision of an artificial environment using digitized and wireless communication technology. It is an ideal based on perception of virtual space, where distance is minimized through the continual process of breaking barriers in non-visible planes. It is domain of mind, in which the object becomes real by individual choice. It is conceived in a plane known as virtual space or cyber space. Marcos Novak describes it as “space created as habitat for our imagination”.

The purpose of this essay is:

- 1) To explore an architectural form in a media of non-concrete space. Space created by a negative space (empty space, residual space, loading space).
- 2) To define a new technology that marks the beginning of a real virtual environment accessible to everybody. Proposing the idea of socialization through the architecture and revitalizing negative spaces comprehended as valuable public places.
- 3) Identification and representation of sources that make possible telecommunication technology in an enclosed space. Prototype of a new communicational platform re-interpreted by cyber space, digital images, high-speed data, mobile Internet and application based on Intranets, extranets and mobile multimedia.

Abstract

There is an assumption that architecture can provide an evocative vision of an artificial environment using digitized and wireless communication technology. It is an ideal based on perception of virtual space, where distance is minimized through the continual process of breaking barriers in non-visible planes. It is the domain of the mind, in which the object becomes real by individual choice. It is conceived in a plane known as virtual space or cyber space. Marcos Novak describes it as “space created as habitat for our imagination”.

What are the new tendencies in Architecture? These are unknown yet. There is an incursion in different areas, it is seen that the scope of architecture includes Transparency, mix media, layering, transarchitecture, and hypersurfaces. It is an expression of high-speed technology in the process of change, pointing to the new frontier of “Space”. My focus is toward the integration

of building and environment, making a negative space a place where people break anti-social behaviors and develop social interactions.

Matter of change (Negative Space)

Going beyond the limit of a city's empty space, in which empty is represented by non-used areas product of gradual and random growing, is these space that bring the possibility to explore an environment of complex and interesting configuration.

A city's negative space is a real form, defining a form externally and does not appear as a detached object; it is empty. Therefore, contains space (Boeri, 69).

As a matter of change, a city becomes a complex organism that performs a large number of activities and contains a larger number of habitants, generating gradual changes and internal transformation. It is caused by an apparently incongruous juxtaposition of monads, an indivisible impenetrable space that affects individual trajectories. These trajectories are rendered as all areas sunken in an incongruous juxtaposed addition of dimensionless structures that create rhythm. (Paterson, 89)

Working with the idea of an empty space, my purpose is to explore the potential, value, and diversification of this space that is a product of layering, and transformation of activities. Furthermore, there is a need for materializing a virtual space, a hollow, a space in which humans are immersed. Common places where aspects of the physical world will be accommodated within a negative space.

Understanding urban space as a universe where open and closed or solid and void occurs, it is my intention to recreate an urban space that integrates architecture into a social space. I envision a city's negative space, as a valuable space to be used for social purpose, in this case, I explore boundaries of digital communication technology, where the user will have an opportunity to communicate in a virtual setting while interacting at the same time with others.

Making connections between digital technologies and today's approach of portable architecture

Envisioning a promise future, I believe architecture can be devolved toward close system in which architecture act as independent elements auto sustainable with a deterritorialized conception. It is more a vision space oriented where the machine, in this case building stand by itself.

Immerse into the last tendency, I discovered an emergent idea of metamorphism in architecture, term related with the state of a mineral element in which pronounced changes by pressure, heat, and water result in a more compact and more highly crystalline condition.

The architectural concept is defined as Hypersurfaces," As a verb, hypersurface considers ways in which the realm of representation (read images) and the realm of instrumentality (read form) are respectively becoming deconstructed and deterritorialized into new image-form of intensity". (Hypersurface, 75)

Other interpretations of hypersurface: It is a disruption between elements in nature related and deeply rooted by binaries associations as: image/form, inside/outside, structure/ornament, ground/edifice, etc.

Defined as "lost in the space" as contemporary conditions formulated by contemporary theorists Frederick Jameson and Mark Wigley. It is a materialized response of a media culture, in which Hypersurface is a response of experiences guided y space–time-information. Hypersurface explain by the author is not a just a binary relation to surface, it is a different interpretation describing complexity with the architectural skin and the real world (Hypesurface, 74).

All of the changes, which have occurred in this period, are related to a high-speed computer technology; therefore, it has established a path toward more complex digital technologies integrated into the built environment.

Media identification

In defining new communication technology, there are a large number of inventions created to provide a faster and more efficient audiovisual contact with a long distance partner. The most recent computer advances allow us an immediate interchange of data and visual contact with efficient and high quality data communication, using microwave technology. It is being used as a media to develop virtual reality software, also known as cyberspace.³ Some of this technological advances are being used in architecture to represent the closest view of our built environment, producing an specialized and more complex architecture.

One of great example in this environment is:

Telepresence: It creates the illusion of being in another environment without the restriction of distance, place or time.

The following three definitions that express the idea of telepresence:

- a) In a simple context: It is related with a capability to operate in a remote o computer-mediated world.
- b) Cybernetic definition: It is an index of the quality of the human-machine interface.
- c) Experimental conception: It means a mental state in which a user feels physically present within the remote world.

Based on that idea, telepresence involves connecting ourselves directly to a computer networks, using all output and input that handles neural connection in an state of mind in which primary equipment is needed Body suits and external stations provide us with an hallucinatory experience, contacting a strange space without actually being present (Lozano, 1).

Personal Information Display (PID) it is a communication device, a lightweight headset designed for private computer use in a public place. This device resembles a wraparound glasses headset, with of a visor to reflect overhead glare. The peripheral unit is under development at Virtual Vision, Inc. (Yu, 126).

Evolution of virtual reality technology is possible through the rapid evolution of affordable computing and display technology, along with a development of software and hardware systems designed to work together. Using this kind of digital technology marks the beginning of a virtual environment accessible to everybody throughout an enclosed space. A Prototype of a communication platform reinterpreted by cyberspace, digital images, high-speed data, mobile internet and application based on intranets, extranets and mobile multimedia will make possible immediate communication which can experience different environments with long distance partners.

Assumable, there is an infrastructure already built in this area of communication technology, I conceive this media-interaction taking place in a designed space, flexible and adaptable to a variety of environments and represented by movable, portable units.

Movable Architecture

Building is no longer a static platforms; it is moving toward an advanced concept based on movement, transfiguration, and fusion. It changes over time depending upon building needs and uses. It is represented by a bio-centric conception of architecture, where the natural world is mirrored into structures that have taken a natural pattern as form.

In a world of unstable elements, movable architecture represents an alternative that provides, in most of these cases, sustainability and affordability. The response to these changes is represented in architecture through innovative advances incorporated into the building construction.

Today's architectural projection is grounded in a transitory building, capable of being moved and erected anywhere. Such kind of structures are designed to offer a range of different facilities, such as offices, toilets, sales rooms and classroom (Riba Journal, 19).

Portable building design appears as a commercial alternative for investment toward specific uses: exhibition, emergency support, and recreational activities. It has been an area developed in more depth by spatial programs and enhanced by computer applications in recent design trends (robotics and cyber oriented design). Portable architecture uses materials such as carbon fiber, Kevlar and silicone with lightweight qualities that improve structural strength responding to dynamic and static forces (Franklin, 70). That concept of movable architecture has its roots in industrialized

countries with a high level of urban growths. Its vision of the future is structured to cope with problems of a rapidly changing society and deal with the idea of maintaining stabilized human lives.

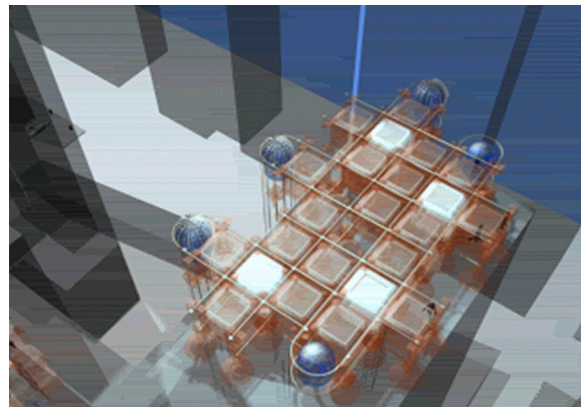
I believe there are no boundaries to human creations. What one can see today is a reflection of hundred of years ago in somebody's imagination. It is hard to picture a real model from a virtual model. Simply, there is not been invented advanced technology that equalizes creations of human imagination.

Translated into architecture, it is possible to picture human beings traveling from one environment to another, communicating and experiencing the physical stimuli mapped in our minds. It is just a matter of time. Then, a global interactive communication will materialize where the spaces that inhabit our imaginations can be located. Trans-architecture, architecture of transition, is buildable and capable of changing according to an empty space. The challenge is directed toward the city's negative space where the architecture can relocate an activity of pro-human interaction, exploring the ideas of mobility and transparency.

Computer Generated Images (3D VIZ, AutoCAD).



1. Vertical circulation North Facade



2. Top view



3. City View



4. Vertical circulation (magnetic field)

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