

New York's Cube at Spada

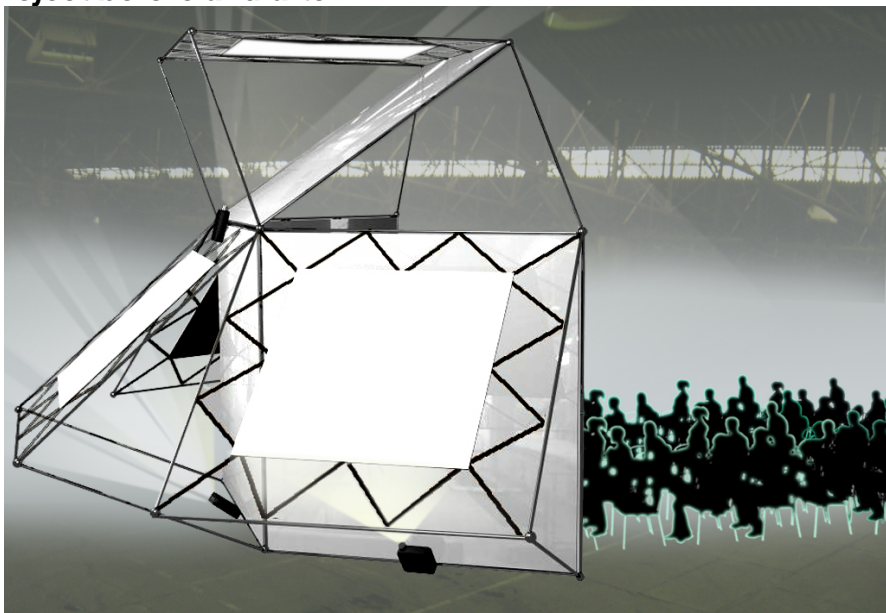
Project description -- Jean-Marc Gauthier - November 2004
Created with the help of Miro Kirov and James Tunick

1- The project / introduction

This project, created for Spada, an empty industrial building in Nice, is a spatial environment (the cube) that enables the discovery of a city, New York, and communication with its people. Visitors of the cube are immersed inside a virtual space showing the city and its inhabitants.



The project before and after



The design of the space, inspired by Star Trek's "Holodek", shows how a digital world can become part of the architectural space in which we live. The interior space of the cube is created with a digital network of motion sensors, behavioral engines, spatial sound and three dimensional graphics. New York's Cube allows people to experience new kinds of relationships between themselves, with others, and with the rest of the world. The virtual spaces presented inside the cube allows visitors

- *to be immersed inside the four dimensions of a virtual space*
- *to play with behavioral engines controlling several media: visuals, music, voice, animation. Live shows can take place on the "reactive" stage inside the cube.*
- *to communicate with other groups of people in the world through telepresence.*

New York's Cube can change on demand and become

- *a multi-dimensional collective space that can "react" to visitors*
- *a virtual reality cave for a total immersion experience. The cube can receive four visitors or a show with an audience of two hundred people*
- *a telepresence setup that allows to create artworks remotely between several artists, with meetings and collaborations between visitors and artists.*

2- The program

The following setups can target diverse crowds of people interested in visual arts, music, dance, design, sciences, new technologies.

- Total Immersion
- Responsive Stage
- Telepresence

2.1 Total Immersion presents virtual spaces that can be controlled by visitors. For example, the Virtual Museum is a virtual promenade inside New York's museums and art galleries.



This illustration shows the Virtual Museum. Visitors are immersed inside a cube covered with three-dimensional images. A gesture of the hand can trigger the interactive navigation through the artworks of the museum. The visit can be linear, pre-recorded or random. Additional screens provide interviews with artists and real-time views from webcams located inside New York's museums. Viewers are standing in the middle of a virtual space visible inside and outside the cube.

Another possibility of the total immersion experience may be Visitors of the "Infinite City cab" who can accelerate or slow down time during an eventful visit of the city. The experience would simulate the inside of a New York cab, but with the passenger in control.



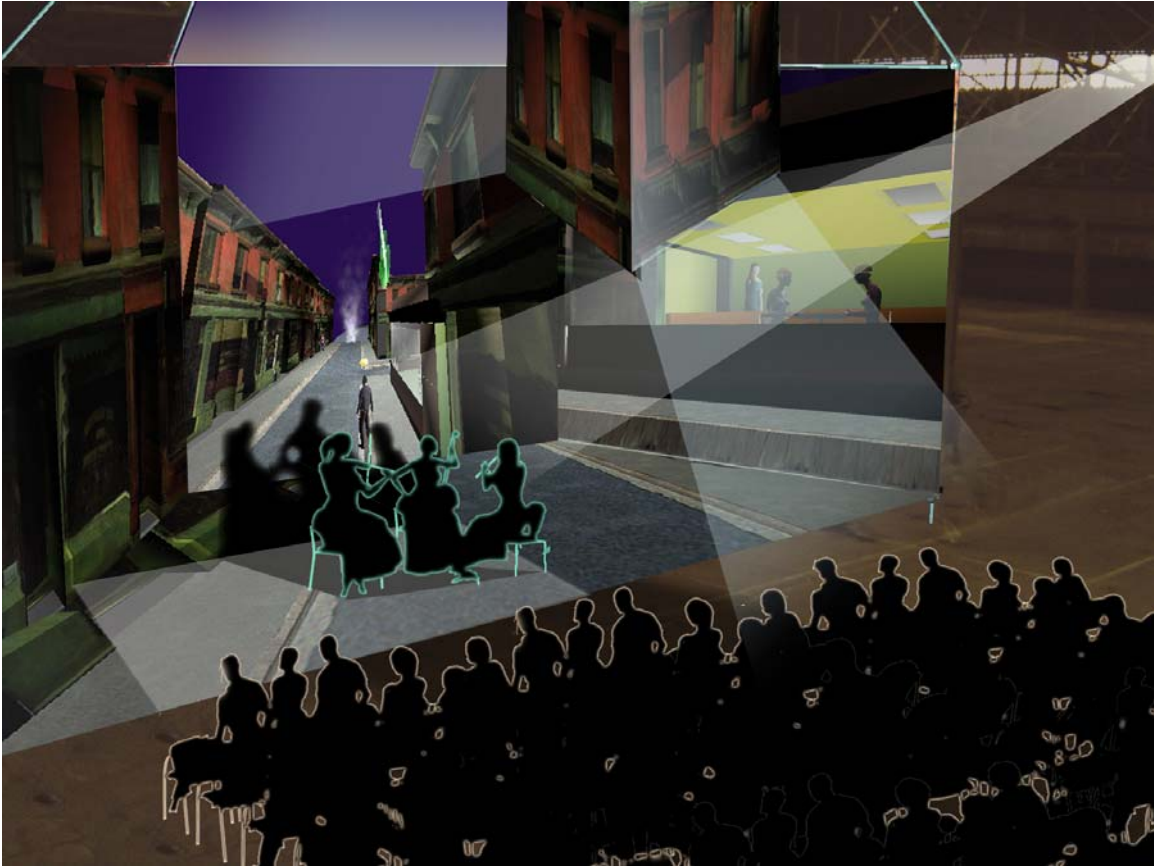
This view, shot inside the cube, shows the Infinite City with a group of visitors taking part in an interactive cab drive through New York City. The other virtual spaces available in the cube are

- Virtual Central Park visiting a forest in the heart of Manhattan from the point of view of an insect.
- Nighthawks, the interactive reconstitution of New York in the forties.
- In Virtual Pop, the cube becomes a Virtual Times Square about art and consumerism with virtual reality applications of design, fashion, cars, comics, cellular phones, digital cinema, robotics, nano technologies and airspace industry.

This illustration shows New York's Cube becoming a Virtual Times Square.

2.2 Responsive Stage

The virtual cube turns into a responsive stage that can react in real time with musicians, dancers and painters in front of an audience of 200 people.



This illustration shows a jazz performance. The band plays inside New York's Cube surrounded by Nighthawks, a virtual street at night inspired by the painting of the same name by Edward Hopper. The street scenes change according to the musicians and the audience. The "responsive" stage takes the audience inside a late night bar where a couple of nighthawks talk endlessly.

2.3 Telepresence is organized around virtual events that take place at the same time and in different places around the world.

Examples of telepresence meetings inside the cube are:

- Artists from New York and Nice meeting inside the cube for a remote collaboration session on musical or visual art pieces.
- Teams of scientists visualizing and collaborating remotely on projects.

