

What is the MMB?

The Multi Mega Book (MMB) is an "uptodate" electronic book sculpture ...a magical and stimulating journey through some of the most intense moments of human experience in media, technology, science, architecture and culture. This project is available in different versions:

1. Architectonic-multimedia installation
2. Virtual Application (Multi Mega Book in the Cave)

The Multi Mega Book in the Cave is project of Fischnaller(Fabricators) which is being developed with EVL (Electronic Visualization Lab) at Illinois University at Chicago in the CAVE: Cave Automatic VirtualEnvironment". A VR full immersive interactive installation with high resolution stereoscopic images. The content of the Multi Mega Book in the CAVE is based in Maxi-Page 17: "The shift from the printed+book to the electronic text+digital skin" . The user can explore, experiment, interact in the first person and in a creative way with two revolutionary moments of human history and experience the shift between: the printed+ communication (XV century) and electronic communication (XX century).

The MULTI MEGA BOOK (MMB) in the CAVE (VR application) expands one Maxi-page of the ongoing Multi Mega Book multi-media installation "The shift from the printed+book to the electronic text+digital skin". The user experiences, and creatively interacts with two moments of human history; the Renaissance and the Electronic Age integrated into one unique environment. The application juxtaposes two revolutions which have transformed the history of communication and in consequence human history.

The interactive visitor freely explores the different dimensions of the two key centuries through the use of the CAVE(TM) a Virtual Reality Theater. When the user enters the CAVE, the Multi Mega Book is in front of him/her. S/he can turn the pages, and move through the pages into various parts of the worlds within. One world is an idealised Renaissance city, the user can see famous buildings, walk through Leonardo's "Last Supper", and visit and use Guttenberg's printing press. A tunnel leads from here to another city - a "CD-City" which visualises the movement of digital, networked information, a city in which everything is interactive.

The navigation and the interaction of the Multi Mega Book is often surprising, designed to draw the user from the Renaissance to the Information Age, exploring two different modes of communication and showing how both eras combined mathematics, innovation, art and cutting edge technology.

In its entirety the MMB is a metaphor for means of communication through time. The different pages of the MMB-installation give access to different aspects of the history of communication. The MMB in the CAVE focuses on the specific argument of "The shift from the printed+book to the electronic text+digital skin".

NEM: THE AVATAR IN THE MMB.

Nem is composed using basic geometric forms, circle, triangle, sphere. These shapes shift to create a column or a character. In the Renaissance city he appears

first as an "info-point" column. As the visitors approach, he opens up into a "humanoide" figure and establishes an interactive relationship with them as he guides them through the environment.

In the CD-City Nem is a "network agent" - He no longer guides the visitor from place to place but acts as a node for sending and receiving information.

The changes in Nem's shape and behavior are related to the epoch. In the Renaissance, both guide and visitor, have to move their bodies to get to the original source of the information. In the CD-City where the information is mainly digitalized, Nem exists as a "high speed carrier", bringing information to the user who is not required to travel to its physical source. However, as the digital interchange flows around the CD-City, the visitor is encouraged to travel, and to interact with any of several Nem network agents.

The Multi Mega Book in the Cave hosts a part of "L'Ultima Cena Interattiva". A work developed by Franz Fischnaller in collaboration with Prof. Daniele Marini, Università degli Studi di Milano (Lab Eidomatica) and the contribution of a group of students.

L'Ultima Cena Interactive (LAST SUPPER INTERACTIVE):
http://hpux.dsi.unimi.it/imaging/LAST_SUPPER/lastsupper.html

Brief description:

This installation is a Virtual Reality interactive journey into Leonardo da Vinci's masterpiece: "L'Ultima Cena". The visitor can navigate inside and around the church of "Santa Maria delle Grazie", enter into the "Refettorio", the dining room of the priests and friars of the church, visit the Ultima Cena in its particulars. It appears in a transparent overlay, a graphical representation of Leon Battista Alberti's Theorem (Costruzione Legittima). Beyond the theorem display it appears the Leonardo da Vinci's masterpiece: the Ultima Cena. While navigating towards the perspective centerpoint of the masterpiece, the painting becomes transparent and the visitor can actually penetrate the masterpiece and get inside the "virtual room" where the Ultima Cena is taking place. It is a 3D ambience environment.

The visitor can "walk" inside the room where Christ and the apostols were having dinner...visit the "inside" of the painting, go around the room, interact, look at the Refettorio from the point of view of Christ, have the real feeling to inside the painting and see from the "other" side of this masterpiece" ...etc.

The overlay of the Theorem in the original viewpoint demonstrates the exact overposition of the perspective composition. It constructs the homogeneous coordinate representation of the painting, performs the linear transformation in the perspective space, and performs the final projection of the visualisation plane in cartesian coordinates of the three dimensional scene imagined by Leonardo. This navigation is a powerful tool to understand the relationship between the real architecture of the Refettorio and the painted architecture by Leonardo.

Approaching the Ultima Cena you can visit the painting in its particulars and discover the beauty and the details of this masterpiece, etc.

Some examples of the interactive experience of the visitor with the MMB in the Cave...

"I am surrounded on every side. Buildings, streets, squares, arches, corners, sculptures, objects, paintings of the epoch reveal that this is an "ideal" Renaissance city. Pieces by artists of the calibre of Michelangelo, Alberti, Botticelli, Leonardo, Brunneleschi become protagonists in this imaginary city rich in symmetry, colour and depth..."

"A stone grey floor emerges beneath my feet, the street seems endless. It leads from one corner to another, through passageways a porticos. The buildings are real size, with fine details and meticulous facades. Their slight sepia colour contrasts with the intense blue of the Mediterranean sky. The richly ornamented environment, together with the ambient sound, completely immerse me in the epoch."

"What shall I do! I think for a few seconds: I can fly, see, walk, navigate ...I decide to go for the aerial view. I fly around stopping on top of the Cathedral Santa Maria del Fiore, the Dome of Florence. I can see Brunneleschi's revolutionary technique; the construction of the cupola. I move the wand slightly and the cupola grows up in front of my eyes, as if I were really in that epoch watching it's construction."

"Far on the horizon I recognize Santa Maria delle Grazie. This building was built in the 15th century in Milan. Inside, in the refettorio, Leonardo Da Vinci painted the LAST SUPPER. I look around the building, enjoy the facade and the aerial view. Then I enter through the door. It is completely dark. Red wire-frame grows into the space, forming the inner architectural structure of the church, and revealing the lines of Brunneleschi's concept."

"Walking through this red structure I see a diagonal lightbeam ...following it I am "transported" into the Refettorio ...I recognize Leonardo da Vinci's masterpiece: the Last Supper ...As I navigate towards it the painting becomes transparent ...it transforms into a 3D space ...The Last_Supper becomes real! I am inside, close to the apostles. I can walk around the table and look out of the painting, back out into the refettorio from the viewpoint of Christ. But the surprise is not finished, Judas is getting up, he walks through the table and dissolves into the emptiness"...

"...I return to the city ...suddenly my attention is attracted by flying objects; printed pages with antique drawings, movable type. I follow this stream which brings me to the "Libreria Laurenziana"..."

"...I walk up the stairs designed by Michelangelo ... enter the room ...there I find Gutenberg's printing press. Splash! Pages with renaissance images, illustrations of heliocentrism, contemporary navigation, and discoveries, are being printed. I can also print...I grab the movable type, compose phrases, lay them down under the template, place a sheet of paper inside and watch them appear."

"My exploration continues ...I discover a light blue transparent gateway. Objects are flying out of it: papers, pixels, books, disks, streams of light ...I slip in and find myself travelling along a twisting tunnel surrounded by objects ...codes, numbers, keywords, symbols, machines, fragments of images, ...I fly up, and Flash! The space morphs into a different environment. I am transported from the printed+book to the electronic text+digital skin."

"Pages have become discs, digital information, electronic streams. Everything is interactive!

Everything turns in a high-speed vortex...layers of "network landscapes" appear ...there are no boundaries ...everything expands into an open cyber space ...we are inside a mega universe..." "I slip out through the visible exitdoor, into a pyramidal space. Here I can select pathways that instantaneously transport me back to the Multi Mega Book and it's interactions which can send me through time and space...

Mission - Statement of the Multi Mega Book

- * To explore the technological potential of the CAVE: (cave virtual environment); to explore and expand the boundaries of traditional artistic media and of visitor participation in an art- work.

- * To create an application which will be an example of how an immersive, interface technology, such as the CAVE, can be used to illustrate and interpret a crucial transformation in the evolution of communication and technology.

- * To create an emotional, immersive experience for the public of being in different centuries and in different worlds all in one unique container, the Multi Mega Book in the Cave.

- * To stimulate the visitor, both through audio/visual impact and through the sense of excitement and control that navigating through and interacting with a VR environment brings.

- * To make the interface with the complex technology invisible and the illusion seamless, so that the visitor is caught up in the spirit of the experience and does not feel threatened by metallic lifeless machinery.

- * Creating and integrating Avatars, which will be used for CAVE to CAVE interaction over high speed networks, so that users in different geographical locations can share this VR Renaissance city and 21st century city.

- * To develop a more intensely aesthetic interpretation of imagery and visual design in a Virtual Reality environment. To use VR and the Cave as a conclusive experience for the creation of a new language in design and in the visualization of information.

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<http://www.evl.uic.edu/EVL/NEWS/MMB/index.html>
<http://www.evl.uic.edu/EVL/NEWS> (search Multi Mega Book)
http://hpux.dsi.unimi.it/imaging/LAST_SUPPER/lastsupper.html
<http://www.evl.uic.edu/EVL/VR/systems.html>
<http://www.evl.uic.edu/EVL/VR/systems.html#CAVE>
<http://www.evl.uic.edu/EVL/VR/systems.html#ImmersaDesk>

MULTI MEGA BOOK IN THE CAVE- Virtual Reality Application

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