

VR WORKSHOP 2005 "Virtuality in Arts and Design"

VIRTUAL EXHIBITION PROJECTS

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<http://www.artsmachine.com>

Abstract (EN)

The workshop has obtained a High Patronage of the Italian Ministry of Foreign Affairs. It discusses themes linked with creation and application of the virtual reality in the Arts and Craft, to produce and communicate cultural content. The event gives an occasion to express and discuss different combinations of art languages and industrial design planning. The activity develops in two different but interactive levels: the student laboratory and the discussion forum about inherent themes. The meetings will be held at the Ecole du Louvre and Politecnico di Milano, Industrial Design Faculty between professors and students. Simultaneously through a web blog there will be a continuous debate and elaboration on the proposed projects. As results the workshop offers different exposition models with significant examples developed within the student laboratory.

Keywords: Virtual Reality, workshop, research, collaboration, digital multimedia documentation

I. Introduction

The complexity of digital media for expositions, request a particular attention to describe the relations between visitor and interactive dispositives. The analysis of those relations solves conceptual problems about the communication of cultural content. For that purpose, the designer planner should have suitable competences and high sensibility, regarding elements for discussing cultural complexity. The international workshop offers an important occasion for interdisciplinary collaboration and analysis of the phenomenons at various levels with consequential elaborations of method and tools on related themes.

II. Methodology



Fig. 1: User activity model (Prof. Perrot courtesy)

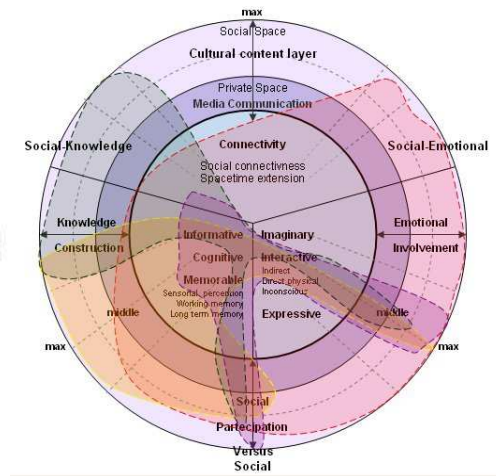
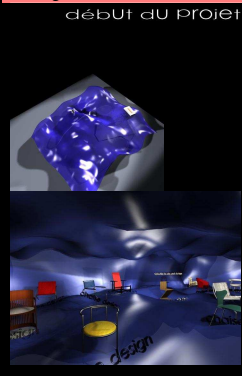


Fig. 2: Meta-model "Conceptual map"

The "Virtuality in Arts and Design Workshop", during its sessions has taken into consideration different media typologies and its inherent problems. Those thoughts has permitted a development of a theoretical meta-model for the expositions planning for cultural content. The developed model is a "Conceptual Map" defined within three fundamental study fields: the information field for the "Construction of knowledge"; the sensorial field for "Emotional involvement" and the area of "Social Participation". Every field mentioned before, has been defined with more subfields. The parameters has been placed on the conceptual map axis, each for every field through a qualitative evaluation to define a digital communication media. The two external zones are defined, respectively, as the "Private space" and the "Social space", within the use of media and its cultural content. The internal circle width, visually indicates the conditions of being part of the media within or not within the social spaces. Defining that media property, we define different reality conditions: virtual reality, extended reality or mixed reality. The level that describes the "emotional involvement" area, indicates which conditions has been improved to create an immersive reality.

III. Workshop projects

Project #1: MEMORY FORMS student: Elena Castells Poch



This project proposes an immersive virtual environment which offers the visitor a sensorial exploration and interaction with the staged artefact. The environment is characterized with its plastic "mnemonic" surfaces that moulds and maintain it shapes as a memory of the accomplished visit. The visitor becomes an active and integrated part of the exhibition dynamics, with trasforming and updating continuously the informations, making it avallable for the following visit. The exposed artefacts becomes useful elements of the acquiring knowledge. The direct interaction process with the informations, allows the visitor to create its personal visit described with the wide sensorial involvement. The particularity is to make new memorable experiences filled with intense emotions. The exposition is suitable for different utilization: installations within different equiped environments or on wide interactive screens, connected to the web.

Project #2: Art and Craft Virtual Museum students: Daniela Marizzoni, Vera Lodda



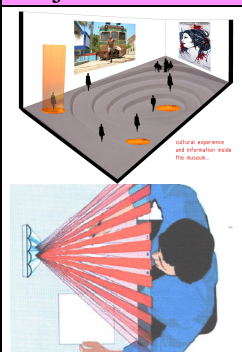
The aim of this project is to obtain a virtual museum model that would broaden the possibility of knowledge acquisition through expositions. It describes a multimedia system that guides the visitor within the cultural informations discoveries, composing a knowledge "puzzle". The system provides the user with the possibility to accomplish cultural experiencee through different personal exhibition theme combinations. The visitor's interaction composes a theme map of the information route, carried out with indications about the obtained results. The virtual museum could be used to support the real museum visit or the new opportunity to create original theme exhibition Interpretation on the global network. The final rappresentation acquires its aesthetic value through the utilization of the modern artistic languages.

Project #3: Digital Intersections student: Giannantonio Bongiorno



Each day of our life, we need elements that makes it easier: elements that could guide you on your's daily path. Most of those are cultural informations. The aim of this project is to create a layer of social and cultural information network, that would connect and share selected knowledge "pieces" to its users. The information structure becomes, in this way, new social tissue expanding the museum boundaries toward other connected places which belong to the same space-time dimension. I imagine architecture that speaks directly to you, buildings that suggest you the right path, calling you with your own name. The virtual fluid architecture found its "dimensional interzone" of knowledge diffusion that is avallable by passing the gates with your own personal device as: PDA, mobile phones and satellite navigators. This project as been inspired by the "Situationist" projects of the '60 and as specially by the Constant's project.

Project #4: Cultural Skin - student: Alessandro Vidoni



The museum becomes an "incubator" of personal and global culture informations. The project proposes interfaces, elements that characterize the internal and external space, whichh allow the visitor to approach the museum's virtual reality. The information units "info-cocoon" are made of octagonal transparent surfaces. They lead again to the babstistry form whichh symbolically though it's architecture should have led the Man to the celestial spirituality. That should conduct to leave the cultural experiencee as a regeneration and constructive form. The same way, the cultural information emitted by the technological architecture becomes itself a "new skin" of the visitor. The inside of the device allows the access to the informations through polarized surfaces "Pilkington". The connections from the outside to these spaces "info-cocoon" of the museum with wireless systems like blue tooth or wi-fi system that enables the download of the required informations.

IV. Workshop results



Fig. 3: Projects results visualisation.

The application of the methodology to the laboratory projects, define their quality and makes it visible for the different categories and various relations levels. The resultant models of the virtual media, offers useful indications about the shared informations; the definition of the user's activity; the interaction modalities with the information and with other connected users. The visual language model has confirmed the importance of the aesthetic value as a meaning element and to emphasize the emotional intensity of the medium. The workshop has experienced the encounter of museology and museography disciplines with industrial design, using theoretical instruments to develop unifying project practice. The final results could be considered helpful as a comparison base for successive didactic improvement.

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Attached documents

- "**Fig1**": User activity model, File JPG, 30Kb.
- "**Fig1b**": Exposition Scheme (prof.Perrot courtesy), File JPG, 48Kb.
- "**Fig2**": Metamodel Conceptual Map, File JPG, 58Kb.
- "**Fig2b**": Metamodel Conceptual Map without projects, File JPG, 54Kb.
- "**Fig3**": Project's results, File JPG, 86Kb.
- "**Project1a**": image n.1 project1, File JPG, 21Kb.
- "**Project1b**": image n.2 project1, File JPG, 28Kb.
- "**Project2a**": image n.1 project2, File JPG, 26Kb.
- "**Project2b**": image n.2 project2, File JPG, 36Kb.
- "**Project3a**": image n.1 project3, File JPG, 31Kb.
- "**Project3b**": image n.2 project3, File JPG, 145Kb.
- "**Project3c**": image n.3 project3, File JPG, 44Kb.
- "**Project4a**": image n.1 project4, File JPG, 22Kb.
- "**Project4b**": image n.2 project4, File JPG, 75Kb.