

ACM Multimedia Interactive Art Program: An Introduction to the Presence/Absence Exhibition

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ABSTRACT

The second ACM Multimedia Art program followed the successful formula used in ACM MM 2005, consisting of a session of long papers, a selection of posters and an art exhibition of multimedia works displayed at a gallery for a period encompassing the conference duration. “Presence/Absence” was selected as the central theme for the exhibition. In this paper, we discuss our motivations in organizing an art program at ACM MM, the exhibition theme, the works selected, and their potential impact in the technical community.

Categories and Subject Descriptions

J.5 [Computer Applications]: Arts and Humanities - fine arts

General Terms

Arts Research and Practice, New Media Art, Interactive Art

Keywords

Culture, Multimedia Arts, Technology

1. INTRODUCTION

Multimedia computing is a technical field with strong and pervasive connections to contemporary art. As argued in last year’s exhibition review paper [17], multimedia has been an artistic medium since its very beginnings. Many strands of the most technical aspects of multimedia are about delivery of creative content, and artists have always been quick to harness the expressive potential of all kinds of multimedia technology. This second art track has been organized within the ACM Multimedia conference to provide an explicit forum for the presentation of technical multimedia papers with a focus on providing tools to artists and for papers describing art pieces that exploit current multimedia computing technology. As a vivid demonstration of the latter, we have again organized an art exhibition of multimedia works in conjunction with the conference, but in a gallery open to the public. The art program as a whole attracted about eighty submissions, from artists and the professional technical community.

In this paper we describe the exhibition. In the next section we present the exhibition theme. In Section 3 we discuss each of the works selected. Section 4 discusses interdisciplinary impact, and we conclude with a discussion of the selection process and acknowledgements.

2. PRESENCE/ABSENCE

For centuries, artists and philosophers have explored the notion of presence from multiple perspectives, considering its physical, psychological, and cultural dimensions. In that exploration, technology has played an important role, not only in the development of the tools used for the “representation” of presence, but also in defining it: from the revolution in painting brought by photography, to the new concepts of presence brought by technological advances in the last sixty years (virtual reality, telepresence, immersive presence, experiential systems, etc.). Such technologies, and in particular those that combine multiple media (video, images, computer graphics, audio, haptics), seem to increase “presence,” questioning our embodied, singular sense of being in this world as the only way of positioning ourselves. That questioning is closely linked to cultural, social, and economic factors: presence can be used to reaffirm power or control structures; it can multiply our sense of being by erasing distance barriers and allow us to take on new, virtual identities, or it can be interpreted as leading to absence as in the belief in some cultures that photographs steal the soul.

Artists have worked with “technologies of presence” (e.g., image, light, reflection, emotion), in traditional art for a long time. However, while the rapid spread of technology has brought unprecedented changes in the very basic notions of presence (“being there” can be interpreted as being “on-line”), advances in transportation have lowered costs and changed the physical landscape: those with enough resources are able to travel to be “anywhere” in short periods of time, and opportunities for the less fortunate have also opened up, allowing the unprecedented movement of people creating great challenges for humanity in the 21st century.

In the scope of these new challenges and opportunities, we invited inter-disciplinary works that address the issue of presence both in artistic and technological, but even more, in political (migration, home, sense of belonging and identification) contexts. In particular we sought interactive multimedia works that by combining multiple media, technologies, and novel technical ideas, realize strong artistic concepts that give a new perspective on any aspect of presence.

3. PHYSICAL AND DIGITAL SPACE

From a total of 47 submissions, the 16 works selected span a wide range of artistic practices, techniques, and methods to address different issues related to the exhibition theme.

A number of works mix the virtual and real to give the viewer/participant in the interactive work two presences – in the physical world and in a virtual construct. “Seven mile boots” [10]

mixes physical space with the virtual world: as the wearer walks, wearing networked boots, she enters different internet chat rooms to overhear real-time conversations. Active Ingredient's "Ere be Dragons" [3] measures a player's heart rate and uses a combination of media in a GPS/augmented reality game to encourage exercise. "Body Degree Zero" [4] also uses biological sensors to create a virtual presence of two participants. Tseng's "Immersing ME" [14] also mixes the virtual and the real as images of viewers of the work are captured and divided into many pieces. Gemeinboeck and Krell's work [6] explores memory by interactively redisplaying complex combinations of video previously captured in the space.

"Tangible Weather Channel" [15] and "Small Connection" [8] use tangible media to experience remote presence, the latter creating an intimate communication channel with light and touch, while the latter uses air and water to convey presence in the weather conditions of a remote location. "KODAMA" [16] creates a world by capturing voices of the visitors to the installation and representing them as bubbles in a forest.

Arango's "Vanishing point" [1] uses news sources to render a map in which countries disappear if they are not mentioned in the news sources. Birchfield's work [2] mixes images and sounds created by two virtual artists who compete with each other given user input. "Non_sensor" [11] subverts a magnetic position-sensing device using everyday electrical or metallic objects as impromptu tools of artistic expression. Cighlar's "Tastes Like" [5] does away with technology altogether—the body itself serves as a conductor of electrons to generate audio-visual collages. "The King Has..." [9] solicits anonymous secrets via text message and memorializes them on wooden tablets displayed in public places.

Takahashi's "diorama table" [13] playfully mixes physical elements with virtual ones: tableware placed on a table cause virtual objects to appear and interact. Nelson's "Bomar Gene" [7] creates a web of narratives in which the lives of several individuals can be discovered. The work's complexity explores non-linear narrative structures using multiple media. Stenner's "Playas" [12] creates a virtual reality game environment from real and synthetic images of a town in New Mexico.

In this disparate array of works, the artists are exploiting the richness of multimedia to explore aspects of presence: enabling one to feel present at remote real locations, in virtual environments or to co-exist in a virtually augmented real location, while exploring the human and political aspects of presence and absence, across physical and temporal separation.

4. INTERDISCIPLINARY IMPACT

The works in this year's exhibition bring together a wide variety of media for both input and output- from camera-projector installations to biological sensors of human affective state and physical media of wood, water and air. It is notable that by using such varied sensors, actuators and display technologies, artists in these and other works stretch the boundaries of multimedia computing wherein the bulk of work is often focused on conventional computing interfaces and mass media such as video and audio. Projects here use sophisticated middleware and networking to stream and deliver the disparate media and exploit pattern recognition to extract crucial information from the input

streams. Hardware and software are stretched to their limits to encompass the artists' vision, and often (as GPS and magnetic sensors here) used in ways unintended by the original technologies' creators. Artists also make full use of current graphics processors and tools, such as game engines, to produce rich graphics they desire.

5. SELECTION PROCESS & ACKNOWLEDGEMENTS

All works underwent a rigorous selection process, which consisted of double blind reviews by a Technical Program Committee and individual discussions by a curatorial committee. Emphasis was placed on artistic merit and on how multimedia technology was used to express a particular concept, not on technical novelty, authors' backgrounds nor affiliations.

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