Chromesthetic Painting Interactions

Abstract. *Chromesthetic Painting Interactions [CPI] is a project of a multidisciplinary research group that aims to investigate Synthetic Synesthetic Art and Digital Medias. This project intends to study the use of digital technologies for the artistic appreciation of a certain collection of synthetic synesthetic paintings. The digital technologies are used to improve multimodal interaction and enrich user experience. This project also investigates the potential use of these paintings in the fields of music education and music therapy.*

This project is located in IPAC (Interdisciplinary Programs and Activities Center) of SUNY Oswego. CPI project is in line with the IPAC mission, which is to nurture the development of an interdisciplinary community among interdisciplinary issues. It is a result of the IPAC Fellow Program initiative. The HCI (Human Computer Interaction) Program is also a partner of this project. As an international effort, this project also involves the IPAC Fellow Tatiana Aires Tavares (from the Informatics Institute of the Federal University of Paraiba).

This project aims to use HCI concepts and techniques to investigate synesthesia in virtual environments. Digital convergence is everywhere. Mobility and connectivity are now requirements for many daily activities. This is changing the way users deal with networked content. This fact is transforming user's needs, actions and reactions into a digital convergence scenario. The chromesthetic painting interactions bring together multisensory interactions, multimedia resources and synhesthesia to enrich the user experiences.

Our experimental space is the Synsynart art work. So, we can add multisensory interaction features as Natural (NUI) and Touchable User Interface (TUI) for accessing multimedia resources (such as image, audio, video) into a convergent media environment (Fig.3). The first step is to incorporate Natural Interaction in the Web/Multimedia user interface. The touch sense is supported by the mobile resources (as cell phones and tablets). We will use TUI to improve the interaction with the real paintings (using augmented reality) and also to offer a new digital user interface. Finally, we intend to develop a mixed environment, made by physical and virtual elements, where visitors can become artists and play with the interactive paintings.

It is time to designers and developers think about: "feeling as users" instead "acting as users". Virtual environments are becoming a pervasive part of our physical reality. This project mixes human senses, art, digital media and design interaction to investigate, improve and promote innovative aesthetic experiences for the user.

Chromesthetic Paintings Homepage: http://www.cs.oswego.edu/~blue/art/synsynart.html