

The Blob and The MIMOID project

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1. ABSTRACT

The Blob was developed as an initial part of the MIMOID project [1] which is an interactive mini opera based on ideas from Stanislaw Lem's novel Solaris [2]. Musicians, artists and technicians jointly developed the Blob as a piece of the scene for the opera, the Solaris planet covered by an organic and chaotic ocean. A short live-performance where the audience take part will show the Blob and its part in the Mimoid opera together with singer and musician. Between each performance the audience can interact with, and explore, the Blob.

1.1 Keywords

Mixed Reality, Opera, Distributed Multi-user Virtual Reality, Interaction

2. INTRODUCTION

The Mimoid project is a combination of a research-project and a small-scale opera-production to be performed in a distributed multi-user mixed reality environment. The Blob was the first step of developing the scene, the Solaris planet.

The research part in the project includes the development of both tracking- and behavior-controlled avatars, a new kind of visualization of the World Wide Web, and interactive control paradigms for a spatialized soundscape.

The artistic part contains both the graphic designs of the virtual stage and actors, and the music. The design is based on the contrast between a sterile, brushed metal-like interior and the organic, colorful outside. These two themes are also reflected in the cast's costumes. The music (and sound) is a mix of modern chamber-opera and EAM (Electro-Acoustic Music). The actors are one "live" singer (baritone) and one virtual avatar (pre-recorded mezzo-soprano). In a second version, both of the singers will perform live, but on different locations.

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The project was initiated in January 1998 and will continue within the prolongation of the EC i³-project eSCAPE.

3. The Demonstration

On a small stage, a short piece from the opera is performed with song, music and interactive scenery. The background of the scene is more or less entirely made up by the Blob which, depending on actor or audience influence, changes textures and shape.

The design of the Blob is the first step of creating the scene for the opera, the Solaris planet, which is described in the book as a planet covered by an organic and chaotic ocean. The Blob was jointly developed by technicians, artists, and musicians. We tried to get the technology to meet the demands of art. The piece is implemented in a shared multi-user virtual reality system, i.e. DIVE [3].

The Blob uses different kinds of interaction devices to allow a person to manipulate it to generate sound and graphics. As the user touches the Blob, it moves and changes shape and texture, and emits sound depending on how it is touched. Intense interaction with the Blob gives a violent behavior while calm interaction results in little movement and soft sounds. The inspiration for the Blob and its textures is a beautiful organic underwater fantasy world, with fragments of "cloned memories" with jellyfish-like behavior, which are interactive and change shape and colors depending on different influences and reactions.

Between each short play the audience can interact with and explore the Blob, changing its sounds and shape, by using a touchscreen or possibly a dataglove.

As this is an ongoing project we may have more functionality implemented at the demonstration.

4. REFERENCES

- [1] <http://www.sics.se/~kalle/Projects/eScape/Mimoid>
- [2] Lem, S. 'Solaris', Harcourt Brace Jovanovich, 1987
- [3] Carlsson and Hagsand, "DIVE – A Multi User Virtual Reality System", IEEE VRAIS, Sept. 1993