VOORUIT Multimedia Event IPEM40!

1. General information

Site: Vooruit, Cultural Center, Ghent, Belgium
Date: October 18th, 2003
Context: Concert and multimedia event (interactive dance installation)
Involved partners: IPEM
Involved artists:
- Dancers: Domenico Giustino, Ophra Wolf
- Guitar: Laura Maes
- Composition for guitar and electroacoustic sound in Max/MSP: René Mogensen
- Coordination and MEGA Project software environment programming: Guy Van Belle

2. Aim

- Verify the appreciation of this technology both from multimedia experts (the multi-media artists) and from the public.
- Test MEGASE in a real performance involving all the research aspects addressed by the MEGA project, more particularly (i) real-time audio analysis of human full-body movement of one and more dancers, (ii) real-time analysis of music performances, (iii) real-time synthesis of expressive visual content and (iv) real-time synthesis of expressive audio content.
- Test multi-modal integration of analysis techniques and strategies for mapping the analysis outcomes onto real-time generation of audio and visual feedback.
- Present the MEGA outputs to the general public, to artists, and to multimedia experts.

3. Concept

First scene: Raw materials are moved around, rearranged in the artistic space; the movement is charged with tense sound. But through movement, tension is released, and beauty becomes recognizable, in an idiomatic sense.

Second scene: The idiomatic beauty of the Quasi-Tarantas gradually accumulates a heaviness from sound artifacts that grow from it, and eventually the idiomatic line is dissolved. Materials are moved around again, but this time as a result of exchanges between individuals. The materials are also the fuel of the exchanges. A circular world has grown out of the raw objects; the objects dissolve and produce a sound idiom that is different from the original beauty idiom, and it eventually secedes to silence.

Third scene: Silence is a fear-invoking propellant, and beauty transformed, an Interlude, eventually crashes with the original sound of the space and its

materials. The contained movement is surrounded by spiraling freeflow. Sound, materials and movement are one. The storm spirals violently, its center is slow however.

Fourth scene: A new idiom appears from the storm - a Fantasy Dance. The materials and their sonic effects crumble. We are left with a naked silence.
The objects are no longer important, and movement exchanges appear without them.

4. Relation with MEGA

- Outputs from MEGA are tested: WP3 (real-time analysis of dance performances), WP4 (real-time analysis of music performances), WP5 (real-time generation of expressive visual content), WP6 (real-time generation of expressive audio content) in an interactive context (mapping of features of the dance and music performance onto generation of visual and audio feedback).
- Evaluating the MEGA System Environment in a whole concert including several pieces needing for different kinds of analysis and different mapping strategies (WP7 and WP8)

5. Technical description

The work utilizes video tracking of an object in the introductory First scene, and of dancer movement in the Third scene. The information from this is used to control triggering, as well as   pitch and spatialization parameters (quad surround) of the electro-acoustic sound. R. Mogensen has composed three movements of guitar music entitled "Quasi-Tarantas," "Construction Interlude," and "Fantasy Dance," that begin the Second, Third and Fourth scenes respectively. IPEMs ear objects will provide information regarding the details of the guitarist's interpretation of this music. This information determines, through several cumulative mechanisms, various types of real-time processing of the guitar sound, and has some influence on parameters of the electro-acoustic music and sound that follow. The information is also used to vary some parameters of electro-acoustic processing and spatialization of the sounds of the objects manipulated by the dancers on stage during the Second and Fourth scenes.