Concert “Electronic Frankenstein”

1. General information

Site: Teatro Carlo Felice, Auditorium Montale, Genova, Italy
Date: November 21st – 23rd, 2003
Context: Concert
Involved partners: DIST
Involved artists: Andrea Liberovici (composer and director), Paolo Giacchero (scenery), Ottavia Fusco (actress), DIST - InfoMus Lab (EyesWeb interactive video processing).

2. Aim

The event aimed at using and testing MEGASE in a real performance involving real-time motion analysis and generation of interactive video.

3. Concept

The concert depicts the contemporary composer as a kind of Frankenstein, creating a new sound creature starting from infinite combinations of existing sounds. The composition is like a live body, arising from several music genres and sub-genres meeting and fighting between them in a precise correspondence with body parts: head, feet, hands, and so on. In this mapping, every sound is conceived as a character emerging from the integration of music, words, light, and gesture.
The concert is divided into two parts. For the first one, “Frankenstein Cabaret”, several writers and poets were asked to write a sentence getting inspiration from one anatomical or psychical body part. The text of the second part, “Electronic Lied”, is extracted from messages gathered from chat lines on the theme of love. The philosophical issue of identity is addressed by considering the exchanges of messages, the unexpected meetings, the change of identity and genre, and the anonymity that modern communication means on the Internet (e.g., chats) allow.

4. Relation with MEGA

Some research outputs from MEGA were employed: in particular, outputs from WP3 (real-time analysis of human full-body movement) and from WP5 (real-time generation of visual content) were used in an interactive context (mapping of features of the actress’ full-body motion onto real-time generation of visual feedback).

5. Technical description

The EyesWeb open platform was employed for motion analysis and for generation of visual content in real-time. In particular, some strategies for direct mapping of detected motion cues and features of the output images were experimented. For example, features like color, amount of deformation, amount and color of body tracks, etc. were associated to extracted expressive cues such as Quantity of Motion, Motion Direction, Amount of Upward Movement, Contraction Index.
A PC (P3, 800 MHz) equipped with frame grabber card and a standard color videcamera were used for the performance. The EyesWeb open platform and the EyesWeb Expressive Gesture Processing Library were employed for motion analysis and for developing mapping strategies.

6. Performance evaluation

More than 300 spectators attended the concert along the three evenings during which it was performed. The performance was highly appreciated by the audience.