Performance Title: “Allegoria dell’opinione verbale”

1. General information

Site: Teatro dell’Opera Carlo Felice, Auditorium Montale, Genoa.
Date: March 13, 2002
Context: Concert
Involved partners: DIST, DEI, UPP
Involved artists: Roberto Doati (Composer), Francesca Faiella (Actress), Alvise Vidolin (live electronics), InfoMus Lab (EyesWeb lips/face movement analysis and interactive video processing)

2. Aim

This piece was conceived by the composer during a workshop at InfoMus Lab at DIST in June 2000 and performed (first performance) in September 2001 at the opening concert of the season of Teatro La Fenice, Venice.
The concert only included this piece, about 12minutes long, and was structured as follows:
- performance of the piece
- soon after the performance, distribution to the public of the questionnaires (no explanation at public entrance, only at this point). No introductory words apart from the kind request to fill the questionnaire.
- discussion, presentation, explanation by the composer, the actress and A.Camurri of both aesthetic/artistic and technological issues, including a short live demonstration of how the system works by showing it on the the big screen (see enclosed jpeg file).
- second performance of the piece
- public answers to second questionnaire
- end of the event

The aim of the concert was to measure and evaluate the reaction of public to a concert with interactive technology from MEGA.

3. Concept

Actress is on stage, seated on a stool placed in the front of the stage near the left side, turned towards the left backstage (so the public sees her profile). A big screen projects her face in frontal view (A videocamera is placed hidden in the left part of backstage, and is used both to project her face on the big screen and to acquire her lips and face movements). The audience can therefore observe the movements of the actress' face, while listening the piece and thus perceiving the overlapping and interaction of her movement with sound changes coming from the loudspeakers. She therefore plays the text in front of the camera, while EyesWeb processes the movements of her lips and face, in order to obtain parameters used to record and process in real-time her voice and diffuse spatialised electroacoustic music on four loudspeakers placed at the four corners of the auditorium in a standard electroacoustic music setup. The signals reproduced by the loudspeakers are only derived by actress’ voice: former recordings of her voice, real-time recordings and post-process in real-time, etc.
There were two performances of this piece. During the former, the listeners didn't know how the system worked: they could only see the actress on the stage, her face shown on the screen, and listen to the music. Only at the end of the first performance the piece was explained and discussed (about 25 min).
After each performance the listeners were asked to fill out a questionnaire about their impressions and comments.
The audience included 60 people, with a wide variety concerning age, sex and culture. A preliminary analysis of the data shows a concentration of the answers in the middle of the scale

used for the measures. The interest changed little between the two performances, in general increasing when the interest was high.

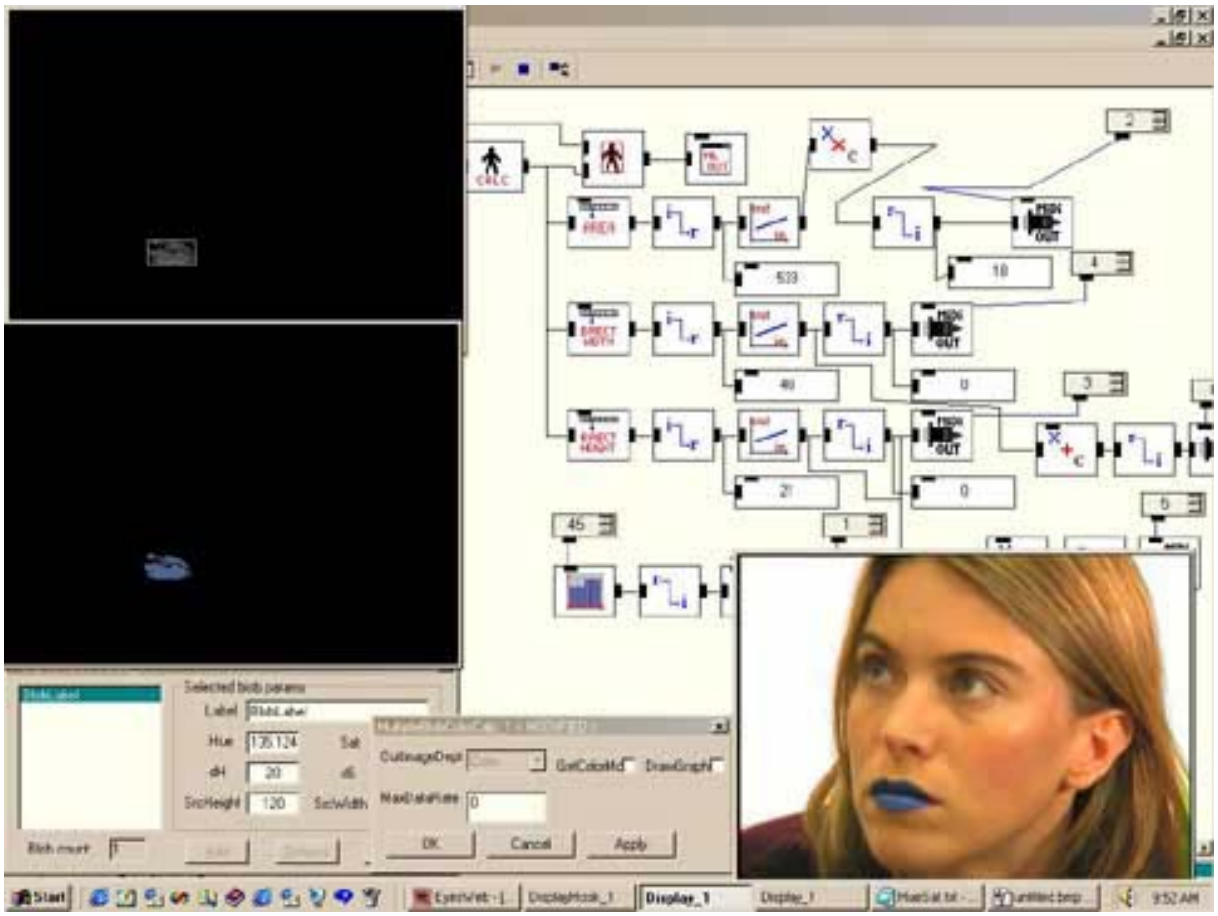
4. Relation with MEGA

Objectives:
- test some research outputs from MEGA from WP3 (real-time movement analysis of actress' face and lips) and WP6 (real-time post-processing and spatialization of actress' voice) in an interactive context (mapping of actress' lips/face movement cues on audio post-processing and spatialization)
- test on spectator's reactions in an ecological scenario (real concert)
- verify if spectators change their impression in the second listening, after receiving more information on the performance.

5. Technical description

5.1. Hardware and software set-up

Color videocamera, EyesWeb setup for movement analysis.
Setup for audio spatialization and post-processing (Max/MSP and Csound).



The EyesWeb application general description of the Eyw (or PD) patches used in the performance.

6. Performance evaluation

After the very first performance the audience immediate impressions were positive (Mean 6.0, on a scale *very negative* 0 to *very positive* 10). The second bar from left shows perceived strength (mean 5.9) indicating a common strong experience of the performance among peoples in the audience.

After the second performance (and discussion with the staff) the impressions were significantly more positive (mean 5.8) relative to the audience's first impressions, (*more negative* 0 to *more positive* 10) . However, the strength of experiences were also affected (mean 5.4) but not significantly above scale-level five, which for the two rightmost bars defines *no change* according to the former performance.

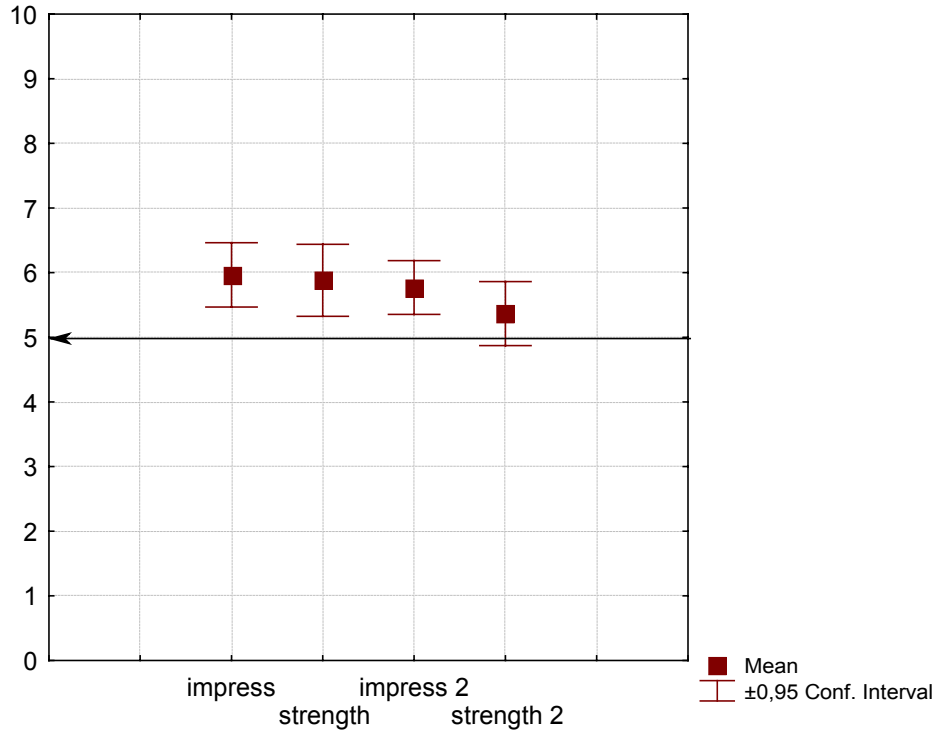


Figure 1. Mean and 95% confidence interval for the audience's perceived first impression of the performance (first bar, from left), strength of experience (second bar), and to what extent the impression (third bar) and strength (fourth bar) has been changed at the second performance after discussion with the staff.