



Music Paedeia:
From Ancient Greek Philosophers
Toward Global Music Communities

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EGGS - Elementary Gestalts for Gesture Sonification
Tools for new music experience
(When the listening dimension is the Rule for discovery)
C. Fedrigo, M. Goina, P. Polotti, S. Radin
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**<http://www.conservatorio.trieste.it>, <http://visualsonic.eu>,
<http://www.cristinafedrigo.it>**

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Musical Environments and Music Teaching-Learning

**EGGS (Elementary Gestalts for Gesture Sonification): tools for new music
experience (When the listening dimension is the Rule for discovery)**

Abstract

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**EGGS (Elementary Gestalts for Gesture Sonification): tools for new music
experience (When the listening dimension is the Rule for discovery ...)**

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EGGS, The Research Programme: Gestural expressiveness, Sound, Representation

The research programme, developed by Conservatory of Music “Tartini” of Trieste for the academic years 2010 – 2012, (funded through an open regional competition for institutions in the High Educational System, as Universities and Conservatories of Music) aimed at testing and developing resources for multimedia in artistic and pedagogic areas.

Researchers according to area of competence:

School of Music and New Technologies: Prof. Pietro Polotti

Researcher: Maurizio Goina

School of Music Education: Prof.ssa Cristina Fedrigo

Researcher: Sara Radin

Project coordinator: Prof. Paolo Rodda

Background information. EGGS (Elementary Gestalts for Gesture Sonification) is a system developed by Maurizio Goina and Pietro Polotti, (Music and New Technologies Department, Conservatory of Trieste, Italy) and tested by the presenter of this demonstration and Sara Radin, in a longstanding research project, for the first uses of this system in educational contexts. It is based on perception processes and psychological studies regarding learning by listening, cognitive and meta-cognitive functions, and studies of psychomotor coordination in music performance.

The purpose.

The workshop experience, addressed to music teachers and educators, aimed to highlight the possibilities of EGGS in the concrete music teaching and educational practices and in real educational setting. Users can improve their listeners'

awareness of and competence in performance control. They can also experience different points of view on their relationship with sound by improvising, moving in space and time to produce and “play” basic musical structures, and managing their relationship with others and themselves. They can play and sing at the same time, or play with other people. They can create and discover new sound dimensions.

Method.

This version of EGGS is functional to manage time working both in groups and individually / in pairs, choosing ranges, sounds, scales and sound characteristics related to gesture characteristics. It lets users define, play, improvise, and create criteria and activities (music / sound games), and manage the aspects of setting.

Content.

The EGGS system transforms gesture and body movement into sound and also into graphic signs, receiving light input, caught by camera, from light sources applied to the body of the performer. It helps the organisation of inner representation through listening, moving, playing music. One or more people can use it at the same time, playing in different ways and improving the relationship with others and themselves through the listening experience.

EGGS is useful for pitch representation and for other characteristics of sound as well as first music simple structures. Users can easily change sound characteristics and organisation through the relationship between gesture and sound production by following the different possible setting situations. The system gives the immediate feedback needed to consciously manage listening and the playing performance.

Application for music education. EGGS is a flexible system available for different contexts (educational and professional) at different levels of musical expertise. It can also be used for personal development and difficult situations; these tools show new perspectives in music education using new technologies.