

BODYSNATCHERS/ULTRACORPI

a project by *cantierezero*

translocal collective for music and contemporary arts (I/A)

www.cantierezero.org

New works for piano, violin, self-sensing actuators and electronics by

Agostino Di Scipio

Giorgio Klauer

Stefano Trevisi

Gerhard E. Winkler

Stefania Amisano, Claudio Cristani | *piano duo*

Ivan Rabaglia | *violin*

Hardware/software development: Giorgio Klauer, Claudio Weidmann

Sound projection, video: Giorgio Klauer, Stefano Trevisi, Agostino Di Scipio, Gerhard E. Winkler

Duration of the concert: 60/65 minutes

CONCEPT

Inspired by the renown sci-fi cult movie "Invasion of the body snatchers" directed by Don Siegel in 1959 where aliens are misteriously taking the place of humans hijacking their individual physiognomies, *bodysnatchers/ultracorpi* keeps up the research on identity giving new matters for reflection, like the relationship with the Other, the biological embodiment and technological protheses, the concept of contamination and métissage, the changing and transformation which natural environments are subjected to, regarded as conflictual and potentially destructive but also as a vital metamorphosis capable of generating new spaces of existence.

The interpretation of the concept of the Other opens up multiple perspectives, anyway the idea of motion seen as the process enacted by non-original species which adapt themselves to new environments and produce new ecosystems, played the key role in the project development.

The coexistence of the technical/scientific perspective along the artistic one is in *bodysnatchers/ultracorpi* of particular significance. The project makes use of self-sensing actuators, that means interactive devices which can be mechanically coupled to the strings, the tuning pins, the cast-iron plate, soundboard and other hardwood parts of the piano, as well as to the violin. Like fingers of a robotic arm, these transducers dramatically increase the feasibility of sound morphologies, but they also allow to explore the bodies which they are coupled with, by measuring their behaviour once the players apply some energy to them.

During the performance the musicians - in this case, both the players and the composers - confront themselves with the alien presence of the electromechanical devices enacting them directly and/or driving them remotely in order to occupy, affect, alter, confuse and enrich the sonic identity of the instruments - that is, their body.

The concept of prothesis and the conflict between different species does not concern a simple acoustic/electroacoustic polarity but the musical instrumentation itself, which is mutant, as the instruments are continuously subjected to a tight confrontation with each other in the research of new forms of integration and of endless dialogue. Snatchers, gormandizers and identity kid-nappers, but also *ultracorpi*, bodies capable of extending beyond and debording from outward identity.

The visual element is brought about in real time, documenting and at the same time transforming the visible, generating new/other perspectives and parallel, complementary or alternative views.

INNOVATIVE ASPECTS

Bodysnatchers/ultracorpi is a project that furthers an acousmatic listening behaviour inside a mixed framework, by putting the sounds bound to the physical causality on a par with those projectable over loudspeakers only. To achieve this goal, a unique dynamic instrumental preparation has been developed.

Loudspeaker motors have been modified in a way that permits their mechanical coupling with the components of acoustic instruments. The resulting devices are actually “self-sensing actuators”. Their primary function is that they can be driven as shakers, both directly by hand and remotely from the mixing console. So both the players and the composers are able to enact them during the concert performance. As the cornerstone of a circuit, these transducers also accomplish the function of sensors, measuring the variation of the mechanical impedance of the body they are coupled with, feeding back to the sound projection console a signal which can be amplified to become audible or analyzed to get structural informations about the whole system. So their enaction by the computer (composer’s side) and by hand (performer’s side) is resulting an additional information feedback which comes along and complements the acoustic sound captured and amplified by more common miking techniques.

The signal supplied by the self-sensing actuators can be used to drive a physical modeling live synthesis of sounds, making them resemble in a very closed way those resulting from the mechanical actuation taking place in reality (or just the opposite). The electromechanical preparation can anyway drive the acoustic instrumental sound morphologies itself, making them more appropriate to computer virtualizations.

The capability of being driven both from the sound projection console and by the players on the stage blurs the segregation of competencies between the artists, especially performers and composers, virtualizing and potentially inverting their roles, without the latter really taking effect and without a switch to an improvisational approach coming true. Albeit composers and performers retain their roles and the written score remains a fundamental need, new chances arise for the development of compositional methods, performing strategies and meanings. As an example, the information fed back from the self-sensing actuators as an audible and analizable signal, gives the composer the chance of a haptic surrogacy of the force that is returned to the player by the instrument once he applies some energy to it. In a sense, the typical framework of performing is brought into effect on the composer’s desktop becoming potentially a compositional framework too.