## **Real-Time Composition of Sound Environments**

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## **Abstract**

In this paper I will present some aesthetic and technical aspects of my work related to real-time composition of sound environments through the works « Geografia Sonora » and « Vocalscapes on Walt Whitman ».

« Geografia Sonora » (2013) is a sound and video installation on the theme of the sea; an imaginary sound « constellation » of singing/speaking voices, sound signals, as well as natural and mechanical sounds from countries bordering the Mediterranean. The soundscape and the video are generated, re-composed and transformed in real time ad infinitum. The sound material of the installation is a collection of personal field recordings, sample donations by my « informants » in their respective countries, and samples found in archives. The sound space is organized as an archipelago of « sound islands » organized in families. The navigation between the « islands » (juxtaposition, superimposition and spatialization of sounds) is organized automatically by a « navigation map », a computer program within the environment Max/Msp and Jitter.

« Vocalscapes on Walt Whitman » (2014) are electroacoustic interludes extracted from « The Body Electric » cycle - a composition for a speaking-singing female voice, ensemble & electronics based on Walt Whitman's « Leaves of Grass ». « Vocalscapes » can be seen as an electroacoustic composition as well as a sound installation. The piece explores both the idea of poetry as soundspace and as « geography » of languages, voices, performances and humans. The sound material derives from the recordings of fifteen talkers, each one having recorded a Whitman's poem in her/his mother tongue in her/his place. The recorded material has been composed and spatialized automatically by Max/Msp and the Spatialisateur both driven by Antescofo software and programming language.

Through these two works I will show: 1) by which means a vast and renewable sound material in participative projects can be organized and processed automatically in a computer environment in order to beget a sound installation in real-time as a coherent open score; 2) how such a sound environment may be seen simultanesously as a sound composition, as the trace of a shared experience via participation (and exchanging), as the record of poetry and vocal performance, as the soundmark of a community and as a micro-geography of music and sound.