

Juan Sebastián Lach Lau

PhD graduation Concert 1 Electronics

Ahí estése...

2011

Multichannel installation. Instrumental intervention: Ezequiel Menalled.

Aisthesis means sensation and perception in ancient Greek. For Aristoxenos the harmonist, in musical hearing *aisthesis* involves the ear as much as the intellect in order to discern in context the musical sense of notes and intervals. In this piece the computer generates harmonic textures based on the sounds happening in the space of the installation from the basis of an analysis that metaphorically imitates the 'sensual ether' where perception occurs and from which it extracts and puts into motion certain harmonic qualities inherent in sounds, in the same way as intellection (*noesis*) infers abstract forms (*eide*) from sensory data (*aisthesis*). *Ahí estése* means 'stay put' in Mexican Spanish.

Clinamen

2011

Quadraphonic electroacoustic piece. Composed collaboratively with Alberto Novello.

Clinamen is the term used by the Roman philosopher Lucretius to denote the infinitesimal deviations to which atoms are subject and which determine the macroscopic changes in matter. Turbulence is the main source of inspiration for Lucretius' physics, anticipating current theories of self organization such as chaos and fractals. The logic of *clinamen* is one of complex deviations and abrupt changes accumulating in infinitely small zones of indetermination, an internal torsion inherent to substance.

All of these ideas are present in the piece, put into play in relation to several musical characteristics at different levels of scale. 'Changes of state' are produced in sonic matter depending on the speed at which the rhythmic processes are presented. These are based on an algorithm developed by the authors in collaboration. A transition is made between various kinds of electronic processes going from recorded samples up to noise and impulses, passing through sine waves and their various kinds of modulations. The piece is the result of the residency of the authors at the Centro Mexicano para la Música y las Artes Sonoras in Morelia, Mexico, during March and April of 2011.

Circular Limit

2008

For bass recorder and live electronics. Robert de Bree, recorder.

This piece stems from my research into algorithmic harmonic fields. Its building material is a microtonal pitch set derived from a psychoacoustic analysis of a low G tone of the bass recorder, providing the content to navigate the field according to the harmonicity of its intervals. Other sound aspects, such as verticality/horizontality, articulation and dynamics, are coupled to the field.

This algorithmic control allows for slow, almost imperceptible transitions between distinct harmonic configurations, as in the second half of the piece, transitioning slowly from a tonal state, through atonal and finally towards what I call an 'antitonal' zone. The first half of the piece journeys through each of the possible modes constituted by the pitch set, interspersed with 'timbral' interludes. The computer part accompanies the recorder by generating the same kind of harmonic excursions, providing a wider ambitus of notes, timbres and vertical/horizontal combinations.

naar Gent

2012

Stereo electroacoustic piece.

This piece is programmatic enough not to need a program note. It uses what I call 'dissonance chorales' and 'granular harmony' over a field recording.