# Music 154: Composition and Performance of Instrumental Music with Electronics Stanford University Spring 2009 Syllabus

**Instructor:** Bruno Ruviaro (ruviaro@stanford.edu)

Teaching Assistant: Marisol Jimenez (marisolj@stanford.edu)

Meeting Time: Mondays 1:15 pm - 3:05 pm.

Meeting Location: Knoll 217 (CCRMA Classroom)

Office Hours: Tuesday 11am-12pm

## Class description:

What is electroacoustic music? Acousmatic, computer music, algorithmic composition, tape music, glitch, electronic, musique concrète, noise, laptop performance, organized sound... what are all these names? This course will provide a brief historical survey of electroacoustic music and discuss some of the most salient questions associated with it, from both a compositional and musicological point of view. Topics to be covered include: possible definitions of musical sound and musical instrument; Schaefferian theory and musique concrète; serialism and elektronische Musik; tape music and computer music in the USA; analysis of electroacoustic music; sampling and intellectual property; algorithmic and computer-aided composition; live-electronics and improvisation. The course does not require previous experience in the field. Classes will be based on discussion of selected listening and reading materials, as well as hands-on electroacoustic fun with sounds.

Class website: http://ccrma.stanford.edu/courses/154/

#### **Student evaluation:**

50% class participation;

25% individual project (June 1st);

25% final exam (June 8th);

#### April 6, 2009 – A century ago

What is a "musical" sound? What happened with musical sounds in the 20<sup>th</sup> century? Composing inside and outside the sound. New sounds and new grammars. Early electronic instruments: Telharmonium, Theremin, Ondes Martenot.

Luigi Russolo, Edgar Varèse, John Cage, Pierre Schaeffer.

## April 13, 2009 – Concrete Music

Musique concrète. Recording and editing found objects. A glimpse at Schaefferian Theory: reduced listening, acousmatic, objets sonores, concept of musical instrument, abstract vs. concret, the four types of listening. Solfège de l'objet sonore. The Acousmonium; spatial diffusion as performance.

Pierre Schaeffer, Pierre Henry, François Bayle, Bernard Parmegiani.

## April 20, 2009 – Elektronische Musik

Serialism and *elektronische Musik*. Spatialization as a compositional parameter. Analog and digital. Synthesis techniques: quick demo. Computer music origins: Bell Labs, University of Illinois. Early commercial synthesizers. Institution- and home-based studios.

Karlheinz Stockhausen, Iannis Xenakis, Gyorgy Ligeti, Max Mathews, John Chowning, Jean-Claude Risset.

## April 27, 2009 – Sampling, borrowing, property

Musical borrowing in electroacoustic music. Intellectual "improperty": sampling and issues of ownership and authorship. Accessibility and diffusion of recorded music. Plunderphonics. Creative musical recycling. Sampling and concatenative synthesis. Collective composition. Music over the network.

John Oswald, Stockhausen, Negativland.

## May 4, 2009 – Voice, language, speech

Human voice in the electroacoustic world: text-sound pieces. Issues of text recognizability. Speech and music. Sound poetry. Radio art. Language and verbal meaning. Music and politics; engaged pieces.

Herbert Eimert, Luciano Berio, Charles Dodge, Paul Lansky.

# May 11, 2009 – Shelving all this noise

Genres and sub-genres and sub-sub-genres: artificiality and naturalness of over-compartmentalization of styles. Case study: glitch and noise. Technical mastery and the "aesthetic of failure". High-tech and low-tech.

Ryoji Ikeda, Oval, Christian Marclay, Alva Noto.

# May 18, 2009 – Analysis, notation, scores

How to analyze electroacoustic music? Comparison between analyses of score-based and scoreless musical pieces. Is there "notation" in electroacoustic music? Notation versus *écriture*. Descriptive and prescriptive scores. Listening scores. Score following. Dynamic scores and other types of alternative computer-based notation.

Jonathan Harvey, Morton Subotnick.

#### May 25, 2009

NO CLASS (Memorial Day)

#### June 1, 2009

Presentation of individual projects.

#### June 8, 2009

Final Exam.

# Reference readings:

Chadabe, Joel. Electric sound: the past and promise of electronic music. Upper Saddle River, NJ: Prentice Hall, 1997.

Cox, Cristopher; Warner, Daniel (Eds.). Audio culture: readings in modern music. New York: Continuum, 2004.

## Webresources:

EARS (ElectroAcoustic Resource Site): <a href="http://www.ears.dmu.ac.uk/">http://www.ears.dmu.ac.uk/</a>

Ubuweb: <u>www.ubu.com</u>

SonHors: <a href="http://sonhors.free.fr/index.htm">http://sonhors.free.fr/index.htm</a>

# **Journals**:

Organised Sound (Cambridge Press)
Computer Music Journal (MIT Press)

# Magazine:

*The Wire* (www.thewire.co.uk)