# MUSIC 154 Electroacoustic Music Analysis

### Instructor

Rodrigo F. Cádiz, rcadiz@ccrma.stanford.edu

# **Course Description**

Electroacoustic music has expanded not only the possibilities of instrumental music towards a wider field of sonic material, but it has evolved into a new art form, denoted by some scholars with the more general concept of sonic art. The usual absence of a written score, in addition to the relatively young age of electroacoustic music has presented some unique difficulties to its analysis, and as a consequence a common analytical lexicon consistent with the particularities of this new art form has not been clearly established yet. This course will explore the most important methodologies for analysis of electroacoustic music that have been proposed in the literature. Class meetings include lectures, student discussions of relevant literature and listening sessions. Assignments include weekly readings, homework, and a final project. Basic musical proficiency is required. Experience with programming, music analysis, or music perception/cognition is desirable.

#### 2-4 units

## Scope of the Class

The main focus of this class is the analysis of electroacoustic music. This includes the various discussions provided by composers and music researchers as well as considerations of the perception and cognition of electroacoustic music.

### Software

It is recommended that each person have access to an application that can produce spectrographs. EAnalysis is preferred, but it only runs on Macs. Cross-platforms apps such as Audacity and Sonic Visualizer, could also be useful.

### Contents

- Electroacoustic music: definition, boundaries, sub-genres, listening modes.
- Musical analysis: purpose, tools, applicability.
- A semiotic model for the analysis of electroacoustic music.
- Poietic analyses: generative, philological.

- Trace (neutral level) analyses: spectro-morphological, temporal semiotic units, computational, visual, memetic.
- Esthesic analyses: mimetic, narrative, cognitive, soundscapes, listening strategies.
- Examples of analysis of important pieces in the genre of electroacoustic music.

# Textbooks

The following textbooks are recommended, although most of the readings will be based on articles in academic journals.

- 1. Cook, N. 1987. A guide to musical analysis. New York: W.W. Norton & Company.
- 2. Emmerson, S. (ed). 1986. The Language of Electroacoustic Music. Basingstoke, Hampshire: The Macmillan Press Ltd.
- 3. Licata, T. (ed). 2002. Electroacoustic Music. Analytical perspectives. Westport, Connecticut: Greenwood Press.
- 4. Landy, L. & Emmerson, S. (eds). 2016. Expanding the horizon of electroacoustic music. Cambridge: Cambridge University Press.
- 5. Landy, L. 2007. Understanding the Art of Sound Organization. Boston: MIT Press.
- 6. Manning, P. 2013. Electronic and computer music. New York: Oxford University Press.
- 7. Moore, A. 2016. Sonic Art. An introduction to electroacoustic music composition. New York: Routledge.
- 8. Roads, C. 2015. Composing electronic music: a new aesthetic. New York: Oxford University Press.
- 9. Roy, S. 2003. L'analyse des musiques electroacoustiques: Modeles et propositions. Paris: L'Harmattan.
- 10. Schaeffer, P. 2017. Treatise on Musical Objects. An essay across disciplines. Oakland: University of California Press.
- 11. Simoni, M. (ed.) 2006. Analytical methods of electroacoustic music. New York: Routledge.
- 12. Truax, B. 2001. Acoustic communication, Wesport: Abblex Publishing.
- 13. Wishart, T. On sonic art. 1996. Amsterdam: Hardwood Academic Publishers.

## Grading

- 20% Attendance and participation
- 30% Homework / analysis assignments
- 50% Final analysis project and paper

Students can add as much as 15% to their final grades by completing extra credit experiments, projects, or papers approved by the instructor.

## Final Exam

There is no final exam for the course. If final presentations of the analysis project do not take place on the last day of class, we will use the Final Exam time for final presentations. Final papers will be due by the end of the scheduled Final Exam time.

## Students with Documented Disabilities

Students with Documented Disabilities: Students who may need an academic accommodation based on the impact of a disability must initiate the request with the Office of Accessible Education (OAE). Professional staff will evaluate the request with required documentation, recommend reasonable accommodations, and prepare an Accommodation Letter for faculty. For students who have disabilities that do not typically change appreciably over time, the letter from the OAE will be for the entire academic year; other letters will be for the current quarter only. Students should contact the OAE as soon as possible since timely notice is needed to coordinate accommodations. The OAE is located at 563 Salvatierra Walk (phone: 723-1066, URL: http://oae.stanford.edu).