Ecomusics & Ecomusicologies 2014

Teaching Acoustic Ecology and Sound Art

Dialogues Across Disciplines

Thomas Ciufo

Background

Background and Motivations

R. Murray Schafer - A Sound Education / The Thinking Ear

*Schafer teaching video is online here

Background and Influences

Pauline Oliveros - Deep Listening

Teaching Philosophy / Ideals…

- Listening
- Creativity
- Critical thinking
- Interdisciplinary collaboration
- Problem solving
- Inclusion
- Engagement

Definitions? Acoustic Ecology

- "The study of the effects of the acoustic environment or soundscape on the physical responses or behavioral characteristics of creatures living within it"
  (R. Murray Schafer)

- "an area of education, research and practice that focuses on the scientific, social, and cultural aspects of natural and human made sound environments"
  (World Forum for Acoustic Ecology)

- Ecomusicology can be defined as "the study of music, culture, and nature in all the complexities of those terms. Ecomusicology considers musical and sonic issues, both textual and performative, related to ecology and the natural environment"
  (Allen)

Core Concepts: Acoustic Ecology

- Schafer suggests that we try to hear the acoustic environment as a musical composition and further, that we take responsibility for its composition
- called for "sonological competence"— through practical exercises, such as soundwalks and listening exercises
- hopes that increased sonological competence would instill future generations with an appreciation of environmental sound
- foster a new approach to design and conservation — one that will incorporate an appreciation of sound

Definitions? Sound Art…

- Sound / sonic art…?
- *Music* - and everything else / all sounds? (including non-human sounds)
- "If the word 'music' is sacred and reserved for eighteenth and nineteenth century instruments, we can substitute a more meaningful term: organization of sound" (Cage)
- "Let us throw 'music' out of the window but bear in mind 'musical'; something with phrases, starts, ends, middles, highs, lows, louds, softs, breaths, pace, shape, form, emotion and energy…" (Moore)

Overarching Goals

- **Engaged (Deep) Listening** - “listening in every possible way to everything possible to hear no matter what one is doing” (Oliveros)

- **Interdisciplinarity** - students from a wide range of backgrounds study emerging and overlapping fields - working together across disciplines
  "Should we not seek many paths to wisdom in order to face such crises?” (Allen)

- **Encouraging creativity** - everyone can be (is) creative (even scientists)

- **Critical thinking and research** – everyone can do research (even artists)

- **Engaged / hands on** - don’t just read, talk, write, but also make / create / do…

- **Develop technical skills** - field recording, sound design and soundscape composition

- **Support risk taking** – explore new ways of thinking / engage the success of failure

- **Student-centered learning** – students given ownership of the class

Design and Structure

- **Hybrid design** - combines seminar, lab, and studio approaches
  includes reading, writing, discussion, listening exercises, technical tutorials, creative and research projects

- **Hybrid content** - combining acoustic ecology, sound art, experimental music, audio technologies, and contemplative practices

- **Interdisciplinary** - no prerequisites and no assumptions about students background
  integrates recourses from a variety of interrelated fields

- **Project based** - start very simple, build over the course of the semester, presented in class, shared online - minimally defined…

- **Student-centered experiential learning** - students have a strong voice - facilitate discussions, decide on project directions, inform content and pacing…

Topics

- Acoustic ecology, sound studies, and listening practices
- Field recording, acoustics and soundscape composition
- Music and it's others / (new) approaches to sound making
- Digital processing, noise, glitch and the aesthetics of failure
- Installation and conceptual sound art
- Current events focussed on sound and the environment
- Intersections of sound art / environmental research / activism

Learning Outcomes

- Increased interdisciplinary analysis and research skills
- New appreciation for the possible relationships and overlap between scientific, artistic, and contemplative practices
- Improved written, oral, **aural**, and technical skills
- Increased confidence in creative abilities (and a stronger sense of self?)
- Increased awareness of and appreciation for our shared sound environment - a sound commons for all living creatures (Titon)

Accessibility /Sharing / Group Process

- All course materials are online - no cost for books or materials
- All technologies are free and available beyond the academic environment
- Group authored course blog allows for sharing and exchange outside of class meetings
- All student work is posted to SoundCloud (free sound sharing web site)
- All projects are presented and discussed in a supportive group setting

Accessibility /Sharing / Group Process

Course Blog

Acoustic Ecology and Sound Art

The Generation Game: Experimental Music and Digital Culture questions

Posted: March 18, 2014 | **Author:** jordynhouse | **Filed under:** Uncategorized | Leave a comment

1. Why did the author leave his record out to be damaged by the cat and warped by the sun?

2. After reading this article, what do you think generative means, in the context of music?

3. "Generative music is like trying to create a seed, as opposed to classical composition which is like trying to engineer a tree" What do you think this quote from the article means? Why is Generative music the seed and classical music a tree?

4. Do you think we can trust humans or machines to make music? (read last 2 paragraphs on page 245)

Archives

- March 2014
- February 2014
- January 2014

Recent Comments

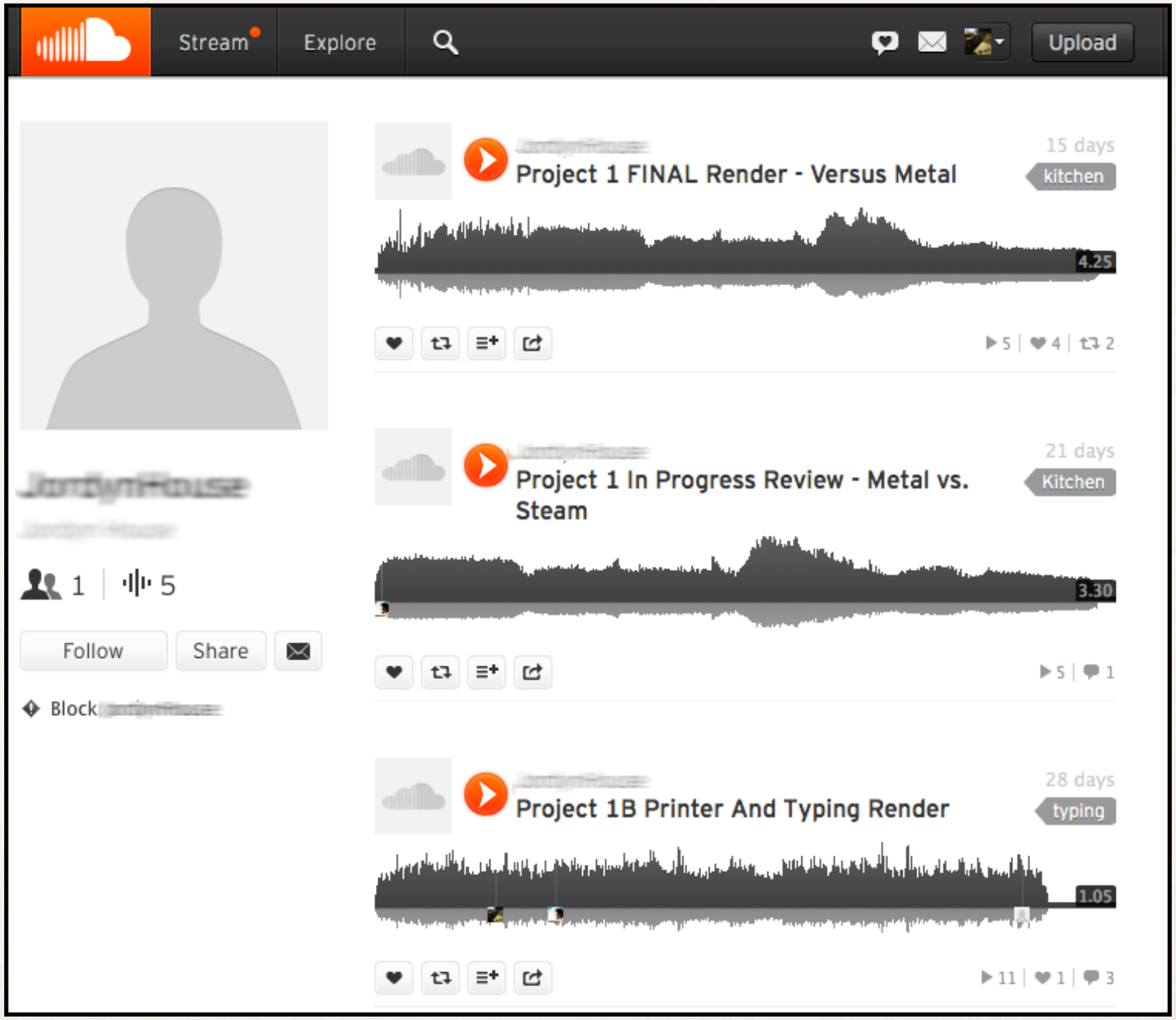
thomas on **Responses to Dunn article**

thomas on **Responses to Dunn article**

thomas on **Responses to Dunn article**

Accessibility /Sharing

SoundCloud - sketches, work in progress plus finished pieces



Research Projects

Recent project topics

- Student Soundscape Lessons - a Second Grade Curriculum
- Effects of Noisy Classrooms on Student Learning
- The Effects of a Cat's Purr on Health
- Bio-Acoustics and Noise Pollution

Listening Approaches

- **Pauline Oliveros**: Deep Listening Practice (various sources, see bibliography)
- **R. Murray Schafer**: Sonological Competence (A Sound Education: 100 Exercises in Listening and Sound-Making)
- **John Cage**: various sources / short articles
- **Hildegard Westerkamp**: Soundwalks
- **Thich Nhat Hanh**: Compassionate (Deep) Listening
- plus others (Schaeffer, Lopez, Eno...)

Listening Approaches

Pauline Oliveros: Deep Listening Practice (various sources)

Pauline Oliveros, from *Software for People selected writings 1963-80*

The Poetics of Environmental Sound

Listen to the environment for 15 minutes or a longer but pre-determined time length.

Use a timer, clock or any adequate method to define this time length.

Describe in detail the sounds you hear (heard) and how you feel (felt) about them.

Include internal as well as external sounds.

You are part of the environment.

Explore the limits of audibility:

(highest, lowest, loudest, softest, simplest, most complex, nearest, most distant, longest, shortest sound)

Listening Approaches

R. Murray Schafer: Sonological Competence
(A Sound Education: 100 Exercises in Listening and Sound-Making)

1.

We begin with a simple exercise. WRITE DOWN ALL THE SOUNDS YOU HEAR. Take a few minutes to do this; then, if you are in a group, read all the lists out loud, noting differences.

Everyone will have a different list, for listening is very personal; and though some lists may be longer than others, *all answers will be correct.*

This simple exercise can be performed anywhere by anyone. It would be a good idea to try it several times in contrasting environments in order to get into the habit of listening.

Listening Approaches

R. Murray Schafer: Listening walk (A Sound Education)

13.

On our way back to the class we are going to take a Listening Walk. In order to ensure that each person has the best opportunity to listen we will walk in single file and in such a way that each person is just out of earshot of the footsteps of the person ahead. If you hear their footsteps you are too close and should slacken your pace. Returning to the classroom the group is asked to write down answers to the following questions (or those most appropriate to the occasion).

a) What was the loudest sound heard on the walk?
b) The softest sound?
c) A soft sound destroyed by a loud sound.
d) The highest-pitched sound heard.
e) Three sounds that moved past you.
f) Three sounds that moved with you.
g) Three sounds heard from above.
h) One sound that changed direction as it moved.
i) One sound made in response to another.
j) The ugliest sound heard.
k) One sound heard twice only.
l) A sound made by something opening.
m) A different sound heard through the opening.
n) The most remarkable (memorable) sound you heard on the walk.
o) A sound with a distinctive rhythm. (Can you notate or repeat the rhythm?)
p) The most beautiful sound heard.
q) The sound that came from the greatest distance. How far?
r) One sound that either slowly rose or slowly fell in pitch.
s) The sounds you would like to have eliminated from this soundscape.
t) One sound you missed that you would have liked to have heard.

Discuss the various replies.

Listening Approaches

R. Murray Schafer: Field recording (A Sound Education)

67.

Choose a sound that seems to be disappearing from the soundscape. Record it as if you were preserving it for a museum collection. Try to imagine that your recording may be the only surviving specimen of a precious lost sound object. What information would you want to accompany the recording? Date of recording, history of the object recorded, date of origin, present location, etc. Get into the habit of cataloguing material recorded for later reference.

Listening Approaches

R. Murray Schafer: Topics / approaches (A Sound Education)

- listening: describing, analyzing, categorizing, seeking out particular sounds
- sound (listening) diaries - “what was the first sound you heard today? or what is the most memorable sound experience you have had in your life?”
- making and imitating sounds, using sound objects, vocal exercises, ‘nature concerts’
- using tape recorders for investigation
- aural illusions, sound paradoxes, aural memory, interviews, architectural acoustics
- soundscape design

Tech Resources - hardware

Recording

- Smart phones / tablets can work, but are not ideal
- Limited frequency response
- Most are mono
- Can be improved with external microphone

Tech Resources

Portable stereo flash recorder - 100.00

Tech Resources - software

Editing and production

- Many options for both Mac and PC (and tablets / phones)
- Audacity (free)
- Reaper (free trial period, inexpensive to buy)
- GarageBand (Mac / tablet only)
- Ableton Live, Protools, Logic... (professional digital audio workstations - 200.00+)

Tech Tips

- Don’t be intimidated - you do not need to be a tech expert
  You can all explore and learn together / from each other
- Lab not always required - some students can bring laptops / tablets
- Students can share recorders and other equipment
- Many free software options
- Much of this work can be done without any technology at all...

Strengths

- Introduces students to an interdisciplinary field of study
  a new way of working / thinking / learning / listening

- Helps students discover or reconnect to their innate creativity
  everyone is creative and 'musical'

- Encourages students to develop a deeper awareness of sound and our shared sonic environment - fosters engagement with active listening / heightened awareness

- Student report positive learning experiences - class is challenging, but also engaging and fun – they often struggle with the readings and really enjoy the projects

- Many students grow to appreciate the freedom and responsibly involved in student-centered / self-directed learning

Challenges / Open Questions…

- A lot to explore in one course… breadth over depth
- Where can this interdisciplinary field thrive? (music, environmental science, communication studies, art...?) perhaps best if team taught?
- How to defuse grading tension / increase exploration, discovery, risk taking?
- How to more deeply integrate contemplative aspects without alienating students?
- How to integrate and foster social or community involvement?
- How can this all lead to lasting engagement / action / change?

Thanks for Listening!

- Web resources for this talk (including bibliography) available at:

www.ciufo.org/ecomusic2014

- Comments / ideas / dialogue would be welcome:

tc@ciufo.org