

MIT OpenCourseWare
<http://ocw.mit.edu>

21M.361 Composing with Computers I (Electronic Music Composition)
Spring 2008

For information about citing these materials or our Terms of Use, visit: <http://ocw.mit.edu/terms>.

21M.361: Composing with Computers I (Electronic Music Composition)

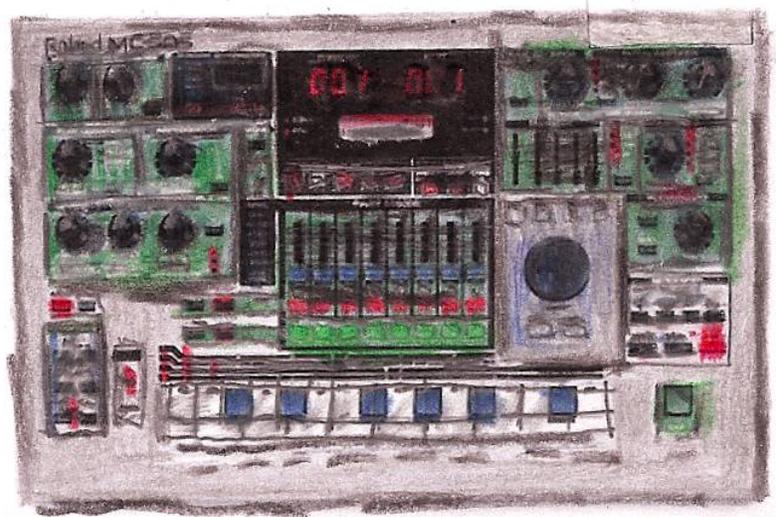
Peter Whincop

Spring 2008 OCW

Listening Notes 3.2: Noise and Other Stuff

(A bit on Niblock is courtesy of Evan Ziporyn, and used with permission.)

Radiohead—Pulk/Pull Revolving Doors (from Amnesiac) (2001)



Drawing of Roland MC-505 looping sampler by Peter Whincop.

I put this one in just because it is so excellently excellent. Amnesiac is ridiculously underrated. The songs on it were all recorded at the same time as those for Kid A. See:

http://en.wikipedia.org/wiki/Radiohead#Kid_A.2C_Amnesiac_and_a_change_in_sound_.281999.E2.80.932001.29.)

I find some recent Radiohead to be a little over-produced (such as Hail to the Thief), but not this song (nor on In Rainbows). According to Colin Greenwood (member of the band): "Pull/Pulk Revolving Doors was made using an MC505 and some loops, together with some other found loops that we made in St Catherine's Court when we were recording OK Computer." (Taken from <http://www.songmeanings.net/lyric.php?lid=33352>, unverified, right near the top of the forum. This thread attempts to find "meaning" behind the song.) I hope after you listen to it just to be amazed and to have your head screwed with a little, a critical listen might show you that you now have the skills to put together such a song: creation of noise (well, that will come over the next couple of weeks, and when we do Max/MSP; in the advanced course we will be looking at how to make sounds with a metric ****ton of static and clicks and distortion), modification of voice (even more in Max/MSP), reverb and delay, adding in samples, etc.

múm—We Have a Map of the Piano (from Finally We are No One) (2002)



Courtesy of Múm. Used with permission.

This is my favorite song in the universe. It makes me want to visit Iceland (except for their breaking of the moratorium on whaling last week—Fall 2006). Everything in this song is perfect, especially phrasing and the way it overlaps and contradicts. And how to be tonal and repetitive and how to play with drum (percussion) loops without being dull. And how to have the strangest little girl voice ever. Another thing I like about this piece is its excellent production: everything is placed very nicely, not extremely, just subtly. Oh, and how to be folksy without being one of those folksy types. And look at them. And they let us reproduce their material! (Courtesy of Múm. Used with permission.)

Please don't flow so fast
You little mountain hum
I'll take a bottle down to you

Please don't flow this fast
You hold a little hum
I'll bottle sounds of me for you

Please don't flow so fast
You little mountain din
I'll bottle piano sounds from you

Please don't flow so fast
You little mountain noise
I'll close my eyes and bite your tongue

I went to a concert last year (2006) of Avey Tare (Dave Portner) from Animal Collective and Kría Brekkan (Kristin Anna Valtýsdóttir) and the voice in these early múm CDs is for real.

Alvin Lucier—Music on a Long Thin Wire (1977/1980/1992)



Drawing courtesy of Rae Zucker. Used with permission.

The following is paraphrased from an interview with the composer I found at <http://www.furious.com/perfect/ohm/lucier.html>.

Lucier, reflecting on the original installation, said “[i]t just sounded wonderful... It’s got this other-worldly quality about it.” He likens the sound to light as it changes during the day: “always moving, always

changing, you don't see how it's produced but you know it isn't on tape. It doesn't have that lifeless quality of sounds on tape. You know, the live organism."

The piece grew out of an acoustics class he was teaching with a physics instructor at Wesleyan. One experiment involved an electromagnet driving string and oscillator. He decided to hugely expand the experiment (though still without learning the technical aspects—a trademark of Lucier's *modus operandi*). And the result: he "discovered that the imperfection of the way it was installed made a very interesting and wonderful sound. It was always changing. That's the interesting thing about it—it isn't fixed like a string on a piano. It's subject to all kind of internal and external things."

He thought it should be a performance piece: a big guitar string, improvised on by people playing the "oscillated pitches into the wire." He said that it "never really worked very well. It always started in interestingly and spectacularly with the sweeps and slides... [eventually] it sort of developed into a wishy-washy improvisation kind of thing." He then decided to make it a sculptural piece, less of a performance piece, rather, "a tuning with a single oscillator... just let... go by itself... [T]hen the piece took on a magical quality. No one was intending to make it sound any way. It was just sounding by itself. It feels like a natural phenomenon."

Ultimately, he feels that it has stood the test of time.

Lucier is the composer of *I Am Sitting in a Room* and numerous other works of sound art, often using invented instruments. There's just been a retrospective of his output at UVA [Fall 2006], oddly enough in the School of Architecture. Most music schools shun him. There is now quite a repertoire of wire installation music. For example, in 21M.540 we listen to Alastair Galbraith and Matt De Gennaro's *Autahi* (from *Long Wires In Dark Museums* (Vol.1)), from my home country. According to noise record label owner, composer, and performer, Howard Stelzer (see below), Wellington, New Zealand, is the world capital of noise at the moment. I've found sampling from these wire pieces to be fairly fruitful.

Just say something.

Seht/Stelzer—[track1] (from *Exactly What You Lost*) (2006)

Email from Howard Steltzer (used with permission):

Hi Peter

I don't mind at all if you play that track for them! It will be released this week anyway, but I'm just happy that you would play it for your students, so please go ahead.

The album (all tracks are untitled) was composed by sending cassettes

through the mail from Boston to NZ and back. I'm honestly not sure what technology Stephen/Seht used, but I used cassette players (the hand-held 'walkman' variety), a Behringer mixing desk, a microphone and a delay pedal. We started with environmental recordings of banal suburban sounds... airplane overhead, kids playing in the park, walking through the grocery store, etc... Stephen also had tape loops, but again I never asked him precisely how he made those. I played his sounds out into the air around my neighborhood, walking around with the tape recorders, and recorded them into a separate walkman. Then I improvised with the tapes back at home, again recording to cassette (with the record volume up, so that I get that lovely tape-saturation sound). The way I improvise is to act manually, directly with the tape, slowing it down with my fingers, amplifying the reels, things like that.

So, we did this back and forth for a year or so. Some pieces emerged as you hear them, others took some more active shaping. The first track was done using a loop/delay pedal called the Headrush, made by Akai, to make and layer loops on the fly. I did this with some stage of our collaborative tapes (don't remember exactly what the source sound was at that point... it's all jumbled, and doesn't really matter), made a few layers of it, improvised with those layers, and then Seht further transformed it and gave the track its final shape. Maybe on a computer? I don't know.

For other tracks the process was more involved. Like, the final track started as Seht's tape loop, then I looped and added to/saturated that, and we went back and forth for a while until it bulked up. The final section is taken from an improvisation I did with our source tapes live in Albany, in a big (empty) rock club, through a huge PA... the rhythm comes from a tic that the motor of one of my tape decks was making, amplified and slightly distorted, but played back through the big speakers into a cavernous room. Seht did something or other to the recordings (I'm not sure what) and it became the end of the album.

The composition was conversational and organic. We had no overall plan, but the tone of the album emerged from us talking. If it seems somewhat melancholy, it could be because we were both in relationships that ended while we were working on the music. We each edited bits, until we both liked it.

Howard

So, what do you think? Worth all the effort? I think so.

Nmperign/Jason Lescalleet—The Mystery Disease That Haunts My Town (2006)

Nmperign/Jason Lescalleet—This is Ruined (2006)

I'm still awaiting a response from them [2007]. Still [2008].

Phil Niblock—Sweet Potato (2003)

Niblock is at this point the grand old man of the New York loft scene: he has been presenting his own music and that of other experimental composers in his living room (Experimental Intermedia—see link below) for decades. A true believer. Like Tenney, his music is not about feedback or noise per se, but is

based on finding the noise inside non-distorted sounds. Specifically, he works with recordings of long tones played on real instruments, which are then layered and microtonally transposed to create unexpected high partial consonances and—equally important—dissonances. All his pieces are made using this same process, using nothing but Pro Tools. In live performance, a live musician might or might not play along, and Niblock might or might not show his own video work, exclusively of people at work around the world.

He is also famously elusive about his music. His notes on this piece simply say, “The samples all moved from soft at the beginning, to louder, then soft at the end. The waveforms looked like sweet potatoes.” More instructive is the following: “These pieces should be played VERY LOUD. Sweet Potato should be played less loud than the rest.” Inconveniently, however, the titles of the pieces are mislabeled on the CD itself, so if you go looking for this one, it’s listed as “Yam Almost May.” Some of the sonic artifacts are lost in mp3 conversion, others probably won’t play so well on headphones, but you’ll get the idea.

Some obvious questions: What is the instrument? Would you have guessed it was a single instrument if you didn’t know this? Clearly the piece sounds electronically processed—it is not—but why does it sound this way? This piece has much more ebb and flow—would you still consider it to have the kind of continuity you hear in, say, Graham’s “one hundred mics”?

More information:

<http://media.hyperreal.org/zines/est/articles/niblock.html>

<http://www.experimentalintermedia.org/>

?—[track 3] [unknown German blue CD from around 2001]

As I don’t know anything about this song, I have little to say. I bought it in the coolest CD store in the world (cooler than Other Music in NYC and as cool as Forced Exposure just north of here) run by a fantastically crazy woman who pretended to be normal (but I can see through those guises...). I took the CD out of the case, as usual, filed the artwork under "SROMF" (“scattered randomly on my floor”), and I can’t find it now. The CD is somehow data protected because it does not appear as an audio CD on my computer, even though it plays in a normal CD player. So CDDb was of no use.

The whole thing uses industrial sounds. How different is this from another piece we have studied that uses industrial-type sounds, the Schaeffer Study? Do you like it? Can you imagine how you would make this piece? Would you make such a piece? Why use industrial sounds?

Maryanne Amacher—Head Rhythm 1 [and Plaything 2] (from Sound Characters) (1999)

Sonic Youth meets this composer:

<http://www.ecstaticpeace.com/daytrip/>

We'll be listening to this one in class. It has to be listened to LOUD—it mostly won't damage your ears—through loudspeakers, not headphones (though, despite the composer's claim, the effect will still work, though not as well). Among the tinkling, the ear produces its own tones that are not on the recording. You'll be surprised. Cupping your ears with your hands towards the speakers, which you should be between, enhances the effect. (Cupping your ears is an interesting thing for all kinds of music, especially orchestral, because it brings out high frequencies.) I have no idea if the composer herself worked out the required frequencies to produce the psychoacoustic illusion.

Maryanne Amacher is an elusive character. She apparently lives in a house that is falling down somewhere near Bard College. Most of her work is sound art, and she refuses to have it released on CD due to its sound-art character—the physicality and space would be lost, and all that stuff artists say about bodies too. Here is an example of how to track her down: go to <http://www.kaiserworks.com/amacher/> and click on “contact.” [Well, I just checked that, and it no longer seems to exist.]

For an interesting interview with her, go to <http://www.newmusicbox.org/page.nmbx?id=61fp00>, and click on ‘Read a complete transcript...’

Also look her up on Youtube. Right now [2008], the following link works, and is good:

<http://www.youtube.com/watch?v=pfp47mOXXZo>

I have gleaned the following from the CD liner notes.

Amacher makes use of the ears' ability to “act as instruments and emit sounds as well as receive them.” She calls this ‘Third Ear Music.’ The piece is thus composed. At the right sound level, she continues—and that means “quite high and exciting,” which I take to mean LOUD and on good equipment—“the tones in this music will cause your ears to act as neurophonic instruments that emit sounds that will seem to be issuing directly from your head.”

She says that in her concerts, her “audiences discover music streaming out from their head, popping out of their ears, growing inside of them and growing out of them, meeting and converging with the tones in the room.” She is a site-specific sound artist, meaning that she shapes her works to a particular space. By

doing so, the sounds she produces interact with the acoustics of the room.

Now for some composer-speak, as if the previous quote wasn't enough: "Tones 'dance' in the immediate space of their body, around them like a sonic wrap, cascade inside the ears, and out to space in front of their eyes, mixing and converging, with the sound in the room. Do not be alarmed! Your ears are not behaving strange or being damaged! Nor are loudspeakers being damaged." This sounds like the introduction to the 60s television series *The Outer Limits*—I'm doing this from memory: "There is nothing wrong with your television set. Do not attempt to adjust the picture. We are controlling transmission." And so on.

She goes on to (try to) explain that the resulting tones, not present in the original music, but produced by our ears, is real (which is true), "similar to the fusing of two images resulting in a third three dimensional image in binocular perception." The sounds and patterns do not originate in your speakers; rather, interaurally. (She is right. But she does say, "[k]nown as 'otoacoustic emissions' scientific experiments have shown that ears are even capable of emitting sounds after death! I do not know if she is right.) She (mostly correctly) believes that all music has otoacoustic emissions (sounds like a complaint worthy of a visit to the doctor), and that "they are usually registered subliminally, and are certainly masked within more complex timbres. I want to *release* this music which is produced by the listener, bring it out of subliminal existence, make it an important sonic dimension in my music."

On otoacoustic emissions: http://www.otoemissions.org/index_1024.html.

Personal story: I had my ears tested at Mass Eye and Ear Infirmary a while ago, and the specialist (for people who don't experience the cocktail party effect too well, such as myself—see http://en.wikipedia.org/wiki/Cocktail_party_effect) put a strange probe in my ear with several tubes. Some of them played sounds (e.g. 3 ms bursts as described in the 'chirp' section of the otoacoustic emissions link above), and the others recorded the slightly delayed response by my ears—playing their own music. It's was truly weird thing.

Don't write about this piece; just know all this ready for when we hear it together during class next week.