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

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

Peter Whincop

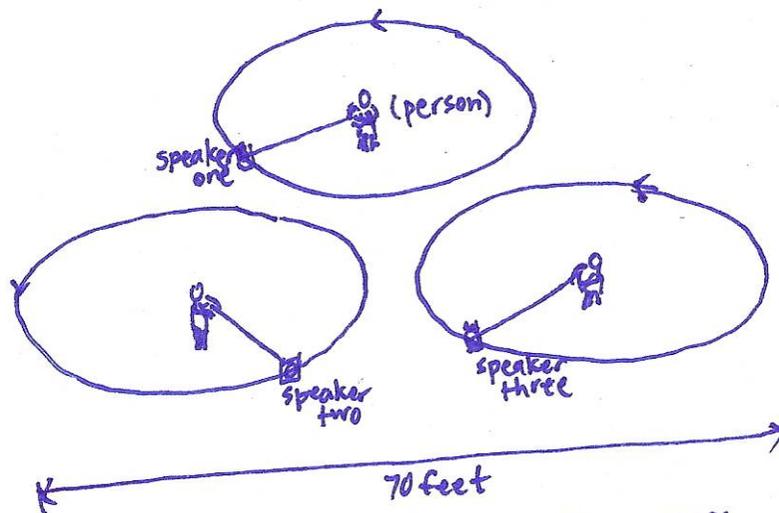
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### Listening Notes 2.2: Compositions with Feedback

(some of this is stolen from Evan Ziporyn)

#### Gordon Monahan—Speaker Swinging (1982)

I'm not sure if feedback is involved. I know there are nine oscillators, and the Doppler effect is apparent, but I can't see microphones in any of the pictures on the web. Anyway, it's a great piece, so I thought I'd include it. There is a diagram of how to perform the piece, from <http://www.medienkunstnetz.de/works/speakers-swinging/images/2/>. Also there is a one second (!) video of it in action.



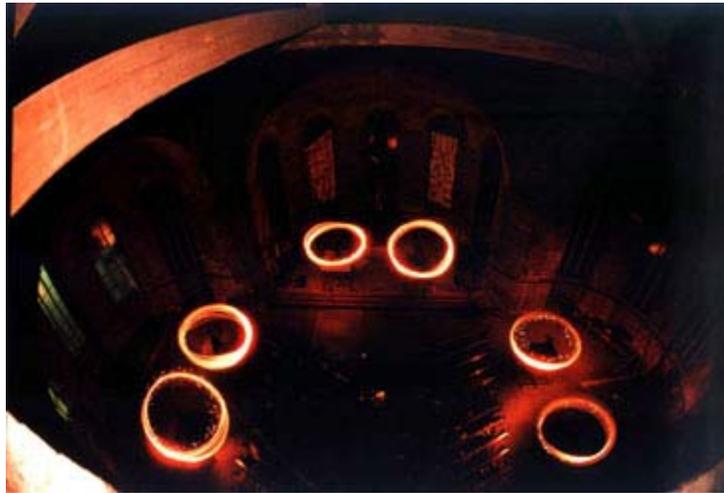
Based on a diagram by Greg Van Alstyne, 1987.

Drawing by Peter Whincop.

What follows I have garnered from the same (and related) webpages. Double quote-marks quote the webpage author, and single quote-marks the composer.

The composer sees performances of this work as “a hybrid with sculptural, installative [sic.—it's one of those words in a few Western European languages], and performative, athletic aspects ‘due to the corporeality of the swinging boxes and because sweat, heavy labor, and stubbornness are required.’” The site elaborates on the connection with the Fluxus performances (<http://en.wikipedia.org/wiki/Fluxus>); here

'physical gestures produce the sounds.'



Courtesy of Gordon Monahan. Used with permission.

<http://www.gordonmonahan.com> has a nice photo of the artist, and links to all(?) his performance pieces. The photos for *Speaker Swinging* are spectacular. So is what he says about the piece: the metaphor between Doppler shifts caused by rotary speaker motion and “the molecular movements of electrons that occur within solid state tremolo and vibrato circuits.” Apparently by mimicking processes that used to be modeled on human-scale mechanical-acoustic systems, but now make reference to the atomic scale, “it necessarily acknowledges the celestial.” Well, yeah, of course. How could it be any other way? The resultant effects (naturally acknowledging the celestial)—phasing, vibrato, and tremolo—are fundamental to the work, as are the elements of sweat, struggle, fear, and seduction.”

I say to you, caveat auditor. And as to the inspiration: from hearing “Trans Am automobiles cruising on a hot summer night with Heavy Metal blaring out of the windows. As the cars cruised by, there was that fleeting moment of wet, fluid music, when one tonality melts into another.” All that wetness and fluidity and sweat and seduction (and struggle and fear, heavy labor and stubbornness)—I think that’s where I’ve been going wrong with my own composing.

What do you think? Can you imagine a piece the converse of this consisting of circles of speakers, and a microphone being swung around? How would it sound? Perhaps this could be sound piece for the class.

Speaking of these sorts of pieces, see

[http://www.music.columbia.edu/~douglas/portfolio/study\\_for\\_time\\_travel/](http://www.music.columbia.edu/~douglas/portfolio/study_for_time_travel/). Very interesting.

**Slap Happy Humphrey—逆光線 (Gyakkosen) (Light In My Eyes) (from s/t) (orig. 1992/1996)**

Slap Happy Humphrey (named after the 70s English band Slapp Happy and a giant professional wrestler

Happy Humphrey) was a Japanese noise band. There's a big noise scene in Japan, and Slap Happy Humphrey must rate as one of the weirder groups. As far as I can tell, they made only one (self-titled) CD. It isn't all noise; the "juxtaposition" of noise with everything else is truly bizarre. (I qualify this later.) The group are Hiroaki Fujiwara, Jojo Hiroshige, and Mineko Itakura. I took the following from what the noise guitarist, Jojo, wrote for the CD liner.

Slap Happy Humphrey's concept was to do "noisy covers of the songs by [森田童子 (Morita Doji)," who was active from 1975 until 1983. One of her songs, ぼくたちの失敗 (Bokutachi no Shippai) (Our Failure), was used in 1993 as the theme song for a TV series. Enjoy the original at <http://www.youtube.com/watch?v=7H5555py7OA> [as of July 2008]. This piece is not covered by SHH on this CD, but is in a similar vein to the ones they did cover. This week's song was their first hit.

Because of the television series, there was a sudden Morita Doji "boom" (I'd like to have heard that). So they put off making a full CD for a year. "The idea of performing Morita Doji songs in the middle of noise was actually something I'd been thinking about since the end of the '70s, when she was still performing. I knew her music from rock and folk coffee shops, common in the student sections of Kyoto, where I was a high school student. I had already started improvising, and my personal interpretation of Morita Doji songs had them leading out of a noisy environment."

I quite like that, an interpretation growing naturally out of an environment: the next sentence demonstrates that Jojo didn't think of this as some kind of absurd juxtaposition. "[I]f I choose to use her music, I hope my interpretation and expression can be excused. Mixing the desperation, resignation, nostalgia, sadness, loneliness, emptiness, and embrace in the songs with my noise moves them into another dimension." He must have been keeping up with string theory. And he calls this "more than a loving cover version," rather, "a new style of expression."

And he ends up saying that "[i]f this CD is seen just as an indulgence on my part, it will be meaningless beyond meaninglessness." Hmmmmm. Meaning...?

Every song on the CD has feedback and distortion presented in a different way, and in a different relationship to the folk-like song. What do you think of the "juxtaposition"? What do you think the juxtaposition means? Does the feedback/distortion seem improvised, or composed (or at least practiced)? Would you want to hear more from SHH? Notice how he says "The idea of performing Morita Doji songs in the middle of noise..."—do you hear it that way? Is it "a new style of expression"?

### **Peter Whincop—It was so nice to see you again (2002)**

Sorry, me again. There just aren't that many feedback pieces around (though I am in the process of revising this section considerably, having come into possession of quite a booty of feedback works). This piece is built of several layers, which come and go throughout. There is a voicemail message (a very sweet one) that has been messed with using Max/MSP, starting quietly and reaching full volume near the end (though still quite drowned by the other, now-sweet sounds). Now and then there is a fairly beautiful sound, the result of a complex series of convolutions of carefully chosen samples. Toward the end, the hissing singing sound is strangely the sound of the door to a suite in the Venetian Hotel, Las Vegas, being opened, and reacting to the high pressure being maintained in such an energy-efficient building. It sounded fantastic, and I must have looked creepy standing outside my room door with recording equipment, with two very attractive Korean women occasionally coming and going.

There is also the sound of a laboratory-contained nuclear fission reaction (boys playing with small bombs). Throughout are clicks, explosions, percussive sounds, screams, etc. I removed the mooing sounds from the lab recording; I have no idea what they were doing there to start with. These were generated initially by various sorts of clicks, performed live on a Serge analog synthesizer, and processed first through a feedback Max/MSP patch, then spatialized using Spat. So, a lot of the sounds in this piece are made by very controlled feedback, sometimes delicate, sometimes screaming.

This is one of my favorite pieces, one of my first, and perhaps one of the few happy ones (although an ex-girlfriend calls it the 'strangulation piece' because she thinks it sounds as though I'm strangling the other ex-girlfriend whose voice it is). No questions. Update 2008: apparently all my music is beautiful and disturbing. I don't know what to say.

### **Phil Kline—Bachman's Warbler (1992, rec. 1997–98)**

Check out <http://www.philkline.com/>. Pretty impressive.

This is a live performance, with no score but with strict compositional instructions. The materials are one harmonica, a table, and 12 boomboxes with internal microphones, each with short blank cassette loops loaded. The composer records an inhalation and exhalation of the harmonica into one (in other words, major and half-diminished chords), sets the playback, and proceeds to the next machine.

What factors contribute to the change of sound? How does this piece relate to and differ from the others? What would be gained and what would be lost if the piece were assembled in a studio rather than recorded live in performance? (If the answer is 'spontaneity,' please explain if and why this is advantageous or not.) If you didn't know the source material, what would you attribute the sounds to? Do

the sounds of the tape recorder buttons clicking distract you, or are they part of the piece in a satisfactory way—in other words, would you edit them out?

### **Michael Gordon—Industry (for solo cello and electronics) (1993, rec. 1994)**

The performers are: solo cello (Maya Beiser) and live electronics (distortion gradually added with a Tube Screamer guitar box). The effects are not actually feedback, but analog overdrive distortion. Having said that, the circuit has feedback in it, not just for, say, temperature compensation, but as part of the sonically-directed design.

The composer writes: “After the Russian Revolution, there was a period where Russian composers tried to make pieces that sounded like factory sounds. When I wrote Industry in 1993, I was thinking about the Industrial Revolution, technology, how instruments are tools and how industry has crept up on us and is all of a sudden overwhelming. I had this vision of a 100-foot cello made out of steel suspended from the sky, a cello the size of a football field, and, in the piece, the cello becomes a hugely distorted sound.”

Is there a formal purpose to the distortion? How does it relate to the other formal processes in the piece? How does this distortion compare with, say, the distortion in my piece from last week (0609 [jam2sp1.1])? Are there other factors besides electronics that give the cello its distinctive, overdriven sound? What accounts for the extremely low pitches that are produced outside of the cello’s range? Can you hear the connection to industry, as described by the composer?

Do you picture a giant cello? I played one of my early pieces (from January 2003) to (yet) an(other) ex-girlfriend, explaining that I thought it was a little hallucinatory—as in, very abstract, moving shapes, colors, visually evocative—and she responded by saying, yes, I can see that, I mean I can see a giant pink handbag!

### **Sonic Youth/Steve Reich—Pendulum Music (from Goodbye 20th Century) (1969/rec. 1999)**

The following are tidbits borrowed from the internets.

The composer spend the summer of 1968 living and working in New Mexico. While visiting Boulder, meeting up with some other artists, they played around with a Wollensack tape recorder—a funky 50s machine with a cheap electric mic. Already an antique by then. Reich, ready to record something, with speakers turned up, decided to swing the mic back and forth “like a lasso. As it passed by the speaker of the machine, it went ‘whoop!’ and then it went away.” He attributes this to being “out West”!!

After the obligatory composerly laughter, Reich was struck by the idea of using two or three tape machines to create an “audible sculpture phase piece.” Thus it happened. They all let loose with their mics, in other words, treating them as pendulums, listening for that “whoop”—the levels had been set to permit feedback only when the speaker and mic were within a small range. After ten minutes, “which was a little too long for my taste,” the pendulums rested, and a pulsing drone ensued.

“It’s the ultimate process piece. It’s me making my peace with Cage [nice one, Steve]. It’s audible sculpture. If it’s done right, it’s kind of funny.” Reich likens it to the days when he worked with visual artists in art galleries and museums—a kind of WYSIWYG attitude. “This piece does that and hopefully, it’s effect is kind of funny at the same time.”

And “...It’s a very provocative piece because it’s not something you usually hear at concerts. So, it sits there as kind of a loner. It’s not a piece that needs to be done very often. I was not interested in recording [it].... I never have been close to John Cage but this piece was a way of saying ‘OK, here it is but it isn’t!’”

What do you think of this piece? How does it compare with the other Reich piece we have listened to, Come Out? Do you like the sounds?—compare this to the Monahan. Can you imagine a score of this piece somehow specifying a different form? Would you have done it differently? What do you think Reich means by saying “It’s me making my peace with Cage”? Why do you think he finds it funny?

Okay, the confession: I pretty much hate this piece. Feedback can do so much more, and even less, but a little more interestingly, even as a performance piece or installation. A 21M.361 student from 2007 (Eduardo—hi!) did a version of the piece with the signal passed through a Max patch, which algorithmically altered the sound, and also generated a third, imaginary pendulum. Now, that was nice.

### **David Cossin—A. C. T. (Amplified Cardboard Tube) (rec. 2002)**

The best description of this is on the actual recording, taken from a radio program (WNYC radio for John Schaefer’s New Sounds program on September 4th 2002). From the composer: “Through amplifying this found instrument using control feedback I can create a singing drum. I can accompany myself with a real time looping sampler (Echoplex) that records instantaneously what I play.” This instrument (which also involves outboard equipment) was used for Tan Dun’s soundtrack for Crouching Tiger, Hidden Dragon. I see on the web that others have now emulated him; and he recently performed it with his looping sampler and solo horn.

From an email I just received from Evan Ziporyn:

"About the cardboard tube, David basically found the tube in a dumpster, worked up his thing, and showed it to Tan Dun, with whom he's worked for many years (he more or less improvised all the percussion parts for *Crouching Tiger*, which is the bulk of that soundtrack). Tan had him do it at various lec/dems, and took to saying that David had found the tubes in a dumpster 'outside of a temple'... he then told David that the instrument was great, but needed a name, and suggested 'Tiger Dragon Drum'... at that point David decided that its official name was 'Amplified Cardboard Tube.'"

Just write something about this. For any questions I ask about it, I'm sure the answers are on the radio broadcast. Think about how the composer/performer had so much control of the feedback pitches, and how delicate the sounds are.

For more information in general about Cossin, see <http://www.davidcossin.com/>.