

**21A.340J / STS.075J**  
**Technology and Culture**  
**Fall 2003 MIT**

**THEME 2: COMPUTERS AND INFORMATION TECHNOLOGIES**  
**Lecture 9. November 4**

**Our Machines, Our Music: From White Noise to Black Noise**

Pinch, Trevor and Frank Trocco. 2002. Introduction: Sculpting Sound, Chapter 1: Subterranean Homesick Blues, Chapter 3: Shaping the Synthesizer. In *Analog Days: The Invention and Impact of the Moog Synthesizer*. Cambridge: Harvard University Press, (pp. 1-31, 53-69).

"A synthesizer assembled parts of sound into a complete sound" (p. 67).

*What goes into this assembly? Pinch and Trocco argue that ideas about what counts as a proper musical instrument are part of it. How?*

Keyboard: makes it look like you're playing music! HISTORY OF MUSIC

Technophallus guitar. Machismo. HISTORY OF GENDER

Rose, Tricia. 1994. Soul Sonic Forces: Technology, Orality, and Black Cultural Practice in Rap Music. In *Black Noise: Rap Music and Black Culture in Contemporary America*. Hanover, MA: Wesleyan University Press, (pp. 62-96).

Asks us to think about the question: "What is the point of rap's volume, looped drum beats, and bass frequencies?" in terms of *technology and sociology*.

Connected to traditions that highlight rhythm over melody: "the complexity of rap music, like many Afrodiasporic musics, is in the rhythmic and percussive density and organization" (p. 65). break beats

But there are *new* things here as well. Rap artists have appropriated recording studio technology — SAMPLING in particular — for purposes other than those for which it was originally intended and built; they have appropriated it "in keeping with long-standing *black cultural priorities*, particularly regarding approaches to sound organization" (p. 63). *What does Rose mean?*

"the arrangement and selection of sounds rap musicians have invented via samples, turntables, tape machines, and sound systems are at once deconstructive (in that they take apart recorded musical compositions) and recuperative (because they recontextualize these elements creating new meanings for cultural sounds that have been relegated to commercial wastebins)" (p. 65). Builds on tradition, but also refigures that tradition importantly in the context of new technologies of reproduction.

"Rap music uses repetition and rupture in new and complex ways, building on *long-standing black cultural forces*. Advances in technology have facilitated an increase in the scope of break beat deconstruction and reconstruction and have made complex uses of repetition more accessible" (p. 70).

*What is the importance of repetition?* Snead claims that it has a social meaning in Afrodiasporic musics as connected to circulation, equilibrium (p. 69). "Rap producers' strategic use of electronic reproduction technology, particularly sampling equipment, affirms stylistic priorities in the organization and selection of sounds found in many black diasporic musical expressions" (p. 71). *Do you buy this?*

She's writing about "the significance of culture in the development of technology" (p. 71).

*What does Rose mean when she writes:*

"repetition cannot be reduced to a repressive industrial force" (p. 71). That would be the Marx argument, right? That repetition is the signal feature of labor alienation.

"Positioning repetition in late capitalist markets as a consequence of that market, marginalizes or erases alternative uses of and relationships to repetition that might suggest collective resistance to that system" (p. 72).

*What is the cultural meaning of sampling in rap?*

Samples become not a way of saving time or sneaking a reproduction by as the real thing, but "a point of reference, as a means by which the process of repetition and recontextualization can be highlighted and privileged" (p. 73) links to tradition and artistic, communal, cultural, antecedents.

"Sampling, as it is used by many of hip hop's premiere producers, is not merely a shortcut used to 'copy' musical passages" (p. 79). "for the most part, sampling, not unlike versioning practices in Caribbean musics is about paying homage, an invocation of another's voice to help you say what you want to say" (p. 79).

Questioning the idea of the "original" by playing turntables (technologies of mechanical reproduction) as instruments. Destabilizing the whole idea of original versus reproduction (p. 74).

*How does Rose illustrate that "Rap production resonates with black cultural priorities in the age of digital reproduction" (p. 75), What is the role of technology?*

Working in the red. "Using the machines in ways that have not been intended, by pushing on established boundaries of music engineering. Rap producers have developed an art out of recording with the sound meters well into the distortion zone" (p. 75). Highlighting the technology not as a medium to transmit notes, but as producers of noise.

Rap as a complex fusion of orality and postmodern technology: "This mixture of orality and technology is essential to understanding the logic of rap music; a logic that, although not purely oral, maintains many characteristics of orally based expression and at the same time incorporates and destabilizes many characteristics of the literate and highly technological society in which its practitioners live" (p. 85). *Can we unpack this? How does rap do both of these things and what is the place of technology here?*

Rose says that rap is part of Walter Ong has called a "post-literate orality" (p. 86). An orality that depends on writing — or other technologies of inscription — for its existence. *Explain?*

"Sampling technology as used by rap DJs and producers is strikingly similar to Ong's interpretation of narrative originality in oral cultures: 'narrative originality lodges not in making up new stories, instead formulas and themes are reshuffled rather than supplanted with new materials' Rap DJs and producers reshuffle known cultural formulas and themes. It is in this context that narrative originality is lodged. In the age of mechanical reproduction, these cultural formulas and themes are in the form of recorded sound, reshuffled, looped, and recontextualized" (p.88).

The recorded voice as a signifier of presence becomes an element of composition, in some ways ushering in a post-literate orality, an orality dependent on technology. Collective experience is encoded in recorded orality. Chuck D has called Rap CNN for black people. Sounds become elements of composition

Sampling undermines copyright law: "Computer sampling instruments create access to sounds formerly uncopyable and therefore unprotected" (p. 91). *So what?*

Different notions of authorship can be supported by sampling technology. The unintended effect for people who thought of phonographs as simple recordings — as tools for reproduction, not new production — is that individual authorship becomes more difficult to sustain technologically and requires recourse to copyright law that enshrines a very individual idea about ownership and creativity.

Paul Gilroy claims that Rose's "assertions that hip hop is reducible to a core of invariant and exclusively African-American "black practices" that permanently resist both commodification and white appropriation" are problematic. *Why?*

"in a world of bytes and microprocessors, large and complex ideas can be rewritten revised, 'samples' by computers and reorganized by composers" (p. 89).

samplers as time machines (p. 96).

Williams, Ben. 2001. Black Secret Technology: Detroit Techno and the Information Age. In *Technicolor: Race, Technology, and Everyday Life*. Alondra Nelson and Thuy Linh N. Tu with Alicia Headlam Hines, eds. New York: NYU Press, (pp. 154-176).

Different moments of Afrofuturism:

*The outer space moment:* Lee Perry's Black Ark studio, Sun Ra, P-Funk. (includes various articulations, including Nation of Islam and the idea of the Mother Plane)

*Imagery of aliens.* Mark Dery quote, (p. 165). Statements and then reversal (P-Funk: *Mothership Connection*).

The robot becoming cyborg moment:

Ben Williams argues that Detroit techno as an Afrodiasporic cultural form operates *differently* from hip-hop/rap as analyzed by Tricia Rose. *HOW?*

Detroit techno was a soundtrack for the evisceration of Detroit by the auto industry, which replaced the factory workforce — largely black — with machines (or by relocating offshore). (unemployment level among Detroit's majority black population was 27 percent). Williams reads techno as a commentary on black workers becoming robots/being replaced by robots, which is something techno artists simultaneously mourn and romanticize.

This also brings in *Kraftwerk*: "We are the Robots." Compare Petryna's bio-robots.

Williams writes: "Becoming robots was for African American musicians, a subliminally political act, the ramifications of which can be read both as a form of self empowerment and an identification with otherness, whether technological or racial. The historical recognition of oneself as a robot — or a unit of capitalist labor — is accompanied by the simultaneous inversion of that identity so that it becomes a form of power; robots, after all, are stronger tougher, and more enduring than mere humans" (p. 161).

*Explain?*

So, the contrast: "Where hip hop firmly inscribed its blackness within the machine created grooves by recontextualizing the oral tradition and sampling canonical funk grooves, techno's more total embrace of mechanized sound and aesthetic moved away from such traditional signifiers of the black body" (p. 163).

"Where hip hop tended to use recognizable samples that were intended to trigger emotional memories/histories, techno treated its found sounds as interchangeable elements of an endless data stream" (p. 163).

*cyborg/cyberspace moment*

"Blackness becomes production technique; alienation is converted into cyborg identity; and the practice of international musical data exchange becomes a utopian myth of non-property based, open source collaboration that function as a resolution to the contradictions of global electronic capitalism" (p. 171)  
*comment?*

*Film excerpt: Scratch*

Your papers are due on our next meeting, the 18th.

Let me read you the assignment:

For this paper, you should write about some aspect of computer and information technology, either another example of something we discussed in this thematic unit (computers and the self, artificial life, electronic music) or something we did not read about (e.g. cell phones, computer games). You must use some of the theoretical tools offered in the readings for this section (e.g. Edwards, Pfaffenberger, Rose) to analyze your case.

Let's go over some themes from this segment!

We started with WHAT is A COMPUTER

We got TOOL FOR REPRESENTATION, MODEL, COMPUTER AS MEDIUM  
KNOWLEDGE/POWER  
CLOSED WORLD/GENDER: SEX/GENDER/TECHNOLOGY  
HARD MASTERY/SOFT MASTERY  
EXPERT SYSTEMS/KNOWLEDGE AS INFORMATION/INTERPRETATION  
HETEROGENOUS ENGINEERS/CONSTRUCTION  
TECHNOLOGY'S DOUBLE LIFE  
REVERSE COMMODITY FETISHISM  
SILICON SECOND NATURE  
HACKING