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Intellectual Property Meets the Cyborg

Performance and the Cultural Politics of Technology

Philip Auslander

I

SOME CURRENT USES of computer technology in the popular music industry, particularly the use of digital sampling in rap and rock music, have focused attention on an important nexus of cultural discourses: performance, technology, and the law. The issues that have come up recently, primarily in the context of popular music performance, resonate with other issues in the arts over the last decade, including battles between playwrights and theatres over uses of texts, the postmodern strategy of image appropriation in the visual arts, and the current debate over the use of unpublished biographical materials by literary scholars.

All are questions of textual ownership that inevitably engage artistic practices, ethical questions, and legal concepts such as that of intellectual property. Some of these debates are new, some are not: whereas disputes between playwrights and theatres over the use of a play text are hardly novel, the issues raised by digital sampling present new challenges. While recent discussions of popular music focus on the uses of particular technologies, many of the debates in other cultural realms have little directly to do with technology. Nevertheless, I will argue here that our current technological environment is an important context for these debates, even in some instances where the use of a particular technology is not itself

in question. What I see at issue is less the ethicalness of using technology in particular ways, than the question of how our cultural and political environment is responding to technological change.

II

The technological environment governed by advanced information technologies now encompasses the cultural realm, bringing legal and political ambiguities with it. Through digital sampling, currently a widespread practice in popular music production, musicians can either incorporate parts of another's recorded music into their own, or build their own musical performance from information electronically sampled from another's. Beginning with a sample of a particular drummer, for example, another musician can elaborate an entire electronic "drum" performance whose stylistics will derive from the sample. In 1984, the group Frankie Goes to Hollywood sampled from Led Zeppelin drummer John Bonham for their notorious recording of "Relax." The drumming on that record both is and isn't John Bonham's. Bonham, who was deceased, did not play on the sessions that produced the record, yet the drumming on it is his in that a new drum performance was electronically "cloned" (and that is the word used in the context of digital reproduction) from a sample of his drumming. The result is a drum track whose performance characteristics were "authored" by Bonham, even though he had never actually played it or anything quite like it.

Digital sampling raises an issue that is, as far as I know, historically unprecedented. Specifically, performance itself is now commodifiable. By "performance itself" I do not mean "a performance," in the sense that a recording of a performance might be said to be a commodified version of that performance. What I am referring to here as "performance" is something much less concrete and specifiable than that. In the case of "Relax," Bonham's performing itself—not a song he wrote or a particular drum performance of his—acquires exchange value: genetic samples that encode what we might call performance style—rather than a specific textual content—now can be bought, sold, traded, and stolen.

Such practices clearly challenge most of our traditional concepts of authorship and textual ownership. Who is the author here? Is it feasible to argue that a musician (or his estate) is entitled to compensation when someone else elaborates a musical performance from a tiny piece of electronic information extracted from his recorded performance? Or combines his performance with those of others? For that matter, could one argue

that the author of the software used in this cloning of a dead drummer is really the author of the performance? Or is the author actually the machine that did the work of bringing the software to bear on the raw digital information extracted from Bonham's original performance?

Although I will confine myself to discussing this issue in terms familiar from critical discourse on the arts, I am tempted to argue that this whole issue has transcended those terms, and is now really a question of bioethics comparable to the moral dilemmas raised by genetic engineering.

Digital sampling and related textual practices thus challenge engrained ideas concerning authorial rights of ownership. Simon Frith argues that sampling "calls into question the principles that underpin copyright law," principles that are inextricably linked with the conditions of cultural production under commodity capitalism: "Anglo-American copyright law is not a statement of ethical principle but a device to sustain a market in ideas . . . ," as the phrase "intellectual property" itself suggests. In other words, these textual practices implicitly insist that authors have no intrinsic, natural right of ownership to the texts they produce, that such a right exists only as a function of an economic system that commodifies cultural production. Through textual appropriation, samplers implicitly challenge the concepts of authorship and ownership that make such a market possible, and proceed on the utopian premise that we are all free to use our cultural environment as we see fit. The market and the legal establishment supporting it have not found it easy to respond to this subversive practice. Most of the lawsuits that have resulted from sampling have been settled in favor of the copyright holder; because most also have been settled out of court, there is so far no clearly established legal method of containing the practices themselves.

These events fall into the historical pattern of the relationship between information technologies and social institutions that Ithiel de Sola Pool, from whom I have borrowed the concept of a "technological environment," identifies in *Technologies of Freedom*. Pool argues that there is always a lag between the development of information technologies and the institutions and agencies that govern and regulate their use: "Institutions that evolve in response to one technological environment persist and to some degree are later imposed on what may be a changed technology." Often, the result is that the freedoms made possible by new technologies are undermined by inappropriate social, political, and legal restriction when models derived from one technology are applied to another. Pool cites copyright law, designed to protect intellectual property in a world whose main technology of communication was the printing press, as a particular example, noting that "Totally new concepts will have to be invented to

compensate creative work in [the environment created by computer technologies]. The print-based notion of copyright simply will not work."

In the case of digital sampling, the arguably outmoded copyright model is being imposed upon the products of the new technological environment, and threatens freedom of expression. As seems so often to be the case these days, a new aesthetic is in danger of being outlawed just as its expressive possibilities are beginning to be explored.

The Bette Midler case of 1989 is worrisome in this context, even though it has nothing specifically to do with advanced information technologies. Midler won a suit against an advertising agency for using as background for a commercial a version of the song "Do You Wanna Dance" that sounded like her 1971 version, ironically by one of the back-up singers she had used on the session that produced her recording. It is worth noting that Midler's version of the song is distinctive largely by contrast with the best-known earlier version, recorded by the song's writer, Bobbie Freeman, in 1958. Freeman took the song at a faster tempo than Midler, and treated it more as a dance tune than as the ballad Midler found it to be. The jury determined that the advertisers had "appropriated what is not theirs"—Midler's sound and performance style.

One wonders, too, in what sense these things are Midler's. The hallmark of Midler's style, after all, is pastiche—presumably, the Andrews Sisters could have taken *ber* to court for stealing their style when she impersonated all three of them on her recording of "The Boogie Woogie Bugle Boy of Company B." And, as I indicated, one could argue that Bobbie Freeman and his producers are partly the "authors" of Midler's style, since her version acquires much of its stylistic identity intertextually through contrast with his.

This case has disturbing implications for cultural production within our current technological environment because it suggests that such abstractions as "style" and "sound" are not only identifiable and appropriable, but therefore legally protectable as property. It thus represents an effort to redefine the cultural commodity in terms of style rather than text, to make style—the very thing that digital cloning can duplicate—ownable. Although I have no desire to defend the use of "soundalikes," a crassly exploitive device at best, the decision in the Midler case may only further erode the already embattled freedom to use related strategies in more valid artistic contexts.

Another performance practice that takes on particular significance in terms of our current high technological environment, even though it is not literally a product of technology, is the use of appropriated texts in the textual collages created by some performance artists. One particular

example is The Wooster Group's incorporation of parts of Arthur Miller's play *The Crucible* in their piece *L.S.D.* (. . . *Just the High Points* . . .) (1984–5), which resulted in a legal struggle with Miller. Clearly, The Wooster Group's appropriation implies the same poststructuralist attitude toward a literary text as digital sampling implies towards recordings as musical texts. As Peter Wollen puts it, "Reproduction, pastiche and quotation, instead of being forms of textual parasitism, become constitutive of textuality." In this particular case, one might ask exactly how The Wooster Group's use of Miller's text should be described. It was not a question of interpretation: *L.S.D.* was not a production of *The Crucible*, but a cultural text that incorporated parts of another cultural text. The Wooster Group did not use *The Crucible* because it tells a certain story, but rather because of its cultural aura, its status "as an icon that gathers together a network of associations and experiences."

It is not at all clear that such a use of a play text constitutes a *performance* of the play, even legally. The Wooster Group's appropriation of Miller's text is not easily assimilable to traditional understandings of the text-production relationship in theatre, or to the legal structures designed to protect the author's rights of ownership in that relationship. In fact, it throws these issues into question very much the way the uses of digital technology have: samplers, too, choose their source materials for their cultural aura as much as for their musical properties, particularly in rap music. Their work is frequently evaluated in terms of its cultural references and resonances.

What I would like to suggest here is that it is more productive to conceive of L.S.D. (metaphorically, of course) as a performance that sampled from Miller's text than to think of this as a matter of interpretation. Just as we would not say that a musical composition that contains a sample from a Beatles recording is a performance of a Beatles song, we should not use critical language which suggests that L.S.D. and similar performances are in any sense productions of their source texts. This new designation does not clear up the legal and ethical problems posed by textual appropriationists like The Wooster Group and digital samplers. It does, however, offer a way of describing a relationship between text and performance (and amongst texts) that is not assimilable to such traditional characterizations as "performance of," "interpretation of," or even "quotation from."

In addition to shaking up conceptions of authorship, textual ownership, and intertextuality, digital technology also confounds most of our usual suppositions about representation and reproduction. We are accustomed to thinking of a recording as a *representation* of the performance it records.

In good Platonic terms, a recording transcribes an original, but is not that original: it is at a remove from authenticity. In cases where a performance on a digital musical instrument has been stored on a computer disc, however, the "recording" (i.e., the information on the disc) can be made either before or after the "original" performance, thanks to MIDI (musical instrument digital interface) technology.

Pressing a key on the keyboard of a MIDI-capable synthesizer not only causes a tone to be played but also transmits some data bits on an output cable that identify which key was struck and how hard it was struck. A synthesizer can also have a MIDI input cable. If it receives key-play information through this cable, it will play a tone exactly as though one of its own keys had been pressed. In principle, anything that can be done on a synthesizer can be locally controlled by sensors on the machine (such as keys, buttons, or knobs) or remotely controlled through MIDI.⁵

What is recorded by the computer through the MIDI cable is a set of instructions for recreating the original performance rather than a transcription of that performance. A programmable keyboard is like a player piano in that it produces an actual performance rather than a representation (recording) of a performance. The difference, however, is that whereas the information on a piano roll has been translated from its original form into a storeable form, digital information need not be translated to be stored, as the computer and the synthesizer speak the same binary language. The recording is therefore not at the same Platonic remove from the original performance as in the case of the player piano. The same binary information that the keyboard produces in performance is entered onto the recording of the performance. When the stored information is subsequently decoded to produce sound, it is literally reproduced, produced again, not represented. Rather, the original digital performance takes place again, robotically. This aspect of digital sound production clearly undoes the cherished distinction between "live" and "recorded" performance as well as that between "original" and "reproduction." In cases where the computer does not transcribe information generated by a hand-played performance on the keyboard but is programmed to "play" the instrument directly, the "recording" precedes the event "recorded," and the automated performance is the "live" performance.

In her famous essay "A Manifesto for Cyborgs," Donna Haraway argues that "High-tech culture challenges [the] dualisms [that have been persistent in Western traditions] in intriguing ways." The fundamental dualisms that

digital technology challenges in its relation to performance include those of author and interpretor, owner and user, original and reproduction, "live" and recorded. Our cultural tendency so far has been to respond to this challenge by reinscribing these dualisms, redefining them where necessary. Critics and legislators deplore the use of programmed performance in "live" settings; traditional distinctions between author and interpretor and between owner and user have been extended from the realm of specifiable texts to that of inchoate style to bring new technological developments within the grasp of existing legal structures.

Not coincidentally, the market for cultural commodities depends precisely on the maintenance of such dualisms for its very existence. These responses are conditioned, I believe, by the unspoken assumption that the authentic, originary—and, therefore, privileged—version of any performance is the "live" version, and that recorded or mediated forms of performance are—as secondary, commodified versions of that irreproducible originary moment—intrinsically inauthentic, however pleasurable. This privileging entails an idealization of the performer as the maker of the authentic work, the source of the authentic style, and a reification of the performer's presence.

Ш

Haraway's vision in "A Manifesto for Cyborgs" provides a valuable antidote to the nostalgia for presence and the neo-Luddism that the current response to sampling and related practices represents. From a left-feminist perspective Haraway suggests that the destabilizing impact of technology can be seen as politically valuable, arguing that rather than attempting to restore rigid dualistic boundaries where they are beginning to crumble, women should embrace the possibility of decentered, multiplex identities that high technology implies to construct what she calls "cyborg identities," identities in which the boundaries of such dualisms as self and other, person and machine, technology and nature are no longer clear. Haraway's argument is that the concept of the cyborg-an inorganic being compounded of human and machine - provides a way of conceiving of political identities that simultaneously transgress boundaries and make possible unexpected and improbable unities. Clearly, the technological environment created by information technologies is a terrain ripe for the creation of such identities.

To the extent that much pop music performance today is the product of human/machine interfaces, we are already in an era of performing cyborgs. Most pop cyborgs, however, are content simply to garner the benefits of high technology unselfconsciously, and thus fail to use their ambiguous status as a position from which to articulate cultural or political commentary. A notable exception is Laurie Anderson, whose hybridization of the rock concert and performance art yields a performance discourse that is constructed through advanced communications technologies, and that explicitly challenges the kinds of dichotomies problematized in the technological environment at large.

Anderson's use of technology to extend her performance range makes her into a sort of cyborg to begin with—her performances are produced by something that is part woman, part machine. Through her multilayered analysis of signification, gender, and information technology in her 1986 performance film, *Home of the Brave*, Anderson articulates the utopian politics of technologically created, complex identities that Haraway describes.

Early in the film, Anderson appears masked, lecturing the audience in a digitally synthesized "male" voice. The subjects of her lecture are the digits "0" and "1." She points out that in common discourse, these signs have opposite meanings: to be "number one" is at the other end of the spectrum from being a "zero." She suggests that this way of using signs needs to be reformed, because the distance between the highest and lowest, between "0" and "1," leaves "very little room . . . for everybody else. Just not enough range." She proposes that we should abandon the value judgments associated with these signs and recognize them as of equal value because they are equally

the building blocks of the modern computer age. Anything that can be expressed in words or numbers, in any language, can be communicated using this simple, foolproof system. It's all here in a nutshell—the entire alphanumerical system, A to Z, the zero to infinity of digital intelligence.

She then gives examples of letters, numbers, and a musical phrase expressed as digital combinations, zeroes and ones filling the projection screen behind her. As she concludes, she counts off a two-beat rhythm ("and zero—and one"). Projections of a large zero and a large one alternate behind her, accompanied by a metallic, rasping sound.

In this section of her performance, Anderson not only describes the leveling of cultural binaries implicit within the epistemology of digital technology, but enacts it. The figure we see before us displays both male and female signs, yet ultimately is neither. It is also a cyborg, a human being whose voice is produced by the very digital technology it describes

for us. This figure claims to have written the song from which Anderson extracts her example of binary code: the irony may be that the cyborg, the amalgam of human and machine, truly *is* the composer in this case, as Anderson used a computer in composing the song.

The passage is comic in that the lecturer's hyberbole and the seeming inefficiency of expressing a simple number, letter or musical note as a huge number of ones and zeroes appear somewhat ridiculous, yet underlying this gently deflating humor is the suggestion of the deep technological utopia Haraway has in mind. Computer logic cannot abolish binaries—it cannot exist without them—yet those binaries imply no value judgments; unlike the societies and cultures it has had such an impact on, digital technology itself is genuinely indifferent to the differences between the terms of the binaries it employs.

In addition to suggesting that the epistemology of computer technology may have something to teach us politically and socially, Anderson addresses the breakdown of representation and presence in the environment created by advanced information technologies through her incorporation of the author William S. Burroughs into *Home of the Brave*. Burroughs reads the text on the version of the song "Sharkey's Night" included on Anderson's recording *Mr. Heartbreak* (1984). He appears in the film in several guises, first as a voice heard through a white telephone receiver suspended above the stage, a reference to the last lines of "Sharkey's Night" ("Paging Mr. Sharkey. White courtesy telephone please."). Speaking as Sharkey, he says, "I'd rather see this on TV."

He is next heard as the only vocal content of "Late Show," in which Anderson "plays" Burroughs's voice on her tape-bow violin, an instrument with a magnetic playback head mounted near the bridge that is played by running a strip of recording tape mounted on a bow across the head. In this instance, a recording of Burroughs speaking the line "Listen to my heartbeat" from "Sharkey's Night" is on the tape mounted on the bow. During "Late Show," Burroughs appears on stage to dance with Anderson, though he does not speak. The set for the number includes a giant replica of a television screen on which enormous figures are silhouetted, including three men in jackets and hats strongly resembling Burroughs's attire. They stand in a line and tip their hats at the end of the song. Later on in *Home of the Brave*, Burroughs himself is seen as a silhouette, while his voice is heard on the soundtrack.

By interpolating these multiple, fragmented versions of Burroughs (as disembodied voice and silent body; as "live" presence and as recording; as representation and as simulation) into her performance, Anderson plays across the lines of binaries that our current technological environment

has problematized. Burroughs's voice on the telephone may well be recorded, yet he is present "in person," as we discover when he emerges to dance with Anderson. He has, however, been deprived of full presence—he can be seen but not heard, or heard but not seen. When he is simultaneously seen behind the screen as a silhouette and heard, his visual presence is no different from that of the simulated, hat-tipping "Burroughses" silhouetted on the television screen.

In fact, we cannot even be certain he really is behind the screen, or that he is speaking the words as we see him. The Burroughs we see in *Home of the Brave* is simultaneously present and represented, "live" and recorded, with no clear distinctions between those terms and no privileging of the "live" presence over the recorded or simulated versions.

Anderson also addresses the impact of technology on questions of textual authorship and ownership through her incorporation of Burroughs. As Anderson draws the bow across the violin in "Late Show," she fragments Burroughs's spoken words into a Burroughsesque cut-up by making him stutter, repeating certain sounds and words, not playing back the entire sentence until the end of the song. She also raises and lowers the pitch and speed of Burroughs's voice by manipulating the speed of the bow, so that we hear Burroughs's "natural" voice only at fleeting moments. In doing this, Anderson makes Burroughs's speaking voice into a musical instrument: the fragmentation of the sentence creates a rhythm that is consonant with the structure of the song (thus punning on "heartbeat"), while her play with pitch and speed stretches Burroughs's spoken words into a melody.

The gender and cultural politics of Anderson's appropriation of Burroughs's voice (presumably with his permission) are complex to the point of undecideability. We might be tempted simply to say that the appropriation and manipulation of a prominent male artist's voice by a woman artist constitutes a political statement in itself, especially when the male artist is a notorious misogynist like Burroughs. Although critical assessment of Burroughs has assigned him a prominent position in the American literary avant-garde, it is not at all clear that he occupies a position of patriarchal privilege that Anderson is usurping or challenging.

By employing his Dadaesque cut-up method in composing his texts, Burroughs has partly refused the patriarchal role of the authoritative creator. Throughout his career, he has assiduously cultivated the romantic image of the artist as outlaw, as marginal, as a killer, junkie, homosexual black sheep scion of an American industrial dynasty. Anderson, on the other hand, has equally assiduously moved from the culturally marginal position of a woman performance avant-gardist to a prominent position within commodity culture as a Warner Brothers recording artist.

The Anderson/Burroughs nexus does not lend itself comfortably to interpretation in terms of binary opposition. Of the two, who is at the cultural center and who is at the margin? Who is the appropriator and who the expropriator? Who is the "0" and who the "1"? As cultural figures, Anderson and Burroughs are both made up of networks of identifications that constitute cyborg identities even before we discuss the specific effect of technology upon them in Anderson's performance.

Through the mediation of electronics, Anderson's and Burroughs's voices merge: the voice that emerges from the tape-bow violin is his, yet it is not. It is her "voice" in that she plays the instrument, yet it is not her voice. He "authored" the sentence by speaking it, yet she wrote the words and actually controls the articulation of the spoken text with her bow. The homosexual-junkie-misogynist-Beat novelist, and the heterosexual-feminist-postmodernist entertainer-performance artist achieve a strange and unstable unity of the kind described by Haraway for the duration of the song by speaking through a single voice that belongs to both, yet to neither. To further enrich and complicate matters, the line "Listen to my heartbeat" reappears later in *Home of the Brave*, at the end of "Sharkey's Night." This time the line is spoken by Anderson, but using her digitally-synthesized "male" voice—her altered voice sounds, in fact, very much like Burroughs's altered voice at the end of "Late Show."

Again, a peculiar and provisional unity of very different entities is achieved through the mediation of technology. The two voices sound alike and say the same thing: they could belong to the same person, yet neither actually belongs to anyone. To whose beating heart are we being asked to listen?

What I would like to suggest here is that all of the voices in Anderson's performance belong to the performance itself, which itself becomes a cyborg that absorbs, genetically recodes, and debinarizes the dualisms represented by the following pairs: verbal text/musical text, speaking/singing, Anderson/Burroughs (i.e., self/other), author/reader, man/woman, homosexual/heterosexual, feminist/misogynist, avant-garde art/popular entertainment, person/machine. The voices we hear in this performance belong at least in part to the electronic processes, not to Anderson and Burroughs.

When we finally do hear the heartbeat at the end of "Sharkey's Night," it is the same rasping, metallic sound in the rhythm of a human heartbeat that we heard at the end of the lecture on "1" and "0." This time, Anderson "plays" the sound on her tapebow violin, just as she earlier had "played" Burroughs's voice; the projected 0 and 1 from the opening lecture sequence reappear, flashing in time with what we now understand to be the beating of a cybernetic heart.

The aesthetic practices facilitated by digital technology have opened new horizons, and present new challenges to engrained critical and legal concepts of the authorship and ownership of texts, and of representation generally. As I have suggested, these challenges constitute part of a larger cultural environment that contextualizes even some cultural practices that do not involve the use of digital electronics, but that raise questions concerning the use and ownership of cultural texts. At present, these challenges are still being negotiated; it remains to be seen whether we will succeed in constructing a cultural climate in which the freedoms offered by digital sampling and related practices can be pursued in progressive and equitable ways. Early signs are not altogether propitious: the initial impulse seems to be to bring new technologies and possibilities under the restrictive authority of existing legal definitions. Historically, this development has hindered the positive social and cultural development of new information technologies.

Laurie Anderson foregrounds these very issues through her self-conscious use of digital technology in *Home of the Brave*. Anderson both presents and enacts a utopian vision based in the epistemology of digital electronics, an epistemology that rests on binaries, yet privileges neither term of those binaries. Anderson extends this deprivileging to her own identity as author and performer, blurring the boundaries between herself and the machines she employs, and between her own authority as author and performer and that of William S. Burroughs. Anderson and Burroughs merge, and become parts of a corporate, cyborg identity born of information technologies that is the "author" (and "performer") of *Home of the Brave*, and that is not assimilable to the notions of authorship and ownership we currently associate with the concept of intellectual property.

Along with other digital samplers and textual appropriators, Anderson simultaneously presents a radical challenge to the individualistic concepts of cultural production and textual ownership that underpin the market in cultural commodities. Her work reflects a provisional glimpse of the cultural environment that will become possible if new technologies are indeed permitted to realize their potential as "technologies of freedom."

NOTES

^{1.} Simon Frith, "Picking Up the Pieces," *Facing The Music*, ed. Simon Frith (New York: Pantheon, 1988), 123–124.

^{2.} Ithiel de Sola Pool, *Technologies of Freedom* (Cambridge: Harvard University Press, 1983), 5.

^{3.} Peter Wollen, "Ways of Thinking about Music Video (and Postmodernism)," Critical Quarterly 28, no. 1–2 (1986): 169.

- 4. David Savran, "The Wooster Group, Arthur Miller, and *The Crucible,*" *The Drama Review* 29, no. 2 (T106, 1985): 105.
- 5. Max V. Mathews and John R. Pierce, "The Computer as a Musical Instrument," *Scientific American* 256, no. 2 (1987): 133.
- 6. Donna Haraway, Socialist Review 15, no. 2 (1985): 96-97.

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