Electric Production and Direction: *Mural Study (two panels) ca. 1933-34 by William Karp*

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Techno-

Driven Chamber Music

Is It Driving Musicians Out?

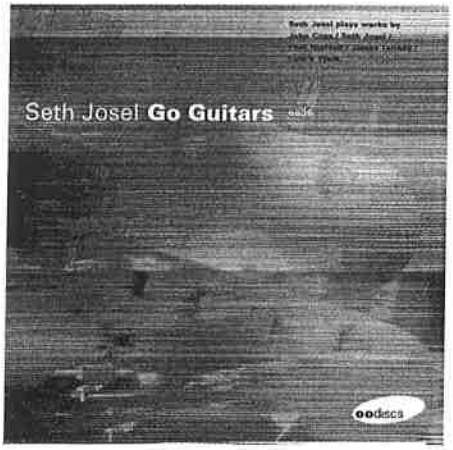
By Kyle Gann

If you know the Beatles' *White Album* , you may remember a quirky little track called "Revolution No. 9." A sound collage of voices from other recordings, crowd noises, and backwards snatches of music, it grew out of the band's passing fascination with the European avant-garde represented by Stockhausen and other composers. More accurately, it probably reflected John Lennon's fascination with Yoko Ono, who had come from that avant-garde world. With its recurring looped voice repeating the clip "number nine, number nine, number nine," it was rock's first tape collage.

That was 1968. What you probably don't know is that in 1992 "Revolution No. 9" became a piece of chamber music.

That was the year that David Weinstein, a composer from Manhattan's irrepressible Downtown scene, formed a group called Impossible Music from several like-minded musicians who performed on CD players. Impossible Music collected the recordings that the Beatles had used, and—using CD players that had been "hotwired" to respond to unconventional demands such as looping and skipping—performed "Revolution No. 9" in the world premiere of its chamber music version. Chamber music? Well, what else would you call five guys intently performing on CD players in front of an audience?

CD players as musical instruments, DJs spinning vinyl records, composers performing on computers, computers spitting out music by themselves—a lot of musicians who play good old-fashioned acoustic instruments find all this technology threatening. The purpose of digital



music equipment seems to be to put musicians out of business. And it's true that hundreds of composers have used technology to become more self-reliant. In their defense this is because of a hardly groundless feeling that most classical musicians keep newly-composed music at more than arm's length. Synthesizers, samplers, and computer software have become so sophisticated and so affordable that someone working alone in a $10,000 studio can now create his or her own CDs of virtual orchestral music rivaling the Berlin Philharmonic in acoustical richness and complexity. Why bother with performers when you can do it all yourself?

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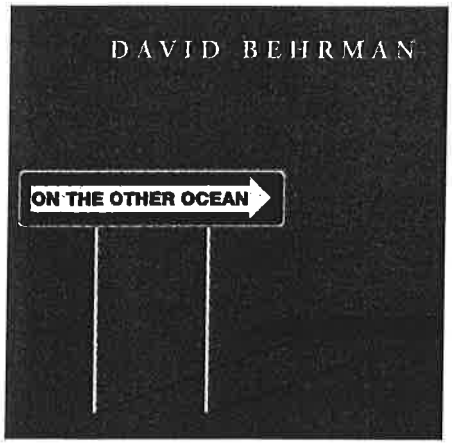
And yet, truth be told, oboists and violinists should quit worrying about technology and start looking at what it can do for them. I have never yet found a composer who expressed a desire to quit working with live performers. Quite the contrary. Except for the occasional diehard software maven, most electro-composers say that they would love to work with performers more, if performers would show any interest. No composers I know, no matter how many electronic discs they've put out, fail to jump at the chance to write for ensemble when it's offered to them. They are fully aware that your better-than-average cellist or tuba player brings benefits that can't be found in a box: theatrical presence, the dazzle of transcendent virtuosity, the humanly lyrical touch, the charm of unpredictability.



As the technology becomes more sensitive and sophisticated, more and more composers—and performers as well—are finding ways to integrate it with live performance, to electronically expand what chamber music is capable of. For one thing, technology can allow a player or chamber ensemble to bypass economic limitations. To give a rather spectacular example, minimalist pioneer Steve Reich premiered a new work in 1999, Triple Quartet, for three string quartets. Now, how often can one string quartet manage to get two others to sit in for a part of a concert? But Reich, practical musician that he is, wrote it to be playable by one live quartet and the two others on tape, which is how the Kronos Quartet premiered the piece at Lincoln Center. (Actually, nowadays, music on "tape" usually means on a recordable CD, but the terminology has not yet changed to reflect that.)

Many other composers have used the same strategy for soloists. Mary Jane Leach wrote her "4BC" for four bass clarinetists, but it is usually done by one clarinetist with the others prerecorded on tape. (An even more daunting work of hers requires—

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yikes!—eight bassoonists.) Likewise, Lois V Vierk wrote her "Go Guitars" for five guitarists or one guitarist and tape. Call *that* "chamber music," playing with four prerecorded versions of yourself? It offers some of the same pleasures, one of which is that you know the other members of your ensemble *extremely* well.

Of course, some performers, and many composers as well, are not excited about performing along with tape; it does deny a certain amount of tempo flexibility and performance spontaneity. For those people, the new interactive music software offers far more subtle environments. David Behrman creates software pieces that respond to a live performer by creating a mellow aura of harmonies in reaction to the performer's pitch choices. In his *On the Other Ocean* (Lovely Music CD 1041) recorded with flutist Maggi Payne and bassoonist Arthur Stidfole the computer makes an interestingly compliant chamber music accompanist, passive and without original ideas of its own, yet infinitely alert, with a turn-on-a-dime response.

Those who desire more unpredictable co-performers might prefer Richard Teitelbaum's music. Despite its title, his "Concerto Grosso" only uses three live performers; the soloists are accompanied by digitally controlled acoustic pianos and synthesizers. Here the computer not only accompanies, it records and stores whatever improvisations the soloists come up with, then reforms the material into its own massive and always surprising climaxes. Once Teitelbaum's computers take off, the solo clarinetist or pianist gets the heady feeling of having created a monster.

For the player who's not into improvisation, there are plenty of other kinds of techno-driven chamber music. A lot of electro-acoustic music requires the same old performer skills but offers a new array of sounds. Eve Beglarian has written chamber works integrating instruments with the sampler—a digital box that can record any sound and manipulate it by chopping it up, lengthening it, changing its pitch, looping it, and so on. Her "Wolf Chaser" for violin, percussion, and electronics, surrounds its acoustic melodies with the sampled whirr of a wolf chaser (or Indian thunder stick, a flat piece of wood swung on a string). Nic Collins' *Broken Light* is a CD player quintet—that is, a quintet for CD player and

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string quartet. Some composers need electronics to achieve more pitches per octave. The Seattle-based Trimpin, for example, has invented a bass clarinet with dozens of extra keys controlled via computer; but he still needs a clarinetist to blow into it.

There are different kinds of samplers, but a keyboard sampler is played just like a piano and needs a pianist. You may press G-sharp and a train whistle blows, then press E-flat and hear a dog bark, but the skills are utterly traditional. Some composers, though, want more subtle control over sound envelope and dynamics; they use not a keyboard, but a MIDI wind controller, usually played by a clarinetist or saxophonist. Others want the kinds of tone control offered by string players, which is one reason that skeletal, space-age-looking electric violins and cellos are becoming more and more common. Computer MIDI-control can be a cold, unsubtle way to trigger sounds, and many composers are turning to digitized traditional instruments to regain the delicate fluidity of a live performer.

Digital musical technology is no more likely to disappear back into nonexistence than the automobile or TV; it's here to stay. But no musical mad scientist is predicting the end of the acoustic-instrument performer. The digital revolution—whether it's number nine, number one, or number thirty-seven—is, rather, a challenge, calling for chamber musicians to get involved. Composers can produce their music solo if they're forced to, but they're essentially a social bunch. So every year a couple more instrumentalists redefine themselves as players of the electronically "extended" trumpet or flute. Pianists Lois Svard and Loretta Goldfarb have taken to performing on synthesizer, or using e-bows (electronic guitar-string vibrators) on the piano strings. Libby Van Cleve is the East Coast's designated extended oboist; Martha Mooke has pioneered the five-string electronic viola; Jeffrey Krieger the electronic cello.

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All of these performers continue to use the traditional skills they trained for in school. By extending their instrument technologically, though, they can elicit a world of sounds, noises, textures, and volume levels that their teachers never dreamed of. It's only a matter of time before they are numerous enough to band into electronic chamber groups. And once that time comes, I'm willing to bet that late twenty-first-century violinists—able to trigger orchestras, voices, and *fff* thunderstorms at the pluck of a string—will find it quaintly amusing that we once worried that the violin would become obsolete. ■