

Five-Foot Noise

While Machover fiddles at MIT, another composer turns virtual reality software to different ends 2000 miles away in North Dakota. We haven't heard Henry Gwiazda's lively sample-collages recently because he's been developing a new aesthetic around spatial location. He'll go public with an installation called *buzzingreynold'sdreamland* October 9 through 11 at Hartt College in Connecticut. It uses loudspeakers, but only one person can hear it at a time. "With speakers, you can't get sounds behind you. All the sounds are in front of you. You can, however, get sounds very large, like five feet tall. With headphones, you can't get sounds in front of your face. You can get them on top of your head, behind, below, 20 feet to the side." You get a hint of Gwiazda's fluid sound-choreography by listening to his *themythofAcceptance* on a new CRI disc called *Night Chains*, featuring electro-cellist Jeffrey Krieger. Listen with headphones, and the cello seems to pass through your head from one ear to the other and back with startling realism. —K.G.

'Til the Fat Lady Clicks

Tod Machover's Virtual Reality Opera

BY KYLE GANN

I've long known the '95-'96 season would be the year virtual reality invaded music. It was supposed to begin at the Atlanta Summer Olympics with Tod Machover's *The Brain Opera*, but when I called Machover for a progress report, the sponsor had fallen through: "Coca-Cola decided they don't want to do a technology thing at the Olympics." That's lucky for us, for instead the piece will premiere at Lincoln Center's summer festival next July 22 to August 11, and will also be available—assuming things go as planned—around the world via the Internet. People physically present will see an hourly performance for three musicians and electronics, different each time. Net cruisers, though, can contact the opera's web page, download the music, alter it to taste, and send the alterations back to be heard at Lincoln Center.

Some of *The Brain Opera's* software is still in development, and high technology has a way of sideswiping artistic intentions, but if Machover—composer of the computerized opera *Valis* and inventor of touch-controlled "hyper-instruments"—pulls off only half his plans he'll break new ground. As you enter the lobby of the Juilliard library,

he predicts, you'll be offered a series of musical experiences. "One's a 'melody easel,' where you get to paint melodies with your finger. One's called Harmonic Driving, like a video game where you get to steer through a piece of music. You can control the tempo with an accelerator pedal, and if you stay on the main road it's less interesting than if you take a variety of detours." He's hoping for sensors that will allow the audience to influence the opera's textures and progression, but what's more in place is the Internet component.

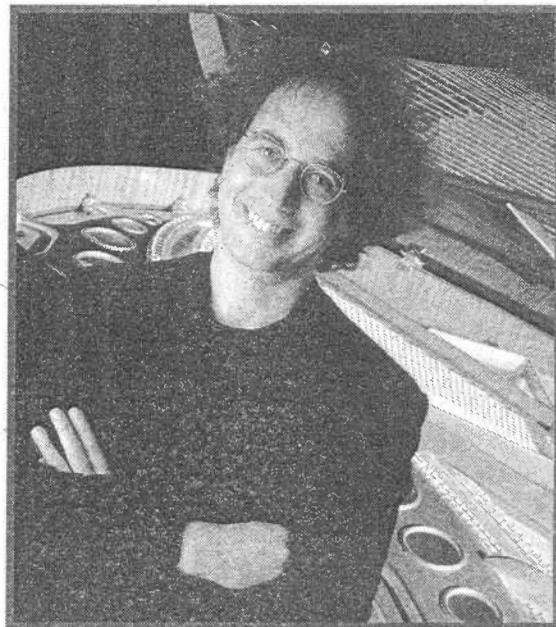
"At Lincoln Center, the piece will be 45 minutes with a beginning and end, integrating material received from the Internet. On the Internet we want a version that goes on without beginning or end. You'll have buttons or sliders on your screen with which you can say, do more of this, stretch that, exaggerate this, put that in the text. The musical processes take place on our computer at the Media Lab, then the sound is sent back to your home com-

puter. We're not sure how quickly the software to that will develop. The problem is today the Internet only allows

Brain Opera on the writings of his MIT colleague Marvin Minsky, the artificial intelligence pioneer. "People think the

brain operates as if there's a little manager in the middle, like an orchestra conductor—that's you. Every time something has to get done, that person says, 'Muscle, do this, and nerve, do that,' and it goes down to your finger, which finally moves. Minsky says that it's the opposite, that there is no conductor, no 'you' at the center of your mind. On the contrary, you are made up of lots of independent specialists, each pretty good at something, but not independent enough to do a complex thing on its own."

Likewise, *The Brain Opera*, shaped by hun-



WEBB CHAPPELL

Machover, composer of an opera shaped by the Internet

communication in one direction at a time."

Aptly, Machover has based *The*

dreds of webheads, will contain no central controlling mind. After so many brainless operas, it's worth a try. ❖

ORIGINAL MOTION PICTURE SOUNDTRACK

BRINDLE