

# Noises Off: Sound Beyond Music

**T**o state the obvious: Sound is more than music. This has always been true, but the old distinction between “found” sound (produced in the world but living its life outside human intent) and “constructed” music (the imposition of human genius upon selected, designed sounds) is increasingly moot. Not only is music often “found,” sound is often “designed.” This is true of the rarefied realms of art, the globalized realms of commerce and the erudite realms of science.

Museums, galleries and artists’ studios are getting noisier: It is not that there is so much more “Sound Art” now than 10 years ago, but rather that so much more art has sound. There are myriad reasons for this, from the highfalutin and theoretical to the incidental and pragmatic. For many artists, for example, the digital camcorder has become the new sketchbook, and it is so difficult to defeat the camera’s built-in microphone that most video footage is accompanied by sound by default. Also, just as a camera often redirects the artist’s eye, so the constant presence of a soundtrack, whether intentional or not, draws attention to sound. The result is students shooting video with the lens cap on, for the sole purpose of gathering sound, or playing back audio only from the camera, without bothering to hook up a video monitor. When it comes time to edit, video and sound are cut and pasted using the same keystrokes and mouse clicks, with neither media privileged over the other. This ubiquity of recorded sound has sparked a new interest in the “Soundscape” theories of R. Murray Schaefer [1] and a proliferation of CDs and MP3s of acoustic environments, both familiar and exotic.

While CD sales shrink with the proliferation of peer-to-peer file exchange, and concert attendance continues to dwindle, the creative (and often highly profitable) use of sound is expanding into many other facets of our lives: cell phone ring tones generated \$4.4 billion in sales worldwide in 2005; incoming e-mail and outgoing microwave popcorn announce themselves with boops and beeps. Sound design in Hollywood film and computer games today is much more than just wind machines and synthetic pongs and has become essential to the legerdemain of reality on screens both big and small.

The emerging field of “sonification” works to map data to sound rather than to visual images—providing aural alternatives to pie charts, line graphs and spreadsheets. With the right sound design, the ear can be a better analytic tool than the eye, as in the case of a medical lab that translated urinalysis data into synthesizer chords and reduced their false-negative and false-positive rates by a significant percentage.

For this issue of *Leonardo Music Journal* we solicited papers on this expanded role of sound in art, science, business and other aspects of everyday life. Sonification of data is a subject of several papers, including those by John Gibson (on plant growth), Andrea Polli (climate information), Carrie Bodle (upper atmosphere and ionosphere conditions) and Matt Volla (movement of passengers on BART commuter trains). With Escheresque recursion Stephen Barrass, Mitchell Whitelaw and Freya Bailes listen to brainwaves generated by people listening to music, while Gil Weinberg and Travis Thatcher created an audio installation in which brainwave activity is sonified and spatialized to mimic the spatial distribution of electrical activity in the brain itself.

Accounts of soundscape recording range from the sublime (Louise Wilson’s use of record-

ings of the environment in her installation in an abandoned military base) to the terrifying (Trevor Paglen's clandestine recordings from California prisons). Beth Coleman and Howard Goldkrand create artificial soundscapes by digitally emulating the behavior of bees, while Chris Kubick and Anne Walsh build up audio works from libraries of sound effects. The artistic and social significances of artificial acoustic space, as well as real architectural acoustics, are discussed in papers by Stuart Jones, Seth Cluett and Thanos Chrysakis.

This issue features special sections by two guest editors. Tara Rodgers solicited the statements from Bodle, Coleman and Goldkrand, Kubick and Walsh, Paglen, and Volla. Jürgen Bräuninger contributed essays written for Unyazi, South Africa's first electronic music festival, held in September 2005; abstracts of essays by Theo Herbst, Lucas Ligeti, Pauline Oliveros, Matthew Ostrowski and Rodrigo Sigal are included in the issue, with full articles available online [2].

The *LMJ* CD, *Interpreting the Soundscape*, is curated by Peter Cusack, an English artist equally well known as an improvising musician and as a soundscape recordist. The 15 tracks include examples of data sonification and recordings of acoustic and electromagnetic phenomena from around the world and under the sea.

The world is only getting louder, and there will be days when one cannot hear the signal for the noise—or when the noise carries as much information as the signal. We hope that this issue of *Leonardo Music Journal* might remind us to open our ears to both.

NICOLAS COLLINS  
*Editor-in-Chief*

#### References and Notes

1. R. Murray Schaefer, *The Tuning of the World* (New York: Alfred Knopf, 1977).
2. See <[lmj.mit.edu/LMJ16.html](http://lmj.mit.edu/LMJ16.html)> for links to these articles and for additional information related to LMJ16.

*New York—born and raised, Nicolas Collins studied composition with Alvin Lucier at Wesleyan University, worked for many years with David Tudor, and has collaborated with numerous soloists and ensembles around the world. He lived most of the 1990s in Europe, where he was Visiting Artistic Director of Stichting STEIM (Amsterdam) and a DAAD composer-in-residence in Berlin. Since 1997 he has been editor-in-chief of Leonardo Music Journal. He is currently Chair of the Department of Sound at the School of the Art Institute of Chicago. Recent recordings are available on PlateLunch, Periplum and Apestaartje. His book, Handmade Electronic Music—The Art of Hardware Hacking, was published by Routledge in 2006.*