

INTRODUCTION

Groove, Pit and Wave

Despite the Comet Kahoutek–like anticlimax of Y2K, the rollover of the millennial odometer was accompanied by dramatic reports of one apparently earthshaking transformation of our culture. The salient fact byte, repeated in mainstream and music presses, web sites and even the odd Ph.D. dissertation, was that in 1999 more turntables were sold than guitars [1]. The news was all the more notable as it came at a time when the vinyl LP had been almost universally supplanted by the CD as a format for the distribution and consumption of music. These turntables were not purchased to be stockpiled by the few remaining vinyl purists in anticipation of future shortages; they were bought by disc jockeys. They were not bought in order to *listen* to records, but to *perform* records. Many hours spent revving my surf engine have yet to yield an authoritative primary source, nor indeed any evidence to raise the status of this statistic above urban legend. But whether or not this fact is fiction, all the popular willingness to accept it reveals a fundamental change in public attitude as to what constitutes a musical instrument. The medium is no longer the message—it has become the instrument. The couch potato has shuffled onstage to displace the guitar god.

The vast majority of music we hear arrives not directly from a shimmying violin string or an undulating column of air, but from grooves on vinyl, particles on tape, pits in plastic, electromagnetic waves and pulses of light. Long before McLuhan, composers were already aware of the influence of recording and transmission on their music. The first piece of electronic music I performed, as a college student, was John Cage's *Cartridge Music* (1960), a piece in which performers act as discless jockeys, amplifying tiny sounds with pickups severed from the arms of record players. Much of my own work has been based on the manipulation of found recordings or radio transmissions, the quirky behavior of hacked CD players, and extensions of DJ-style cutting and mixing. And while my musical sensibility was largely shaped by the post-Cagean experimental music of the 1970s and the improvised music of the 1980s, many of the same concerns about the artifacts of electronic mediation are resurfacing in new genres and scenes. The pervasive chatter about the inversion of the guitar/turntable ratio suggested that the time had come to devote an issue of *Leonardo Music Journal* to the musical implications of grooves, pits and waves.

As Sérgio Freire, Peter Manning and Guy-Marc Hinant recount in this issue, composers have used records and film soundtracks as compositional tools since the 1930s at least. The subsequent advent of the tape recorder was essential to the development of electronic music in post-war Europe. By the 1960s, pop producers had refined studio technique to the point where records were no longer mere reproductions of performances; some records were so dependent on the possibilities of tape that there was no possibility of approximating them in concert. The record player became a device for experiencing performances that did not exist in real time, but for the most part it was not a performance instrument in itself. John Cage put a DJ onstage in 1939 for his *Imaginary Landscape No. 1*, written for piano, cymbals, turntables and frequency records, and the radio disc jockey Cousin Brucie proclaimed himself the "Fifth Beatle" for his role in breaking the Fab Four's singles into the U.S. market in 1964, but such overt acknowledgments of the creative potential of record players would remain anomalous until well into the 1970s.

As Yasunao Tone writes in this issue, records for Cage were not "a neutral reproducing device." Cage's influence was felt among avant-garde composers such as Steve Reich, Terry

Riley, Alvin Lucier, Hugh Davies and Gavin Bryars, who began using turntables and tape recorders as instruments for the live manipulation of sound—in contrast to (and sometimes in conscious reaction against) the prevailing tradition of pre-recorded electronic music. Simultaneously, in early discotheques, such as Sanctuary in New York City, disc jockeys developed the technique of cross-fading between two turntables to create a seamless dance floor mix [2]. By the early 1980s DJs from Grandmaster Flash to Christian Marclay (interviewed in this issue by Douglas Kahn) had established the legitimacy of the turntable as a musical instrument and made the DJ a virtuoso.

As the decade progressed, the distinction between playback and performance was further muddled by the proliferation of digital samplers, which placed snippets of records under direct keyboard control and unleashed the copyright-taunting styles of hip-hop and rap, as well as the “Plunderphonics” of John Oswald [3]. Samplers were supplemented in the 1990s by affordable software for recording and mixing sound on home computers; laptops moved freely between the recording studio and the stage with the rise of electronica. Meanwhile, contrarian DJs such as Marclay and Otomo Yoshihide stressed the cumbersome physical presence of the vinyl record with works that celebrated its ticks, skips and imperfections. Tobias C. van Veen writes in this issue about his work with vinyl [4], while, as Caleb Stuart recounts, Yasunao Tone, Oval and I all have incorporated digital errors of the supposedly “perfect” CD into music that served as prototype for subsequent pop styles characterized by “glitch.” These artifacts of recording are now sufficiently entrenched in contemporary music that artists/programmers such as Nick Collins [5] and Trace Reddell, as they discuss, have in turn developed software that mimics and extends the DJ’s vocabulary.

Not only have *recording* technologies been embraced as musical instruments, but traditional and emergent networks for the broadcast and distribution of music have been picked from the pockets of the “Music Industry” and adapted as performance tools. Following in the footsteps of Cage’s *Imaginary Landscape No. 4* (1951) for 12 radios, musicians such as Ron Kuivila, Scanner and Gert-Jan Prins have incorporated live radio transmission and reception in their performances, as does Matthew Burtner, who discusses his work here. Peer-to-peer file exchange using technologies such as Napster, Kazaa and Morpheus has placed music distribution directly in the hands of the consumers, to the ire of the industry. An individual’s MP3 compilation is an expression of personal musical choice that blurs the distinctions between a record collection, a remix and a DJ set—DJ-ing for the agoraphobic—and is a critical part of the new musical “hand-luggage” described in this issue by Holger Schulze. The Internet, however, is more than just an on-line swap meet: Álvaro Barbosa, Marlene Corcoran, Christopher Burns, David First and Michael Bussière illustrate how the Web and networks have become laboratories for the development of new models of musical interaction as well as global venues for real-time performance.

A dozen years ago there was no contest between guitars and turntables. Rhys Chatham’s *An Angel Moves Too Fast to See* (1989), for 100 electric guitars, was produced spectacularly in multiple venues, while Christian Marclay’s performance with 100 turntables in Tokyo was nearly thwarted by the sponsor’s difficulties rounding up enough instruments—despite the fact that said sponsor was Panasonic, manufacturer of the world’s best-selling DJ turntable. Is it possible that subsequently, in the wake of Kurt Cobain’s suicide perhaps, the guitar market suffered cataclysmic collapse, while turntable sales blossomed like kudzu vines around the world?

More turntables than guitars? Maybe not. A fundamental shift in what makes music *music*? Undoubtedly. As Philip Sherburne writes in his introduction to the CD accompanying this issue, “music has come to concern its own process, its own materials, its own making” [6]. Music isn’t just *conveyed* through grooves, pits and waves. Music *is* grooves, pits and waves.

NICOLAS COLLINS
Editor in Chief

References and Notes

1. Will Hoover, "CD Generation Spins LP Revival: Loyalty of Fans Helps Vinyl Recordings Defy Predictions of Their Demise," *Honolulu Advertiser* (6 March 2000) <<http://the.honoluluadvertiser.com/2000/Mar/06/islandlife1.html>>; Rajan Datar, "More Club. Club Class!," *BBC News*, The Money Programme (8 March 2001) <http://news.bbc.co.uk/1/hi/events/the_money_programme/1208710>; "DJ Interview: Jam Master Jay," *The Loop—Scratch Newsletter* 1, No. 1 (August 2002) <<http://www.scratch.com/theloop/news/newsletter.html>>; Virgil Moorefield, "From the Illusion of Reality to the Reality of Illusion: The Changing Role of the Producer in the Pop Recording Studio," Ph.D. diss., Department of Music, Princeton University, January 2001, ch. 3, pp. 11–12 <<http://www.virgilmoorefield.com/prodtext.html>>.
2. Bill Brewster and Frank Broughton, *Last Night the DJ Saved My Life* (New York: Grove Press, 2000) pp. 135–137.
3. See Chris Cutler, "Plunderphonia" <<http://www.ccutler.com/plunderphonia.shtml>>.
4. This issue includes a special section of Extended Abstracts by authors Michael Bussiere, Christopher Burns and Matthew Burtner, Marlena Corcoran, Trace Reddell, and Tobias C. van Veen. Their full articles and supplemental materials are available on-line. See the special section in this issue for more information and links.
5. No relation to LMJ editor in chief.
6. *Splitting Bits, Closing Loops: Sound on Sound* is Volume 13 of the LMJ CD Series, included with this issue. Contributors include: AGF, M. Behrens, Alejandra & Aeron, DAT Politics, Stephan Mathieu, Francisco López, Institut fuer Feinmotorik, Janek Schaefer, Steve Roden, Scanner and Stephen Vitiello. The CD is also available individually through <www.cdemusic.org>.

BACK ISSUES AND CDS AVAILABLE

LMJ Back Issues and Compact Discs

Back issues of *Leonardo Music Journal* (*LMJ*) are available through the Electronic Music Foundation's CdeMusic at <<http://cdemusic.org>>, where information about the contents of the journal issues and CDs and about ordering them can be found online. *LMJ* Volumes 1–13 can be ordered in conjunction with their accompanying journal issues; *LMJ* Volumes 8–11 and 13 can be ordered as individual CDs or in conjunction with journal issues.