# LMJ 21:
# *Beyond Notation:*
# *Communicating Music*

For the Sonambiente festival of sound art in Berlin in 1996, Christian Marclay produced *Graffiti Composition*: Every other night during the month-long festival a crew of assistants would fan out across the town and plaster sanctioned kiosks and illicit walls with large sheets of white paper marked with 12 blank five-line staves—empty scores waiting to be filled; during the days a photographer would visit the same sites to document the public's contribution to this city-wide collaborative composition.

Most of the 5,000 sheets that were printed disappeared almost instantly, blown away, torn down or covered over. Some survived with no amendments other than a smudge of dirt or the brief visit of an occasional fly. But hundreds served their purpose, enticing people to jot down a musical passage, a doodle or, as someone wrote in tidy, quiet letters, "a message to the world" [1].

As befits the work of an artist who has for many years split his attention between the gallery and the concert hall, the photo documentation was both published as a print edition and used as the score for live performances. That any of the graffiti incorporated playable notes was a remarkable testament to the persistence of traditional musical literacy in European culture—one would have been hard-pressed to produce a score from a similar postering campaign in a major U.S. city. Fifteen years later, music notation as it has been known for several centuries—dots and crochets on five lines—is becoming ever more marginalized as a world language.

Most music today is produced, distributed and heard through digital technology—computers, iPods and cell phones. Notes can be picked out on a keyboard and samples grabbed from existing recordings, then corrected, sequenced, layered and orchestrated as easily as words can be processed. We're living in a Cmd-X/Cmd-V world; it's no longer essential to know how to read and write music notation in order to function within this new paradigm, unless you're a member of that ever-dwindling percentage of musicians who play scored compositions on acoustic instruments.

But the decrease in one form of musical literacy has been offset by a proliferation of digitally appropriate alternatives to the printed score: software for interactive computer music that can be downloaded from the composer's web site; iPhone apps for remixing your favorite music tracks; web-based compositions that respond to input from players all over the globe. For Volume 21 of *Leonardo Music Journal* we asked composers, sound artists, software developers and other inventors to discuss the impact of technological change on the way they create and distribute musical instructions.

The computer plays a central role in most of the submissions we received. Yago de Quay, Ståle Skogstad and Alexander Jensenius employ a combination of hardware and software to translate a dancer's body movement into the sound score of their "Dance Jockey" project. Thor Magnusson traces the roots of performances with "live coding" back through graphic notation, player piano rolls and pre-digital algorithmic music systems. Catherine Pancake's "Optical Scores" consist of short video clips, originally from organic sources, but subsequently manipulated digitally to create abstract rhythmic images that serve as "complicating agents" for live improvised music. Gustavo Diaz-Jerez details his work with "Melomics," a suite of

software tools for composing and scoring that draw on biological models and techniques of supercomputing.

Many of our authors focus on the ways in which the World Wide Web enables "social composition." Robert Hamilton, Jeffrey Smith and Ge Wang coin this term to describe the distributed and networked composing and performance tools they have developed for their mobile phone Apps—handheld digital musical instruments "that interface with emerging social networks" using the positional data available in smartphones. David Plans Casal explores "crowdsourcing human intelligence as a form of collaborative music-making," in which a very large number of web participants contribute to the composition—or mashup-style "re-composition"—of a single musical work. Stephen Cornford's "Digital Economy Action" proposes a digital chain letter in which repeated decoding and encoding transforms a single audio file as it is circulated, pseudo-virally, through e-mail. Nick Bryan-Kinns describes Daisyphone, a form of "distributed music-making" in which scores and their annotations are shared across the web.

Owen Vallis and Ajay Kapur discuss how the "advent of online communities has democratized the process of musical interface design," focusing on the Monome digital control surface and its variants and antecedents. Nick Collins [2] reflects on ethical issues posed by musical automata and avatars in the future where "viral musicians are traded like baseball cards."

But non-digital alternatives to the traditional score are represented in this volume as well. Juraj Kojs contributes a concise history of the notation of physical actions—rather than specific notes—in music, concluding with a description of some of his own compositions. Michael Fowler looks at the influence of Zen garden design on the score of John Cage's *Ryoanji* and his own musical projects. Coming from a sculptural background, Mark Berghaus describes his work with three-dimensional scores.

Andrew Raffo Dewar has curated the companion CD for this volume, *Beyond Notation/ Notation Beyond,* on which we hear music derived from a suitably wide range of alternative scores—from notated actions (such as those described by Juraj Kojs) and graphic scores to iPhone apps and architectural plans. As Raffo Dewar concludes, "each work featured on this recording provides a unique diving board for explorations of not only the craft of composition, but also semiotics and approaches to musical communication." Like any other language, music notation is not a fixed thing; it evolves, adapts new expressions to keep pace with the emergence of new things to be described, new activities to be communicated. At the moment we are living through a burst of creativity in the development of new musical slang and we hope this volume of *Leonardo Music Journal* can make a small contribution to our growing lexicon.

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**References and Notes**

**1.** Susan Tallman, "Always this Tüdelditüt—Christian Marclay's 'Graffiti Composition,'" *Art on Paper* (July–August, 2000) pp. 28–33.

**2.** No relation to me; see <www.nicolascollins.com/collinscup.htm>.