About This Issue

Composer Annette Vande Gorne, a leading figure in the European acousmatic music scene, founded the institute Musiques & Recherches and the studio Métamorphoses d'Orphée in Ohain, Belgium, in 1982, and has trained many musicians there in the decades since. She also initiated the annual international acousmatic festival "L'Espace du Son," the spatialization competition of the same name, the musical aesthetics review *Lien,* and the composition competition "Métamorphoses." In addition to these activities, she taught electroacoustic composition (initially in the Liège and Brussels Royal Conservatories, and later at the Mons Royal Conservatory, where she founded a department of electroacoustic music), all while producing a good number of highly regarded compositions herself. This issue's first article consists of the initial half of an interview with Vande Gorne, the conclusion of which will appear in the next issue (Summer 2012). The composer discusses how she was influenced by her teachers Pierre Schaeffer and Guy Reibel, as well as by François Bayle. From Schaeffer came his system of classifying sounds; from Reibel, an emphasis on gesture and improvisation with a sounding body; and from Bayle, many concepts, such as the notion that the artwork creates itself, with the artist being only a resonator or sounding board. This half of the interview explores Vande Gorne's attraction to nature, archetypes, and poetry, and it also conveys some of her ideas on space as a musical parameter.

The second article, by researchers currently or recently affiliated with Belfast's Sonic Arts Research Centre, asks the question, "How might different performers develop individual styles when asked to learn a highly constrained musical instrument?" The question arises from previous research suggesting that constraints in human–computer interfaces actually facilitate personally expressive actions and interactions. In *CMJ* 34:4, for example, Thor Magnusson argued that musical virtuosity consists in exploration of the instrument's constraints, as opposed to its "affordances." Taking this to its extreme, the authors of the article in the current issue conceived of a study in which musicians were given a minimal electronic musical instrument—a wooden box comprising a speaker and a single push button that sounded a fixed-frequency beep—and were asked to create a two-minute performance after a week's practice. The researchers found that participants adopted three distinct approaches to the instrument's constraints: (1) operating within the constraints, (2) a problem-solving approach, and (3) an exploratory approach. The people in the last group created performances whose styles were the most distinct. The authors offer a number of other observations and interpretations, concluding that for some performers, style emerged as a result of constraints, and for some others, it emerged in spite of constraints.

The article by Anthony Prechtl et al. presents Hex, a novel MIDI sequencer designed for exploration of microtonal music. In place of a traditional sequencer's piano-roll representation of pitch, Hex displays a microtonal "button lattice" of the sort that was described by Andrew Milne, William Sethares, and James Plamondon in *CMJ* 31:4. Indeed, Milne is also a co-author of the Prechtl et al. article, the most recent in a line of publications about what the authors call Dynamic Tonality. This article is not merely a description of a software implementation: it makes several contributions to tuning theory, specifically regarding the two-dimensional visual representation of pitch.

Also drawing upon music theory—in this case, Fred Lerdahl's theories of tonal pitch space and his formulas for analysis of musical tension—the article by Ryan Nikolaidis, Bruce Walker, and Gil Weinberg demonstrates how a concrete implementation can help refine theory. Their algorithm uses melodic attraction, harmonic expectancy, and rhythmic stability as aspects of musical tension. Through empirical validation the authors extended the mathematics that Lerdahl had used to describe voice-leading stability. Specifically, Nikolaidis and colleagues employed a tension equation to drive a generative music algorithm, and asked listeners in a user study to assess the tension. The study's results show high correlation between generative tension coefficients and perceived tension. Additionally, the authors' work demonstrates real-time sonification of visual information: The movements of fish in an aquarium are detected, visual parameters are extracted (including higher-level ones such as tension), and the parameters are mapped to harmonic, melodic,

Front cover: Annette Vande Gorne at the controls during a concert at Vienna's Technische Universität, 28 November 2010. (Photo by Thomas Gorbach.)

Back cover: Screenshots from one of the items from this issue's Products of Interest section: IanniX, an open-source graphical sequencer based on the work of Iannis Xenakis.

and rhythmic features of music that the algorithm generates on the fly to "accompany" the fish.

The final article, by Bob Gluck, relates historical information he uncovered through interviews with numerous individuals who were active in electronic music in New York City in the late 1960s. Gluck's article in *CMJ* 31:2 detailed part of the history of the well-known Columbia-Princeton Electronic Music Center in uptown New York. His present article brings to light a little-known downtown counterpart: a studio founded by composer Morton Subotnick in 1966 and loosely affiliated with New York University (NYU). Outfitted with a Buchla Series 100 modular synthesizer, this significant but comparatively short-lived studio gave birth to a number of electronic compositions, including Subotnick's *Silver Apples of the Moon* (1967) and *The Wild Bull* (1968). When Subotnick returned to California in 1969, the studio moved from its original location on Bleecker Street to NYU's Film School, where it was disbanded in late 1970. Others who worked at the studio, in one location or the other, included Maryanne Amacher, William Bolcom, Rhys Chatham, Michael Czajkowski, Brian Fennelly, Ingram Marshall, Charlemagne Palestine, Eliane Radigue, David Rosenboom, Laurie Spiegel, Robert Starer, Serge Tcherepnin, Woody and Steina Vasulka, and Bea Witkin.

In this issue's Reviews section, Elainie Lillios reports on a retrospective concert of Larry Austin's works; Michael Gogins lauds Dmitri Tymoczko's book *A Geometry of Music* as a groundbreaking contribution to music theory, with especial import for algorithmic composition; and Ross Feller offers his impressions of a CD of compositions by Christopher Bailey for various combinations of instruments, voice, and electronics.