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## About This Issue

An interview with Natasha Barrett opens this issue. Ms. Barrett's acoustic music is well known to many *Computer Music Journal* readers and has been previously examined in these pages. (Her composition *Little Animals* appeared on the compact disc for *CMJ* Volume 22 and was subsequently described in her article in issue 23:2. The *Journal* published reviews of her discs *Isostasie* and *Kraft-felt*, and individual pieces have been covered in reviews, like that of the 2006 International Computer Music Conference in this issue.) The current interview focuses on Natasha Barrett's skillful and meticulous placement of sounds in space. She comes across as a seasoned composer who avoids oversimplified, doctrinaire attitudes toward the variety of spatialization techniques. When presenting her music, she enjoys not only live multichannel diffusion of stereo recordings, but also playback of multichannel recordings encoded in ambisonics or 5.1 surround sound. Some readers might be surprised to learn that for practical reasons, Ms. Barrett customarily composes in stereo or normal quadraphonic audio first, then adjusts the piece for ambisonic encoding. The interview also touches upon topics such as her avoidance of reverberation and her approach to composing for an instrumentalist plus loudspeakers.

Occasionally, the *Journal* publishes articles on the history of electro-acoustic music. In this issue, Robert Gluck outlines the work of the 32 international composers who studied at

the Columbia–Princeton Electronic Music Center (CPEMC) in New York City from its inception in 1959 through the 1970s. Vladimir Ussachevsky was instrumental in bringing composers from many countries to the center, where they not only absorbed electronic music techniques but also left their imprint on the center's culture. Nearly all hailed from outside Europe: Japan, Korea, Israel, Egypt, Ghana, Iran, Turkey, Mexico, and, notably, five South American nations. The article traces their prior experience with electronic music (ranging from none, in many cases, to a pioneering background, in the case of Halim El-Dabh), how they came to study at CPEMC, the role of mentors and assistants at CPEMC, the prevalence of live performance with tape (spearheaded by Mario Davidovsky), and how the composers' careers developed upon their departure from the center (for example, some of them founded new studios).

As we saw in the previous issue of the *Journal*, researchers continue to develop interesting new sensors and controllers for music. They also find new applications for existing sensors, as evidenced by this issue's article by Mikhail Gorman and his colleagues. The authors have taken the EyesWeb software platform (see the article by Antonio Camurri et al. in *CMJ* 24:1), which is a camera-based system for analyzing bodily movements that was originally designed for artistic applications such as dance, and put it to use in the field of rehabilitation medicine. (It should be added that,

like the present authors, Antonio Camurri and his colleagues have themselves explored some therapeutic uses of EyesWeb.) In the Gorman et al. application, the camera tracks a small body part (e.g., a hand, finger, or foot), and the software maps its motion to musical parameters. The patient controls synthesized music by moving the tracked body part in ways defined according to the therapist's goals for exercise. We thought that *Computer Music Journal's* readers might enjoy this glimpse into a different application domain for some familiar musical technology.

Two years ago, we presented an article by Elaine Chew and Yun-Ching Chen on their algorithm for pitch spelling. (Pitch spelling refers to the process of choosing the correct pitch name from several possible enharmonic equivalents, a crucial task for applications that convert MIDI data to music notation.) In the current issue, David Meredith re-examines the Chew and Chen algorithm. He has implemented the algorithm, run it on a much larger corpus than its original authors had, and found that the algorithm can be simplified without sacrificing performance. For example, its "spiral array" representation of pitch can be replaced with a simple line of perfect fifths. In addition to presenting a detailed analysis of these results, his article briefly compares the Chew and Chen algorithm to other systems, such as his own PS13s1 algorithm and certain of the Melisma programs by David Temperley and Daniel Sleator.

*Front cover.* Kyong Mee Choi derived this abstract image from a photograph in the Natasha Barrett interview.

*Back cover.* Egyptian composer Halim El-Dabh is shown alongside the first page of the handwritten score to his tape piece *Leiyla and the Poet*, composed at the Columbia–

Princeton Electronic Music Center in 1959–1961. See the article by Robert Gluck for more information. Images courtesy of Halim El-Dabh.