Howard Kenty
Scherzo; Dance. (Mvmt III of V from *I Exhale (Hamletmaschinemusik)*)
Honorary Mention, Digital Musics category, Prix Ars Electronica 2008.

Notes:

Scherzo; Dance. was originally composed as part of a suite of music and sound for a performance of Heiner Müller's play *Die Hamletmaschine*, for a dance by Ophelia. My goal was to match the play's abstract postmodern style with haunting music and sound that was slightly off-putting for a traditional listener's ear. For several of the pieces, I experimented with microtonal software, trying to find interesting ways to warp the sound of a conventional sampled piano. However, I addition to the microtonal effects, I found that the software generated pitch bends as a side effect, altering the piano's sustained overtones in an incredible way that could never be achieved in an analog or acoustic realm. Through these digital techniques, I was able to achieve a truly bizarre and hypnotizing effect that suited the production perfectly, and made a beguiling piece of music.

This piece is scored for two microtonal sampled pianos. Due to the somewhat complicated implementation of the microtonal processing, there are a few notation and performance explanations required. Briefly, the microtonal processing works by outputting a specific MIDI pitch bend value whenever a note is triggered, thereby retuning the note. Because pitch bend is a global parameter (i.e applies to all notes played by an instrument), if note X is sustained, subsequent note Y triggers not only itself in its retuned state, but also retunes the sustain of note X by Y's pitch bend value. As the piece makes extensive use of this effect via pedal sustain on one of the pianos, a separate stave has been added to represent the retuning of these sustained pitches.

Live performance can be realized with two MIDI pianos/keyboards outputting to a computer running sampled piano software, a detuning patch in MAX/MSP, and additional delay and reverb processing for spacialization and added sustain.

The score contains five parts. At the bottom, Keyboard 1 and 2 are both shown in their performance notation, i.e. what the performer would play on the keyboard. Above, each keyboard is shown in concert pitch. As the performer need possess no special microtuning reading or playing ability, and the piece's tuning system is irregular, the microtones are represented in the most straightforward way possible: by displaying a positive or negative number above the note, indicating how many cents are added or subtracted. Additionally, Keyboard 1, which uses the sustain pedal, has below it the supplemental track indicating how far and in which direction the sustained notes are bent from their original pitch (in this case, all down). The sustain track loosely indicates these bends visually, but notes the exact amount above in cents. (This often differs from the amount that the effective sounding pitch in the concert score is altered by, as the bend values used in retuning are sometimes more than a half step away from

the original pitch; to read pitches altered by half steps in addition to extra cents would be cumbersome, so keyboard pitches have been notated to their closest half step.)

Keyboard 1's durations are notated in a simple manner convenient for reading, but any notes within the pedal area can be assumed to sustain until they fully decay. When playing without the pedal depressed, as Keyboard 2 always does, performers should be very careful to observe the durations noted in the score, so that only the marked sustain bends get introduced. Additionally, there are no slurs in the score, only ties. Altered notes that are tied only display a microtonal alteration on the initial note, but are assumed to maintain the same pitch until finished.

The audio version on the included CD was played and sequenced by me in Cakewalk SONAR using Tascam Gigapiano, MAZ Vsampler, and Tobybear's Microtuner plugin, with additional spacialization processing. (Of necessity, this piece will always be a 'MIDI' version, depending as it does on a sampled piano.) The microtuner MAX/MSP patch effectively models the Tobybear plugin's implementation of the specific Scala scale used by the piece, in a more stable way suited to live performance.

From the Prix Ars Electronica *CyberArts 2008* compendium, p. 71:

Howard Kenty's piece Scherzo; Dance. for two pianos is equally remarkable (Honorary Mention). Based on complex structures of microtonal sound processing, it has an astonishing poetic power. As jury-member Chen Qiangbin put it: "The musical language he uses is traditional, pianistic, and to some degree similar to the methods of Passacaglia and minimalist music. As for the electronic approach, the composer has used conventional, simple hardware and software to achieve the desired 'bizarre and hypnotizing effect'. In contemporary digital music, people want to hear works that not only cause surprise, curiosity, unexpected feelings and futuristic visions, but also contain poetic imagination and fantastic auditory perceptions."

- Howard Kenty