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Title: I Dig A Pygmy

Year: originally composed in 1990, continuously revised. Four-channel version composed 2001.

Duration: approximately 13 minutes

Instrumentation: Kurzweil K2000 keyboard sampler, Alesis Wedge reverb

Program notes:

In honor of the 10th anniversary of the death of John Lennon, I was commissioned by the University of Massachusetts Lowell to write a piece. For this piece, I decided to use spoken and sung materials–all samples from music by Lennon and the Beatles, and words spoken by Lennon in interviews–in the tradition of Stockhausen and Berio's text pieces, but to add two other dimensions. While early *musique concrè te* exploited the sound of the voice for its emotional and musical content, the literal meaning of the text (if there even was one) was more often than not incidental. In my piece, however, I wanted to make sure the samples I used were intelligible, so they would have literal textual value for the audience, as well as aural: what Lennon was saying or singing was to be as important to the piece as the sound of him saying it. Maintaining a balance between intelligibility and sonic interest created a tension in the design of the piece I found quite challenging.

The other added dimension I envisioned was that while tape composers labored over their creations for months to emerge with a recording, I wanted to do a live piece, with as much improvisation as possible, in front of an audience. In essence, I wanted to create a "hyper-instrument", made up of "pieces" of John Lennon. First I would build it, then I would learn it, and then I would attempt to perform on it.

The piece was originally composed for a Roland S770 sampler, and later was converted to be played on a Kurzweil K2000.

The piece is structured into five sections, each with a different set of samples mapped across the keyboard. Program changes are used to go from one section to the next. The sections are played in a pre-determined order, and the beginning and end of each section worked out in advance, so that the transitions between them are predictable. What happens within each section, however, is improvised. The length of each section is therefore very flexible, and varies depending on how I feel about it at the moment. Each section can last from two to three minutes, resulting in a piece that runs between 10 and 15 minutes. The sections alternate as to the kind of material they contained: sections 1, 3, and 5 are mostly spoken samples, while 2 and 4 are all musical samples. Each section's samples are joined by a unifying theme. Roughly described, they are, in order: ironic humor; mystery and dread; Lennon's relationship with his audience; the opposition of anger and pacifism; and religion, violence, and death.

Great advantage has been taken of the looping capabilities of the instrument. The K2000 allows two different loops on the same sample: one plays while the key is being held down and the other if the key is released but the sustain pedal is being held. This allows me to change loops dynamically. Another important feature is panning. While many of the sounds are given fixed locations in the stereo (or in the later version, surround) field, the K2000's random control source allows some sounds to show up in chance locations. In addition, by placing some sounds on two or more adjacent keys on the keyboard, and subtly varying the timing of the two notes as they were played, I am able to create phasing and flanging effects, which can be quite dramatic.

Real-time controllers including modulation wheel, pitch wheel, data slider, and foot pedal are used to operate filters and vary the reverb dry/wet mix. Each section has its own reverb algorithm, using the K2000's internal reverb/effects processor, so that the apparent "performance space" varies widely.

In 2001 I was commissioned by the Brandeis University Electro-Acoustic Music Center to create a four-channel version of the piece, to be premiered at the Center's Marathon concert, which was part of the Boston Cyberarts Festival. This was accomplished by adding additional "layers" to each of the K2000 programs and assigning them to the second ("B") pair of outputs on the instrument. These outputs are fed to an Alesis Wedge reverb, which is programmed to complement the internal effects on the K2000, and controlled by MIDI program change commands from the K2000.

While none of the technology in "I Dig A Pygmy" is brand-new, the concept of a semi-improvised electronic performance piece, using recognizable materials, is still of great interest to audiences. In the words of John Chowning, "A keyboard is still the

most expressive musical controller we have," (interview to be published in Mix magazine, March, 2005), and "Pygmy" illustrates that maxim bu using the keyboard in a completely non-standard, yet highly expressive way. Since the piece's creation, the use of loops has become ubiquitous in music of all kinds, and yet the way the piece uses them, to create dynamically shifting, multi-layered textures which are sometimes rhythmic but never static, remains unique.

Biography: Paul Lehrman studied electronic music at Columbia University under Vladimir Ussachevsky, Mario Davidovsky, and Charles Dodge, and received a BFA in orchestral performance as a bassoonist from Purchase College Conservatory. He has an MA in electronic music performance from Lesley University. He is the principal author of the standard college text on MIDI, "MIDI For The Professional" (Music Sales Corp.), has consulted for many electronic music hardware and software companies, as well as serving as executive director of the MIDI Manufacturers Association for four terms. As a composer, his music has been heard on PBS, A&E, BBC, History Channel, Discovery Networks and France 3, and he has received several commissions for live performance works involving computers. His efforts to realize George Antheil's 1924 "Ballet Mé canique" have put him on the stage at Carnegie Hall, London's Royal Festival Hall, and San Francisco's Davies Hall, among many others, and his documentary film about the project, "Bad Boy Made Good," won first prize at the FilmFest New Haven in 2003. He is the "Insider Audio" columnist for *Mix* magazine, and teaches Music for Multimedia at Tufts University.

Setup time and rehearsal requirements: If a four-channel sound system is in place, setup takes about 15 minutes, and another 15 minutes of rehearsal should be sufficient.

Technical requirements: Four discrete channels of audio (the equipment uses 1/4inch outputs, unbalanced), with two speakers on stage, slightly upstage of the performance position and the two others at the back or sides of the hall; 110-volt power supply with two outlets; keyboard stand, keyboard bench or stool, music stand. Simple lighting. It would be best if the system could be powered up ahead of time and left on so that the samples do not have to be reloaded at the last minute, which takes a couple of minutes.