Volker Straebel

Two Trash Can Recordings (He didn't like collage)
Sound Observation #6

live stereo diffusion of four channel digital audio (2010)

I – horizontal

II – vertical

Program note:

Sound Observations is a series of electroacoustic works – live performances and sound installations – that observe the qualities of live or recorded soundscapes.

For *Two Trash Can Recordings (He didn't like collage),* two recordings were made by holding a microphone into trash cans, thereby observing the resonant frequencies of their interiors as stimulated by the surrounding soundscapes. The two trash cans were located in New York City on 55th Street and 7th Avenue, and on the 86th-floor observation deck of the Empire State Building.

Throughout the piece, both recordings are played together, though they never mix. In the first movement ("horizontal"), excerpts from the two recordings are introduced successively, then simultaneously. The simultaneous recordings are strictly filtered such that the two frequency bands move toward each other without meeting. In the second movement ("vertical"), the two recordings retain their full vertical frequency range, but rapidly alternate until our sluggish perception blends what actually remains separate.

The duration is approx. 5'40". Audio recordings by Gerhard Schultz and Volker Straebel, audio programming by Fabian Brinkmann.

Performance:

The second movement follows in quick succession after the first; four seconds of silence separate them. The second movement comes in two versions: "Vertical (A)" and "Vertical (B)." In a given performance, only one version is to be played. To experience the full dynamic range of the piece, the music should be played rather loud.

Though the audio files are stereo (44.1 kHz, 24 bit), four or more speakers surrounding the audience are desirable. Throughout the piece, two stereo files are played at the same time: for the first movement, I_55th.wav and I_Empire.wav; for the second movement, either IIA_55th.wav and IIA_Empire.wav, or IIB_55th.wav and IIB_Empire.wav.

In the first movement, the amplitude of the two files played is fixed. In the second movement, the files could be mixed live.

Documentation:

"Horizontal" was created in ProTools, using filter EQ3, 24 db/octave. The filtered 55th Street recording begins in the high register (high-pass cut off frequency 15,360 Hz) and expands down toward the frequency band above 960 Hz. The filtered Empire State Building recording begins in the low register (low-pass cut off frequency 30 Hz) and expands up toward the frequency band below 300 Hz.

"Vertical" was created in MatLab and programmed by Fabian Brinkmann (TU Berlin). The script is controlled by a data table indicating the sound sources, start times, durations, and stereo pannings of each of the approx. 172,700 samples, which range from 100 ms in the beginning to about 0.02 ms toward the end. In version A, the sample durations decrease steadily, while in version B, chance determined deviations of +/- 20% are superimposed on this steady decrease.

Audio recordings by Gerhard Schultz (Empire State Building, 86th-floor observation deck facing West; September 25th, 2010) and Volker Straebel (Northwest corner of 55th Street and 7th Avenue; September 28th, 2010).

Produced at the Electronic Music Studio of the Technical University Berlin, Audiocommunication Group. Thanks to Bill Dietz and Jean Szymczak.

First performed at Experimental Intermedia, New York, on December 19, 2010.