Christina Viola Oorebeek

CHROMOTOY II (2005)
for partially prepared yamaha disklavier and live electronics

Program Notes:
In the last year, I have been exploring a new combination of sounds and techniques in which the sonorities of the prepared piano can be heard in a new way.

"Chromotoy I" was an experimental piece for piano harmonics and toy piano. "Chromotoy III" is a piece for toy piano, Midi-toy piano and acoustic grand piano and live electronics. In **"Chromotoy II",** I wanted to be able to produce series of piano harmonics by placing large felt blocks, which I designed and had made in piano factories, behind the piano dampers.

Because of the technical possibilities of the 'electronic-pianola instrument' the Disklavier, it became possible to have the disklavier play melodies and rhythms with these Piano harmonic sonorities which would be extremely difficult, if not impossible in another fashion. I combined these piano tone colors with the usual piano timbre. Also, and at the same time, I used computer software to execute live recording and playback of the disklavier and various audio samples and effects.

There is a margin for improvisation in triggering the timing of the live recording and the playback of the music played by the disklavier. At the end of the piece, the pianist improvises directly on the Disklavier as a normal acoustic grand piano.

This piece was supported by the Dutch composition fund/ het fonds voor de scheppende toonkunst and was supported by STEIM

Technical considerations:
equipment:
G4 Powerbook I (OSX 10.3.9) with the software program Logic Pro 7
Motu audio/midi interface 828mkII
G4 Powerbook II (OSX 10.4) using the software program Lisa 1.24
Midi-controller M-Audio oxygen 8
2 microphones
Felt blocks used for creating the harmonics
   1. Felt block 32.5 cm long, 4 cm high, 3 cm wide
   2. Felt block 17.5 cm long, 4 cm high, 3 cm wide
Two speakers
A mixer

Chromotoy II is a combination of 6 pre-composed sections (called regions in Logic Audio), live electronics and improvisation on the Partially prepared Yamaha disklavier within prescribed limits of pitch and time. By placing felt blocks behind the dampers of notated pitches, sounding Harmonics are produced.
there is the possibility to record and play back live recorded fragments of the pre-composed regions within a partially flexible time frame, with, or without pre-programmed effects in which:

1. the partially prepared acoustic disklavier sometimes plays the pre-composed regions solo in Logic Audio through midi file-triggering.

2. The live electronics record and playback audio fragments of these regions in Logic Audio and through Lisa, with or without the pre-composed material being played simultaneously by the disklavier.

3. The performer improvises on the disklavier in a specified part of the piece, with or without live electronics.
the composer does prescribe playing the 6 pre-composed sections sequentially.

The setup:

OXYGEN8 25-Key Mobile USB MIDI Controller
is A 25 key MIDI controller keyboard with 8 rotary knobs and one assignable slider. In chromotoy II, This midi-controller keyboard has the function of a master controller for Logic Audio Pro 7 in G4 Powerbook I, and for the live electronics and audio in Lisa 1.24 in G4 Powerbook II.

Chromotoy II uses pitches 48 – 53 of the Oxygen to trigger the regions 1 – 6 in Logic Audio, pitches 48 – 58 are assigned to the play/stop/pause function. Pitches 59 to 72 are assigned to trigger record and (audio) play zones in Lisa 1.24.

G4 Powerbook I
The pre-composed material is notated in the form of midi files in the software program logic audio pro 7, and is sent to the disklavier by a midi-cable. The oxygen midi-controller is programmed (though logic) to trigger the sections (called regions in Logic Audio) with play/stop/pause commands.

G4 Powerbook II
a lisa 1.24 setup contains 4 recording zones of 3, 5, 7.5, and 10 seconds, each triggered by a midi note on the oxygen midi controller . Midi notes and/or controllers (rotary knobs 1-8) are used to start or trigger 3-4 different playback modes of each of these recording zones. There are various controllers used for some of the playback zones, and one audio sample is used. Two microphones

record the live electronics through the motu audio interface 828mkII into the lisa setup on G4 Powerbook II.

Partially prepared piano
Felt blocks 32.5 cm long, 4 cm high, 3 cm wide are used to create the piano string harmonics written in the score, by placing them behind the dampers of the bass strings with the necessary pressure.

At the end of the piece they are used in a non-specified manner in the improvisation by the performer. However, the improvisation is limited to the lowest two octaves on the disklavier.

The performer controls the sostenuto pedal himself, which is not programmed in midi.