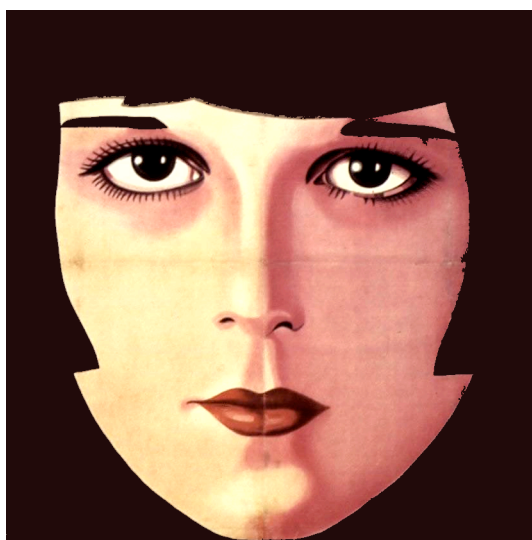


Karlheinz Essl

Pandora's Secret

sound performance for punch-tape controlled music box and live-electronics

2009



dedicated to Isabel Ettenauer

A commission by Linz 09, the European Capital of Culture in 2009

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Score

Requirements

- music box: type “Schaaf” with 20 diatonic notes (mounted on a wooden box)
- 4 especially punched tapes (A, B, C, D)
- Apple laptop (*iBook G4* or newer) with installed software *Pandora’s Secret*
- audio interface with at least one microphone pre-amp and stereo
- contact microphone: *AKG C 411 L*
- MIDI controller: *Korg nanoKontrol*
- stereo PA system

Preparations

Prepare the music box by attaching the contact microphone with some adhesive to the underside of the music box. Now enter the music box into the wooden box in a way that the musical mechanism can’t be seen from the outside. Then put the wooden box in a fitting cardboard box and add the four punched tapes on top. Close the cardboard box with a lid, wrap it in colored fancy paper, wrap with a gift ribbon and decorate it with an impressive red bow.

Important: The microphone cable has to come out of the box!

It is now being plugged into Input #1 of the audio interface which is already connected to the laptop. The MIDI controller is plugged into the second USB port of the computer. Finally, the audio output of the audio interface is connected with the PA system.

1. Entrance

On stage a table with the package as described above.

The clown stumbles on stage, finds the package and looks at it with great curiosity. He approaches the computer, and with a great gesture he presses the [TAB] key.

The mute of the mic is being turned off.

2. Opening the package

The clown cautiously touches the package.

Soft sounds become audible from the speakers.

He backs away a bit, but immediately touches the package again and slides it in slow movements over the table top.

The sounds from the speakers intensify.

Stimulated by the sounds the timid clown's courage is growing. He pulls on wrapping and ribbon and tries to remove the ribbon which he eventually manages. Finally, he triumphantly holds up the package which is still wrapped, and carefully taps on it.

Knocking sounds become audible.

He puts the package back on the table and indecisively moves it back and forth.

Grinding noises from the speakers.

He impatiently drags the wrapping paper and clumsily tears it down in several layers. In between again and again short tapping sequences on the cardboard box.

The mixing of rustling and tapping, intensifying.

A naked cardboard box becomes visible. Full of curiosity he palpates and fingers the box and clumsily tries to open it.

The sounds intensify.

Finally, he manages to open the lid. Inside the package he spots an inconspicuous wooden box that he shows to the audience with great excitement. With a much effort the clown manages to shake the wooden box out of the package. At the same time four punched tapes also fall out. The clown throws the empty package angry to the floor.

Superposition of rustling and rumbling.

Now the wooden box lies on the table. The clown steps back and watches it for a long time.

The sounds are diluting until eventually silence arises.

3. Investigation of the wooden box

The clown takes the wooden box in his hand and ogles it from all sides. With his finger nails he scratches around on the bottom of the box and percusses the corpus. Thereby he scrutinizingly leads the box to his ear.

Densifying scratching and tapping sounds.

With a big bang he puts the box back on the table. Now he discovers the contact microphone which is attached to the soundboard and taps on it once.

Dark tapping sound, accelerating.

He repeats the tapping, accelerates it, and delights in the rhythms which come from the speakers. Being stimulated he starts to improvise a rhythm by striking the soundboard and the contact mic with his fingertips.

While listening to the rhythms from the speakers, with his left hand he moves F2 ("Flanger") of the MIDI Controller:

FLANGER: min > max

The sounds colorize, sounding "electronically".

At the same time the drumming with the fingers of the right hand continues and F5 ("Reverb"), later also F2 ("Flanger") are moved by the left hand:

REVERB: min > max > min > max > min

FLANGER: max > min

The drumming is being gradually reduced and eventually ends.

The rhythm slows down and finally dies away.

The clown waits until the sounds from the speakers have faded away.

Now he discovers that it is possible to slide the soundboard in and out. He pulls it out a little and slides it back in with a loud attack. He accelerates these accents and finally takes out the soundboard (on which the musical mechanism is attached) completely.

4. Investigation of the musical mechanism

The clown discovers that on the bottom of the soundboard there is a musical mechanism with a crank mounted. He palpates and percusses it at first cautiously, then more and more intensively, and eventually plucks at the mechanical system. At last he turns the crank slowly in the opposite direction

The rattling of the cogwheels becomes audible.

and pauses terrified. The clown playfully explores this peculiar rattle by playing rattle sequences of various lengths which are interrupted by pauses of different lengths. At the same time he slides F9 (“Transposition”) slowly to the middle position:

TRANSPOSITION: min > 50%

The extent of transposition of the canon expands.

Now the clown inserts the musical mechanism into the wooden box again, though this time in a way that the musical mechanism with the crank faces upwards. He turns the crank, pauses and harks, and repeats this procedure several times. Thereby he slides F9 (“Transposition”) down slowly:

TRANSPOSITION: 50% > min

The extent of transposition of the canon decreases to unison.

With a big bang he bumps the musical mechanism to the stop and looks at the now correctly assembled instrument.

5. Play with the punched tapes

A

The clown discovers the punched tapes which had fallen out of the package in the beginning. He enters **punched tape A** into the music box and winds – in the wrong direction.

The rattling of the cogwheels becomes audible again.

Irritated he pauses and then turns the crank cautiously in the opposite direction – the punched tape begins to move. Slowly he winds the tape through up to the first red marking and listens dreamily to the sounds of the speakers.

The same note is repeated and densifies.

He then keeps winding cautiously up to the second marking.

Superimposing tone figures from the music box become audible.

He keeps cranking the punched tape and suddenly winces when the first chord cluster becomes audible. Then he takes heart and winds the rest of the tape *rubato* through the music box.

Punched tape A falls out.

B

The clown looks around the table and discovers another **punched tape B** which he enters into the music box and winds through up to the red marking. Then he slides F9 ("Transposition") slowly up until the number 1 appears on the numeric keypad "transposition interval".

TRANSPPOSITION: 0 > 1.0 (= semitone)
The canon gets out of tune.

Now he winds the rest of the tape – again *rubato* – through the machine.

Punched tape B falls out.

The controller F5 ("Reverb") is being slowly moved to the middle.

REVERB: min > 50%
The chromatic canon is being distorted.

C

Now the clown enters **punched tape C** and for c. 5" turns the crank in the wrong direction whereas the speed is more and more slowing down.

The rattling of the cogwheels becomes audible – though this time distorted.

The controller F9 ("Transposition") is slowly moved down to the stop, after that also controller F5 ("Reverb"). Eventually F1 ("Detune") is brought to the middle position.

TRANSPPOSITION: 1.0 > 0
REVERB: 50% > min
DETUNE: min > 50%

After that the clown winds the tape very slowly through the music box until it finally falls out. Then he leisurely moves controller F5 ("Reverb") to the middle:

REVERB: min > 50%
The detuned canon dissolves in reverb.

Finally F1 ("Detune") is being moved completely down.

DETUNE: 50% > min

D

The clown enters **punched tape D** into the music box. While slowly winding he moves F5 ("Reverb") carefully down. As soon as he reaches the end, he pauses.

REVERB: 50% > min
The reverb gradually vanishes.

Now he moves F1 ("Detune") slowly to the middle and continues winding for a few seconds.

DETUNE: min > 50%
The canon gets out of tune.

Then he stops and moves F9 ("Transposition") very slowly to the maximum.

TRANSPOSITION: min > max
The extent of transposition of the canon greatly expands.

He keeps cranking for a few seconds, then stops and moves F5 ("Reverb") very slowly to the top.

REVERB: min > max
The overall sound is literally drowning in reverberation.

The clown continues winding for a few seconds, then moves F2 ("Flanger") very slowly to the top.

FLANGER: min > max
Overtone glissandos are being added.

He keeps winding, then moves F4 ("Comb Filter") very slowly to the top.

COMB: min > max
The overall sound becomes more acute.

Now he moves the rest of the punched tape, first slowly and then faster and faster, through the music box.

A mighty sound cloud is emerging.

With great gesture the clown presses the **[RETURN]** key on the computer keyboard.

The canon transitions into freeze mode and after 20" extremely slowly fades out.

With a sudden twist the clown turns away from the music box and listens spellbound to the sound of the speakers. Then he jumps to his feet and runs outside in horror.

After a while the sound cloud becomes softer and softer and eventually vanishes.