

Appended

*An Aleatoric Study
for
Electric Guitar with Live Electronics
and
Pre-recorded Sine Waves*

Equipment

An electric guitar with two pickups and a humbucker near the bridge

A digital-audio interface (AG03 Yamaha model used in the recording)

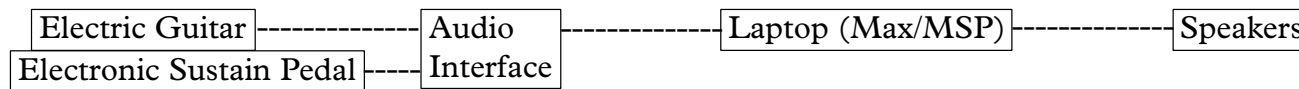
A laptop with Max Runtime 6 on it

A hard pick

A coin, preferably one with a larger circumference, such as a quarter

A very small comb with one layer (dog-grooming)

Setup



Distortion, sound filtering and other effects are manifested through the computer, no extra equipment needed.

Performance Notes

Each movement uses a different MAX patch. The patches are laid out next to notation pages with **S signs (S1, S2, S3)** circling them. These signs denote **segments**. The performer has to make sure to refer to these diagrams in order to initiate the right segments before (checklists at top left corners) and during the performance of a movement. **A segment is initiated with a mouse click unless a pedal sign is encountered.**

I.

-
- pickup 1
 - pickup 2
 - humbucker
-

In this movement, the MAX patch used is a granular processor. The performer uses a coin to execute sliding gesture(s) on indicated string(s). He/she refers to the above image in order to **approximate** the **distance** and **time** taken for each sliding gesture. Upon pressing down the pedal, a two second sound-segment is recorded, it is played back through a six second envelope. The earlier the release of the pedal, the earlier the grain size automation is initiated. A frequency-shifter is used to further enhance these gestures. A bit-crushed sinebank track accompanies the performer throughout the movement.

II.

The MAX patch used in this movement is a frequency-shifter. The performer chooses one of the indicated harmonic nodes, mutes all the strings with the left hand and drags the pick swiftly upwards with the right hand. **The duration between each gesture and the pressure with which the left hand mutes strings are up to the performer, each time.** The depth and speed of shifting is controlled through a cycle object; every time the pedal is pressed down different control signals are sent to the shifter object.

III.

The third movement is the least aleatoric of all. A pfft patch is used to enhance upper frequencies of the sound played. **The performer plays indicated pitches, pressing down on the pedal only slightly after.** It is once again up to the performer to decide on the durations between each sound. The two envelopes on the patch are volume automations. Pressing down the pedal obliterates the initial attack, putting an emphasis on the overtones rather than the fundamental pitches. The release of the pedal corresponds to the second envelope which turns down the sound. The performer always plays two different pitches, except for the very last sonority; overtone collisions of two different fundamentals is the core idea here. Later on, a granular sub-patch is used to slow down the resulting sounds.

I. Hommage to Messiaen

Hakki Cengiz Eren

- S1** draw an envelope as in the diagram
- S2** select a lowpass filter as in the diagram
- S3** load sinebank into the buffer object
- S5** turn on ezdac
- S4** initiate sinebank track

1:25 min.

sporadic → less sporadic → frequent → very sporadic

S7 toggle gate open to initiate downward freqshift

S6 increase panning distance to 75

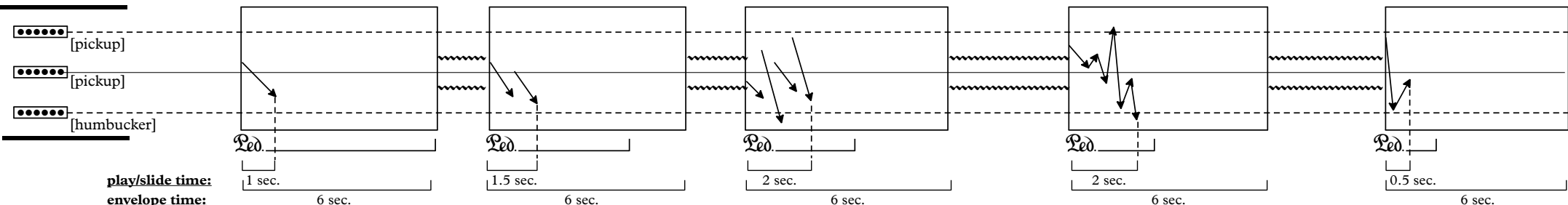
slide with coin covering **only the 6th string**, play intermittently a few times, change pattern slightly each new time

slide with coin covering only the 6th string, play intermittently a few times, change pattern slightly each new time

slide with coin covering **6th and 5th strings**, play intermittently **many times**, change pattern slightly each new time

slide with coin covering 6th and 5th strings, play intermittently many times, change pattern slightly each new time

slide with coin covering **only the 5th string**, play intermittently a **few times**, change pattern slightly each new time



0:52 min.

sporadic → very frequent

S7/S8

toggle gate close(S7) and open the other one(S8) to initiate upward freqshift

S6 increase panning to 100

S6 increase panning to 127

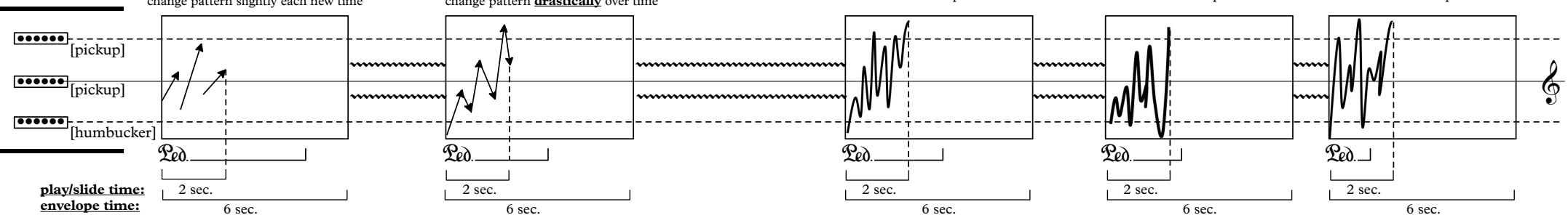
slide with coin covering 6th and 5th strings, play intermittently many times, change pattern slightly each new time

slide with coin covering **6th, 5th and 4th strings**, play intermittently many times, change pattern **drastically** over time

maintain an overall upwards motion

maintain an overall upwards motion

maintain an overall upwards motion

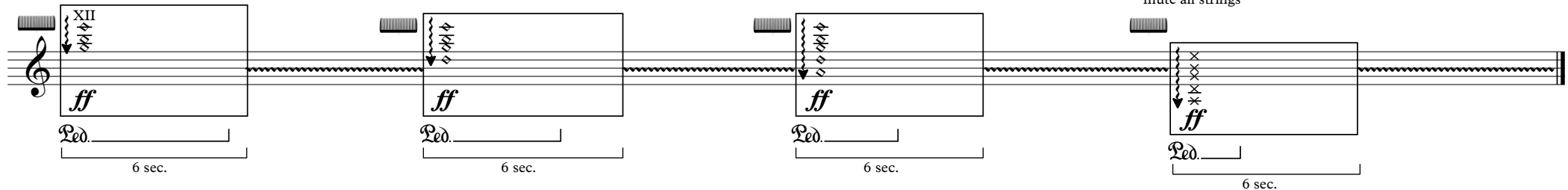


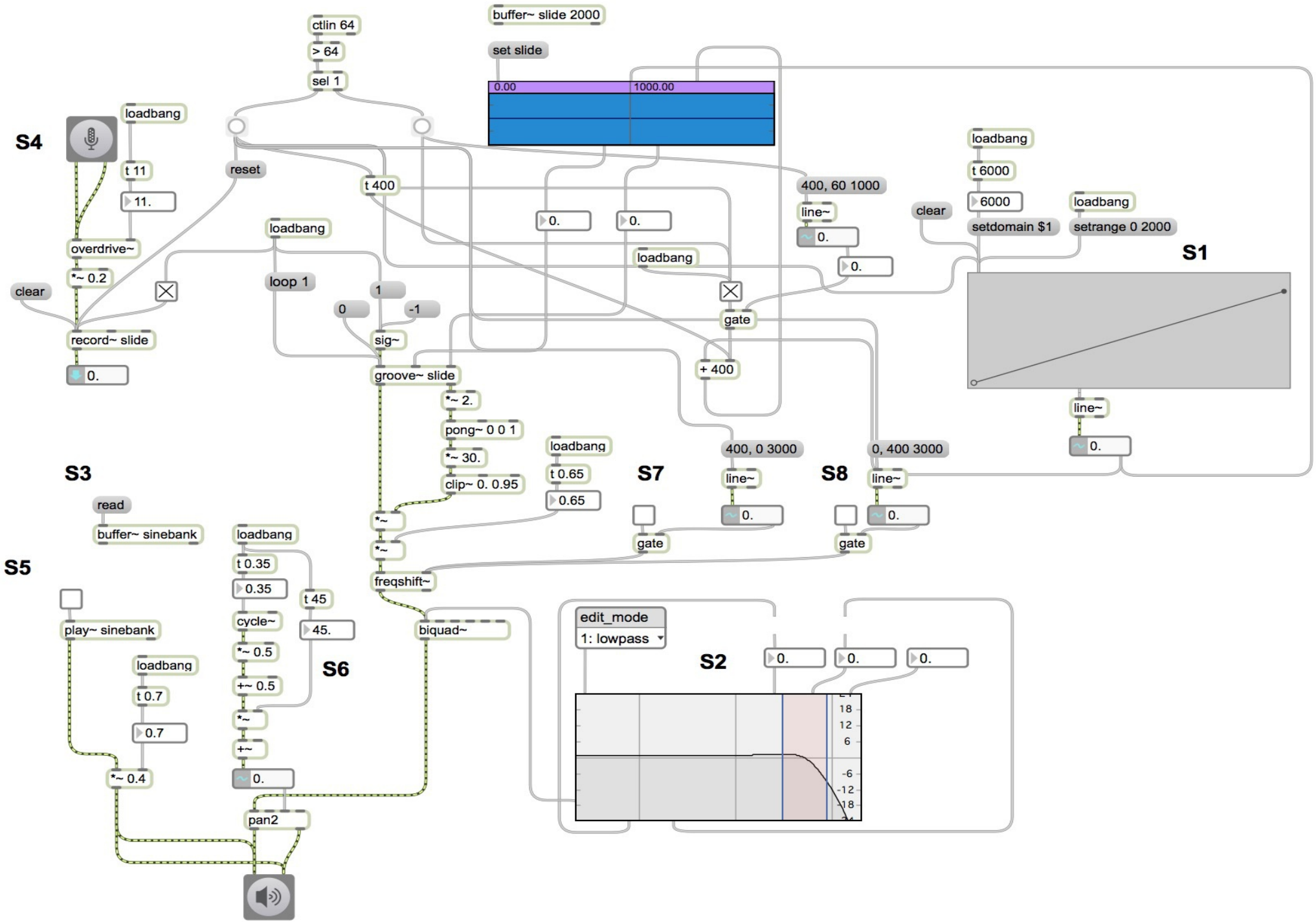
1:03 min.

very sporadic

take comb and slightly dampen all strings at 12th position

mute all strings





- S1** toggle selection gate open
- S2** select a highpass filter as shown in the diagram
- S3** turn on ezdac
- S1** *Ped.* counter to 1

II. Distant Elephants

Hakki Cengiz Eren

ca. 45 sec.

ca. 1 min.

ca. 1:10 min.

1. Choose one of the harmonic nodes,
2. Mute strings with left hand lightly
3. Press pedal down and release
4. Drag pick upwards violently!

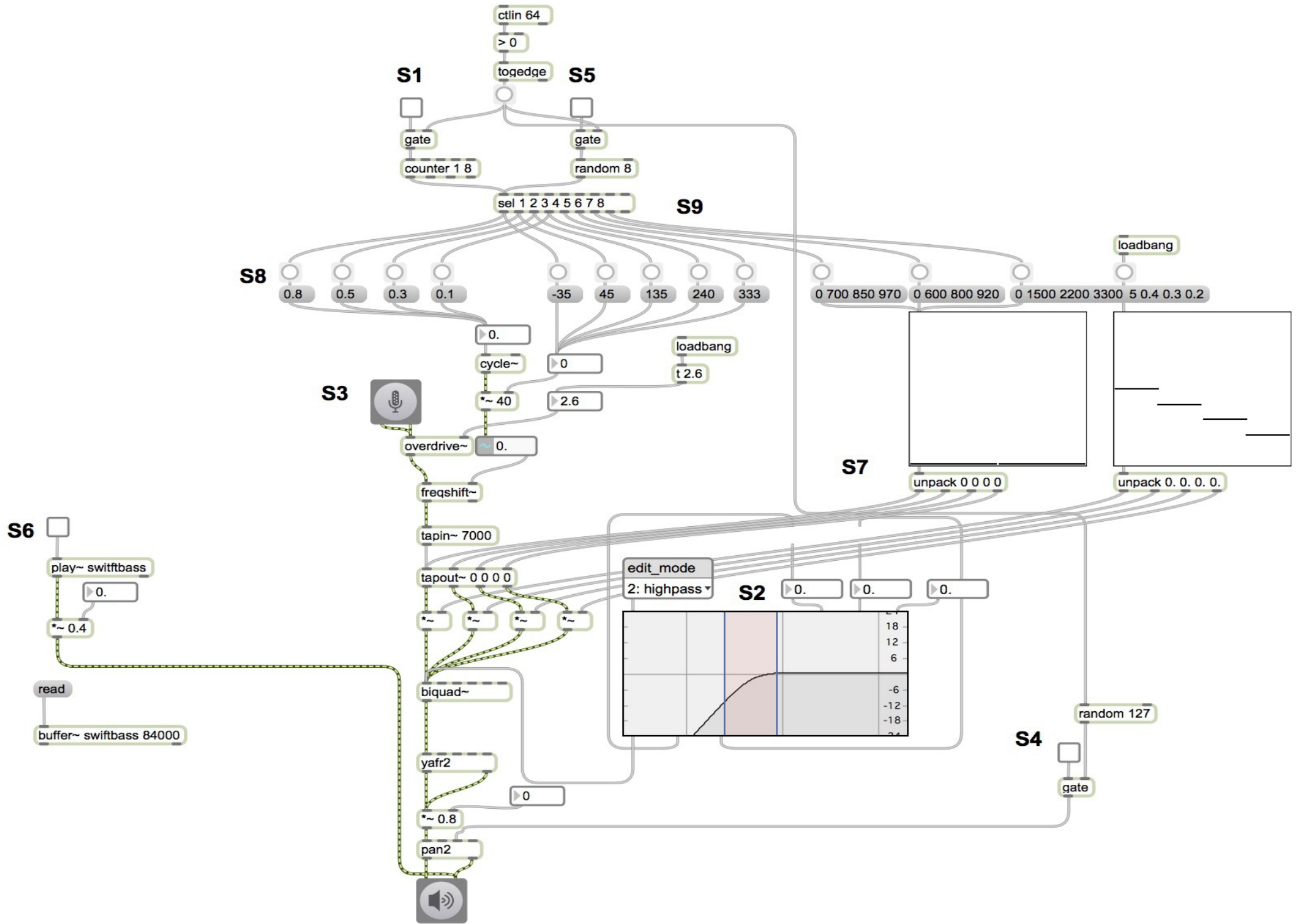
Repeat this process throughout the movement,
vary the left hand pressure and duration between
 each gesture.

start rolling chords

ca. 1:30 min.

ca. 2:00 min.

ca. 3:10 min.



- S1** select a frequency range from the rslider as shown in the diagram
- S2** draw an envelope as in the diagram
- S3** draw an envelope as in the diagram
- S5** select a lowpass filter as shown in the diagram
- S5** make sure the middle switch is selected
- S6** turn on ezdac
- S7** initiate drones track

III. Burial

Hakki Cengiz Eren

② = B quarter tone down 0:43 min.

E. Gtr. *p* *p* *p* *mp*

Bass. *p* *p* *p* *mp*

Ped. _____
(always slightly after)

1:25 min.

E. Gtr. *mp* *mp* *mf*

Bass. *mp* *mp* *mf*

Ped. _____

S5 initiate granulation by selecting the bottommost switch

S8 playback speed to 0.5

S9 overdrive to 0.5

S8 playback speed to 0.4

E. Gtr. *mf* *f*

Bass. *mf* *f*

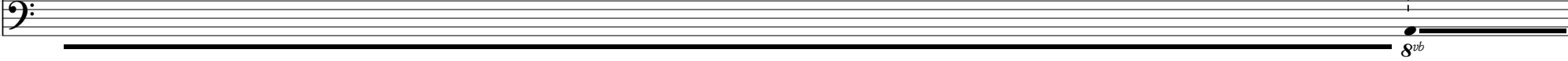
Ped. _____

S8

playback speed to 0.3

2:40 min.

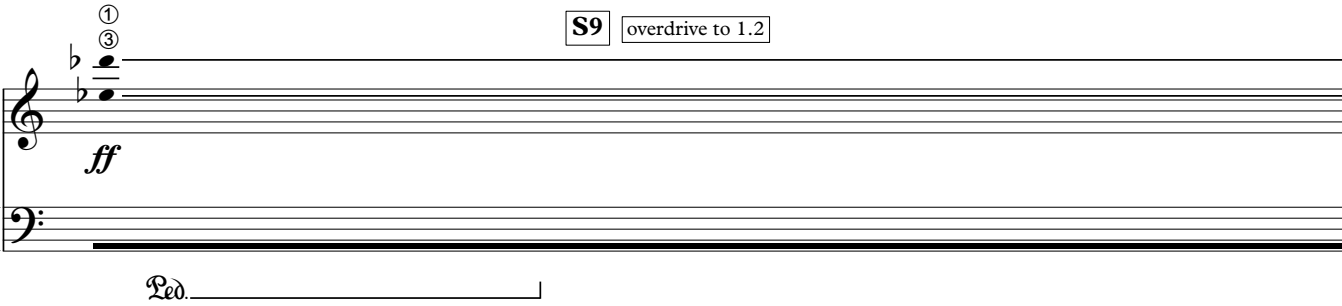
E. Gtr. 

Bass. 

S9 overdrive to 1.2

S8

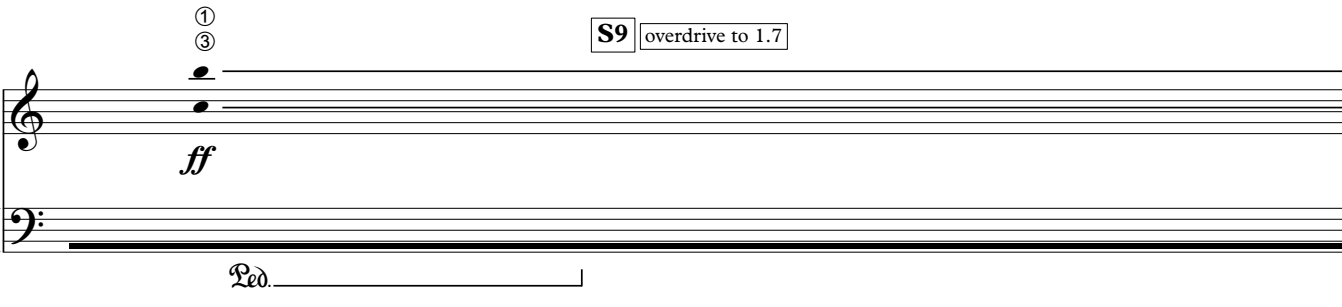
playback speed to 0.2

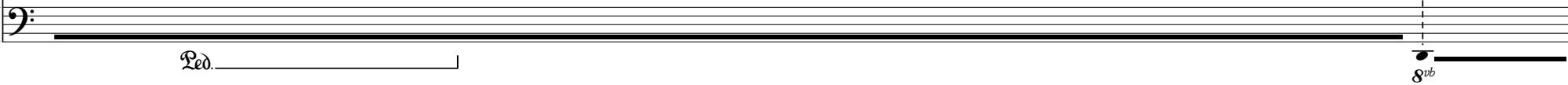
E. Gtr. 

Bass. 

3:53 min.

S9 overdrive to 1.7

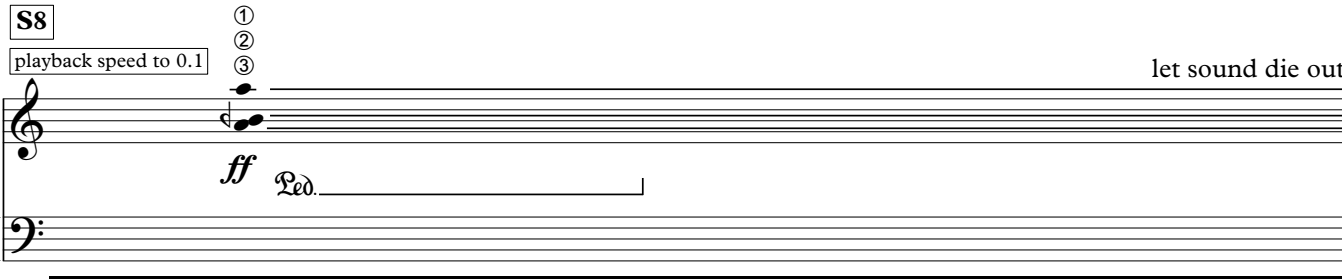
E. Gtr. 

Bass. 

S8

playback speed to 0.1

let sound die out...

E. Gtr. 

Bass. 