Flickering

For 2 object performers, violin, guitar & live electronics



Heather Frasch, 2024

Flickering for 2 Object Performers, Violin, Guitar and Live Electronics Performance Notes:

General

Timing: The score uses spatial notation within a structured time grid. Throughout the piece timings are appropriate, and activity is appropriate, except for the G.P. at 6 minutes. However all performers should have a **stop watch** to keep track of the time.

Guitar

Extra note about timing: It's not necessary to be rushed when switching between techniques during certain tight transitions. The guitarist can decide to either stop early or start late, and prepare the next technique in a calm manner.

Tuning: The Guitar should be tuned in the following way with the specific hertz frequencies. The notation uses these accidentals below to indicate those frequencies. The score is in C, and the guitar part contains both the sounding pitch (top clef) and the normal fretted pitch. There are several moments during the piece where the guitarist needs to retune in real time to bend and



distort the sound. The string should return to the original frequency as much as possible, except near the end where the new tuning on string 1 continues until the end.



Harmonics: The number in the circle below indicates the string and the number above is the partial number. There are several moments when when the guitarist needs to stop the harmonics on all strings using either a band or a clamp device. In that case, the partial is indicated in the text below.

Objects: Ebow, String Bow, Thin string of metal beads, metal slide



= **Bow + Wobble**: The guitarist needs to bow the open strings (or stopped harmonics) with one hand, and run a metal slide or hard smooth object on the back of the guitar in circular motions with the other. Both activities should be relatively slow. A relative tempo is indicated. The guitarist should explore a rhythmic / tempo balance between to two techniques so that a 'wawa' type sound emerges.

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= slide or smooth object + bow to achieve the effect above



=Muted: Sound should be as unpitched as possible. Using RH to mute string and pluck using half harmonic pressure. Exact placement can be ad lib.



= **Unpitched Light Flesh Taps**: While muting strings with LH, very lightly bounce flesh of finger tips along the strings in erratic phrases along the strings. Exact placement and duration of phrases can be ad.lib.

+ Beads *****
= Beads: A thin string of metal beads (approximately 20 cm) should be tapped to the back of the guitar.
Exact position should be found where a nice rattle noise happens when strings are excited.

Glissandi: Use ebow in combination with slide. Most often the starting / ending pitches are not exact. In a few moments the guitarist should erratically move the ebow behind and above the position of the slide so the pitch goes up and down.

* Soundfiles or videos of guitarist using these techniques is available upon request from the composer.



very small clothes pin, ~ 3 cm (preferably plastic but wooden also ok); Attach to Sul II

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Clip Rattle = with clip attached to Sul II, lightly tap the clip (not the string) so that the clip moves to create a quiet rattle sound.



Artificial Harmonic Trill: Trill the diamond note head finger, i.e. the one that is using harmonic pressure, so that the sound fluctuates between the stopped note and two octaves higher.



Material in boxes: *ad lib* activity inside the boxes, listening carefully and using sensitivity to context to inform musical decisions as to how active it should be.



= Dark horizontal straight line indicates a **held** tone. Tone should carry through until indicated to stop.



= Light Taps = lightly and rapidly strum the flesh of the R.H. fingers on the strings indicated near and over the bridge to create a quiet plucking sound. Placement can change but should remain within the areas of just over each side of the bridge. L.H. mutes strings and varies position.



BB Pizz. = Pizzicato Behind the bridge on the indicated string, Sul G/ Sul IV in this example

Extremely Slow Glissandi = while duration is inexact, the performer should try and make the glissandi extremely slow — to be as slow as possible.

Object Performers:

Objects: 2 tin coffee cans, 2 small glass jar, 6 small cork balls (~1.5 cm diameter), 4 small styrofoam balls (~ 2 cm diameter), miniature LED lights (~.5 diameter), 8 small wooden pencils, 2 small pieces of ply wood, 4 small metal allen wrenches , 4 DIY bead motor glass objects, 2 Glass orbs with an opening at the bottom [All objects can be borrowed from the composer upon request)

Set up: Each performer has 3 transducers whose amplitude output they control via Max/msb (details on the electronics below). The faders in the score refer to a 16 channel midi fader controller which can be used to control the electronics. Or another system needs to found. Performers can reroute the fader output if needed.

The **dynamics** in the score refer to the levels of the amplitude coming into the transducers Performance Set up:



{Performer 1}

Transducer 1 (For Balls/Cans)

Transducer 2 (Orb placed above)

Transducer3 (for wood/pencils)



Transducer 4 (For Balls/Cans)





Transducer 5

(Orb placed above)

Transducer 6 (for wood/pencils)



5 Glass Motor / Bead Objects in front of performers

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Extra Information for object performance techniques can be found here: <u>https://heather-frasch.squarespace.com/</u><u>objectperformancetechniques</u>

Extra information on guitar and violin techniques, including video and sound files can be obtained by the composer to a private link (at the request of the musicians involved in developing the piece)

Electronics

Equipment: 1 computer running Max/msp, 1 midi interface with minimum 16 channel countroller, 1 sound card with minimum 8 channel output, 6 transducers, 3 amplifiers (optional), DIY electronics

The electronics in this work use a combination of DIY kinetic objects + real-time processing and sampling using Max/msp.

The **sound card** should have **8 channel output** and is routed in the following way. Plus 2 direct Inputs for Amplification and Processing of the objects.

Output 1 & 2 = main stereo outputs to main speakers Output 3 & 4 = to transducers 1 & 2 Output 5 & 6 = transducers 4 & 5 Output 7 & 8 = transducers 3 & 6 **Amplification** on acoustic instruments should be used to blend in with the final mix of objects and electronics. But it's not being processed and doesn't necessarily need to go through the sound card but should go through the main mix.

Best to add in small amplifiers from the sound card outputs to the transducers for gain control but it's not necessary.

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