v.5: 4-11-18

In the unknown there is already a script for transcendence

grand piano, custom ebows, and magnetic-resonator (2018)

for Zubin Kanga

The piano as stringed instrument, where each string is a reservoir, a dynamic continuum across note and timbre. The pianist as spectral explorer, mapping the instrument's prominences, surfing its shifting eddies and currents.

A magnetic resonator becomes a prosthesis with which the pianist explores the dynamic resonance of the strings. Metal bolts are 'preparations' of the strings to make them inharmonic (like a bell sound), destabilizing the specific pitch of the string into multiple competing pitch-timbre complexes. The player explores the tipping points between stable pitches and multiphonics, through to the dissolution of the string sound into complex timbre.

The title is from Liza Lim's *Patterns of Ecstasy* … (p.27)

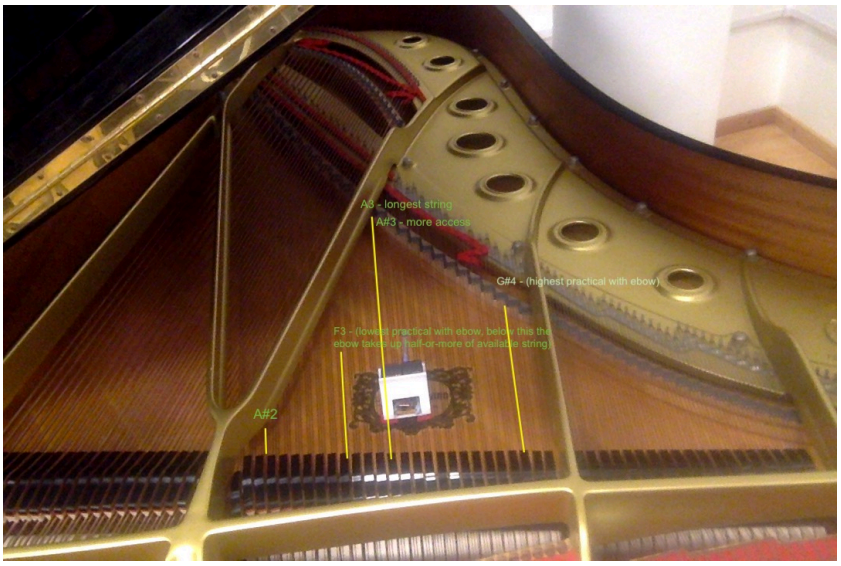
In the unknown there is already a script for transcendence by Scott McLaughlin was commissioned by Zubin Kanga with funds provided by Arts Council England. *In the unknown there is already a script for transcendence* was premiered on 17 November 2018 at Huddersfield Contemporary Music Festival.

Required:

- Grand piano.
- 2 x Ebows modified for piano use.
    - Notation: Ebow(FUND) = fundamental mode; Ebow(HARM) = harmonic mode
- Vibesware resonator or similar (http://vibesware.com)
- Metal preparations: screws, bolts.

Pre-concert:

- Pedals:
    - Place a pedal block under the sustain pedal so that the piano sustains throughout.
- Preparations:
    - Insert three preparations in the middle register (delimited by the frame struts, see example), call these prep-1, prep-2, prep-3. Ensure to leave enough space for the modified ebow to sit comfortably on those strings: not too close to the struts, or within two strings of another preparation.
    - Preparations should be between 1/3 and 2/3 way along the string.
        - Avoid halfway point due to strong 2nd partial.
    - Ensure the preparations are tight enough to not buzz excessively.
    - Mute each of the unprepared 3rd strings of any prepared trichord strings.
    - Listen carefully to the complex sound of one preparation, and transcribe its pitches. Label this preparation as ‘prep-1’ and its pitches as ‘chord-1’.
        - Do this with all the preparations and ebows in place, so you can avoid strings muted by the ebows.
    - Memorise the keys for the three preparations, and the key/pitches of chord-1.
    - Ensure resonator is turned-up and can be reached from the keyboard (module-AA)



Yamaha ‘Conservatory C7’ with preparation and modified ebow in mid-register

MODULE-X: **[40”–60”]**

- Playing on keys, build up a resonance field around prep-1 harmony. Play prep-1 (on keys) slow and repeated while interspersing single notes from chord-1 very quiet, using them to highlight near-neighbours in spectrum of prep-1.
    - Dynamics: play prep-1 as loud as you can without it rattling, other notes should be only loud enough that they cause beatings with the prep-1 harmony.
    - Towards the module end, place ebow(FUND) on one side of prep-1 and let bloom, but keep playing the keys intermittently until the ebow has stabilised a tone.

MODULE-A: **[4’]**

- (A1) With slow and deliberate movements[1], use the ebow to explore the string spectrum. Seek out metastable multiphonics, the tipping-points where two or more sounds exist together. When the sounds are balanced like a spinning plate, move on…
    - Contingency: If the sound is too thin or not catching, use a mix of ‘pinging’ the preparation or playing the keys (as in module-X) to keep the sound active.
- (A2) Place 2nd ebow on prep-2 and allow a prominent pitch to emerge and settle. Then without haste, slide the preparation along the string until that pitch matches one sounding from prep-1: match doesn’t need to be exact, the gesture should be smooth, not fussy.
- (A3) continue alternating between ebows 1 & 2, finding metastable points and sliding the preparations to match newly revealed pitches.
    - use contingency as above if the sound isn’t catching.

MODULE-B: **[c.30”]**

- Return to keyboard and gently perturb the sound by playing notes from chord-1 and occasionally prep-1/prep-2/prep-3. The key sound should blend with the ebow sound, like ripples on pond.

MODULE-AA: **[2’]**

- (AA1) while at keyboard, take up resonator. Begin with a gentle crescendo of 19 evenly-spaced key-strikes of prep-3; increasing from imperceptible ripples to intense beating at end. Halfway through this, begin applying the resonator to that string to interact with the sound, and slide prep-3 to match an already sounding pitch (prep-1 & -2).
- (AA2) Move to piano side. Pick any bass string and strongly pluck it, then apply resonator to bring out a strong partial.
- (AA3) With slow and deliberate movements, use the resonator to explore the bass-string spectrum to find multiphonics that match/beat with the ebow sounds. Each time you settle on one, make small movements to one of the ebows to alter their balance and reveal new pitches.
    - You may choose two bass strings to alternate between; you’ll probably need to pluck the string each time you return to it.
- (AA5) When you have a strong match/beating between bass partial and an ebow partial, pluck one/both active bass strings 7 times, evenly spaced like bells, building in intensity (*pppp–mf*), then remove resonator (put away).

MODULE-Z: **[2’]**

- (Z1) for each preparation, very slowly slide the ebow-1 to the string-end and off. Ping the different preparations intermittently across this process. Pause, then do the same for ebow-2.
- (Z2) let ebow-3 sustain for a short while, then ping prep-3 once and immediately remove ebow-3

[1] Rather than pushing the ebow along the string, lift and replace it at different points since this gives more of a ‘kick’ that is likely to disturb the sounding-tone and allow another to take its place.