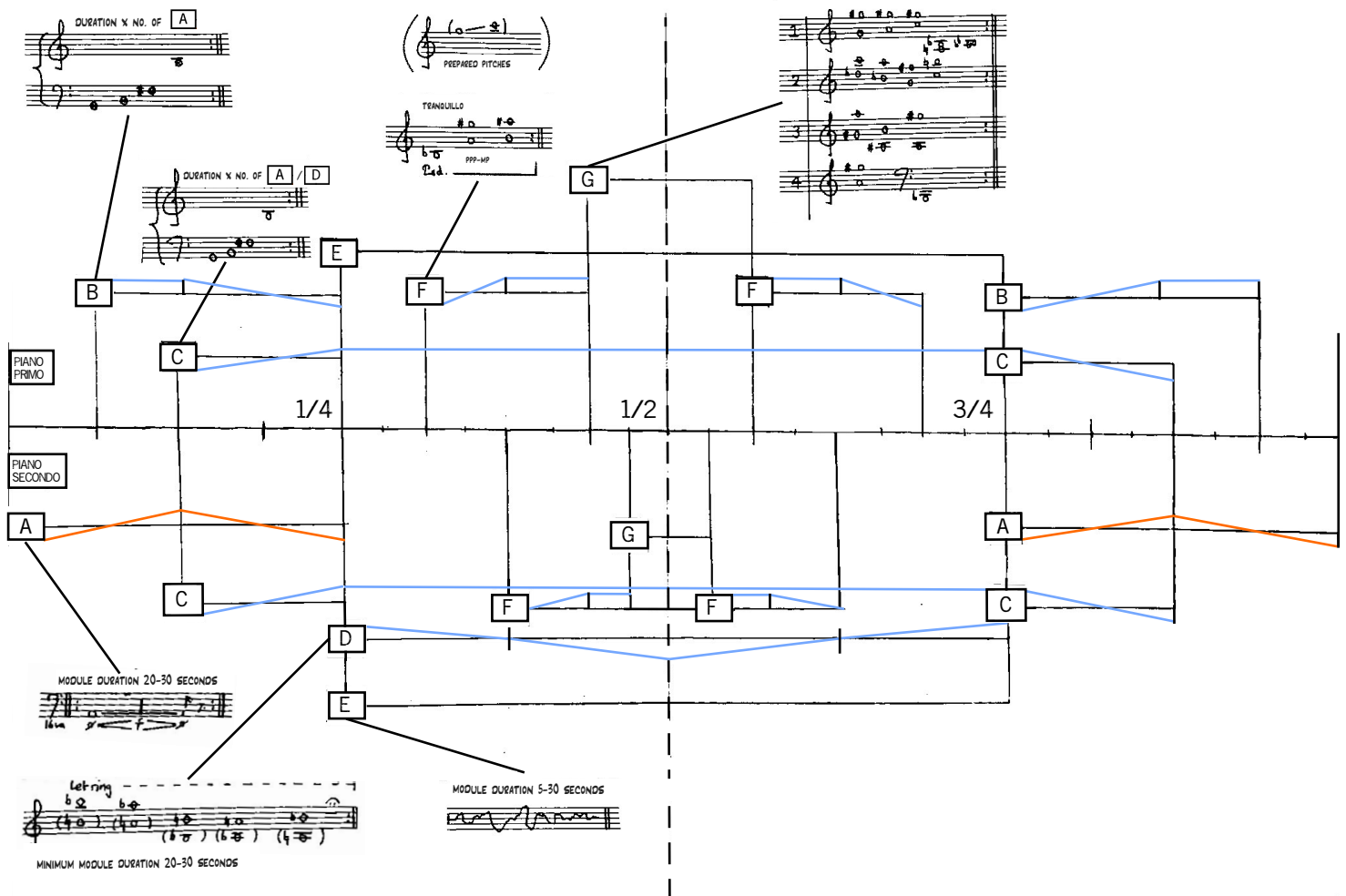


# PALINDROME FOR TWO PIANOS

- = FREQUENCY (OF OCCURENCE)
- = VOLUME (HIGHEST POINT)



# Palindrome For Two Pianos (score notes)

## Materials

- Soft mallet (ensure beater is small enough to target the strings precisely)
- Baoding ball/ metal ball (approx. fist size)
- 8 –16 strong neo-dynium disk magnets (approx. 10mm by 2mm)
- 4 –8 screws (approx. 10mm by 7.5cm)
- Thin bamboo chop sticks (approx. 2.5mm by 30cm)
- Rosin
- Paper clips (preferably small and plastic)

## Material preparations

### Screw & magnet

- To prepare the screw, attach two stacked neo-dynium magnets to the head – they should naturally magnetize together. Place the head on top of the individual piano strings and slide it along towards the key bed until touching the agraffes.
- To play the prepared string, strum the top of the screw to make it sway horizontally. Try to find a steady rhythm to create a continuous tone, and be gentle or the screw will loudly fall over.

### Chop Sticks

- Before rehearsals and performance, coat two-thirds of the sticks in standard violin bow rosin.
- If there is a pointed-end and a flat-end, leave the pointed-end clean as this will be easier to insert into the piano strings

## Modules

### **A**

- Using the lowest string(s) on piano.
- Note is played by consistently hitting soft mallet on string past damper, with in/decreasing force (try to keep the rate of hits quick and continuous to maintain a sustained tone).
- Sustain or sostenuto pedal can be used, or the key can be weighted with an object.

- Can optionally add a Baoding ball on top of the bridge pins at the end of the string to add a rattling texture at louder dynamics.

## **B**

- Place prepared screws on given pitches.
- No pedal (non-pitch rattle).
- Consistent sound and volume.
- Choose any one/ combination of given notes.
- Can choose to change note or sound (to **C**) at the peak dynamic point of an **A** module.
- **Piano Primo** should be mainly responsible for **B** and **C**, but to fill the sound **Piano Secondo** can also contribute.
- If **Piano Secondo** is contributing, a hand signal or gesture from **Piano Primo** should cue when to change from **B** to **C** and vice-versa e.g. **B** closed fist, **C** open fist.

## **C**

- Same as **B**, but with the pedal depressed so pitches are sounding.
- When **A** ends, the optional changes in **C** are now cued by the start of a **D** module. If changing do so immediately after **D** to disguise the transition within its decay.
- **C** in **Piano Secondo** is acting again as a supportive role, and may use easier measures to sustain the given pitches (e.g. e-bow) providing it doesn't contrast too much with the general drone timbre/volume.

## **D**

- Using the rosin-free end of the sticks, insert in-between strings of the given bracketed pitches about 1-2 inches before the agraffes.
- With a very light touch drag your thumb and index fingers upwards to create friction with the stick and produce a resonating pitch. Adjust along string so the prominent overtone heard is the seventh major above the fundamental.
- Try to consistently produce a clear and resonant tone.
- Each pitch is played by 'bowing' the stick once from bottom to top.
- At the beginning of each **D** module, bow any one or combination of the five pitches in quick succession.

## **E**

- Miscellaneous sounds
- Non-pitch
- Not particularly loud
- Slightly sporadic nature
- Approx. 5-8 sounds during complete period
- No one sound can be repeated twice (by one performer)

## F

- Prepared pitches are achieved by placing a paper clip at a nodal point on the first (of the three) individual strings of each given pitch. The sounding result will be the original tone and second 'ghost' pitch a tone/major third below. The nodal point should be adjusted so the 'ghost' pitch avoids another equal tempered tuning. Some points on the string resonate better than others.
- To silence the prepared string, the pianist must depress the damper pedal so the hammer will instead strike the latter two individual strings.
- The given piano pitches are gradually introduced in the order presented.
- Once introduced it may appear in any order and number of times.
- As a miscellaneous timbral variation, each piano can occasionally lift the damper pedal and play a note/diad with prepared pitches.

## G

- Development section expanding the previously introduced material from **F**.
- Consider ways of interacting between two pianos e.g. additive, call and response, imitation/opposites, melodic axes points, registral distribution.
- Four possible improvisational parameters are given with examples in the score:

- 1: Same melody (top) note from a note/diad within the **F** gamut, with a different interval below
- 2: Same interval, being transposed melodically (this can only be a major 7<sup>th</sup>)
- 3: displacing and reordering pitches within **F** diads
- 4: Octave displacing complete diads and note.

## Score reading

- Blue lines indicate frequency of occurrence, within the desired rate of density. For example, **B** begins as frequent as it possible, but gradually diminishes, meaning the probability of it occurring 1/16<sup>th</sup> way through the piece is certain, but nearing ¼ way through never. This doesn't mean however modules **D** or **F** at their full capacity should

be played constantly, but more the full capacity to which the performs wish to state that material. *C* being constant through the middle portion of the piece does mean it will always be present however, but the formation of pitches can be constantly changing depending on cues from the *D* modules, and as *D* gets lower, the potential of changing these pitch formations in *C* also becomes less likely – it becomes more static.

- Yellow lines are only applicable for module A, and simply limit the highest dynamic volume of the module – at 1/8<sup>th</sup> through the piece the module will grow to be its loudest, but nearing 1/4 through will be the quietest peak (a clear dynamic contour should still be perceptible however).
- The horizontal line represents the time frame of the piece and temporal entries for the first and subsequent modules. A performance best attempting to portray the symmetrical aspects of the form may consider time-stamping each event in divisions of the total piece duration. Recommended performance lengths to facilitate this would be numbers divisible by 4 or 8, such as the 12' recording, 20' or 24'. It may be excessive to exceed this however.