

Set

for bassoon and electronics

**Taylor Brook
2019**

about *Set*

Set, for solo bassoon and electronics, was written for Dana Jessen in the Summer of 2019 and is approximately 30 minutes in duration. *Set* is a suite of four pieces with quasi-improvised interludes. Although the score was designed to be played in full, individual pieces and improvisations could be performed separately.

While the four pieces that make up this score are fully composed, the interludes feature computer improvisation to accompany the improvising bassoonist. These improvisations aren't completely free, each with a set of rules for the improviser. This piece, then is a back-and-forth between written and improvised music. Beyond the musical effect, this creates an interesting dynamic between the composer and performer, as the performer becomes the central author of the improvised section and I become a performer through the electronics. This piece was developed with Dana Jessen, who taught me a great deal about bassoon technique during the process. Indeed, the composer-performer dichotomy further breaks down when one considers that large sections of this piece were based upon special techniques that Dana has developed through her work as an improviser.

technique indications

Smorz. - smorzando, produce a tremolo effect using the jaw

t.vib. - tongue vibrato, produce a tremolo effect using the tongue under the lower lip

bisb. - bisbigliando trill, tremolo effect between two or more fingerings for the same pitch

alt. fingerings - alternate fingerings, use an alternate fingering to produce the same pitch, indicated with encircled numbers corresponding to the number of alternate fingerings.

flz. - flutter tongue

norm. - normale, marks an end to the t.vib. or timbral indications

improvisation sections

There are three sections in the piece that call for improvisation. Each of these three improvisation sections are controlled using timing indications and a set of “rules.”

These improvisation sections set up dynamic relationships between the soloist and the electronics, especially in the case of improvisations 1 and 2. It is integral that the soloist is able to rehearse these sections and get a feel for how the electronics will react to them.

multiphonics

The majority of the multiphonics in this piece were taken from Sampson’s book: *Contemporary Techniques for the Bassoon: Multiphonics*. For these multiphonics I have used her preferred notation and included the index number of the multiphonic from her book. In this piece I use both types of multiphonics covered in the book: polyvalent and monovalent. The monovalent multiphonics provide a static combination of pitches, while the polyvalent multiphonics are capable of moving between a single pitch and a multiphonic.

I have also used a few multiphonics that occur when playing notes in the third octave of the bassoon with weak lip pressure, as described in Gallois’ *The Techniques of Bassoon Playing* in the section “12 stable multiphonics.”

Set for Dana Jessen

Taylor Brook

Introduction

$\text{♩} = 76$

(alt. fingerings)

Bassoon

Trigger

Bsn.

tr.

Bsn.

tr.

Bsn.

tr.

El. Bsn. 1

El. Bsn. 2

2

21

Bsn. *f* *mp* *fp* *ff* *mp* *pp* *fp* *f* *mp*

tr.

El. Bsn. 1 *sub p* *f*

El. Bsn. 2 *sub p* *f*

bisb. norm. nasal bisb.

27

Bsn. *fp* *f* *mp* *fp* *f* *mp* *f* *mp* *pp* *mp* *pp* *pp*

tr.

El. Bsn. 1 *sub p* *m.vib.* *s.vib.* *nasal*

El. Bsn. 2 *sub p* *m.vib.* *s.vib.* *nasal*

bisb. bisb. norm.

34

Bsn. *fp* *f* *mp* *fp* *f* *mp* *fp* *f* *mp* *p* *ff*

tr.

El. Bsn. 1 *f* *sub p* *f* *sub p* *f* *sub p* *f*

El. Bsn. 2 *f* *sub p* *f* *sub p* *f* *sub p* *f*

nasal bisb. bisb. flz.

poco rit. $\bullet = 63$

40

Bsn. *fp* *ff* *p* *mp* *pp* *pp* *p* *pp* *pp* *p* *pp*

tr.

El. Bsn. 1 *p* *p* *p*

El. Bsn. 2 *sub p* *p* *p*

nasal bisb. non flz norm. (non nasal) t.vib. slow → fast as pos. t.vib. slow → fast t.vib. slow → fast

click ends m41 cue

Song I

67 $\bullet = 96$

Bsn. *pp* *f* *mp* *mf* *p* *f* *p* *mp* *f* *p* *mp* *pp*

tr. m67 cue

noise *p*

Bsn. *mf* *p* *pp* *mf* *p* *mp* *p* *mf* *p* *p* *mf* *p* *mf* *p* *mf* *p* *pp* *mp*

tr. m78 cue

Bsn. *p* *mf* *p* *f* *p* *f* *pp* *mp* *f* *mp* *mf* *p* *mp*

tr. m84 cue

Bsn. *pp* *p* *mf* *mp* *f* *p* *mp* *pp* *pp* *mf* *p* *f*

tr. m88 cue

91

Bsn. *p* *mf* *p* *mp* *p* *f* *p* *p* *mf* *p* *f* *p*

tr. m91 cue

96

Bsn. *mp* *p* *mf* *p* *f* *p* *pp* *f* *p* *pp*

tr. m98 cue

t.vib. fast as pos.

101

Bsn. *f* *p* *f* *pp* *pp* *f* *pp* *p* *mf* *p* *mf* *p* *pp*

tr. m102 cue

norm. t.vib. fast as pos. norm. t.vib. fast as pos. norm.

bending up 1. pnd

107

Bsn. *mf* *p* *f* *p* *p* *mp* *p* *mf* *p* *mf* *p* *mp* *mf*

tr. m108 cue

112

Bsn. *mp* < *f* > *pp* *fff* *fp* < *ff* *fff* 3

rapid and intense upward gesture

tr.

m114 cue

117

Bsn. *ff* *fff*

unmeasured, fast as possible

tr.

119

Bsn. *p* < *mf* > *p* < *mp* > *pp* *mp* nasal t.vib. fast slow fast slow fast slow

calm and neutral

tr.

p < *f* > *p* < *f* > *p* < *f* > *p*

Improv. I

rules:

1. no multiphonics or vocalizations
2. no references to melodic materials of the previous section

124

Bsn. ~ 1' short irregular staccatto attacks ~ 2' long notes using full breath *f* ~ 1'30" rising lines and gestures ~ 3' free improvisation

tr. m124 cue (improv 1.1) m125 cue (improv 1.2) m126 cue (improv 1.3) m127 cue (improv 1.4)

electronics react to live bassoon, triggering samples and granular synthesis effects

Song II

♩ = 96

Bsn. *mp*

tr. m128 cue

① ②① ②① ②③ ①②①②③ ①②③ ① ②③① microtonal segment

Bsn. *cantabile*

tr. m133 cue

variable G from previous five measures

gliss. harmonics with teeth on reed

Bsn. *pp* *mf* *pp* *pp* *mf* *pp*

tr. m141 cue m144 cue m149 cue

(265) (269)

(120) (120) (132) (181)

mp *mp* *mp* *mp*

Bsn. *pp* *mf* *pp* *pp* *mf* *pp*

tr. m154 cue m159 cue

(267) (139) (139)

(114) (39)

(121) (79)

mp *mp* *mp* *mp*

♩ = 72

Bsn. 161 (265) *pp* *mf* *pp* (269) *pp* *mf* *pp*

tr. m164 cue (120) *mp* m169 cue (120) *mp* (132) *mp* (28) *mp* (132)

Bsn. 171 (267) *pp* *mf* *pp* *pp* *mf* *pp*

tr. m174 cue (139) *mp* m179 cue (139) *mp* (114) *mp* (39) *mp* (121) *mp*

Bsn. 181 (265) *pp* *f* (269) *pp* *f*

tr. m185 cue (120) *mf* m190 cue (120) *mf* (132) *mf* (28) *mf* (132) *mf*

Bsn. 192 (267) (114) (132) *pp* *f* *pp* *pp* *f* *pp*

tr. m196 cue (139) *mp* m200 cue (139) *mp* (114) *mp* (39) *mp* (121) *mp* (79) *mp*

Bsn. 202 *pp* *ff* *pp* *p* *f* *p*

tr. (11) *pp* *ff* *pp* (120) *mp* (120) *mp* (42) *pp* *ff* *pp* (120) *mp* (120) *mp* (132) *pp* *ff* *pp* (120) *mp* (120) *mp*

$\text{♩} = 48$

Bsn. 213 (132) (28) (114) *f* *f* *f* *mp* cantabile 3 3 3 3

tr. m216 cue (265) *p* (120) *p* (267) *p* (269) *p* (132) *p* (267) *p* (28) *p*

Bsn. 220 (132) *f* cantabile *mp* (28) *f*

tr. m220 cue (120) *mp* (181) *mp* (121) *mp* (120) *mp*

(132) *mp* (139) *mp* (132) *mp*

(28) *mp* (139) *mp* (39) *mp* (28) *mp*

(120) *mp* (114) *mp* (120) *mp*

Bsn. 228 (114) *f* *p < f* *p*

tr. (181) *mp* (121) *mp*

(132) *mp* (139) *mp*

(139) *mp* (39) *mp*

(114) *mp*

Improv. II

slowly changing synthesizer doubling live bassoon input
synth tone reacts in diverse ways to bassoon input

236

Bsn.

tr.

m236 cue (improv 2)

Rules:

1. move through part I-V in order
2. provided fragments may be played in any order, repeated, or used as a basis for further improvisations
3. each part should be at least 1 minute in duration
4. dynamics indicate the possible dynamic range when provided with a fragment
5. tempo may be varied freely

Part I:

cantabile

mp - mf

(long note in low register)

p < f > p

p - f

cantabile

mp - mf

with high E-flat key

mp - mf

mp - mf

cantabile

mp - mf

cantabile

mp - mf

Part II:

mp - mf

tongue vib.

p - f

mp - mf

mp - mf

mp - mf

mp - mf

mf - ff

mp - f

mf - ff

with high E-flat key

p - f

Part III:

mf - ff

with high E-flat key

p - f

with high E-flat key

p - f

mp - f

with high E-flat key

p - f

mf - ff

with high E-flat key

p - f

mf - ff

Part IV: Improvise freely in the extreme high and low registers.

Part V:

frenetic improvisation using these notes as basis

Ending:

Song III

♩ = 96

with high E key throughout section

237

Bsn. *f* *mf* *ff* *mp* *f* *p* *ff* *p* *f*

t.vib. norm. smorz. 3 3 3 6

tr. m237 cue synth with heavy rapid tremolo

242

Bsn. *poco* *mp* *f* *mp* *ffp* *pp* *ff* *pp* *mp* *p* *mf* *p*

t.vib. fast as pos. gliss. harmonics, teeth on reed norm.

tr.

248

Bsn. *pp* *ff* *mf* *t.vib.*

tr.

252

Bsn. *mf* *f* *mf* *ff* *f* *fp < ff* *smorz.* *t.vib.* *flz.* *bisb.*

tr.

256

Bsn. *f* *ff* *mf* *f* *mp* *fast as possible (unmeasured)*

tr.

259

Bsn. *fp < ff > mp* *fp* *ff* *f* *ff*

tr.

263

Bsn. *mf* *fff* *sub p* *mp* *random harmonics* *repeat as fast as possible* *t.vib. fast as pos.* *t.vib. fast as pos.*

tr.

267 (t.vib. fast as pos.)

Bsn.

tr.

(t.vib. fast as pos.)

(t.vib. fast as pos.)

274 norm. t.vib. \geq

Bsn.

tr.

norm. t.vib. \geq

norm. t.vib. \geq

fp *fp*

278 (t.vib. fast as pos.)

Bsn.

tr.

(t.vib. fast as pos.)

(t.vib. fast as pos.)

f *mp* *f* *mp*

Until m323, use the high E key for a rapid tremolo.
 For the F-G trill, rapidly slide the index finger over the open hole, creating a "fuzzy trill" effect.

285 (t.vib. fast as pos.) norm. (non t.vib.)

Bsn.

tr.

(t.vib. fast as pos.)

(t.vib. fast as pos.)

winding upward bend 2.png

291

Bsn. *f* *mp* *f* *mp* *f* *p*

tr. *p* *f* *mp* *f* *mp*

norm. (non t.vib.)

norm. (non t.vib.)

298

Bsn. *f* *p* *ff* *sfz*

tr. *f* *p* *ff* *sfz*

slow, wide vibrato (dizzy, drunken)

slow, wide vibrato

slow, wide vibrato

305

Bsn. *p* *mf* *p* *ff* *p*

tr. *p* *mf* *p* *ff* *p*

nasal

norm.

nasal

nasal

norm.

nasal

311

Bsn. *cresc. poco a poco*

tr. *cresc. poco a poco*

cresc. poco a poco

cresc. poco a poco

Song IV

♩ = 126

328 (E-flat key)

tremolo effect

Bsn. *mp* *ff* *mp* *f* *f*

tr. *p* *mf*³

m328 cue

delay and click track

bassoon

333

2-BEAT COUNT IN

m335 cue

Bsn. *f* *f* *f*

tr. *f* *f* *f*

337

Bsn. *mp* *f* *mp*

tr. *mp* *f* *mp* *f*

341

Bsn. *f* *mp* *ff* *mf*

tr. *mp* *f* *mp* *p* *mf* *p*

345

Bsn. *ff* *f*

tr. *mp* *p* *mp* *mp*

349

Bsn.

tr. *f* *f* *f* *f*

353

Bsn.

tr.

Musical score for measures 353-355. The Bsn. part starts with a rest in measure 353, then plays a melodic line. The tr. part has a rhythmic pattern of 'x' marks in the first staff and melodic lines in the lower staves.

356

Bsn.

tr.

Musical score for measures 356-358. The Bsn. part plays a melodic line. The tr. part has a rhythmic pattern of 'x' marks in the first staff and melodic lines in the lower staves.

359

Bsn.

tr.

Musical score for measures 359-361. The Bsn. part plays a melodic line. The tr. part has a rhythmic pattern of 'x' marks in the first staff and melodic lines in the lower staves.

362

Bsn.

tr.

Detailed description: This system covers measures 362-364. The Bsn. part (top staff) begins with a treble clef and a key signature of one flat. It features a melodic line with eighth and sixteenth notes. The tr. part (bottom staves) starts with a percussion staff showing 'x' marks for snare drum. Below it are four staves for woodwinds (flute, oboe, clarinet, bassoon) with various rhythmic patterns and rests.

365

Bsn.

tr.

Detailed description: This system covers measures 365-367. The Bsn. part (top staff) continues with a melodic line, featuring a key signature change to two flats. The tr. part (bottom staves) includes the percussion staff and four woodwind staves with complex rhythmic accompaniment.

368

Bsn.

tr.

Detailed description: This system covers measures 368-371. The Bsn. part (top staff) features a melodic line with several triplet markings (indicated by '3' over groups of notes) and a final triplet with a fermata. The tr. part (bottom staves) includes the percussion staff and four woodwind staves, with the woodwinds playing triplet patterns in the later measures.

372

Bsn. *pp* *mf*

tr.

376

Bsn. *pp* *pp* *mf* *pp* *pp*

tr. *mf* *pp* *pp* *mf* *pp*

379

Bsn. *mf* *pp* *pp* *mf* *pp* *pp*

tr. *pp* *mf* *pp* *pp* *mf* *pp*

382

Bsn. *mf* > *pp* *pp* < *mf* > *pp* *pp* < *mf* > *pp* *pp* <

tr.

385

Bsn. < *mf* > *pp* *pp* < *f* *pp* < *f* *pp* < *f*

tr.

388

Bsn. *3* *3* *3* *3* *3* *3* *3* *3*

tr.

391

Bsn.

tr.

This system covers measures 391 to 393. The Bassoon (Bsn.) part is written in a bass clef with a key signature of one flat (B-flat major/D minor). It features a continuous eighth-note triplet pattern. The Trumpet (tr.) part is written in a soprano clef with a key signature of one flat. It includes a snare drum line with 'x' marks and three staves of eighth-note triplet patterns.

394

Bsn.

tr.

This system covers measures 394 to 396. The Bassoon (Bsn.) part continues with the eighth-note triplet pattern. The Trumpet (tr.) part continues with the snare drum line and eighth-note triplet patterns across three staves.

397

Bsn.

tr.

This system covers measures 397 to 399. The Bassoon (Bsn.) part continues with the eighth-note triplet pattern. The Trumpet (tr.) part continues with the snare drum line and eighth-note triplet patterns across three staves.

t.vib.
fast as pos.

Bsn. 

tr. 

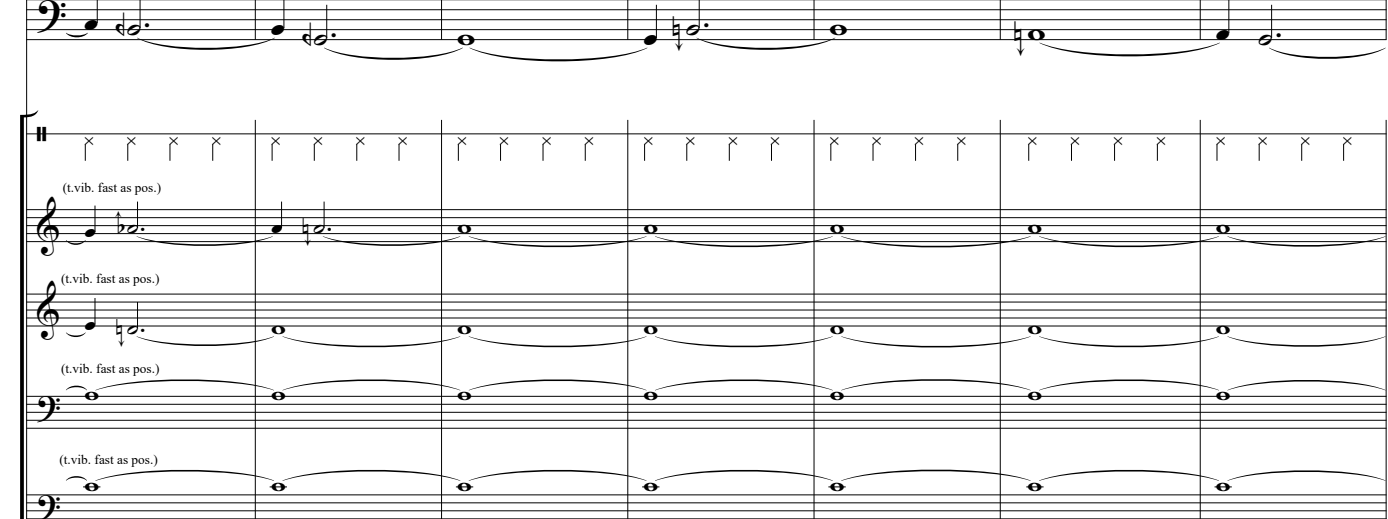
t.vib. fast as pos.

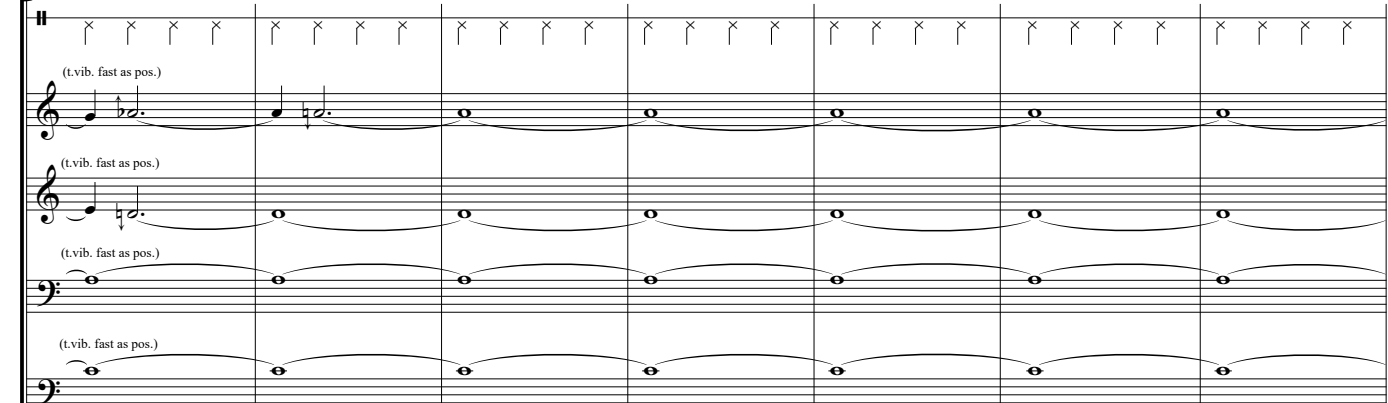
t.vib. fast as pos.

t.vib. fast as pos.

t.vib. fast as pos.

404 (t.vib. fast as pos.)

Bsn. 

tr. 

(t.vib. fast as pos.)

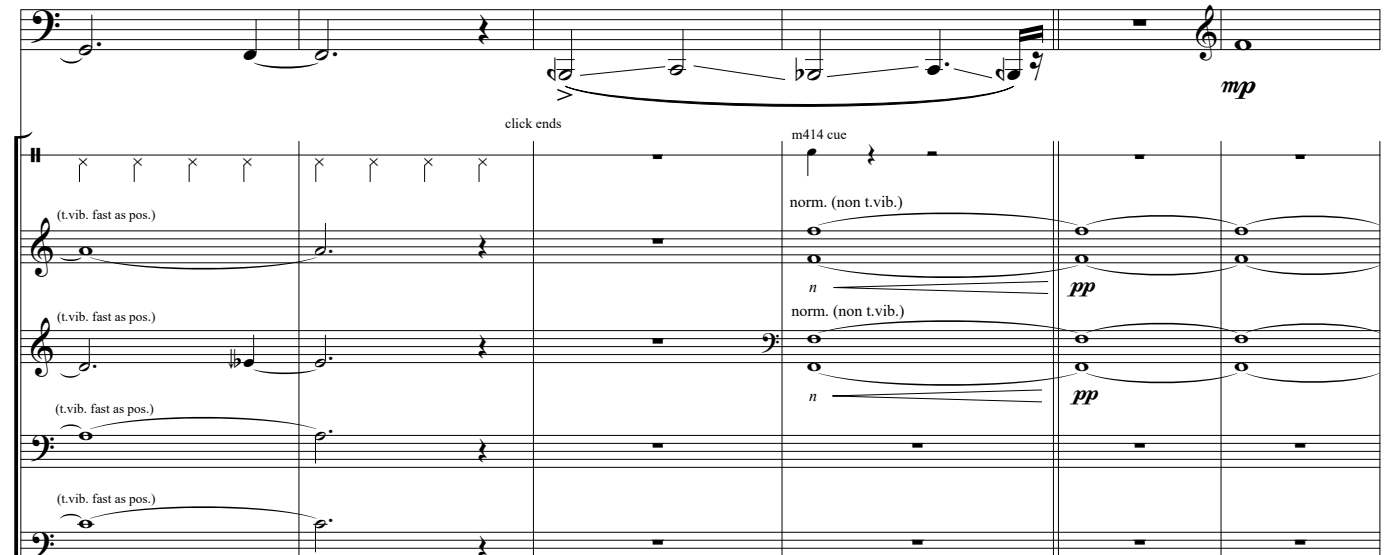
(t.vib. fast as pos.)

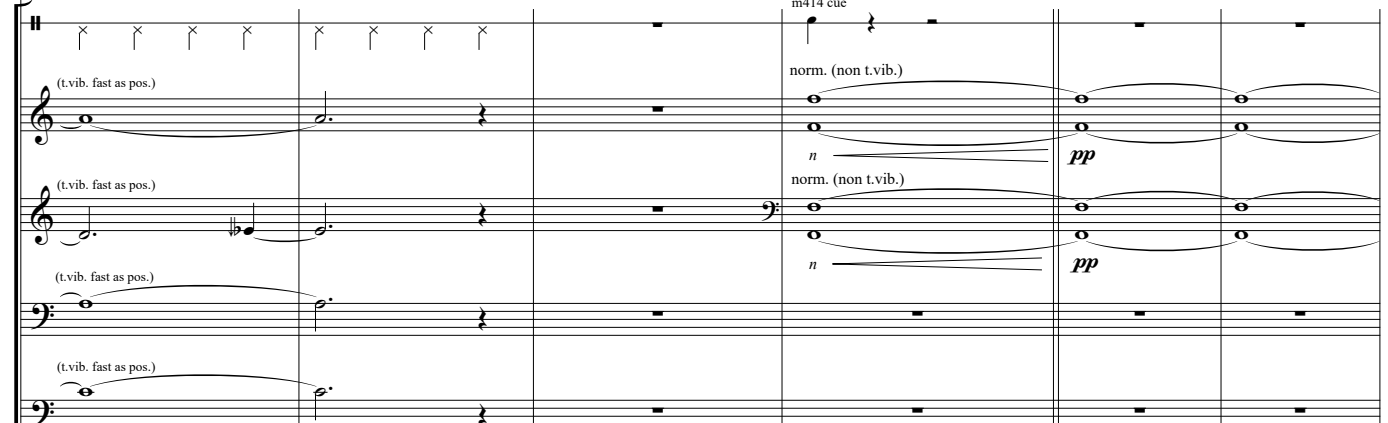
(t.vib. fast as pos.)

(t.vib. fast as pos.)

rit. ----- ♩ = 69
norm. (non t.vib.)

411 (t.vib. fast as pos.)

Bsn. 

tr. 

click ends

m414 cue

norm. (non t.vib.)

norm. (non t.vib.)

pp

pp

(t.vib. fast as pos.)

(t.vib. fast as pos.)

(t.vib. fast as pos.)

(t.vib. fast as pos.)

mp

(alt. fingerings)

417

Bsn. *mf* *mp*

tr.

419

Bsn. *f* *p* microtonal segment 7

tr.

422

Bsn. t.vib. slow → fast *pp* *p > pp pp* *p > pp pp < p > pp < p > pp*

tr.

429 → fast

Bsn. norm. (non t.vib.) dull tone *p* *mp > p < mf > p* *f > p* (69) → air tone

tr. m436 cue