

Triangles – Flute, Violin, Piano

Performance Instructions

Program Note

Like any form of social organization, musical ensembles embody complicated processes of negotiation and compromise between participants in the pursuit of communal expression. In this composition I consider the related facts of coexistence and encounter that play out between a violinist, pianist and flutist, under the metaphorical sonic call of the distant tinning-ringing of triangles.

This 2018 revision of *Triangles* expands upon the first version written in 2012.

General Notes for all performers

This piece targets the processes of discovery and encounter – both at a sonic and interpersonal level – through which individuals (people/sounds/musical phrases) entwine themselves with others.

INTERACTIVE FORM

There is no score for this composition, only individual parts. During most of the piece, each part is played more or less independently of the other parts.

Passages that are unsynchronized are labeled [**NON SYNC TIME**] and those in which the three timelines of the performers come together are labeled [**SYNC TIME**]. All of the following interactions are written into each part but written here in summary.

Opening [NON SYNC TIME]

The flutist begins the piece, quickly followed by the violinist and then the pianist. As soon as the piece begins, each player proceeds at their own pace (non sync time) until Letter A. The violinist will hold a note until being cut off by the pianist, which cues Letter A (sync time).

Letter A [SYNC TIME]

The flutist does not play during Letter A. The violinist and pianist coordinate their phrases. The flutist cuts off the violinist at the end of the passage to cue Letter B. The entire cue is written into all parts.

Letter B [NON SYNC TIME]

Each player proceeds unsynchronized until Letter C

Letter C [NON SYNC TIME, cont]

Letter C is a momentary gathering point at which the course of the three performers briefly coincide. Towards the end of the long decay of a major 3rd dyad in the piano, the violinist will cue Letter C by beginning to play, indicating to the others to move forward as well.

Letter D [SYNC TIME]

Eventually, the violinist and flutist will arrive at a fermata and wait for the pianist to indicate letter D. In this passage, the piano plays alone. The entire cue is written into all parts.

Letter E to end [NON SYNC TIME]

The performers proceed independently to the end. Each player will likely finish at different times.

If deemed necessary, the performers could adjust (or 'explore') their individual paces during rehearsals. (In addition to tempi, the duration of various fermatas in each part could be tweaked). It is, however, not essential that individuals arrive at the landmarks at the same time as each other, or the same way from one performance to the next.

GENERAL REMARKS ABOUT NOTATION

The musical 'material' in this composition is primarily gestural. The notation is often prescriptive of physical actions rather than descriptive of pitches, since so much of the sonic gestures must be found 'in the cracks between notes.'

The original version of this composition included several instances of graphic notation which have been rewritten in this revision. Nonetheless, the performers should interpret the notation with a degree of freedom, particularly with respect to the 'in the cracks' gestures, which will need to be filled in, characterized, played with/against/around and embodied. (Such gestures dominate the violin part, which has many instances of "complex" notation that should be understood and interpreted as quasi-graphical.)

One general notational remark: the duration of **fermatas** is relative to the attached value (i.e. a fermata on a quarter note indicates a shorter sustain than a fermata on a whole note), except when supplied with a time value (i.e. **3-5"**). Normal fermata otherwise suggest a gentle extension or rounding of the indicated duration value. Square fermata are occasionally used to indicate lengthy pauses or clear breaks between sections (as in the flute part).

Following are specific notes for the flutist and the violinist:

Notes for the Flutist

Noteheads

- **Square**: mostly air with little tone. Also used for phonetic articulations (see below)
- **X**: slap/pizz
- **Triangle**: thin, wispy tone; also used for *whistle tone* (abbreviated "w. t.")
- **Slashed**: distorted tone, such as with humming (indicated "sung")
- **Diamond**: indicates the fundamental of a harmonic. Target overtones above the fundamental are indicated with normal noteheads; if the fundamental is placed in parenthesis, it should not sound, if possible.

Phonemes written below square note heads indicate a kind of **phonetic whisper-articulation**, that seeks to semi-vocalize the flute body (although not for actual “spoken” sound but rather as a kind of articulated air noise). The supplied pitches are intended to change the resonating characteristics of the flute; some trace of the pitch may come through. The following phonemes are used:

Consonants and fricatives

s, t, p, and k = as in normal English

ʃ = as the “sh” in “ship”

Vowels

i = “ee” as in “fleece”

e = “e” in “bed”

a = “a” in “father”

o = as the second part of the diphthong “o” in “go”

u = as in “ooh”

Repetition of the same phonetic syllable is indicated by a **dashed line**. A **solid line with an arrow** designates a gradual transition of vowel from one syllable to the next.

Timbre Trills are written as a “tim. tr” above a normal trill indication.

Fingerings are supplied in a few cases. If they do not seem to work (note that sometimes they are intended to ‘dull’ the tone), then the performer should attempt to find alternate fingerings or simply adapt the tone another way.

Vibrato may be used on ‘normal’ sustained pitches and melodic fragments as desired.

Notes for the Violinist

More so than either of the other two parts, the violinist’s music exists ‘within the cracks.’ Furthermore, several over-determined, spastic fast passages include the expression “quasi improvised,” which mean that individual notes/bowings are not as intended to be precisely realized. In these passages, the performer should--after exploring the gestural terrain based on the notation—‘react’ somewhat freely and spontaneously to the notation as much as ‘follow’ it.

Also, in several passages, there may arise conflicting notations, since the action notation used addresses multiple but coinciding aspects of violin technique. These include:

- Left Hand finger pressure (harmonic, half-harmonic, or normal)
- Left Hand finger location (notated pitch, glissandi, string number)
- Right Hand bow pressure (*flautando*, accent marks, dynamics)
- RH bow usage (Tip, Upper Half, Middle Lower Half)
- RH bow location (*sul tasto*, *sul ponticello*)
- RH bow stroke (jété, articulation and accent, Up, Down, string crossing arpeggiation)

As before, the performer should explore the gestural terrain based on the notation in order to make their own path through it.

Noteheads

- **Square:** (white) noise with little or no tone, frequently achieved by *flautando*, *sul tasto*, and light (harmonic) Left Hand finger pressure. Also used to indicate *scrub tone*. (See below). The precise pitch is typically not essential but should at least indicate the register and 'height' along one of the strings. Accidentals attached to square note heads are used to move a pitch away from a harmonic node on the string.
- **X:** a short chunky, scrungy or screechy tone, created by quick, aggressive bow motion sometimes combined with quick LH glissando.
- **Slashed:** distorted tone, such created by heavy pressure in a *sub tone*

Note that pitches in extreme high registers (i.e. near or beyond the edge of the fingerboard) can be treated as indeterminate.

Strings are indicated by bolded Roman Numeral: **I** = E, **II** = A, **III** = D, **IV** = G.

Some recurrent gestural techniques specific are described here.

- *Scrub tone* is something akin to the sound created by slowly rubbing Styrofoam together. It contains changing inharmonic frequencies (not 'white noise'). It is created by maintaining the pressure of the initial bow attack into stroke, which moves slowly.
- **Left Hand trill-glissandi** are indicated by a thick wavy line above or below a passage. This indicates that the entire left hand is "trilled" back and forth around or above the indicated pitches, creating various glissandi effects. Note that this is typically combined with string crossing arpeggiations the Right Hand to create changing and unpredictable movements within a texture.
- *Windshield wiper* indicates the wiping motion used to sweep the bow up and down a string, from *molto sul tasto* (even touching the LH finger) to *poco sul tasto* (edge of the fingerboard) or *sul ponticello*. It can create a filter sweep effect on the 'white noise' of a thin *flautando*.

These and other gestural techniques are also described in the score when they occur.

Triangles

Flute

Adam Mirza

[NON SYNC TIME]

$\text{♩} = 56$ [T23|123D#] (3-7")

to te ta titotetati te ta to te ta te te te ta ti t t

p *mfp* *mf* *p* *ppp* *p* *mp* *ppp* *mf*

Detailed description: This musical staff features a complex rhythmic pattern with triplet and sextuplet markings. The tempo is marked as quarter note = 56. The key signature has one flat. The lyrics are 'to te ta titotetati te ta to te ta te te te ta ti t t'. Dynamics include piano (p), mezzo-forte piano (mfp), mezzo-forte (mf), pianissimo (ppp), mezzo-piano (mp), and mezzo-forte (mf). A fingering chart [T23|123D#] is shown above the staff.

poco vibrato (w.t.)

mp *p* *ppp* *n* *mp* *n* *p*

Detailed description: This section contains three musical phrases. The first phrase is marked 'poco vibrato' and '(w.t.)' and includes dynamics *mp*, *p*, *ppp*, and *n*. The second phrase has dynamics *mp* and *n*. The third phrase has dynamics *p* and a trill marking 't'.

$\text{♩} = 96$ *rit.* $\text{♩} = 56$ *losing tone quickly*

mp *ff* *p* *ppp* *n* *ff* *ppp* *pppp*

Detailed description: This section contains two musical phrases. The first phrase is marked 'rit.' and has a tempo of quarter note = 96. It includes dynamics *mp*, *ff*, *p*, and *ppp*. The second phrase is marked 'losing tone quickly' and has a tempo of quarter note = 56. It includes dynamics *n*, *ff*, *ppp*, and *pppp*.

(air) (air blast) lightly, delicately

mfp *fp* *mp* *p* *fp* *n* *ppp* *mf* *ppp* *n* *ppp* *pppp*

Detailed description: This section contains two musical phrases. The first phrase is marked '(air)' and '(air blast)' and includes dynamics *mfp*, *fp*, *mp*, *p*, *fp*, *n*, *ppp*, *mf*, *ppp*, and *n*. The second phrase is marked 'lightly, delicately' and includes dynamics *ppp* and *pppp*.

hum along very softly (air) $\text{♩} = 72$

pppp *pp* *pppp* *pppp* *pp*

Detailed description: This section contains two musical phrases. The first phrase is marked 'hum along very softly' and '(air)' and includes dynamics *pppp*, *pp*, and *pppp*. The second phrase includes dynamics *pppp* and *pp*. A tempo of quarter note = 72 is indicated at the end.

(The violin passage may arrive earlier or later than notated)

(hold until piano strikes the next downbeat)

♩=120
scrub tone (gentle)

Vln. (unsynchronized)

rit. *ppp* *n* *ppp* *poco cresc.* *pp*

III II

5

t tu

mp *pp*

A [SYNC TIME]

♩=86

Fl.

Vln. (cut off violin)

Pno.

ff *fff* *(long)* *(mp)* *ff*

8^{va} 8^{va} 8^{va}

(3") (5-8")

p *f*

♩=106

Fl.

Vln.

Pno.

lightly pulse the beat now without pulse (short)

ff *mf* *f*

♩=120 ♩=106

Fl.

Vln.

Pno.

[NON SYNC TIME]

B Flute cuts off violin, cueing letter B

♩=56

freely

3

purring [T23|12]

strident

sfz mp p f mp > ff

5

sfz

ppp < mf pp

tu ----- ti ti te ta ta

p mp

♩=120

[T1234|12D#]

[T23|23]

tone and air White noise, dirtier tone normal tone

ff pp > ff pp > fff f

Piercing harmonics with cascades during the taper of the decay

hollow alter fingering ad lib for microtonal detunings

f *pp* *mp*>

$\text{♩} = 60$

pp *n < ff*

unfocused breath creating whispy, ghosted tone that occasionally blend into faint 'normal' tone

$\text{♩} = 212$

[T23|12tr2]

clear tongue-attack

mp pp *mp > pp* *mf pp* *mp >*

[T23|12tr2]

pp *pp* *n*

$\text{♩} = 144$

[T123] with key trill [R123] as fast as possible

[T14|1] [T4|1]

fp fp > pp mfpp *n* *mfp* *pppp* *fp* *p pp*

The result of the key trills combined with blowing up and down the harmonic series should be a cascade series of trills blended into the gesture.

♩=66

pp

[NON SYNC TIME, cont]

Pno. (7-10") **C** Violin Cues Letter C

n *ppp* *p* *ff* *♩=72* *ti* *te* *pppp*

accel. ♩=120

ta *to* *tu* *mp* *n* *pp* *ppp* *mp* *pp* *n* *ppp*

slow air blast overblow

tim. tr (slap)

tr tr tr tr tr tr *ppp* *mp* *pppp* *ppp* *f* *tr tr tr tr tr tr* *ppp* *mf* *ppp*

♩=60

t k p t j t t k p t *ppp* *t k t k t k t k* *ppp* *mf* *t k t k t k t k t p t p t p t p* *mp* *pp* *t* *mf* *fp* *>*

thin $\text{♩} = 72$

n *ppp* *n mp* *p* *n < mp > ppp* *ff*

tim. trill *pppp* tim. trill *ppp*

pppp *ppp* *ppp mp >* *n < f > pp* *mp >* *mp*

(air) (slap)

(slap) *f* (slap) *p ppp* gently *pppp* tim. tr *pppp*

(wait for piano, take breaths as necessary)

D Piano Alone

(tr) *n* *pp* *ppp* *ppp* *pppp*

[SYNC TIME]

E Piano Cues Letter E

ppp *pppp* [NON SYNC TIME] ♩=72 (slap)
n *p* *f* *pppp*
 ti te ta to *pp* *pppp*

ppp *n* *mp* *n* *ppp*
 ti te ta to *n* *mp* *n* *ppp*
 w.t. freely

slow air blast/
 overblow
 tim. tr ad lib
n *mp* *n*

♩=120 tim. tr
n *mf* *n* *f* *ffp* *n*
 tim. tr

Triangles

Violin

Adam Mirza

[NON SYNC TIME]

$\text{♩} = 60$
Flute begins
flautando, very thin
I
II 5
3
7
poco ponticello (half-harmonic)
IV
ppp
*ff*³ *mp*

(IV) *molto pont.*
hold position (IV)
flautando
ppp *ff* *p* *n* *pp*

skittering drop jété into very fast tremolo
I
8^{va}
flautando
IV
ppp *p* *ppp* *pp* *pppp*

$\text{♩} = 144$
(*flautando* cont. until last F#)
ppp

Begin slow windshield wiping between (*molto*) *sul tasto* and *poco ponticello*, ad lib
poco cresc.

p

Extremely fast, agitated - quasi improvised
Upper Half of Bow

ppp

LH glisses erratically up and down in wide intervals (M3- P8) above the indicate pitches, unsynched with RH bow changes. The effect is a sort of agitated but delicate and shimmering filigree.

♩=72 *sul tasto*
II

pppp *f*

sticky, scrunchy: hold bow (middle of bow) above string and bounce it into the string

♩= 72 - 120 freely, with *accel* and *rit ad lib*
skittering/dancing drop jété from above - quasi improvised

(15-20") scrub tone → (8-10") sub tone

pppp *ff* *pp*

15^{ma}
I

very slow crescendo
(begin with very slow bow speed)

UH of bow towards tip, with one finger glissing throughout

(15)

mf *ppp* *mf* *p* *pp* *mf* *pp*

IV IV

$\text{♩} = 60$
scrub tone

IV IV III I

ppp *p* *ppp*

sul pont. ad lib

trill open E

pp 3 5 (short)

$\text{♩} = 84$
Fast and wild skittering drop jété at tip of bow - quasi improvised

I V II I LH Glissandi as before, erratic ad lib

fp 5 3 *p* < *f* *mp* *fp* *fp* 6 *mp* *f* *fp* 5

(cont.)

3 (cont.) 5

ppp *fp* *fp* *fp* *ppp* < *f* >

pp *ffp* *pp*

f *ff* *p* *fpp* *mp* *pp*

slower, less erratic⁴
 LH vibrato

V II

fp *n*

♩ = 120
 scrub tone (gentle)

(hold until piano strikes the next downbeat)

III II

ppp *n* *ppp* poco cresc. *pp*

[SYNC TIME]

A ♩ = 86

brittle breaking tone, poco subtone
 (dampen strings II, III, IV with left hand)

(3") (5-8") coordinate downbeat with piano

p *f*
 Set bow approx 2" from frog.
 Sustain the pressure of the initial attack into the stroke to create the 'brittle breaking tone'. (6")

Pno.

ff *ff* *(mp)* *ff*

$\text{♩} = 106$

$\text{♩} = 120$ rit. $\text{♩} = 106$

sul pont.
(focus on overtones) → scrub tone

(short)

ppppp ————— *mf*

ff *mf* *pp*

ff

(hold until cut off by flute entrance)

[NON SYNC TIME]

B Flute entrance cues B (20")

$\text{♩} = 56$

poco sul pont. (10") (10") □

pppp ————— *mp* ————— *n*

balance a 'normal' (but thin) tone with the resulting internodal distortions that spontaneously arise as fingers pass between 'natural' harmonic nodes

(20") (10") (10") (20")

pppp ————— *mf* ————— *ppppp* > *n*

loose, rounded glissandi shapes

$\text{♩} = 144$ *norm.* 8^{va} (v. short) *sub. ff*

dampen III and IV with 1st finger

$\text{♩} = 168$ *rit.* *scrub/sub tone*

ff 8^{va} *mp*

LH. maintains fixed finger position while erratically glissing entire hand back and forth within a range approx equal to a M3.

$\text{♩} = 120$ *normal* $\text{♩} = 46$

Bow movement becomes very slight

REPEAT ONCE

(8) (10-15")

ppp *pppp*

end L.H. glissandi

(LH gliss narrows and slows, ad lib)

[NON SYNC TIME, cont]

Violin Cues Letter C with entrance

C

Wait until piano arrives....

Pno. Piano chords $\text{♩} = 168$ *pp*

p *ff* *pp*

ppp *3*

Ring. Poco ponticello, at tip of bow, bow held off the string, jété.

Strike using a quick *jété* action of the index finger of right hand to dip into the string using wrist or arm motions to vary the articulation and dynamic. Leave other strings open to ring.

Musical staff with treble clef. It features several triplet markings (three notes grouped with a '3' above a bracket). Dynamics include *p* and *ppp*. There are also some square box markings above the notes.

Musical staff with treble clef. Dynamics include *mp* and *pp*. It contains triplet markings and square box markings above the notes.

Musical staff with treble clef. It includes tempo markings $\text{♩} = 106$ and $\text{♩} = 168$. Dynamics include *ppp* and *mf*. There are triplet markings and a double bar line.

Musical staff with treble clef. It features eighth notes, slurs, and accents.

Musical staff with treble clef. It features eighth notes and slurs. A final marking *n* is at the end of the staff.

♩=120
molto sul tasto (almost touching LH finger) (begin 'windshield wiper bow motion up the fingerboard')

II (1) (2) (3) (4) (5) (6)

pppppp

Almost no sound at first: very small bow motions and extremely light pressure (LH and RH).
 Make sure the LH finger location is 'in the cracks' between harmonic nodes and does not cause the A harmonic to ring properly.

(7) (8) (9) (10) → *poco sul tasto* (edge of fingerboard)

mf

very fast, longer, but lighter bows

→ *molto sul tasto* (almost touching LH finger)

ppp

♩=80
Bouncing, poco sul tasto (at edge of fingerboard)
 Bow at extreme tip, vertical bouncing (without normal 'up' or 'down' bow motion)

pppppp

[SYNC TIME]

Piano *f* *mp* *pppp* Piano Alone

rit.

continue until Letter D →

pp *n*

Freely but gently vary tempo, dynamics and bow action (placement, articulation) in the context of a gradual *rit.* and *deces.*
 Use 'windshield wiper motion' to gradually sweep bow between various *sul tasto* and *poco pont.* positions, listening for changes in overtones of the activated string.

(piano alone)

Pno.

pp ppp ppp pppp ppp pppp

[NON SYNC TIME]

Piano cues Letter E

E

Pno.

$\text{♩} = 42-60$ (tempo *rubato ad lib*)
wispy flautando sul tasto - quasi improvised

(off the string tremolo throughout this section)

IV *n* *pppp*

EXTREMELY SOFT but with erratic flutters of dynamic energy almost NO pressure from RH and LH, initially. Bow begins at tip.

n pppp

p pppp

sub ff pppp

$\text{♩} = 86$

molto tasto → *poco tasto* → *molto tasto*

(3-5") (3-5") (3-5")

ppp → *n* *n* → *mp* → *n* *n* → *n*

Windshield wiper. Begin *molto sul tasto*, touching LH finger.
 During 'up' bow, move up to *poco sul tasto*, at the edge of the fingerboard.
 During 'down' bow, moves down the fingerboard back to the LH. finger.
 The sonic effect is white noise filter sweep.

$\text{♩} = 42-60$ (tempo rubato ad lib)

wispy flautando sul tasto

(3-5")

mp → *pppp* *pppp* *mf*

arpeggio bowing pattern

□ V □ V □ V

(cont. arpeggio glissandi)

sul pont.

□ V □ V □ V

(change bows ad lib)

sul tasto

6 6 6 6 6 6

6 *fp* *f* *ppp* 6 6 10 *ff*

sul ponticello

LH irregular gliss above indicate pitches (M3-P8) ad lib

ppp *mf* *p* *mp* *pp*

sul tasto

pppp *fff* *mf*

poco pont. RH freely arpeggiate and change bows at various speeds, out of sync with LH

fff 6

$\text{♩} = 60$

flautando, (windshield wiper bow motion) *molto sul tasto* → normal →

pppp *p*

ppp increase pressure, adding distortion

Grip and muffle strings at release, Then calmly lower violin and bow.

mf *fff*

Triangles

Piano

[NON SYNC TIME]

Adam Mirza

$\text{♩} = 60$

Flute begins Violin enters (from niente)

pppppp

7 7 5 5

(hold until sound has fully decayed)

(15-20") $\text{♩} = 72$

ppp

Without pedal but aim to keep the key half-way pressed so that the damper is not applied and the strings under that key continue to resonate between attacks. Individual attacks should still be heard (Each striking their own harmonics)

(attacca)

♩ 180

ppppp

Overall effect is an array of brightly ringing, distant chimes. 32nd notes should be played as fast as possible (grouped by slurs into blurred quasi-rolled-chords) while still allowing for each individual note to be just heard.

(8)

(as before)

(8)

ppppp

7-12"

Improvise various patterns (runs, tremolo, bisbigliandi) through various pitch collections in the extreme upper register. Tempo and rhythms should fluctuate independently in both LH and RH (i.e. out of sync).

freely, hesitantly

♩=144 (in time)

pp

Violin cue may arrive earlier or later than written

(wait for violin)

[SYNC TIME]

A

♩=86

brittle breaking tone, poco subtone

(3") (5-8")

Vno. $\frac{4}{4}$ $\frac{5}{4}$ $\frac{4}{4}$ $\frac{2}{4}$ $\frac{4}{4}$

Piano cuts off Violin
 8^{va} strike sharply with finger from above

ff (10") fff (10") (mp) ff (6") (cued by violin)

ff ff (mp) ff

$\frac{4}{4}$ $\frac{7}{4}$ $\frac{2}{4}$ $\frac{4}{4}$

♩=106

lightly pulse the beat now without pulse

ff mf pp

f Ped.

$\frac{2}{4}$ $\frac{4}{4}$ $\frac{5}{4}$ $\frac{4}{4}$

ppppp mf

(short)

♩=120 rit. ♩=106

ff mf pp

ff

Flute entrance cuts off
Violin and Piano pedal

♩=52

B (7-10") $\flat\flat$

(short fermata, cut off before full decay) ♩=132

(blur)

♩=72

sfz *mf* *ff* *mf* (2'')

♩=132

pp (4-6'') *pp* (4-6'') *ppp* (4-6'')

f *mf* *mf* *mp*

♩=120

pppp

Like soft strokes on a bass drum. Dull sound.

sub

Red.

(8).....

(8).....

$\text{♩} = 60$
ppp *pppp* *f* *p* *f*
8^{va}-----

pp *f* *p* *ff*
8^{va}-----
(7-10'')

Ped.-----

[NON SYNC TIME, cont]

C Violin Cues
Downbeat of Letter C

mf *p* *pp*

pp *ppp* *pppp*

mf *f* *f* *ppp* *pppp*

$\text{♩} = 60$ $\text{♩} = 96$ accel.

ppp *ppp* *p* *pppp*

ppp *pp*

$\text{♩} = 120$ rit. $\text{♩} = 96$

6 6 5 5

[SYNC TIME]

D Piano Alone

$\text{♩} = 106$ $\text{♩} = 52$ $\text{♩} = 60$

f pp *softly* *pp* *f* *mp* *finger tip at edge of key* *pppp* *pp* *ppp*

6

[NON SYNC TIME]

E Piano Cues
Letter E

♩=86

ppp pppp ppp pppp (Violin enters after downbeat, Flute enters 1-2" later) f pp

♩=120 mf f p ppp pp

♩=120 gently f pp mp mf f mf ppp

♩=106 ♩=120 p ppp pppp pppp ppp mp mf mp ♩=76

♩=60 ppp pppp hold until all notes have faded out