

remnant

Kerry Hagan & Miller Puckette

For *ensemble mise-en* and MISE-EN_PLACE Bushwick

Score for alto flute, trombone, percussion, piano

2018

Programme Note

Our sound and music installation explores presence and absence by revealing the acoustic disturbances caused in an interior space when bodies occupy it. Through sound alone, we can sense the presence of others by the subtle changes their bodies make to the environment. In this work, we use those sonic disturbances to make an oblique statement of presence and absence, making the absent bodies themselves audible as acoustic reflections and shadows. The work is primarily an installation intended for MISE-EN_PLACE Bushwick. However, its construction allows it to be transported to other locations, making MISE-EN_PLACE Bushwick present in other places. It also enables members of *ensemble mise-en* to perform with their own shadows.

Performance Notes

remnant uses recordings of impulse responses in MISE-EN_PLACE while members of the ensemble walk through the space. We then take only the reflections and filters caused by the presence of the person in the room. We convolve these reflections and filters with recordings of the performers playing the musical segments below. Using generative processes, segments of these recordings and processes are diffused back into the space where the original recordings were made.

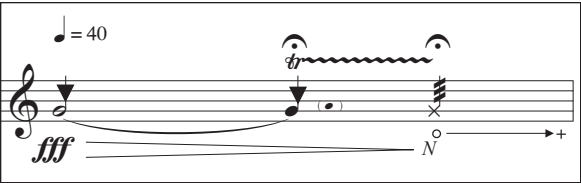
In an optional performance, the same figures and phrases are performed according to the accompanying score while the installation is playing in the same space. The score indicates loose timings for entrances of materials, which should be played somewhat *ad lib*. Performers should not attempt to accurately synchronise the phrases. Rather, they should practice an internal consistency within each phrase itself and play it as such around the time indicated.

The materials performed by the ensemble were designed for convolution with impulse responses. The variety of noise and quasi-pitched materials respond differently in the convolution process. Some consistency in notation between instruments was attempted, but the extended techniques are specialised to each instrument, so many things have to be notated differently. The following segments are all the musical materials used in the recording and score. Performance instructions are indicated beneath each musical figure.

Dynamic markings indicate the loudness the performer should play relative to their instrument. They were chosen to make the ensemble sound somewhat at the same level when playing together. In addition, the live alto flute will likely need to be amplified to match the loudness of the other instruments.

Alto flute

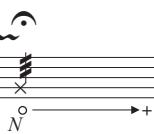
1



A regular notehead with a triangle on its stem indicates that the tone should be mixed air and pitch.



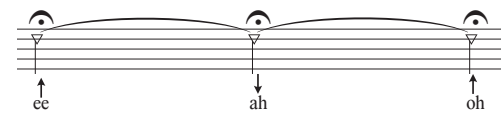
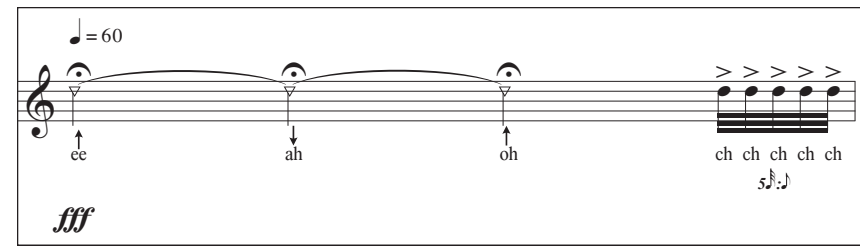
The smaller, parenthetical pitch indicates the second note in the trill.



‘X’ noteheads indicate key clicks. The open circle indicates that the key clicks are performed with the embouchure open. The ‘+’ shows that the embouchure should be covered by the mouth. The arrow means to move from the open embouchure to the closed embouchure over the duration of the fermata. The tremolo marking means to play the key clicks as fast as possible. ‘N’ as a dynamic marking means *niente*.

The overall effect of this passage is to start with an airy sound that begins to trill. The loudness decreases until all that remains are the key click sounds. Then, slowly cover the embouchure with the mouth over the duration of the last fermata.

2



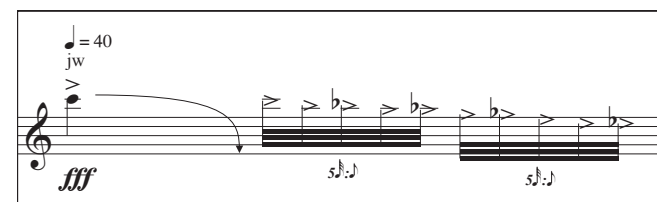
Triangle noteheads indicate only air, no pitch. Up arrows mean inhale to make the sound; the down arrow means to exhale. The vowels under the notes show the shape of the mouth for the sounds. ‘ee’ is pronounced like **feet**. ‘ah’ is shaped like **father**. ‘oh’ is a more open ‘o’ sound, how it might be pronounced in Spanish. The fermatas should be held for the length of a long, but not unnatural, inhale or exhale.



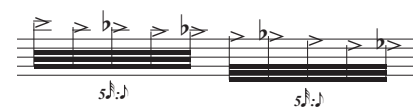
‘ch’ and ‘ts’ are consonant sounds that are articulated with air into the flute. This technique is sometimes called flute beatboxing. The air and sound are produced the way beatboxers do, but into the flute.

This passage is three long, slightly different spectral noises with inhale and exhale shapes. In contrast, it suddenly ends with fast flute beatbox articulations.

3



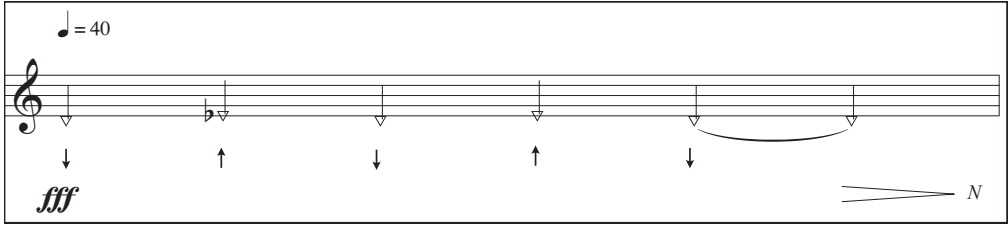
‘jw’ indicates the flute ‘jet whistle’. This is produced by fingering the pitch indicated, though it may not be precisely the pitch produced. By exploding air into the flute as hard and fast as possible, with a great deal of an airy timbre, the sound naturally falls as the air runs out.



Accent noteheads indicate a tongue pizzicato, which sounds like a softer tongue ram. Some performers make the tongue pizzicato by starting with the tongue forward and pulling it back quickly, causing fast, air attacks.

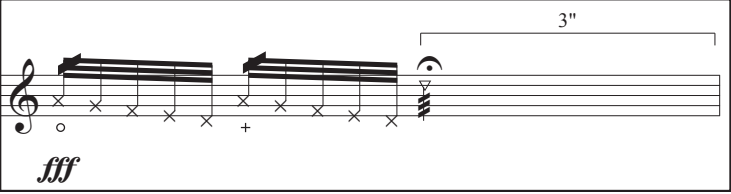
The jet whistle and the descending chromatic tongue pizzicati should musically rhyme a little. Emphasise the descending gesture and the amount of air required to create the sounds.

4

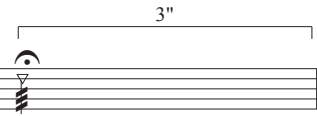


All of the notation in this passage means the same as it means in the previous passages. The air inhale and exhale matched with the pitch indicated should emphasis a quality of loud, long human breathing. The last exhale should die out into silence as the air runs out.

5



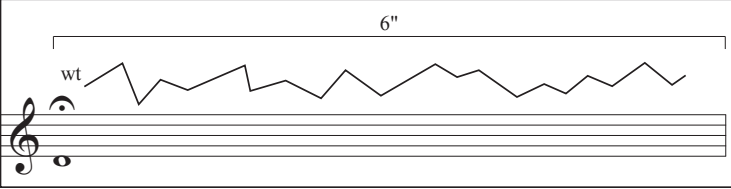
The previous notation instructions are the same; these are descending key clicks at those pitches, first with the embouchure open, then closed. The slash through the beams indicate to play the key clicks as quickly as possible.



The tremolo on an air sound means to use fluttertongue.

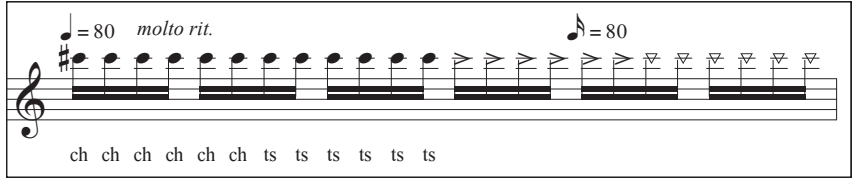
The key clicks should be considered almost like an extended pick-up note to the fluttertongued fermata.

6



‘wt’ means ‘whistle tone’. The jagged contour means to let the whistle tone leap between harmonics without trying to maintain a specific partial. The pitch shows the fingering (fundamental) for the whistle tone.

7



The notation in this passage follows all that has been explained before. The whole passage should be performed like a slow timbral and temporal progression from the beatboxed C sharp to air sounds at the same fingering.

8

As smoothly and slowly as possible

This passage is a fluttertongued gliss from D to A. Extend the gliss as evenly as possible over the longest duration of one breath.

Trombone

1

$\text{♩} = 40$

X noteheads indicated that the fingers should be tapped on the bell. The tremolo means to tap as quickly as possible. It is better to alternate between fingers for a faster tremolo. The crescent shape indicates to use fingernails for a sharper articulation, while the half-circle means to tap with the pads of the finger tips for a softer articulation. This is a quiet sound, so the dynamic marking means to make the passage as loud as possible.

2

$\text{♩} = 60$

flz

ad lib

mf

The triangle notehead means air only, no pitch.

flz

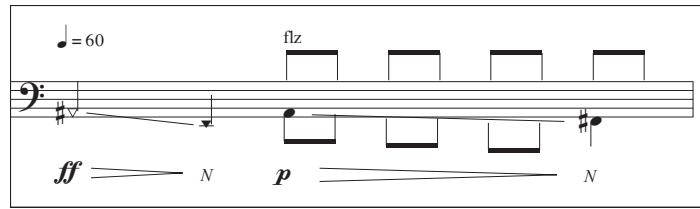
ad lib

The tremolo with flz means a fast, unmeasured fluttertongue. When 'flz' is used without a tremolo, it indicates a tongued interruption of the air, performed like a slow fluttertongue. The stems indicate the tempo of the tongue interruptions. In this case, the fluttertongue slows to eighth note tongue interruptions at the speed of deceleration chosen by the performer.

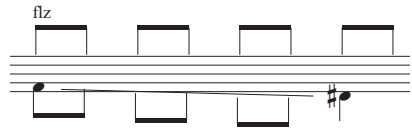
'V' noteheads indicate slap tongue.

The effect of this passage should be a fluttertongued air sound that transforms into the noisy/pitched sounds of slap-tongued notes that descend through the trombone positions at the rhythms indicated.

3



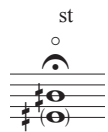
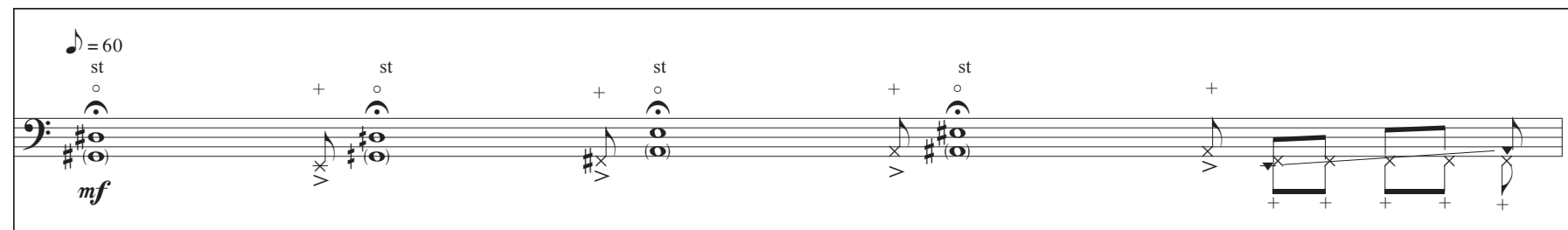
ff This dynamic marking means to decrescendo from fortissimo to *niente*.



The straight lines between pitches indicate a glissando between the indicated pitches. As above, the measured flz indicates tongue interruptions of the gliss.

This passage should be performed like two versions of the same slow gliss down the length of the trombone slide. The first gliss is all air, but the second has interrupted pitches.

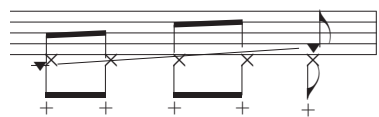
4



‘st’ means split tone. The bottom pitch is the slide position, while the second pitch is the next partial, between which the split tone happens. The player reaches this sound by stopping a lip slur in between the two pitches. In the event that a split tone is difficult to achieve with confidence, the performer can play the bottom note while singing the top note (exactly a perfect fifth above). To achieve a similar tone, the player should sing with an ‘ee’ vowel sound.



The ‘x’ notehead with the mute symbol is an indication to hit the bell of the trombone with a plunger mute. The mute does not stay on the bell; it is struck against it. This should always be performed with the mouth covering the mouthpiece.



In this figure, the performer glisses an air sound from 7th position to 1st while interrupting the sound by hitting the plunger mute against the bell, as above.

This passage is fairly unique in that it has pitches, but lip harmonics are noisy and loud. The performer should play the passage as quietly as possible while still achieving the sounds. The plunger hits and air sounds will be significantly quieter than the lip harmonic, but the performer should attempt to make them as evenly mezzo-forte as possible.

A musical staff in bass clef with a key signature of one sharp (F#). The staff contains three notes: an E on the first line, an A on the second line, and an O on the second space. Above the staff, three horizontal brackets, each labeled "3\"", indicate the duration of each note. Below the staff, the syllables "ee", "ah", and "oh" are written under their respective notes. A dynamic marking of *f* (forte) is placed below the first note.

This should be performed as one sustained sound with morphing timbre. If it is not possible to extend the duration the full 9 seconds, the performer should still evenly divide the timbre changes into three equal segments of the duration that can be held.

♩ = 50

5♩:4♩

3♩:2♩

f

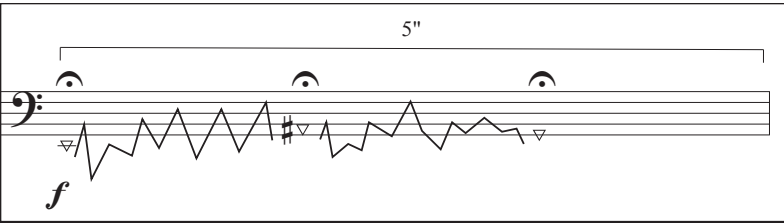
ff

7

Musical notation for the first system of the bassoon part. It begins with a tempo marking of 80 (♩ = 80) and a dynamic of *molto rit.* The notation shows a series of notes, including a half note and several quarter notes, with a fermata over the first half note. The notes are labeled with fingerings: flz, flz, ord, and flz. The system ends with a tempo marking of 80 (♩ = 80).

vi

8

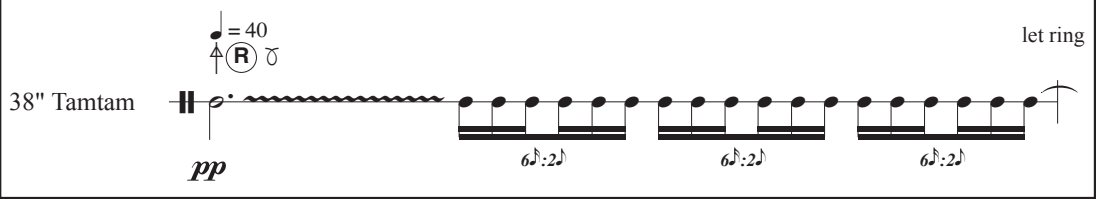


The jagged line in this passage indicates that the performer should gliss randomly, in a jagged manner, starting and ending on the indicated pitches. Even though the A sharp and G are close together, the gliss should move around the entire range of the slide.


Percussion


Three instruments are used, and each passage indicates which instrument is notated: a 38'' Tamtam, a suspended crash cymbal (16'') with a cymbal rattler, and the snare drum (always with the snares on). Additionally, the performer will need a triangle beater, wire brushes, standard snare sticks, and hard and soft mallets typically used for xylophone.


1



 This symbol specifies the triangle beater.

 The enclosed 'R' means to play at the rim of the instrument. When followed by the circle, the performer should play in a circle around the rim of the instrument.

 The wavy line after a note indicates that the mallets, etc., should be scraped on the instrument, rather than struck.

 In all cases where 'let ring' is given, the performer should let the instrument completely finish sounding before moving on to new material on that instrument. It is okay to start a new passage if the new passage uses a different instrument.

In this phrase, the percussionist should slowly scrape the triangle beater in a circle along the rim of the tamtam, then continuing the motion, lightly tap the beater on the rim.

2

38" Tamtam

Snare Drum

mf

mf

$\text{♩} = 60$

This symbol specifies that wire brushes should be used.

When an arrow connects locations, it indicates that the figure should be played starting in one position and continued while moving to the next. In the case where the two positions are on the rim, the passage should be played from one rim to the other through the centre of the instrument.

While it may be easier to sustain the circular brush motion for the full whole note, it will be harder to cross the snare drum that slowly. Also, this will make the snare drum sound quieter. The performer should attempt to make the loudness of both instruments as similar as possible, which may require the circular motion of the wire brushes on the tamtam to be played as slowly as the triangle beater across the drum.

3

Snare Drum

$\text{♩} = 50$

f

3 eighth notes

5 eighth notes

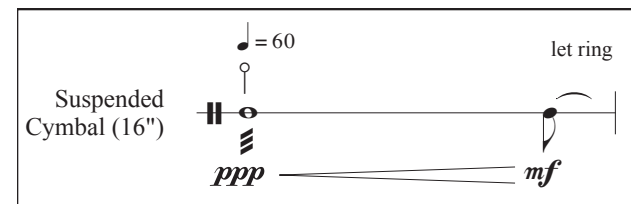
The crescent symbol indicates that the fingernail should be used. In this instance, the fingernail is scraped around the edge of the head.

This symbol indicates that snare sticks should be used.

The notehead with the strike through it means a rim shot.

Although this passage is notated as *forte*, this is due to the fact that scratching a nail on a drum head can be fairly quiet, and the performer should play it as loudly as possible. The rim shot, however, should be played at the same loudness as the scrape, so it will not be performed at *forte*.

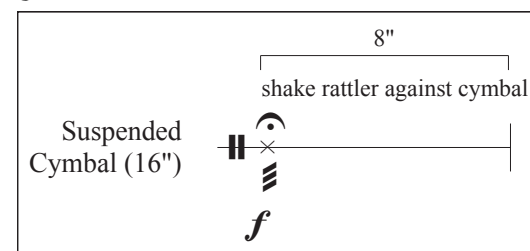
4



This indicates the soft xylophone-type mallet.

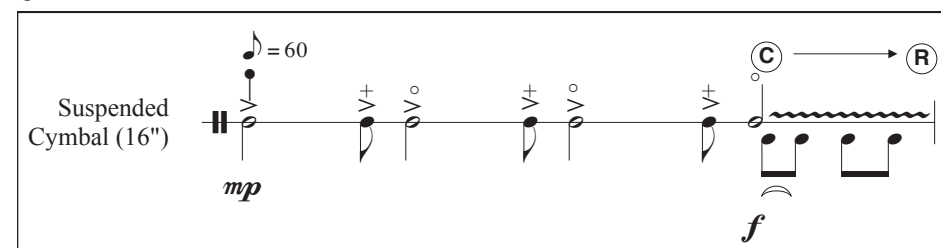
This is a simple roll on the suspended cymbal. It should start as quietly as possible but must not be allowed to get to full loudness.

5



The performer should create the rattling/scratchy noise that comes from shaking the rattler against the cymbal for 8 seconds. Try not to make an attack when dropping the rattler at the end, but do not mute the cymbal. Alternatively, you can drag the rattler in circles in order to get a smoother texture.

6



This symbol indicates the hard xylophone-type mallet.



The plus sign indicates that the instrument should be muted with the hand. The 'o' indicates that the mute is off (the instrument is played as normal).



This notation indicates to play from the centre of the instrument to the edge.

In this passage, the hard mallet is struck normally to ring for a half note, followed by a short, muted strike. At the end, the mallet is scraped from the centre of the cymbal to the edge while the other hand taps the cymbal with the fingernail. The mallet parts should be mezzo piano throughout; the forte marking is to try to make the fingernail taps at an equal dynamic to the scrape.

7

Ⓝ → Ⓜ N to R means to play normally (not necessarily the centre of the drum) to the edge.

This is a standard, quiet roll moving slowly from a normal sound to a roll on the edge of the drum head.

8

There is no new notation in this passage. The tamtam is first scraped from centre to rim, fairly quickly, to create a louder sustained sound. Then, the hard mallet is tapped against the tamtam, but muted by the hand. The last roll should sound like the tamtam is growing from silence to mezzo-forte and left to ring naturally.

9

There is no new notation in this passage. Starting fairly moderately, the tamtam and cymbal should be struck with the triangle beater alternatingly, left to ring naturally. The *ritard* from the beginning to the end should be performed as evenly as possible.

Piano

The pianist is required to have hard and soft mallets typically used for xylophones.

1

♩ = 40

15^{ma}-----

fff

let ring

Notes in parentheses indicate the second pitch in the trill.

 ϕ (\ominus)
$$\begin{array}{c} + \\ \phi \end{array} \quad \left(\begin{array}{c} - \\ \bullet \\ - \end{array} \right)$$

Plus signs indicate to mute the strings with the hand. The 'o' indicates an open string (normal).

let ring

Much of the piano material is intended to reverberate in the piano for a while after the figure is played, especially when the pedal is down. Hold the pedal and let the piano reverberate until the sound has completely died away.

The sustain pedal is indicated with a single line. Start and stop points are given by the hooks on the end. Quick releases and re-pedals are indicated by small triangles.

At the highest pitches of the piano, this should be more percussive than pitched. The second trill, played without mute, will have the most pitch-like sound. Although the third trill is muted by the hand, the piano will reverberate noise and some pitch after the trill has stopped. Let the piano ring as long as the noise can be heard.

2

♩ = 40

pizz.

let ring

fff

N

sost.

N

The block indicates a cluster (all pitches, white and black keys). The N indicates *niente*, which is intended here to mean that the keys are pressed without sound.

sost.

The sostenuto pedal is notated like the sustain pedal, but with ‘sost.’ to specify the middle pedal.

pizz.

let ring

Pizzicato indicates that the strings are strummed with the hand inside the piano. The starting and ending pitches are approximate, given that cross braces in the piano construction may obstruct different pitches in different pianos.

In this passage, the pianist depresses a cluster starting at C3 up to E3 (all five pitches) without sounding the notes. The sostenuto pedal ensures that those strings will continue to resonate in response to the strummed notes in the middle of the piano. The fundamental pitches of the cluster will not be heard, but the upper harmonics sympathetically vibrating with the strummed strings will be predominant.

3

♩ = 60

ff

sust.

This notation indicates that the performer is playing the pedal for the sound source. The sustain pedal should be released and depressed as quickly as possible to make loud clunking noises pianists typically try to avoid.

4

In this passage, the pianist is playing the sostenuto pedal while the sustain pedal enables the piano to reverberate with the pedal noise. The sostenuto pedal should be depressed and released as hard as possible in the rhythm notated to create the clunking noise of the pedal. The sustain pedal will cause the strings to reverberate the noise. Hold the sustain pedal down until all noise has died away completely.

5

This clef and ‘x’ noteheads indicate that the steel sounding board is to be struck.

•

This symbol indicates that the hard mallet should be used.

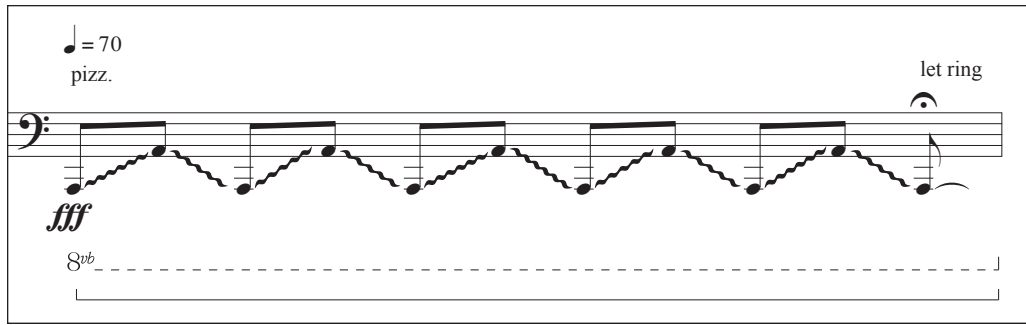
In this passage, the pianist should strike the sounding board hard enough so that the piano rings a little at the end. The sustain pedal should be held so that the strings will reverberate the sound.

6

This notation means to scrape the length of the string on this pitch with the fingernail.

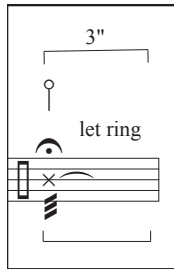
The scraping sound can be fairly quiet, especially in lower strings. It will also crescendo a little the longer it is held. The dynamic here is to indicate the loudest the performer can get the string to sound by scraping. The tremolo notation is only to indicate that it may take fast scraping back and forth to get a louder sound.

7



The notation in this passage is the same as above. Strum up and down the lowest strings of the piano.

8



○ This symbol indicates the soft mallet.

This passage is like the one above; a roll, if possible, but otherwise the fastest repeated striking on the sound board with a soft mallet.

Acknowledgements

The instrumental recordings for the installation were made by Kelley Barnett (Alto Flute), Mark Broschinsky (Trombone), Josh Perry (Percussion) and Yumi Suehiro (Piano). Impulse responses were recorded from Kelley Barnett, Mark Broschinsky and Josh Perry. We would like to gratefully acknowledge the time and effort on the part of the musicians. We would also like to thank Moon Young Ha, Jordann Davis and Kelley Barnett for all their help during our residency at MISE-EN_PLACE Bushwick.

remnant

live performance score

Alto Flute

The first system of the musical score is for the vocal part. It begins with a treble clef and a tempo marking of $\text{♩} = 40$. The first measure contains a half note G4 with a forte (*fff*) dynamic marking. The second measure contains a half note A4 with a fermata. The third measure contains a half note B4 with a fermata. The fourth measure contains a half note C5 with a fermata. The system ends with a repeat sign and a first ending bracket leading to a second ending bracket.

Trombone

Percussion

[illegible]

Piano

Musical score for the piece "let ring". The tempo is marked as ♩ = 50. The score begins with a forte (*ff*) dynamic. The notation includes a series of eighth notes, a triplet of eighth notes, and a final note marked "let ring" with a fermata. The score is written on a single staff with a key signature of one flat (B-flat).

A. Fl.

♩ = 60

ee ah oh ch ch ch ch ch

fff

Tbn.

5"

f

Perc.

5♩:4♩

♩ = 40

38" Tamtam

pp

let ring

6♩:2♩ 6♩:2♩ 6♩:2♩

Pno.

♩ = 40

pizz. let ring

fff

N sost. L

fff

♩ = 40

jw

fff

5♩:4♩ 5♩:4♩

TACET
5-10"

♩ = 60

flz

ad lib

mf

mf

TACET
5-10"

TACET
5-10"

TACET
5-10"

A. Fl.

musical notation for A. Fl. part, including tempo markings like *molto rit.* and *80*, and articulation marks like *ch* and *ts*.

TACET
10-15”

Tbn.

musical notation for Tbn. part, including tempo markings like *molto rit.* and *80*, and articulation marks like *flz* and *ord*.

TACET
10-15”

Perc.

musical notation for Perc. part, including tempo markings like *mf* and *60*, and articulation marks like *38" Tamtam* and *Snare Drum*.

TACET
10-15”

Pno.

musical notation for Pno. part, including tempo markings like *fff* and *60*, and articulation marks like *8vb* and *N*.

musical notation for Pno. part, including tempo markings like *fff* and *70*, and articulation marks like *pizz.* and *let ring*.

TACET
10-15”

A. Fl.

Tbn.

Perc.

Pno.

When sound has completely died out:

When sound has completely died out:

A. Fl.

$\text{♩} = 80$ *molto rit.* $\text{♩} = 80$

ch ch ch ch ch ch ts ts ts ts ts ts

Tbn.

st

+

st

+

Perc.

Suspended Cymbal (16")

$\text{♩} = 60$

let ring

ppp *mf*

Pno.

$\text{♩} = 40$

fff *N*

When sound has completely died out.

A. Fl.

TACET
20-30’’

♩ = 60

cc ah oh

ch ch ch ch ch

5♩♩

♩ = 80 *molto rit.*

ch ch ch ch ch ts ts

Tbn.

TACET
20-30’’

3" 3" 3"

ee ah oh

f

♩ = 40

fff

Perc.

TACET
20-30’’

8"

shake rattler against cymbal

Suspended Cymbal (16")

f

♩ = 80 *molto rit.*

let ring sim.

38" Tamtam

let ring *mf* sim.

Suspended Cymbal (16")

mf

Pno.

TACET
20-30’’

♩ = 70

pizz.

let ring

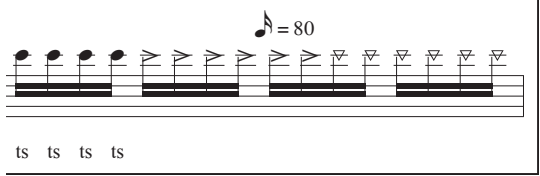
fff

8^{vb}

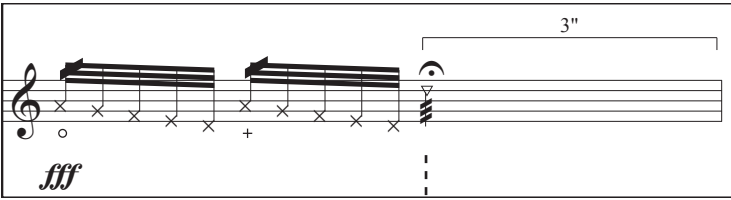
♩ = 60

ff

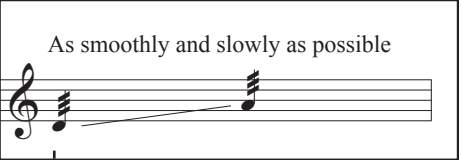
A. Fl.



TACET
10-15''

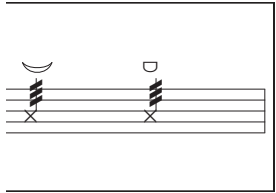


As smoothly and slowly as possible



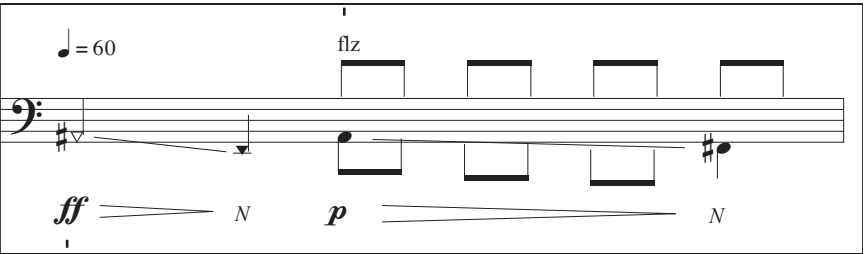
TACET
15-20''

Tbn.



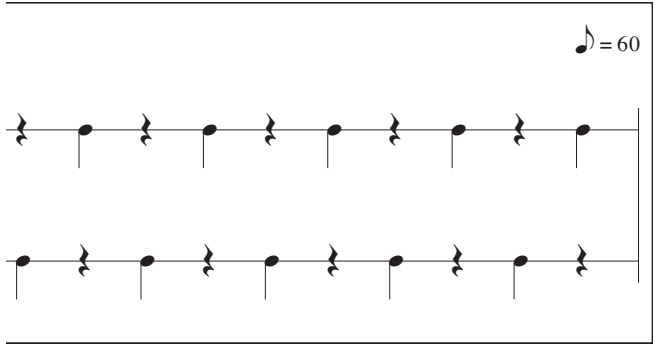
TACET
10-15''

flz



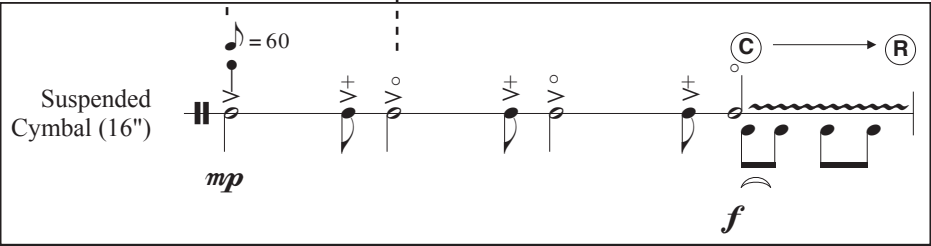
TACET
15-20''

Perc.



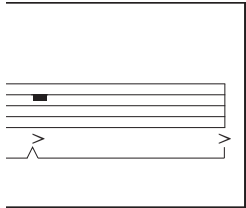
TACET
10-15''

Suspended Cymbal (16'')



TACET
15-20''

Pno.



TACET
10-15''

TACET
15-20''

A. Fl.

♩ = 40
jw

fff

Tbn.

♩ = 80
pedal tone
flz flz ord ♩ = 80

f
molto rit.

Perc.

♩ = 50
38" Tamtam

mf *mp* *mf* *mp* *ppp* *mf*

Pno.

♩ = 70
pizz.

fff *mp* *mf* *mp* *ppp* *mf*