

GRAVITATIONS

BEN JOHANSEN

Gravitations Notes:

Frederic Rzewski stated that “For music not to just be noise it has to gravitate between rational and irrational escape from limitations of both.” *Gravitations* was written with the idea to experiment with pushing these limitations.

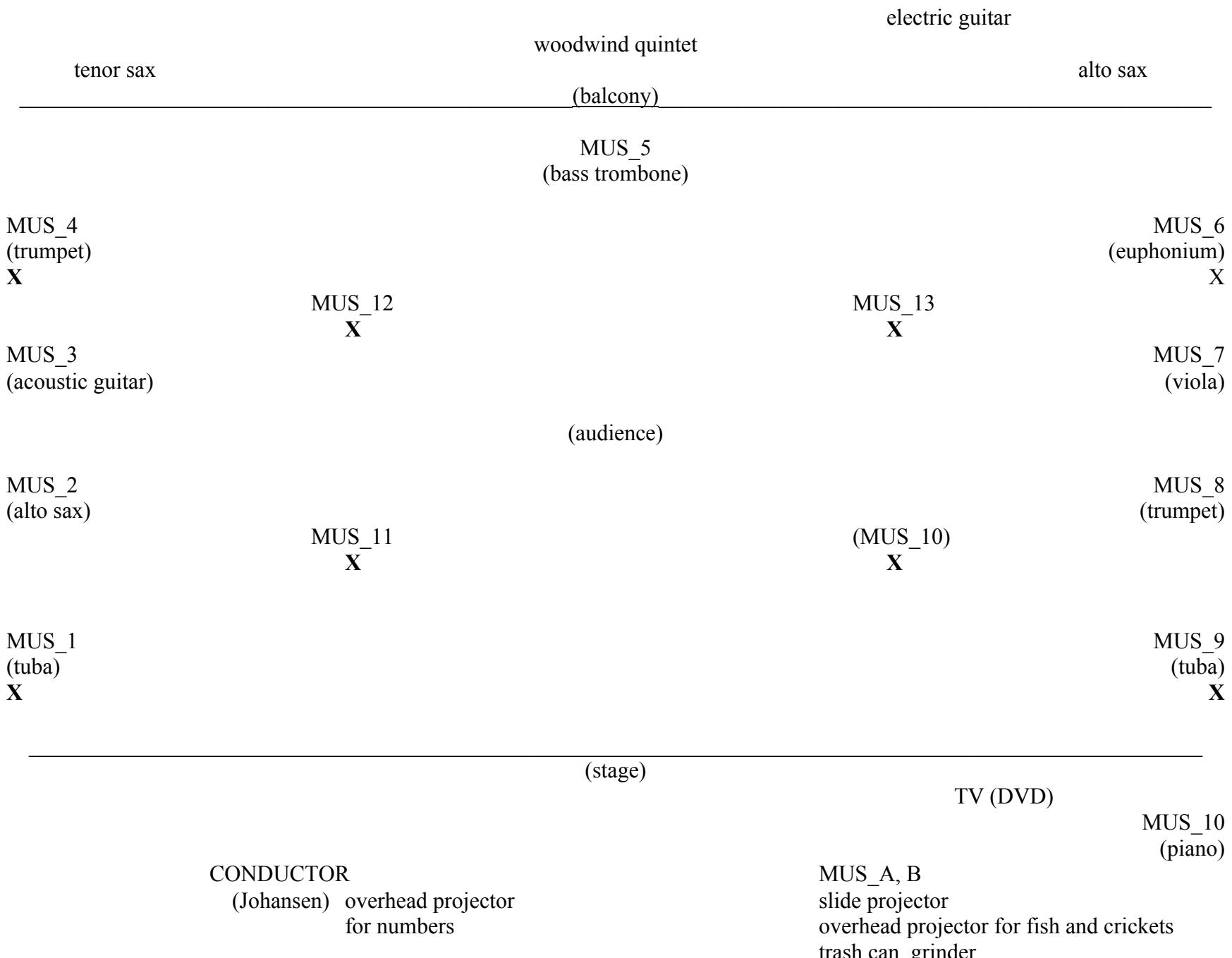
Part of the essence of the piece is in that experimental nature. *Gravitations* is completely controlled by the CONDUCTOR. No rehearsal is allowed; rather people create music together for the first time during the performance. The CONDUCTOR is to use real-time electronic instruments both to improvise transitions between sections and to speak philosophical ideas (speaking into filters), thus directing the flow of the piece.

The CONDUCTOR uses a screen and an overhead projector to display numbers at his own discretion (in consecutive order – 1, 2, 3, 4, 4A, 4B, 4C, etc.). When a number is shown, performers execute the instructions next to the corresponding number in their respective parts.

All pitches can be played in any order and at any duration with temporal independence (with exception to the woodwind quintet). With no rehearsal, the success of *Gravitations* rests in the ability of the performers to improvise freely with confidence. Performers use the score as a guide but must completely rely on their musicianship skills to create music as a group.

Any combination of instruments can be used for musicians 1-10 (MUS_1-10); the instruments used for the first performance are indicated in parenthesis. The diagram below is a suggested setup for the piece. The X's indicate where an iPod with speakers is located. Musicians 1-9 (MUS_1-9) are positioned around the audience while musicians 10-13 (MUS_10-13) are positioned within the audience.

SET-UP DIAGRAM



LIST OF INSTRUMENTS/MATERIALS

10 – various instruments	computers	slide projector
woodwind quintet	loop based recording software	2 – overhead projectors and screens
tenor and alto saxophones	effects filters (especially a vocoder)	fish and crickets
tenor voice	midi controller	vacuum cleaner
electric guitar (amp, effects pedals)	PA system (microphones/mixer)	trash can (metal mallets)
8 – iPods with speakers	TV and DVD player	grinder (safety gear)

Johansen's collected or personal philosophical ideas of music (the latter portion of ten contains Rzewski's words):

1. The central concern of the current concert situation should be with the wall that exists between the stage and the audience, the performers and the listeners. The audience should come to experience music rather than just hear it. They should feel as though they are participants rather than merely seat fillers or ticket buyers.
- 2 (memorized – spoken from “heart”) - That is why I speak directly to you. The easiest and most efficient and effective way performers can break down the barrier is to come out and tell the audience why they like the piece and why they are playing it. I like this piece because it enables me to share many of my thoughts about music through instruments I have been experimenting with [spatial issues?].
- 3 A performance as an object embodies the superiority of a photograph over a recording in that photographs have more potential to become art while recordings traditionally fill the archival role.
- 4 All sound can be regarded as music when organized. The organization of that which is heard is, at times, left up to the listener.
- 5 Does a listener’s lack of knowledge equal less understanding, producing less enjoyment in the more complex? Do those that know much enjoy the simple less?
- 6 If the point of music is communication, a person must have the knowledge to understand it in order to gain from it; otherwise it is analogous to listening to a foreign language.
- 7 If the point of music is to evoke emotion, understanding is only key to whether the emotion the composer intends is conveyed or not, some emotion will be evoked.
- 8 Can music make someone experience an emotion they have never before experienced?
- 9 God does not want us to live dull lives full of conformity. All too often, society fails to recognize diversity as a strength, leading most people to surrender their dreams in exchange for a more predictably safe life. Faith and predictability cannot coexist.
- 10 New music dwells on that which the world said it cannot do. It should not be predictable or comfortable. Why read books, turn on the TV, or go to the theatre but to be moved, thrilled, stimulated, even exhausted?! >>>But, for music not to just be noise it has to gravitate between rational and irrational escape from limitations of both.<<<

1

(no number projected)

- > this page reads from top to bottom
- > begin with the DVD player pause and the volume all the way down on CONDUCTOR's mixer
- > first 16 bars of the tenor line are recorded into Ableton Live and played back as the tenor sings bars 17-32 (which are recorded as well) - creating a 16 bar loop made up of two layers

CONDUCTOR
↓ directions

cue DVD

MUS_A

push "play" on the DVD player

record first
16 bars into
looped based
software
(Ableton Live)

TENOR
VOICE
(sings through
once - then
leaves the stage)

A musical score for a tenor voice part. The tempo is 120 BPM. The key signature changes between C major (bars 1-4), E major (bars 5-8), D major (bars 9-12), and A minor (bars 13-16). The vocal line consists of sustained notes with various vowel sounds (oo, ah, ee, oo) and some slurs. The lyrics are: oo (bar 1), ah (bar 2), ee (bar 3), oo (bar 4), ah (bar 5), ee (bar 6), oo (bar 7), ah (bar 8), oo (bar 9), ah (bar 10), ee (bar 11), oo (bar 12), ah (bar 13), ee (bar 14), oo (bar 15), ah (bar 16).

playback first
16 bars while
recording 17-32

A musical score for the tenor voice part, continuing from bar 17 to bar 32. The vocal line follows the same pattern of sustained notes and vowel sounds as the first section. The lyrics are: oo (bar 17), ah (bar 18), ee (bar 19), oo (bar 20), ah (bar 21), ee (bar 22), oo (bar 23), ah (bar 24), ee (bar 25), oo (bar 26), ah (bar 27), ee (bar 28), oo (bar 29), ah (bar 30), ee (bar 31), oo (bar 32).

bring in the DVD
player's sound
while lowering
the volume of the
looped recorded
tenor layers
(let tenor layers
loop until 3)

DVD
PLAYER
(looped video
recording
showing just
the lips of a
very strong
voice reading
this statement)

mute DVD
volume

The central concern of the current concert situation should be with the wall that exists between the stage and the audience, the performers and the listeners. The audience should come to experience music rather than just hear it. They should feel as though they are participants rather than merely scat fillers or ticket buyers.

2

(wait until at least after the first sentence to project the number)

- > the CONDUCTOR addresses the audience (walk to the front of the stage)
- > this is improvised speech - use the statement below as a reference

CONDUCTOR

(continue to quietly loop tenor layers)

2

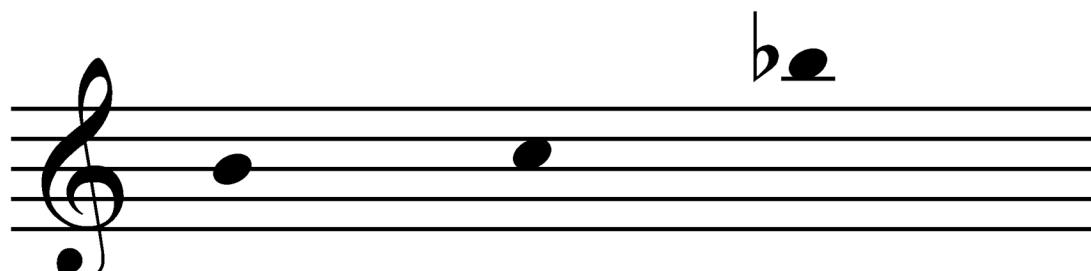
That is why I speak directly to you. 2 The easiest and most efficient and effective way performers can break down the barrier is to come out and tell the audience why they like the piece and why they are playing it. I like this piece because it enables me to share many of my thoughts about music through instruments I have been experimenting with [spatial issues?].

MUS_1-9

2

MOOD = eerie, ghostly, creepy

play notes in any order
at any octave
for any length with any articulation
as quietly and "spookily" as you can
(be sure to stay under the CONDUCTOR's speaking)
you may insert rests/pauses as you feel moved to do so



as soft as possible

do not stop
playing until
3 is projected

BALCONY MUSICIANS

MUS_A

MUS_B

MUS_10 (pianist, in audience with iPod for 3)

TACET

3

(3 - 3B)

- > like numbers on this page occur simultaneously
- > each of the eight musician's of the iPod ensemble has their own iPod and their own set of stereo speaker (8 iPods, 8 stereo speakers)
- > the iPod ensemble is dispersed evenly among the audience

CONDUCTOR

3

Fade out looped tenor layers

A performance as an object embodies the superiority of a PHOTOGRAPH over a recording in that photographs have more potential to become art while recordings traditionally fill the archival role.

MUS_A

3 [3A]

Flip to the first slide on the slide projector when the CONDUCTOR speaks the word **PHOTOGRAPH**
continue flipping through slides at about one slide per second through 3 and 3A
(unless you are moved by the moment to improvise with the iPod ensemble somehow - but there are only 80 slides and they should not be repeated)
when you reach the last slide, stop flipping (leaving the last slide up)

3B

Turn on the overhead projector with fish on it
THEN turn off the slide projector

“iTod Ensemble”

(MUS_1, 4, 6, 9, 10, 11-13)

3

Play ANY song you want
start with volume off and slowly fade in
(keep under CONDUCTOR's speaking)

3A

turn volume louder (improvise with volume levels)
or change songs - do whatever you want!
(make music - listen to others -
be part of the iPod ensemble)

3B

Slowly fade out and turn off the iPod

BALCONY MUSICIANS

MUS_B

MUS_2, 3, 5, 7, 8

TACET

4

(4-4B)

- > like numbers on this page occur simultaneously
- > the CONDUCTOR speaks before 4 is projected on the screen
- > the vacuum used for the first performance sounded a concert F
if a different vacuum is used, all pitches of section-4 must be transposed accordingly

CONDUCTOR

*All sound can be regarded as music when organized.
The organization of that which is heard is, at times,
left up to the listener.*

4

MUS_B

4

Turn on vacuum
(turn off at 4D)

MUS_3, 10
(acoustic guitar and piano)

4A

Improvise with vacuum's concert F
listen to others and foreshadow the
g-minor chord that comes in at 4E

4B

Improvise with vacuum's concert F
listen to others and foreshadow the
g-minor chord that comes in at 4E

MUS_1, 2, 4-9

4A

4 sec.

MUS_7

MUS_6

MUS_5

MUS_4, 8

MUS_2

MUS_1, 9

improvise a 1/2 step above and below the given pitch

improvise a 1/2 step above and below the given pitch

BALCONY MUSICIANS
MUS_A
MUS_11-13

TACET

4

(4C-4D)

- > like numbers on this page occur simultaneously
- > the point of the trombone solo is to aid with the turning off of the vacuum

MUS_3, 10
(acoustic guitar and piano)

4C

Improvise with vacuum's concert F
listen to others and foreshadow the
g-minor chord that comes in at 4E

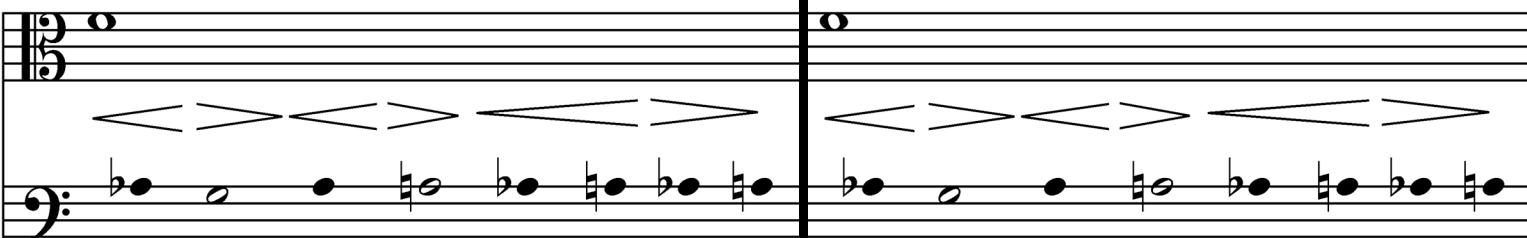
4D

Improvise with vacuum's concert F
listen to others and foreshadow the
g-minor chord that comes in at 4E

MUS_1, 2, 4-9

4C

MUS_7



MUS_6



MUS_5



MUS_4



MUS_2, 8



MUS_1, 9



**SOLO!!! (improvise - begin with a HUGE
4 Sec. cresc. on a concert F)**

go crazy bending pitches (ad. lib.)
but stay in ambient kind of mood

(to aid in turning vacuum off)

MUS_B

4D

Turn OFF the vacuum at the peak
of the trombone's 4 sec. cresc.

BALCONY MUSICIANS
MUS_A
MUS_11-13

TACET

4E

> transition chord (g-minor) into 5A

MUS_1-10

4E

Play and hold a note in the g-minor chord
(bass instruments take the fundamental -
piano and acoustic guitar improvise in g-minor)

5

> all players lower their volume so the CONDUCTOR's speaking can be heard

MUS_1-10

5

continue notes from 4E but decrescendo to
as soft as possible so the CONDUCTOR's
speaking can be heard

CONDUCTOR

5

*Does a listener's lack of knowledge equal less
understanding, producing less enjoyment in the
more complex? Do those that know much enjoy
the simple less?*

BALCONY MUSICIANS (get ready for 5A)

MUS_A, B

MUS_11-13

TACET

5A

> BALCONY MUSICIANS play for the first time

MUS_1-10

5A

Fade to nothing (wait for 6)

BALCONY
MUSICIANS
(WW5tet,
Alto & Tenor Sax)

5A

The woodwind 5-tet begins playing together at 5A - the second time through, alto and tenor saxes begin improvising (trading 4's) all 7 players keep repeating the 24 bars - 5B indicates last time through decrescendo to nothing from 1 to the end of the last time through

The musical score for section 5A consists of three staves of music for woodwind instruments. The top staff features Alto Eb and Tenor Eb parts. The middle staff features Flute, Oboe, Clarinet in Bb, Bassoon, and Horn in F. The bottom staff features a. sax / ten. sax, Fl., Ob., Bb Cl., Bsn., and Hn. The score includes dynamic markings like gm/D and BbMaj7, and performance instructions like 'stop note on rest with tongue' and 'solo!!!'.

[5B]

(last time through - fade to nothing)

(last time through -
fade to nothing)

MUS_A, B
MUS_11-13

TACET

6

> CONDUCTOR should improvise with real-time electronics to transition from 5B to the speaking in 6

CONDUCTOR

6

6A

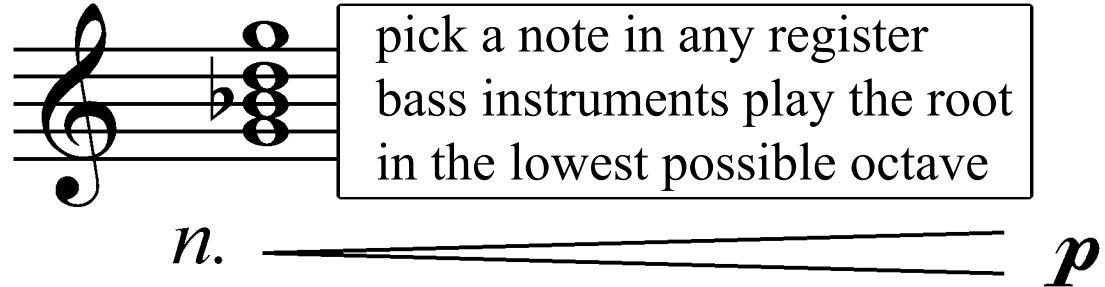
If the point of music is communication, a person must have the knowledge to understand it in order to gain from it; otherwise it is analogous to listening to a foreign language.

ALL PERFORMERS

6

(get ready for 6A)

6A



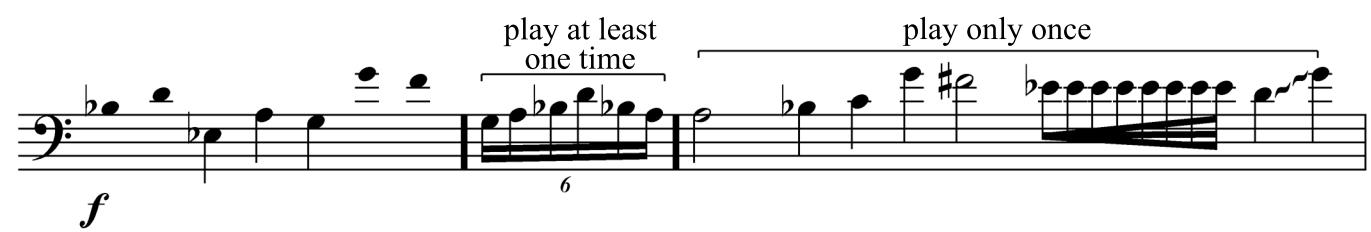
6B

> each performer sounds their given notes (the order is just a suggestion), repeating and/or improvising with the given material until the next section

MUS_7



MUS_6



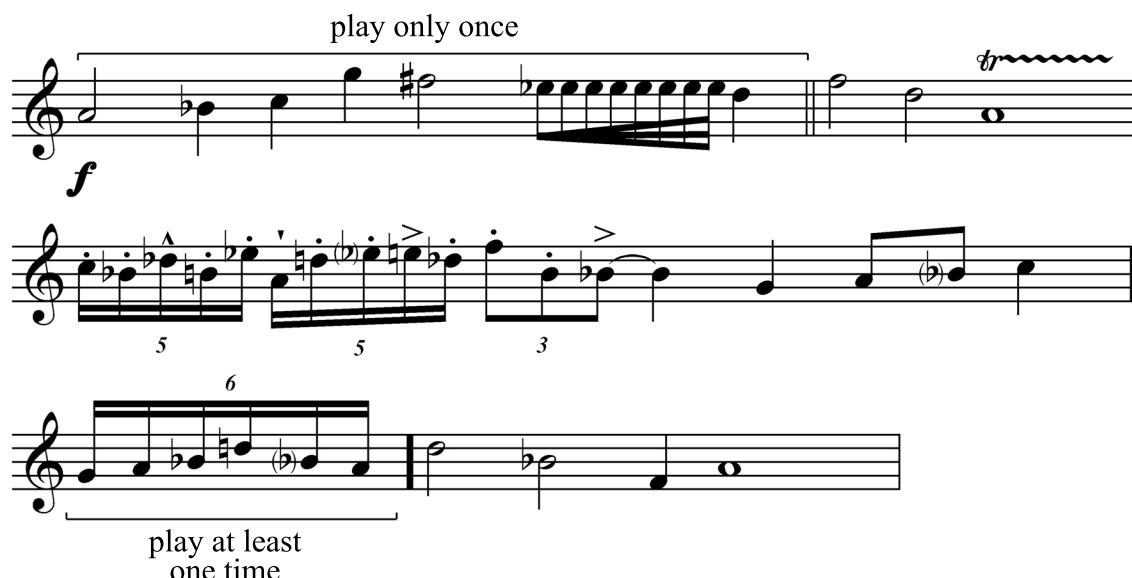
MUS_4



MUS_3, 10
BALCONY 5-tet



MUS_2, 8
BALCONY SAXES



MUS_1, 5, 9
Horn (from WW5-tet)



MUS_A, B
MUS_11-13

TACET

6C

6D

MUS 7

A musical staff with a treble clef at the beginning. It contains five notes: a B-flat (two vertical stems), a C-sharp (one vertical stem), a D-flat (two vertical stems), a G (one vertical stem), and another G (one vertical stem). The notes are separated by vertical bar lines.

A musical score for two voices. The top staff is for the Soprano (S) and the bottom staff is for the Alto (A). The key signature is one sharp (F#), and the time signature is common time (indicated by a 'C'). The vocal parts sing eighth-note patterns primarily, with some sixteenth-note figures and occasional rests. The vocal parts sing eighth-note patterns primarily, with some sixteenth-note figures and occasional rests.

MUS 6

A musical staff in G clef. The notes are: B-flat (3rd space), A (4th space), G (5th line), and B-flat (3rd space). The label "Eb+9" is above the staff.

A musical example showing two staves of music. The top staff is in treble clef and has a bracket above it with the instruction "play only once". It contains a single note with a sharp sign. The bottom staff is also in treble clef and contains a series of notes with sharp and flat signs.

MUS_4

A musical staff in G major (treble clef) and common time. It shows a melodic line starting with a dotted half note, followed by a quarter note on B-flat, a half note on A, another quarter note on B-flat, and a half note on A. The staff ends with a double bar line and repeat dots at both ends.

MUS_3, 10
BALCONY
WW 5-tet

A musical staff in G clef with four notes: B-flat, A, G, and B-flat.

A musical staff in treble clef shows the notes for an Ab9 chord. The notes are A (open circle), B (filled circle), D (open circle), E (open circle), and G (filled circle). The bass clef is also present at the beginning of the staff.

MUS_2, 8 BALCONY SAXES

A musical staff with a treble clef and four horizontal lines. It contains five notes: a bass note on the fourth line, a note on the third line, a note on the second line, a note on the first line, and a note on the fourth line.

play only once

MUS_1, 5, 9 
Horn *f*
(from WW5-tet)

A musical dynamic instruction 'f' (fortissimo) placed below a bass clef staff.

MUS_A, B

MUS 11-13

TACET

7

CONDUCTOR

7

> this is the peak of the piece emotionally - the tenor loop from the beginning comes back with added synthesized drums and a beautiful chord progression (plus real-time electronic improvisation by the CONDUCTOR)

Wait until the performers have faded away before speaking the following statement through the vocoder (vocode using the tenor voice loop accompaniment chords - change chords on the underlined words)

f#m E C F
If the point of music is to evolve emotion,
A D F#m
understanding is only key to whether the emotion
E A gm
the composer intends is conveyed or not,
Eb gm Ab C#
some emotion will be evoked

Play voice loops recorded earlier in the concert along with accompaniment already prepared (plus other real-time improvisation)

MUS_1-10
BALCONY PERFORMERS

7

Slowly fade out from 6D material

MUS_A, B
MUS_11-13

TACET

8

(and 8A)

- > each performer has a piece of paper with a different word circled so paper is ripped at different times all around and in the audience
- > this is the first time the electric guitar is heard (hidden in the balcony the entire time)

CONDUCTOR

8

Can music make someone experience an emotion they have never before experienced?

[repeat statement through delay and pitch-effecting filters]

8A

God does not want us to live dull lives full of conformity. All too often, society fails to recognize diversity as a strength, leading most people to surrender their dreams in exchange for a more predictably safe life. Faith and predictability cannot coexist.

ALL PERFORMERS

(except electronic guitar
and MUS_A)

8

8

Rip this paper in half and
crumple it when I say the
circled word:

*“Can music make
someone experience an
emotion they have never
before experienced?”*

WAIT FOR 9 (YOU HAVE NOTHING AT 8A)

[8A]

(TACET)

MUS_A

8

Take fish off overhead projector, replace w/ crickets

ELECTRIC
GUITAR

8

RIGHT after the CONDUCTOR says the last word
of the statement (“experienced”) - begin improvising
with the following notes - it is all you, so take the
stage! in an ambient, creepy, not-to-loud kind of way



(use any effects pedals you choose
delay and reverb are recommended)

8A

KEEP PLAYING!!! - But when 8A shows be sure to
die down enough for the CONDUCTOR to be heard

9

> calm before the storm

CONDUCTOR

9

New music dwells on that which the world said it cannot do. It should not be predictable or comfortable. Why read books, turn on the TV, or go to the theatre but to be moved, thrilled, stimulated, even exhausted?!

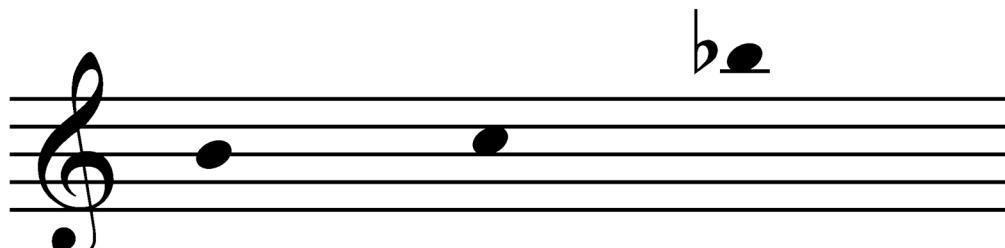
MUS_1-10

BALCONY MUSICIANS

9

MOOD = eerie, ghostly, creepy

play notes in any order
at any octave
for any length with any articulation
as quietly and "spookily" as you can
(be sure to stay under the CONDUCTOR's speaking)
you may insert rests/pauses as you feel moved to do so



do not stop
playing until
10 is projected

as soft as possible

ELECTRIC GUITAR

9

KEEP PLAYING!!! Now you are joined by others playing the same notes but you can improvise anything you want (in an eerie, ghostly, creepy mood)

MUS_11-13

9

Run up to the balcony and stand at the edge

MUS_A & B

TACET

10 > CHAOS

CONDUCTOR

But, for music not to just be noise it has to gravitate between rational and irrational escape from limitations of both.

MUS_1-10
BALCONY MUSICIANS

Begin softly playing the most irrational/crazy/ridiculous noise you can imagine and steadily crescendo

MUS_11-13

Repeat the words the CONDUCTOR is reading over and over again, getting louder and louder as the instruments grow louder then begin to yell and scream as loud as you can

10A

> growing toward the final cut-off

ALL PERFORMERS
(except for MUS_A & B)

If you are not already as loud and mad as you can be get louder than you can and keep blowing/playing your brains out until the CONDUCTOR gives a cut-off (watch!!!)

MUS_A

Start playing the metal trash can with metal mallets - play your heart out! - use discretion in order to keep from damaging your ears or the ears of the audience

MUS_B

Turn on and improvise with the grinder (put on ear protection, safety goggles and gloves)

CONDUCTOR

- CUT OFF - *Finc.*