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"the silence that reigns...."

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the silence that reigns...

for large ensemble

by

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A dissertation submitted in partial satisfaction of the requirements for the degree of Doctor of Philosophy in Music and the Designated Emphasis in New Media in the Graduate Division of the University of California, Berkeley

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Abstract
“the silence that reigns...” for large ensemble
by
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University of California, Berkeley

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A large chamber ensemble is scattered around the stage into five distinctive groups. This idiosyncratic positioning provides the foundation for novel sonic structures, placing the listener inside them at various angles and perspectives. These structures are built from different materials: metal, glass, ceramic and unusual amalgamations. They are large and luminous, deep with intricate patterns along their walls. Their architecture is too fragile and volatile to exist in a physical world; their angles and proportions too askew. These singular spaces can only be held together in a sonic realm.

Throughout the piece, the chamber ensemble shifts its focus to different aspects of complex sounds. For example, when a chopstick is scraped against the tamtam, one hears the resonant metallic vibrations, but also the quiet and gritty scraping of wood against metal. The ensemble zooms in to emphasize the resonance one moment, while articulating the scrape later on.

The large scale and slow tempo give room for the listener to wander inside the sound, to hear its intricate details. It allows unpredictable and fragile sounds to breathe, and their volatile and erratic quality lends richness and depth to the sound. Yet, throughout the piece, there is a constant extracting of energy inside the seemingly stagnant worlds; zooming in, once again, to extract micro-movements. Nothing is ever still, there is always change and motion, even in the quietest and most seemingly silent space.
“the silence that reigns...”
for large ensemble

2 Flutes
Clarinet
Horn
Trombone
Tuba
2 Violins
2 Violas
2 Cellos
3 Double Basses
3 Percussionists
Piano (Inside Piano & Objects)

Groups & Spacing:

Percussionist 1 & 2
Group 1: Flute (C Flute & Bass Flute), inside Piano, and Double Bass 1
Group 2: Flute (C Flute & Piccolo), Clarinet (Bb Contrabass & Bb ), Tuba, Cello, Double Bass 2
Group 3: Horn, Violins 1 & 2, Viola 1, Cello 2, Double Bass 3
Group 4: Viola 2, Bass Trombone, and Percussionist 3

Group 4
(place high in back)

Group 1          Group 3
Perc. 1                  Perc. 2

General:
A sense of stillness should permeate throughout the piece.

Score in C with the exception of piccolo and double basses, which should sound an octave higher and lower than written. Harmonics are at sounding pitch.

Microtones
Quarter tones: \frac{1}{2} \# \# \#

\begin{align*}
&\text{Inexact microtones: Slightly higher than a quarter tone. They are usually employed to obtain acoustical beatings in strings.}

Pacing: \{\text{Between 11-15 pulses}\} \text{ Inexact amount of pulses. Remain in tempo to keep rhythmic unity between phrases.}

\text{\begin{itemize}
\item \text{Crinkle Noteheads: Crinkle the indicated object with a high amount of sensitivity. If no other symbol is Employed, it should be as still as possible, using only a very immobile amount of activity.}
\item \text{Increase the amount of “crinkle” activity; ranging from a bit of activity \rightarrow to very active}
\end{itemize}}

“mf” = Intense activity even if the sounding result is impossible to get loud

Strings
Scordatura: Cellos and Basses. Parts are Transposed.

Cello 1  Cello 2  Bass 1  Bass 2  Bass 3

\text{Sul IV on Bass 1 and 2: need to play those given low notes by detuning when/if necessary.}

s.t.: sul tasto is always \textit{extreme sul tasto}; the timbral change should be exaggerated by not changing the bow speed to compensate; a change in the quality of the sound is desired.

s.p. = always \textit{extremely s.p.}; a change in the quality of the sound is desired

ord. = return to normal playing position; normal= return to normal bow position after c.l. or 1/2 c.l. marking

B.B. = behind the bridge

\begin{align*}
&\text{\begin{itemize}
\item \text{half harmonic pressure: finger pressure in between harmonic and regular. The sound should be erratic and volatile.}
\end{itemize}}
\end{align*}
Shift slowly between harmonic pressure and half harmonic pressure. The transition should be smooth, but the quality in the sound should be unstable.

String Body clef: Top line is extreme sul tasto. Middle line in ordinary position. Bottom line is extreme sul pont. As close to the bridge as possible without being on it. Below the bottom line is on the bridge, indicated with O.B.

Bow Snaps: Indicated with crinkle notehead + body clef. Mute strings with left hand. Hold bow in position that’s indicated on the clef, or on the back of the body. With heavy pressure, slowly rock the bow in a tight figure eight pattern over all four strings. How active and how aggressive will be determined by the dynamics and slashes.

White Noise Notehead: The player should employ as many techniques as possible to keep the sound “unpitched”, and as breathy and wispy as possible. The strings should be muted, possibly with several fingers, extremely light bowing, and sul tasto when no other position is indicated.

Acoustical Beatings: Obtained by one open string and shifting the pitch of the 2nd string to slightly above or below the pitch of the open string. The graphics indicate how fast the beats should be. In this example, the beats should be fast, approximately 8 per second (or as fast as possible)

Multiphonic Technique 1: Find a place on the given string, slightly above or below a harmonic node to produce a “multiphonic” tone. The sound should be volatile and dirty but rich in a variety of pitches.

Multiphonic Technique 2: Both of these pitches are to be played on the same string. Finger pressure needs to be adjusted so that both pitches are heard equally. The performer should to practice to find the balance in finger pressure by placing both fingers in the desired position, then slowly raising the pressure of one, and then the other. Both tones should be heard at equal amplitude.

Ricochet: Mute all four strings, then rapidly cross the bow back and forth across all four strings. It should be light and energetic.

Drum body with hands with enough force for the body of the bass to vibrate and harmonies to emerge.

Harmonic Sweeps on the string indicated. The partials are random within the notated range. Follow indicated rhythms, unless the word “freely” is given.

Bow Stringholder: down by the bridge, but not on the tailpiece. It should make a fragile and hallow groan-like sound.

Winds
Each player needs to be equipped with a piece of cellophane, styrofoam, and parchment paper. The brass should also find a small brush that would make a nice crinkle sound against their instrument.

breath/air sounds: no pitch

dry attacks /tonguing sounds without breath:
Use the consonant underneath to change the attack when there is one written.

If there is an “m” the attack should have more of a munching-type sound, like quiet lip smacks.

Growl Vocal Clef: The growl sound is always used with flutter and usually only with air. The sound should be low unless a clef is written. Then there should be a vocal shift low growl to high, as indicated on the clef.

Whistle Tones: 1. Finger low note (ex, a D) and then play the given partial.
2. Random sweeps in a slow but imprecise rhythm between the indicated partials.
3. Partial free but rhythms precise
4. Finger the note to obtain the given whistle tone.

Jet Whistle: Over blow directly inside the flute

embouchure change positions: 1. normal, 2. into the embouchure without completely closing it 3., upwards position, 5. upside down U is completely covered and performed inside
Clarinet Multiphonic: Over blown pitches and fingerings are at the discretion of the performer. However, fundamental note and dynamics must be respected. The multiphonic can be unstable and swept through, however it must convey a sense of calm.

Brass:
- **Hand Pops**: or mouthpiece pop, which creates a popping sound by slapping the top of the mouthpiece with the palm of the performer’s hand.
- **Reversed Slap**: inhale air rapidly to produce a pop sound
- **Jaw vibrato**: should be controlled by slowly moving the jaw in order to obtain fluctuations in a long tone.
- **Singing while playing**: Performer should singing as close to the notated pitch as possible in order to create erratic acoustical beatings

Percussion Instrument Lists:

All players need the following objects to crinkle: cellophane (thin and noisy), parchment paper, aluminum foil, styrofoam

***All of these objects should be chosen for having a rich crinkle timbre***

Player 1:
- tam-tam
- bass drum
- temple block
- crotale: La#
- **beaters**: chopstick, thin wire rod, brillo pad (metallic), scrubbrush (with hard bristles), small glass jar (about the size of a jam jar), metal object (small metal box or bowl), knife, superball, wire brush, heavy and soft mallet

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I -
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Everything written above the top staff is to be played on the tam tam. Everything written in the middle is for the Bass Drum. The lower line and area are for other objects, which will be indicated in the score.

Player 2:
- large gong
- timpani
- wooden block
- crotale: La
- **beaters**: a thin wooden chopstick, thin wire rod, metallic brillo pad, scrubbrush with hard bristles, small glass jar (about the size of a jam jar), small metal box or bowl, knife, wire brush

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I -
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The top space is for the gong. The middle area is for the timpani, and the remaining lines and spaces are for various objects which will be indicated in the score.

Player 3:
- Small Gong
- Crotale: Sol#
- 2 ceramic tiles
- 2 pieces of styrofoam
- 2 large stones
- Cow Bell

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The top space is for the small gong. The other spaces indicate which is needed.

**Note:** For all percussionists: Much of this piece requires very slow scrapes against various objects. An exploration of the rich potential and difference in the material being scraped, and how it is being scraped is required of the performer. They should always listen carefully and intensely. Most of the sounds are erratic and volatile and this quality should be emphasized.

**Metal object against tam tam or gong**: has the potential to create a rich distorted sound, as well as high intense partials. These partials are desired, but need not be sustained. It is written to leave room for their erratic quality. These sounds are all obtained through flautando pressure, especially when it is requested to perform near the rim of the instrument.

**Superball on Gong and tamtam or drum**: Strokes should always be long and slow. Breath between phrases to keep with the slow pacing of the piece, and to allow for the resonance to fill the space. This sensitivity to motion should paid attention to in the sections written freely.

**Prepared Piano & Objects:**

The piano part is used as a resonant sound board throughout the entire piece. This part could be performed by another percussionist. It should be performed by someone who is comfortable playing inside the piano. The lid should remain off for the entire piece.
Objects Needed:

For Inside the piano:
- brillo pad
- 1 Heavy Coin
- 1 Ceramic Tile
- 1 Glass jar (size of jam jar)
- Superball

Objects to be played (but not inside the piano)
- Small metal lid
- Small metal pot
- knife
- 2 pieces of styrofoam

Objects to crinkle (* see percussionist instructions above)

Techniques:

**Brillo Pad on Lower Strings:** Pedal should remain up, no resonance. Move pad in a small circular motion, very stagnant. It should draw out the crinkling sound of metal against metal.

**Glass Jar:** Depress pedal and slowly rotate the jar in a steady circular motion, either on lower string end, or middle string end, as indicated. Pressure should be as continuous as possible. High glass-like partials should emerge.

**Superball on Lower Strings:** always keep the pedal down. Use any of the lower strings and slowly draw the superball stick across one. The motion should be slow and continuous, with a fairly heavy pressure. A whale-like cry/ groan will emerge. Always listen to what is going on around and respond to that environment. The idea is to keep things calm and peaceful. This way of listening/reacting is most important in sections written as “freely.”

**Coin Scrape on Lower Strings:** a quick motion on any very low string which creates a gesture of intense but controlled rupture. Do not depress the pedal.

**Ceramic Tile:** slowly turn the tile on the lower strings in a circular motion. Keep the pressure very light and delicate, and motion very slow. Keep the sound as much like “white- noise” as possible. High partials are allowed to emerge.

*Note that at measure 139 it is asked for two tiles to be rubbed together. This should not be done over the strings of the piano.

A white noise between the two tiles should emerge.

**Styrofoam:** to clarify, when styrofoam is written with an x notehead it should be crunched in the hands, but when indicated with a normal one, then two pieces should be rubbed against each other in a slow circular fashion. It is best to use two different types of styrofoam for each notehead. The latter should sound like static white noise, no crispness.

**Metal lids and pots:** scrape the indicated materials together. Scrapes should be slow and long, never abrasive, and most importantly material should never be struck.
With a Sense of Stillness

"the silence that reigns ......."

Score in C

\( \text{c. 11-15 pulses} \)
\( \text{J = 35} \)
delicate but still very delicate.
remarque

still delicate but still very delicate.
As still as possible

continue in same way

continue in same way
c. 3-5 p.  \[ \frac{3}{4} \] \( \frac{1}{4} \) = 54  

Still

Delicately flamed

In Perc.

bells just a few slaps

ppp

\( \text{c.l.t.} \) #

10

Follow given rhythms, but free harmonics; keep moving don't articulate the harmonics
like something under the surface on the brink of exploding

create an agitation in the rumble;
the something under the surface on the brink of exploding
\( \frac{q}{4} = 35 \)

Perc.

\( \text{slow sweeps: P6 - PU} \)

(II)\( (I) \)

\( \text{s.t.} \)

\( \text{s.p.} \)

27
slowly move outside
multiphonic
UUU
UUU
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UUU
· ·
move inside
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32

very slowly shift bow position

U

s.t. <----> s.p.

U

very slowly move to the rim

U

sul IV

U

metal rod

U

µ

ord.

U

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U

Hand

U

Hold harmonic

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Hand

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Hold harmonic
Gradually add in hands & remove bowl

Gradually rub 2 stones against each other

Gradually add more & more air

Gradually add in hands & remove bowl

Gradually rub gently together

Gradually add in hands & remove bowl

Gradually add in hands & remove bowl

Gradually add in hands & remove bowl

Gradually add in hands & remove bowl

Gradually add in hands & remove bowl

Gradually add in hands & remove bowl

Gradually add in hands & remove bowl
Flute in C

Calmly: Motion in the stillness

bow styrofoam (placed on timpani)

pp

Gp. 3

B. Tbn.

Gp. 4

Gp. 1

Perc. 1

Perc. 2

Perc. 3

Vln. 1

Vln. 2

Vlc. 1

Vlc. 2

Vla. 1

Vla. 2

Contra

B.Cln.

Cb. 1

Cb. 2

Fl.

Pno.

In.Pno.

*don't dampen; just stop movement*
Gradually slow down to stillness.
erratic slowing up and down of j.v.

slow strokes inside durations

multiphonic

jaw vib.
gradual transition to all breath

draw also engraves 373-37