Through boundaries

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THROUGH BOUNDARIES

by

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ABSTRACT

*Through Boundaries* is a string quartet that attempts to recalibrate the way one listens by focusing on two spectrums, time and pitch. I explore what falls between the boundaries, in reference to the space between sound and silence and to frequencies between the conventional twelve pitches. The two movements are differing interpretations of the same graphical sketch material, viewing it from different perspectives.

I. *In-Between* is structured with short gestures that are juxtaposed with longer periods of time that lack notated sound. Each gesture represents an unnamed event. For example, one gesture may represent the toss of a ball and the next gesture may represent it bouncing against the concrete. Each of these is a discrete point. At first, the space between these points appears empty, but on deeper investigation, it is overflowing with movement and energy. Visually, the ball floats up and falls to the ground. The electronics represent this energy, slowly fading into perception and forming waves of sound that weave in and out, nearly overpowering the quartet.

II. *Glide* explores the interaction of pitches on a micro-level, including quartertones and glissandi that occupy a small pitch range. The movement begins with a still, seemingly static nature. Deviations appear, and harmonies seemingly blur and crystallize. When a larger melodic interval finally arrives, it is overwhelming.
PUBLIC ABSTRACT

*Through Boundaries* is a string quartet that attempts to recalibrate the way one listens by focusing on time and pitch. I explore what falls between the boundaries, in reference to the space between sound and silence and to frequencies between the conventional twelve pitches. The two movements are differing interpretations of the same graphical sketch material.

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PERFORMANCE NOTES

DURATION: ca. 15.25 minutes

INSTRUMENTATION

This piece requires 4 instrumentalists and 1 person to manage the electronics.

- **String Quartet**: Violin 1, Violin 2, Viola, Cello
- **Electronics**: laptop, three sound files (1. InBetween 1.wav, 2. InBetween 2.wav, 3. InBetween End Clip.wav), mixer, stereo pair of speakers

ELECTRONICS

The electronic part is for stereo (2-channel) fixed media and only appears in I. *In-Between*. The part includes two recordings, processed using a granular synthesis patch with the munger1~ object in Max/MSP, coded by Sivan Cohen Elias. The primary recording is freezing rain falling against a glass window, recorded February 7, 2019 in Iowa City, IA. The secondary recording is II. *Glide*, recorded November 13, 2017 in the JACK Quartet reading session, presented by University of Iowa’s Center for New Music and String Quartet Residency Program.

STRING QUARTET

General

- Perform from full score on iPads, using Bluetooth pedals to turn pages.
- Avoid tempo fluctuation unless otherwise indicated.
- Accidentals carry through the measure.
- Quarter tones will be notated using the following symbols:

  1/4-tone sharp

  3/4-tone sharp

  1/4-tone flat

  3/4-tone flat

- Grace notes should be played before the beat.
- Glissandi should be played smoothly, without pause on any discrete pitch until reaching the notated end pitch. Wavy lines between two pitches should be played as glissandi that imitate the contour of the wavy line, where the height of the glissando indicates approximate pitch.
- Both touch-4 and natural harmonics appear in this piece.
- Tenutos indicate heaviness on the start of the note. They are not as strong as accents.
Breath marks indicate a short silence, only in the instrument parts in which they appear. When followed by an empty measure, the silence continues. Change bows on sustained notes as necessary, but hide the bow changes. Bow position is notated using the following abbreviations:

- OB on the bridge (further defined as pitched or unpitched; triangular noteheads indicate unpitched on the bridge)
- mSP molto sul ponticello
- SP sul ponticello
- ord. ordinary bow position
- ST sul tasto
- mST molto sul tasto

I. In-Between
- Approximate length of this movement is 7’ 45”.
- When subdivision beaming is feathered (angled) as shown below, shape the gesture from slow to fast over the notated duration.

- Bow pressure is notated using the following graphics:
  - under pressure
  - 1/2-under pressure
  - normal pressure
  - 1/2-over pressure (square note head)
  - over pressure (square note head)

- Use poco vibrato unless otherwise notated.

II. Glide
- Approximate length of this movement is 7’ 30”.
- Empty measures indicate silence.
- Rhythm is proportional in measures with unmetered notes. The rhythm is intentionally ambiguous and relaxed. Dynamics and timbre are more important than a note’s exact placement in time.
- Notes with an extension line afterward (extension line) should be sustained through the end of the line.
- Note heads without stems or beams are typically followed by an extension line. When a note head is followed by a glissando instead, sustain sound through the duration of the glissando. When note heads appear without extension lines or glissandi, hold the pitches until the next note or rest appears. This typically happens when a succession of pitches occur in a short amount of time.
- Use non vibrato unless otherwise notated. When indicated “irregular vibrato,” use erratic, narrow vibrato.
- Play everything legato unless otherwise indicated.
use variable speed and size vibrato

[Music notation with dynamic markings and playing techniques indicated for each section]
(ST)

Non vib.

Con sord.

Poco a poco

Legato

Non vib.

Con sord.

Legato

ST

 accelerando

accel. poco a poco
then fade out 2. InBetween End Clip on laptop

hold until electronics end

as high as possible

jeté ord.

\[ \text{\textit{con sord.}} \]

\[ \text{\textit{poco}} \]

\[ \text{\textit{p}} \]

\[ \text{\textit{d}} \]

\[ \text{\textit{d}} \]

\[ \text{\textit{o}} \]

\[ \text{\textit{o}} \]

\[ \text{\textit{π}} \]

\[ \text{\textit{π}} \]

\[ \text{\textit{π}} \]

\[ \text{\textit{π}} \]

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\[ \text{\textit{π}} \]

\[ \text{\textit{π}} \]

\[ \text{\textit{π}} \]

\[ \text{\textit{π}} \]
*erratic and narrow
*erratic and narrow