UNIVERSITY OF CALIFORNIA

Los Angeles

Three Studies
for Orchestra

A thesis submitted in partial satisfaction
of the requirements for the degree Master of Arts
in Music

by

Kenneth Lim

2017
ABSTRACT OF THE THESIS

Three Studies
for Orchestra

by

Kenneth Lim

Master of Arts in Music
University of California, Los Angeles, 2017
Professor David Samuel Lefkowitz, Chair

This piece is an experiment on pitch equivalence from a theoretical, rather than perceptual, standpoint; in particular, I dispense with the notion of octave-equivalence, the notion that two pitches that are an octave apart are to be considered equal in many different senses of that word. This constraint, on the one hand, proved to be a severe challenge as it disallowed adjusting musical material for range (hence transposing in octaves) for a given instrument; on the other, the restriction opened new compositional vistas by forcing the composer to think in ways that otherwise would not have occurred to him.

The three movements utilize different modular distances. The first movement employs double-octave equivalence (so pitches are repeated at every other octave), the second a major-14th equivalence (so the distance is a semitone closer than a double octave), and the third a minor-16th equivalence (so the distance is a semitone farther than a double octave). In each movement the modularity is exposed rather explicitly and deliberately, for
example, by means of homorhythmic gestures doubled at the appropriate intervals. Since pitch itself is central to the structure and compositional integrity of the piece, certain instrumental techniques that obscure pitch content – such as glissandos – are kept to a minimum, as frequent use of such techniques would obliterate and defeat the purpose of this piece.
The thesis of Kenneth Lim is approved.

Ian Krouse
Neal Stulberg
David Samuel Lefkowitz, Committee Chair

University of California, Los Angeles
2017
Instrumentation

3 Flutes (3<sup>rd</sup> dbl. Alto Flute & Piccolo)
3 Oboes (3<sup>rd</sup> dbl. English Horn)
3 Clarinets in B♭ (3<sup>rd</sup> dbl. E♭ Clarinet, Bass Clarinet, all three dbl. A Clarinet)
3 Bassoons (3<sup>rd</sup> dbl. Contrabassoon)

4 Horns in F
3 Trumpets in B♭
2 Tenor Trombones
1 Bass Trombone
1 Tuba

Timpani
Percussion I
   Xylophone, Vibraphone, Crash Cymbal, Suspended Cymbal, Tam-tam, 3 Triangles, Chimes, Glockenspiel., 4 Tom-toms,
Percussion II
   Marimba, Bass Drum, Thunder Sheet, Whip, 3 Cymbals, Vibraphone, Castanets, Snare Drum

Harp
Piano (dbl. Celesta)

First Violins
Second Violins
Violas
Cellos
Double Basses

Performance Note

tap pizz. pizzicato in the strings achieved by rapidly tapping on the strings instead of plucking.
poco a poco accel.
II.

Calm but throbbing (\( \frac{\text{b}}{4} = \text{c.72} \))

- Trumpets in B
- Clarinets in B
- Bassoons I, II, III
- Horn in F III, IV
- Bass Trombone
- Trombones I, II
- Oboes I, II, III
- Flutes I, II, III
- Viola
- Violin I
- Harp
- Violin II
- Contra Bass
- Tuba
- Triangle
- Vibraphone
- Marimba
- Percussion

\( \text{D C B E F G A} \)
Più mosso (♩ = c.84)
III. Scherzo

Leggiero ($= 108-112$)

Flutes I, II, III

Obos I, II, III

Clarinet in A I, II

Viola

Harp

Celesta

Violin I

Violin II

Viola

Cello

Double Bass