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Publication Date

2021

Supplemental Material

<https://escholarship.org/uc/item/6t26f61d#supplemental>

Peer reviewed|Thesis/dissertation

UNIVERSITY OF CALIFORNIA

Los Angeles

Human Anatomy

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

by

Yifeng Yuan

2021

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ABSTRACT OF THE THESIS

Human Anatomy

by

Yifeng Yuan

Master of Arts in Music

University of California, Los Angeles, 2021

Professor David Samuel Lefkowitz, Committee Co-Chair

Professor Kay Kyurim Rhie, Committee Co-Chair

Human Anatomy is a three-movement work for Pierrot Ensemble. Each of the movements explores one human organ and the dichotomy within it. In the first movement, “Heart,” I focused on the rhythmic pulse of the beating heart and explored the vitality and fragility of it. In the second movement, “Skin,” timbre is my primary language. The movement starts with the glossiness and perfection of human skin and migrates to the aging of the skin. This movement is my statement to demystify the socially valued “youth looking” and beauty standard. The third movement, “Inside My Feminine Brain” exemplifies my exploration of heterophonic music. It starts with stereotypical feminine sounds, which is nurturing and tender, and by slowly introducing rigid and assertive morse code on top of it, I morph the stereotype, and shape a new voice of women that is both tender and nurturing, and powerful and assertive.

The thesis of Yifeng Yuan is approved.

Ian Krouse

David Samuel Lefkowitz, Committee Co-Chair

Kay Kyurim Rhie, Committee Co-Chair

University of California, Los Angeles

2021

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Techniques and Philosophy

Human Anatomy is a self-exploratory journey for me both philosophically and musically.

Each movement addresses a question about the modern society that I contemplate on a day-to-day basis.

In the society of today, where everyone admires success and power, are we still allowed to be fragile?

In the era that cosmetic products and Instagram filters become manipulative tools of Capitalism, are we still allowed to age, and be imperfect as who we really are?

In the time of the present that is still dominated by patriarchy, what is the real voice of femininity and what is masculinity?

Within the framework of these questions, I explored and expanded my musical language in all movements, each with a different musical parameter.

In the first movement, “Heart,” I borrowed the human heartbeat pattern as the primary material of my piece. I also used metric modulation to link the fast-moving vitality with the slow and fragile moments.

The “Skin” movement was my first attempt in writing timbre-driven music. I borrowed the philosophy of Spectralism in this movement and built my harmonic language primary based on overtone and undertone series. To me, the overtone series resembles the perfect skin. Specifically, the small intervallic relationship in the high register resembles the perfect and glossy looking skin. Undertone series, in reverse, is about imperfection. The microtonal intervallic relationship happens in the lower register, and the cluster of highly resonant bass

register sound forms a chaotic mess. By juxtaposing the perfect and the imperfect using two different pitch systems, along with my choice of various timbres, I not only made my political statement in the movement, but also allowed it to be a complete musical work.

The third movement, “Inside My Feminine Brain” is intentionally named with a sarcastic title. In this movement, I used free flowing, senza mizura piano writing as the nurturing, and wave-like “femininity”. I then introduced rigid morse code rhythms, played by the rest group of the instruments as an opposite strand of energy that stands as a clear contrast against the piano music. The heterophonic music goes on for a while, until they morph into one, forming a new feminine voice, that is both nurturing, and assertive.

Yifeng Yvonne Yuan

HUMAN ANATOMY

For Pierrot Ensemble
(2021)

INSTRUMENTATION

1 Flute

1 Clarinet in Bb

1 Violin

1 Cello

1 Percussion (Bass Drum, Vibraphone, Suspended Cymbal, Crotale)

1 Piano

Three Movements:

I. Heart

II. Skin

III. Inside My Feminine Brain

20'

Transposed Score

Human Anatomy

I. Heart

$\text{♪}=170$ Energetic

Yifeng Yvonne Yuan (2021)
fl. t.

Flute

Clarinet in B_b

Violin

Violoncello

Percussion

Bass Drum

Piano

7

fl. t.

Cl.

Vln.

Vc.

Perc.

Pno.

2 11

Fl. f — p f

Cl. f — p mf

Vln. p — mf — p

Vc. pizz.

Perc.

Pno. mf

14

Fl. f

Cl. p — f p — f

Vln.

Vc. f pizz.

Perc.

Pno. p mf mp — mf

18

Fl.

Cl.

Vln.

Vc.

Perc.

Pno.

3

22

Fl. fl. t.

Cl. ff p ff mp mp mf mp 3 3 3 3 f

Vln. mp pizz. arco pizz. 5 mf

Vc. ff

Perc. Bass Drum

Pno. mf f mf

4 25

Fl. *mp* *mf* *ff*

Cl. *mp* *mf* *ff* *p*

Vln. *p* *f* *p*

Vc. *mp* *mf* *f*

Perc. *p*

Pno. *mp* *mf* *f* *p*

29 Mysterious

Fl. *p* *mp* *p* *mp*

Cl.

Vln.

Vc. *pizz.* *p* *mp* *p* *mp*

Perc. *p*

Mysterious

Pno. *p* *p* *mp* *p* *mp*

39

Fl.

Cl.

Vln.

Vc.

Perc.

Pno.

50

Fl.

Cl.

Vln.

Vc.

Perc.

Pno.

Vibraphone

6

Fl. *mp* *mp* *mf*

Cl. *mf* *f*³ *pp*

Vln. *mp*

Vc. *mf* *f*

Perc. *mp*

Pno. *mf* *f* *mf* *pp*

rit. A tempo

71

Fl. *p* *mp*

Cl. *mp* *pp* *mp*

Vln. *p* *mp*

Vc.

Perc. *mp* *pp* *mp*

Pno. *mp* *pp* *mp*

79

Fl. Cl. Vln. Vc. Perc. Pno.

p mp p
p mp p

p mp p
p mp p

mf

mp *mf* *mp*

7

rit.

89

Fl. Cl. Vln. Vc. Perc. Pno.

rit.

pp ppp pp
pp ppp pp

rit.

pp v pp

rit.

9 8 9 8 9 8 9 8

Musical score page 8, measures 98-108. The score includes parts for Flute (Fl.), Clarinet (Cl.), Violin (Vln.), Cello (Vc.), Percussion (Perc.), and Piano (Pno.). The tempo is $\text{♩} = 108$ and the mood is *Melancholy*. Measure 98: Flute and Clarinet play sustained notes. Measure 99: Violin plays eighth-note patterns with dynamics *pp*, *mp*, *p*, and *ppp*. Cello provides harmonic support with sustained notes. Measure 100: Cello continues harmonic support with eighth-note patterns. Measure 101: Percussion plays eighth-note patterns with dynamic *mf*. Measure 102: Piano plays eighth-note patterns with dynamic *mp*. Measures 103-108: Piano plays eighth-note patterns with dynamic *p*, followed by sixteenth-note patterns with dynamic *mp*.

Musical score for orchestra and piano, page 104. The score includes parts for Flute (Fl.), Clarinet (Cl.), Violin (Vln.), Cello (Vc.), Percussion (Perc.), and Piano (Pno.). The piano part features complex rhythmic patterns with sixteenth-note figures. Measure 1 consists of two measures of rest followed by a dynamic marking of pp . Measure 2 starts with a dynamic of mf for Vln. and $sul D$ for Vc., followed by a dynamic of f for both. Measure 3 begins with a dynamic of mp for both instruments, followed by a dynamic of f . Measure 4 starts with a dynamic of p for Pno., followed by a dynamic of mp . Measure 5 begins with a dynamic of f for Pno.

107

Fl.

Cl.

Vln.

Vc.

Perc.

Pno.

9

ord.

mp

pp

p subito f

mf

111

Fl.

Cl.

Vln.

Vc.

Perc.

Pno.

f

f

mp

mf

ff

f

♩=144 Energetic

10

Fl. 114 ♩

Cl.

Vln. 4 4 4 4 ♩ f mp

Vc. ♩ sfff

Perc. bowed ♩ fff p f p

Pno. ♩ fff f f

♩=144 Energetic

124

Fl. p mf p f

Cl. p mf p f

Vln. ♩ pizz. arco mf pizz. arco mp

Vc. ♩ ff p f ff p f

Perc. bowed p f Bass Drum p ord. mf

Pno. ♩ f v v

135

Fl. *mf* *f*

Cl. *f* *mf* *f*

Vln. *mf* *f*

Vc. *pizz. arco* *f*

Perc. *mp* *ff* *mf* Vibraphone

Pno. *f* *f* *b>* *b>*

This musical score page contains six staves. The first three staves (Flute, Clarinet, Violin) have treble clefs. The Cello staff has a bass clef. The Percussion and Piano staves have both treble and bass clefs. Measure 135 starts with Flute and Clarinet playing eighth-note patterns. Violin joins in with eighth-note patterns. Cello has sustained notes. Percussion plays eighth-note patterns with dynamics *mp*, *ff*, and *mf*. Piano plays eighth-note chords. Measure 143 starts with Flute and Clarinet eighth-note patterns. Violin and Cello play eighth-note patterns with dynamics *p*, *f*, *mf*, and *f*. Percussion plays eighth-note patterns with dynamics *f* and *p*. Piano plays eighth-note chords.

143

Fl. *p* *f*

Cl. *f*

Vln. *f* *mf* *f*

Vc. *pizz. arco* *f* *pizz.*

Perc. Bass Drum *f* *p* *f* Vibraphone *p* *f* *p*

Pno. *ff* *f*

This musical score page contains six staves. The first three staves (Flute, Clarinet, Violin) have treble clefs. The Cello staff has a bass clef. The Percussion and Piano staves have both treble and bass clefs. Measure 143 continues with Flute and Clarinet eighth-note patterns. Violin and Cello play eighth-note patterns with dynamics *f*, *mf*, and *f*. Cello uses pizzicato and arco techniques. Percussion plays eighth-note patterns with dynamics *f* and *p*. Piano plays eighth-note chords. Measure 151 starts with Flute and Clarinet eighth-note patterns. Violin and Cello play eighth-note patterns with dynamics *f*, *mf*, and *f*. Percussion plays eighth-note patterns with dynamics *p*, *f*, and *p*. Piano plays eighth-note chords.

12

151

Fl.

Cl.

Vln. pizz.
arco

Vc.

Bass Drum
Perc.

Pno.

ff *f* *p* rit.

ff *f* *pp*

ff *f* rit.

158

Fl.

Cl.

Vln.

Vc.

Perc.

Pno.

mp

mp

ppp f

II. Skin

Senza misura - expressive, fragile

Yifeng Yvonne Yuan (2021)

10"

Flute/Piccolo: Sul pont. molto - distorted non vibrato.

Bass Clarinet in B_b: *ppp* < *p* *ppp subito* *ppp* — *p* *ppp* — *pp* *ppp* — *mp* *ppp* — *p* *ppp* — *p*

Violin: *ppp* < *p* *ppp subito* *ppp* — *p* *ppp* — *pp* *ppp* — *mp* *ppp* — *p* *ppp* — *p*

Viocello: *ppp* < *p* *ppp subito* *ppp* — *p* *ppp* — *pp* *ppp* — *mp* *ppp* — *p* *ppp* — *p*

Percussion: Cymbal bowed, damp slightly *p*

Piano: *ppp* — *p*

15"

Flute: *pp* — *mp* *pp subito* *ppp* — *mp* *pp subito* *ppp* — *mp* *pp*

B. Cl.: *pp* — *mp* *pp subito* *ppp* — *mp* *pp subito* *ppp* — *mp* *pp*

Vln: *pp* — *mp* *pp* *ppp* — *mp* *pp subito* *ppp* — *mp* *pp*

Vc: downbow upbow downbow upbow downbow

Perc.: *p* *p* *p*

Pno.: *ppp* — *mp* > *ppp* *ppp* < *mp* > *ppp* *ppp* — *mp* > *ppp*

Fl. 8

B. Cl.

Vln.

Vc.

Perc. mp

Pno. $\text{ppp} \xrightarrow[5]{\text{mp}} \text{ppp}$ p

Fl. 11

B. Cl.

Vln.

Vc.

Perc. bowed mp , brush $p \xrightarrow{mp}$, bowed mp , brush $p \xrightarrow{mp}$, bowed mp , brush $p \xrightarrow{mp}$

Pno. p

15"

14

Fl. *fp*

B. Cl.

Vln. *fp* *fp* *fp*

Vc. *fp* *fp*

Perc. bowed brush bowed brush
mp *p* *mp* *mp* *p* *mp*
f subito *p* *p* *f*

Pno. *p*

A

20"

ord.

Fl. *ppp*

B. Cl. *ff*
vibrato sul pont. to ord.

Vln. *pp*

Vc. *pp*
vibrato sul pont. to ord.

Perc. one hand damping the cymbal, making crisp percussive sound
ord. 3
ppp *mp*

Pno. *pp*

Clarinetist should cue the entire ensemble at this moment growling

ord. growling sound

A

15"

Fl. *mf* *p*

B. Cl. *ord.* *ppp f* *p*

Vln. *mf* *p*

Vc. *mf* *p*

Perc. *let go the dampation
let it ring*

Pno. *mf* *p*

B

20"

Fl. *mf* *p* *mf*

B. Cl. *growling* *fff subito* *ppp f* *ord.* *f* *sul. pont.*

Vln. *mf* *p* *mf*

Vc. *mf* *p* *mf*

Perc. *drum stick scrap around the cymbal* *f* *drum stick scrap around the cymbal* *f* *muddy sound* *To B. D.*

Pno. *mf* *p* *mf*

15"

34

Fl. *f*

B. Cl.

Vln. *ord.* → *sul pont.* *pp* → *f*

Vc. *ord.* → *sul pont.* *p* → *mf*

Perc.

Pno. *pp* → *f*

pp → *mp*

15"

39

Fl. *p* → *f*

B. Cl.

Vln. *ord.* → *sul pont.* *add bow pressure* → *mostly pitchless noise* *ff*

Vc. *ord.* → *sul pont.* *add bow pressure* → *mostly pitchless noise* *ff*

Perc. Bass Drum

Pno. *p* → *ff*

18 C

44 sing and play

Fl. *mp* → *f*
B. Cl. *ff* growling
Vln. *f* add bow pressure → scratch tone
Vc. *ff* growling
Perc. Bass Drum *p* → grains → *p* → none grain → *ff* → grains → none grain

tuned to G Superball Mallet on bass drum (1 or 2)

Bass Drum C

Pno. *f* ord.

50 D

Fl. *ff* 3 growling
B. Cl. *f* → *ff* growling
Vln. *mp* → *f* → *p* → *f* → *ff* → *f* → *mf* → *mf*
Vc. scratch tone → ord. → scratch tone → ord. → scratch tone → ord.
Perc. *p* → grains → *f* → *p* → none grain → *p*
Pno. in the piano, slap the strings cluster

57

Fl.

B. Cl. *p* 5 5 5 5 *f* *ff* *p*³ 5 *mf*

Vln. *p* *f* *mp* *f* *sul pont.* *ord.* *p*

Vc. → scratch tone *ff* *mp* *3* *3* *3* *f* *p* *ord.*

Perc.

Pno. *mp*

63

Fl. *jet* [E] *jet*

B. Cl. *ord.*₃ 5 6 *p* *nf* *mp* *mf* *p* *mf*

Vln. *p* *sul pont.* *ord.* *p* *ppp*

Vc. *mf* *mp* *mf* *p* *mf* *sul pont.* *ord.*

Perc. Crotales

Pno. *p* *ppp*

69

F

Vln.

Vc.

Perc.

Crotale with acrylic mallet
ord.

Pno.

76

Fl.

B. Cl.

Vln.

Vc.

Perc.

Pno.

84

Fl. G airy sound *p* *mf* *f*

B. Cl. airy sound *p* *ppp* *mf* *f*

Vln. ord. scratch tone

Vc. *ppp* *p* *ppp* *p* *f*

Vibraphone bowed *p* *f* *f*

Perc. ord. superball mallet bending pitch *p* *ppp* *p* *ppp* *f* *f*

Pno. credit card scraping, slowly fingernail plucking string *p* *f*

94

Fl. ord. *p* *mf*

B. Cl. growling sound *f* *p*

Vln. non vibrato *ppp* add vibrato *p* scrach tone *f* ord.

Vc. ord. *ppp* non vibrato *p* add vibrato *f* scrach tone *f* ord. *p*

Vib. ord. superball mallet bending pitch *f*

Pno. *p* *ppp*

104

Fl. *p* *f* *p* *p*

B. Cl. *ord.* *growling* *f* *p* *ord.*

Vln. → scratch tone → ord. *mp* *f* *p* *pp*

Vc. → scratch tone → ord. *f* *p* *pp*

Vib. *ord.*
superball mallet bending pitch *f*

Pno. credit card scraping, slowly *pp* *p*

f

113

Fl. 3 *ff* *pp*

B. Cl. growling *mf* *f* *p* *ord.* *pp*

Vln. → scratch tone → ord. *f* *p*

Vc. → scratch tone → ord. *f* *p*

Vib. *ord.*
superball mallet bending pitch *f*

Pno. *pp* *p* *p* *pp*

Fl. -

B. Cl. growling *f* - *p* ord.

Vln. → scratch tone *f* → ord. *p*

Vc. scratch tone → ord. *p*

Vib. ord. superball mallet bending pitch *f* - -

Pno. credit card scrap *p* 5 5 5 *mp* 5 5 5 *p* *f*

122

Fl. *ppp*

B. Cl. *ppp*

Vln. *ppp* → scratch tone *ff*

Vc. *ppp*

Vib. bowed *p*

Pno.

III. Inside My Feminine Brain

=56 Freely

Yifeng Yvonne Yuan
(2021)

durations correspond to approximate horizontal space allotted to each note
(N.B: left hand and right hand do not coincide prior to m.)
like waves

Piano

Una Corda

4

7

A airy sound, very tender, from far away

10

Flute/Piccolo: *ppp* — *p* — *ppp*

Clarinet in Bb: —

Violin: —

Cello: *col legno* *ppp* — *p* — *ppp*

Piano: *p* *mp* — *p mp*

ord.

14

Fl.: *ppp* — *p* — *ppp*

Cl.: —

Vln.: —

Vc.: *ppp* — *p* — *ppp*

Pno.: *p* *mp* — *p* *mp* — *p* *mf* — *p* *pp*

rit...
(for flute and cello only) *a tempo*

Fl. 18 *ppp* *p* *l-3 l-3 l-3 l-3* *ppp*

Cl.

Vln.

Vc. *rit...* *a tempo* *n*

mp *ppp* *p* *ppp* *l-3 l-3 l-3 l-3*

Pno. *pp* *mp*

Fl. *p* *ppp*

Cl.

Vln. *n* *p*

Vc. *p* *n*

Pno. *mf* *mp*

23

Fl.

Cl.

Vln. *ppp*

Vc. *p*

Pno. *mf* *mp*

col legno,
ad lib. rhythm

col legno

25

B

rit. - A tempo -

Fl.

Cl. *n*

Vln. *mp*

Vc. *p*

key clicks only

B

ord. - *col legno* -

ppp

Vln. *n*

Vc. *col legno*

rit. - A tempo -

Fl.

Cl.

Vln.

Vc.

Pno. *mf* *mp* *mf*

ord.

28

Fl. *p*

Cl. *ord.*

Vln. *ppp*

Vc. -

Pno. *mf* *p*

ord. *ppp*

31

Fl. -

Cl. *mp*

Vln. *mp*

Vc. *mp*

Pno. *mf*

33

Fl. *p*

Cl. *p* — *pp*

Vln. *p* — *pp*

Vc. *p* — *pp*

Pno. *mp* — *mf* — *pp* — *f*

35

Fl. — *pp*

Cl. — *p*

Vln. — *mp*

Vc. — *mp*

Pno. — *mp*

37

Fl.

Cl.

Vln.

Vc.

Pno.

mp

ppp

mp

pp

mf

pp

39

Fl.

Cl.

Vln.

Vc.

Pno.

pp

mf subito

Very Crisp and a little aggressive
A tempo

pp

mf

p

mf

mp

Fl.

Very Crisp and a little aggressive

Cl.

mf

Vln.

f

Very Crisp and a little aggressive

Vc.

mf

Pno.

mf *mp* *mf* line up downbeats

Fl.

ppp legato

Cl.

ppp

Vln.

ppp

Vc.

ppp

Pno.

D

mp

legato

3

legato

mp

6 6 6 6 5 6 6 6

sync downbeats again between right and left hand

50

Fl. *ppp*

Cl. *ppp*

Vln. *mp*

Vc. *legato*

Pno.

52

Fl. *mp*

Cl. *mp* *mf* *mp*

Vln.

Vc. *mp* *ppp* *mp*

Pno.

Musical score for orchestra and piano, page 56. The score includes parts for Flute (Fl.), Clarinet (Cl.), Violin (Vln.), Cello (Vc.), and Piano (Pno.). The piano part features sixteenth-note patterns with dynamic markings *f*, *ppp*, and 5. The strings play eighth-note patterns.

58

Fl.

Cl.

Vln.

Vc.

Pno.

p

rit.

p

p

rit.

p

6

6

6

6

6

6

60 rit.

Fl.

Cl.

Vln.

Vc.

Pno.

ppp

ppp

ppp

ppp

A tempo

F

rit.

p

ppp

p

ppp

p

pp

p

A tempo

delicate

F

try not to line up with other instruments

35

64

This section starts with a rest for the Flute and Clarinet. The Flute and Clarinet play eighth-note patterns with dynamic markings *p*, *ppp*, *p*, and *ppp*. The Violin, Cello, and Piano are silent. The piano part includes dynamics *ppp*, *p*, *ppp*, *p*, *ppp*, *mp*, *ppp*, and *p*.

68

The Flute and Clarinet play eighth-note patterns with dynamics *mp*, *ppp mp*, *ppp mp*, and *ppp mp*. The Violin, Cello, and Piano are silent. The piano part includes dynamics *ppp mp*, *ppp mp*, *ppp mp*, and *ppp mp*.

try not to line up with other instruments

The Flute and Clarinet play eighth-note patterns with dynamics *p*, *ppp p*, *ppp mp*, and *ppp mp*. The Violin, Cello, and Piano are silent. The piano part includes dynamics *ppp mp*, *ppp mp*, *ppp mp*, and *ppp mp*.

39

71 rit. A tempo

Fl. *ppp* *p*

Cl. *ppp mp ppp*

Vln. *ppp mp ppp*

Vc. *p*

Pno. *mp ppp p*

col legno

Measure 71: Flute, Clarinet, Violin play eighth-note patterns. Cello plays eighth-note patterns. Piano plays eighth-note patterns. Measure 72: Flute, Clarinet, Violin play eighth-note patterns. Cello plays eighth-note patterns. Piano plays eighth-note patterns.

73

Fl.

Cl. *p*

Vln.

Vc. *p* *col legno*

Pno.

Measure 73: Flute, Clarinet play eighth-note patterns. Violin rests. Cello plays eighth-note patterns. Piano rests. Measure 74: Flute, Clarinet play eighth-note patterns. Violin rests. Cello plays eighth-note patterns. Piano rests.

rit.

75

Fl.

Cl.

Vln.

Vc. col legno

ppp

rit.

Pno.

This musical score page shows a five-line staff for each instrument. The first two staves (Flute and Clarinet) have no visible notes. The third staff (Violin) contains sixteenth-note patterns with vertical stems pointing up, labeled 'col legno' above the staff and 'ppp' below it. The fourth staff (Cello) also contains sixteenth-note patterns with vertical stems pointing up. The fifth staff (Piano) has a single note on the first line with a fermata over it. Measure numbers '75' and 'rit.' (ritardando) are present at the top left. The dynamic 'ppp' appears twice: once above the violin staff and once above the piano staff.