### A STUDY OF UNSUK CHIN'S PIANO ETUDES

by

#### SOO KYUNG KIM

(Under the Direction of Adrian Childs and Evgeny Rivkin)

### **ABSTRACT**

This document investigates the six piano etudes that have been written to this point (1995-2003) from an envisioned set of "12 Piano Etudes" composed by Korean-born composer Unsuk Chin (b. 1961), one of the most accomplished composers of the twenty-first century. These etudes are an excellent case study in Chin's developing musical language. They synthesize elements from around the world (scales, rhythms, and harmonies) with influences from composers such as her teacher, György Ligeti. They also reflect her experiments in sound created through her electro-acoustic work. This study provides a brief biography of Unsuk Chin, along with an introduction to her published works. This is followed by a detailed discussion of the six piano etudes. The main body of this study is an analysis of all six etudes with respect to their formal structures, unique harmonic language, and rhythmic virtuosity. Each analysis is followed with performance suggestions to enable pianists to approach the technical difficulty of each work.

INDEX WORDS: Unsuk Chin, piano etude, piano technique, diversity, Korean composers,

Twenty-first century music, global music

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## **DEDICATION**

I would like to dedicate this dissertation to the following people: my parents, Bok Suk
Kim and Ok Hee Kim, my husband Isidor Kim, and my parents-in-law, Dr. Chul and Martha
Kim. Without their unconditional love, patience, and tremendous support, completing this would
not have been possible.

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Completing this dissertation as a mother of two children would not been possible without the continuous love, trust, encouragement, and support of my family. I am much indebted to the sacrifice and patience of my husband Isidor. I would like to give my dearest thanks to him as well as my precious lovely daughters, Alyssa and Christine, who have supported me with their love and trust. I also express special gratitude to my parents, Bok Suk Kim and Ok Hee Kim, for their unconditional love, prayers, countless sacrifices, patience, and support throughout my entire life. In addition, great thanks goes to my parents-in-law, Dr. Chul Kim and Martha Kim, who gave unlimited support, encouragement, trust, and love ever since I became part of their family. I wish to express my special thanks to my sister Soo Jin Kim for her sacrifice as my younger sister and her continuous love.

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## **CHAPTER 1: INTRODUCTION**

### **Purpose of Study**

The purpose of this study is to investigate six piano etudes from 12 Piano Etudes<sup>1</sup> (1995-2003) by Korean-born composer Unsuk Chin (b. 1961). Recognized as a winner of many internationally prestigious awards including the 2004 Grawemeyer Award, Chin is one of the most accomplished composers of the twenty-first century. Her music is often characterized by its unique colorful and imaginative harmony associated with the overtone series and whole-tone collections. Another characteristic of her music is complex rhythmic writing derived both from the European classical tradition as well as non-European traditions such as Indonesian Gamelan music.

This document will provide a biographical background of the composer, an overview of Unsuk Chin's works, an analysis of six piano etudes No.1 through No. 6, and performance suggestions. The analytical portion of this study will focus on the musical form and structure of these etudes and her rhythmic and harmonic techniques. In particular, this study will examine and discuss Chin's use of the overtone series and whole-tone scales to structure these etudes.

According to an email that Chin sent to Bokum Choi, who wrote her doctoral dissertation on Chin's piano etudes, Chin said that "First and foremost, my etudes are meant to be music, and my purpose was not the purpose of a pedagogue. However, at the same time in my etudes there are obviously things pianists can learn from them, such as training independency [sic] of fingers

1

<sup>&</sup>lt;sup>1</sup> Chin's 12 Piano Etudes, which is the only solo piano work among her compositions, is an ongoing project of a set of 12 etudes. So far, she has completed six etudes.

and mind through the challenges of polyrhythm and intricate polyphony, for instance."<sup>2</sup> As we can see in Chin's comment, she regards these etudes not primarily as didactic works, but as complex artistic expressions.

## **Need for Study**

The term "Etude" implies a composition intended to improve a performer's technique.

This genre implicitly demands a high level of technical proficiency from the performer as well as the ability to reflect a composer's intention and stylistic characteristics. To understand Chin's etudes, it is important to look at the genre in general, as well as the specific influence that her teacher and mentor György Ligeti had on her treatment of the genre. Ever since Johann Baptist Cramer and Muzio Clementi originated the piano etude, it has been a major genre of the piano repertoire, especially in light of the treatment of the piano as a virtuosic instrument. Frederic Chopin then elevated the genre from a mere technical study to a concert piece of the highest artistic quality. Etudes for concert performance flourished and were further developed by Liszt, Rachmaninoff, Debussy, and Scriabin throughout the nineteenth and the first half of the twentieth century. In the second half of the twentieth century, etudes explored various kinds of compositional problems along with pianistic difficulties, and this genre has become as much a study in composition as in piano technique. 

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The term of the performance as well as the specific influence that her teacher as well as the ability to reflect a composition as in piano technique.

One of the most important collections of piano etudes of this era is Ligeti's Études pour *Piano*, which received the Grawemeyer Award in 1986. It presents compositional procedures that Ligeti usually followed: diverse experiments in complex rhythmic, melodic, and harmonic

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<sup>&</sup>lt;sup>2</sup> Bokum Choi, "Unsuk Chin's Piano Etudes: A Musical and Pedagogical Analysis," (D. M. A. diss., Texas Tech University, 2009), 51.

<sup>&</sup>lt;sup>3</sup> Ji-Hye Chang, "Contextual Analysis of Unsuk Chin's Piano Etudes," (D. M. A. diss., Indiana University, 2006), 1.
<sup>4</sup> Ibid.

structures inspired by non-European elements such as the Indonesian Gamelan music, African music and other sources. Ligeti's etudes considered as some of the most creative piano works in the twentieth-century repertoire had a significant influence on Chin's own treatment of the genre. Through Ligeti, Chin was exposed to many extraordinary musical sources and ideas, and was encouraged to develop her own compositional language.

In this age of globalization, musicians benefit from understanding music from around the world and works of composers who incorporate diverse influences into their music. Pianists need to develop a technique encompassing all kinds of non-European sources. Chin's piano etudes are valuable works for understanding her unique musical style, one that synthesizes diverse influences from many cultures. Chin's etudes demonstrate extreme rhythmic complexity, a strongly-organized structure, imaginative sound colors, and dexterous motivic development.

As Paul Griffiths writes, "Her music makes no parade of national flavor: her preferences for the sounds of plucked or struck strings, for slowly drifting glissandos and for arrays of bells and gongs all carry no specific cultural overtones, and that indeed is one of her strengths." <sup>5</sup> Her music emphasizes diverse musical resources, rather than emphasizing traits from her national background.

Pianists from all around the world are taking increased interest in Chin's compositions, resulting in more frequent performances of her works, especially *12 Piano Etudes*. However, except for personal interviews, short articles, and some general studies on her works, only a few scholarly documents have so far been published in English about Chin's *Piano Etudes*. No

<sup>&</sup>lt;sup>5</sup> Paul Griffiths, "In Focus: an Introduction to the Music of Unsuk Chin," http://www.boosey.com/pages/cr/composer/composer\_main.asp?composerid=2754&ttype=INTRODUCTION&ttitl

<sup>&</sup>lt;sup>6</sup> There is no published recording of Chin's *12 Piano Etudes*, but some performance recordings can be found on <a href="https://www.youtube.com">www.youtube.com</a> or <a href="https://www.youtube.com">www.youtube.com</a

document written in English has examined all of them in depth. Three doctoral dissertations have been published in the United States. Hae Young Yoo's dissertation "Western Music in Modern Korea: A Study of Two Women Composers" (2005) examines works of two Korean women composers: Jiesun Lim's *Spiritual Dance* and Unsuk Chin's *Piano Etudes*. Yoo examines those two works in relation to the historical background of modern Korea and in relation to sources from Korea. She treats Unsuk Chin's *Piano Etudes* in a general context rather than focusing on analysis of specific etudes. The second US dissertation regarding Chin is Ji-Hye Chang's "Contextual Analysis of Unsuk Chin's Piano Etudes" (2006). Chang discusses common stylistic elements in Chin's *Piano Etudes*, examining two etudes closely, and briefly discussing two other etudes. The last, Bokum Choi's dissertation "A Musical and Pedagogical Analysis" (2009), gives relatively short summaries of Etudes No. 1 through No. 5.

Beyond these three sources, one Korean language dissertation, by Moon Jung Kim, examines Chin's six piano etudes extensively, considering form, harmonic language, rhythm, and pedagogical and performance suggestions. My study approaches these etudes in a fashion similar to Kim's dissertation, but my approach differs in methodology and analytical conclusions about individual etudes.

Chin's etudes are valuable to a pianist's technical and musical development because they incorporate diverse musical influences and provide unique technical challenges for the performers. I hope this study encourages pianists to view Chin's etudes as an important part of the 21<sup>st</sup> century standard piano repertoires and that it will stimulate further studies about Unsuk Chin's other works.

## **Methodology and Organization of Document**

Chapter 2 provides a brief biographical and musical background of Unsuk Chin and also includes a chronological survey of her compositions. The second part of this chapter provides an overview of the six piano etudes, including form and structure, harmonic language, and their treatment of rhythm. Chapter 3, the focal point of this document, consists of detailed discussion and analysis of all six published etudes. Each etude is analyzed, with discussion of its formal structures, influences from European and non-European music cultures, harmonic language derived from Chin's sense of color and texture, and various compositional techniques including motivic development and rhythmic devices. Each analysis is followed by practical advice for mastering the technical difficulties of each work.

## **CHAPTER 2: OVERVIEW**

#### **Unsuk Chin's Life and Works**

Unsuk Chin was born in Seoul, South Korea, in 1961. Chin's family was poor, but her father, a Presbyterian minister, taught her to read music and encouraged her to continue her musical studies. Chin started playing the piano at the age of two, and soon accompanied hymns on the piano. In an interview, Chin says that she discovered music during her early childhood and was immensely fascinated by it. Her first musical aspiration was to become a concert pianist, but her parents could not financially support her goal, and at the age of 13 she began to compose after giving up her dream of performing. She studied composition on her own by borrowing scores from other people and copying them out by hand. She even copied the entire score of Tchaikovsky's *Pathetique Symphony*. Entering Seoul National University after failing admission twice, Chin studied with Sukhi Kang, who was a pupil of Isang Yun, an internationally known Korean-born composer. Kang introduced Chin to the techniques and trends of Western post-war Avant-garde music.

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<sup>&</sup>lt;sup>7</sup> Interview. http://usasians-articles.tripod.com/unsuk-chin.html

<sup>&</sup>lt;sup>8</sup> Sung Hyun Kim, "Unsuk Chin: Dreaming Alice in Contemporary Music," chap. in *Today's Classic: A Series of Biographies of 40 Modern Composers from Stravinsky to Unsuk Chin* (Paju: Art Books, 2010), 463.

<sup>&</sup>lt;sup>9</sup> Korean-born composer Sukhi Kang (b. 1934) studied in Korea and in Germany. A former student of Isang Yun, Kang is known for his work with experimental and electronic music, as well as for his leadership in the Korean branch of the SIMC (International Company of Contemporary Music) since 1978.

<sup>&</sup>lt;sup>10</sup> Isang Yun (1917-1995) was a Korean-born composer. His studies in Germany led him to his fusion of Korean traditional music with avant-garde techniques. The premiere of his oratorio *om mani padre hum* in 1965 and *Réak* in 1966 gave him international renown. Yun was in prison in South Korea (1967-1969) due to his alleged involvement in an East Berlin spy incident. Afterwards, he transformed his musical style to one that was accessible for a wider audience and reflected his personal and political concerns for world peace and reconciliation.

In 1984, her composition *Gestalten* (Figures) was selected for the ISCM World Music Days in Canada, and the following year Chin won the International Gaudeamus Composition Prize in Amsterdam for *Spektra* for three cellos. In 1985 she received a DAAD grant for further study in Germany which she undertook with György Ligeti until 1988. Ligeti's philosophy of music composition, deep individualism, and avoidance of established stylistic currents deeply influenced Chin's music. However, when Ligeti pointedly told her that she needed to develop her own compositional language, Chin experienced a compositional crisis. After the performance of her opera *Die Troerinnen* (Trojan Women) (1986), a piece for three female singers, women choir, and orchestra on text from Euripides' play, she was not able to write any pieces for three years (1986-1989) because she was not able to find an aesthetic to replace the post avant-garde music style.

Chin moved to Berlin in 1988 to work at the electronic music studio at the Technical University. She stated that "The experience at the Technical University was a very helpful step toward being able to compose music that can be felt with the heart, casting away the music that is thought out in the brain with logic." Indeed, this experience changed the way she thought of acoustic instruments and encouraged her to find new sonorities with acoustic instruments, which led her to create highly structured works with a rich sense of color. Winning a prize from the Gaudeamus Foundation for her breakthrough piece *Akrostichon-Wortspiel*, for piano and ensemble (1991-3), Chin received international acclaim for her new distinctive voice. This successful work was inspired by Lewis Carroll's book *Alice in Wonderland*, and contains seven songs on scenes from fairy-tales. Its success led Boosey & Hawkes to offer her an exclusive

<sup>&</sup>lt;sup>11</sup> Program note from www.bso.org/images/program\_notes/Chin\_CelloConcerto.pdf

<sup>&</sup>lt;sup>12</sup> Interview. http://usasians-articles.tripod.com/unsuk-chin.html

<sup>&</sup>lt;sup>13</sup> Hae Young Yoo, "Western Music in Modern Korea: A Study of Two Women Composers," (D. M. A. diss., Rice University, 2005), 59.

<sup>&</sup>lt;sup>14</sup> Ibid.

publishing contract. In this work, Chin found her distinctive compositional voice, even though elements of the work are inspired by Ligeti's style. David Babcock writes on *Akrostichon-Wortspiel*, "There is a resemblance to Ligeti in its flexibility and playfulness but the actual harmonic language is quite different – less systematic and more spontaneous." Arnold Whittall also remarks, "There are hints of the later Ligeti in the simple malleability of the material, and the amusing yet delicate fantasy with which text and music combine." <sup>16</sup>

Contrasting significantly with *Akrostichon-Wortspiel*, *Santika Ekatala* (1993) (its title in Sanskrit can be translated as "harmony to avert evil"), is a purely orchestral work characterized by what Whittall terms a "strong ritualistic quality". This work won first prize in the Tokyo Composition Competition. Chin continued to win awards from other internationally prestigious associations and competitions, such as the first prize for Contemporary Piano Music at the Concours International de Piano d'Orléans in 1997, the 2005 Arnold Schoenberg Prize, the 2007 Heidelberger Künstlerinnenpreis, and the prizes of the Kyung-Ahm and Daewon Foundations. Unsuk Chin's music has been performed at numerous festivals and concert series in Europe, the Far East, and North America, by several of the world's most prestigious ensembles, and featured by leading conductors including Kent Nagano, George Benjamin and Sir Simon Rattle. <sup>18</sup>

In the 1990s, Chin was continuously commissioned to compose works: *Fantasie mécanique* (1994), *Xi* (1998), and *Double Concerto* (2002), all three commissioned by the Ensemble Intercontemporain; *ParaMetaString* (1997), commissioned by the Kronos Quartet; a *Piano Concerto*, commissioned by the BBC for the BBC National Orchestra of Wales; and

<sup>&</sup>lt;sup>15</sup> David Babcock, "Korean Composers in Profile," *Tempo*, New Series, no. 192 (April 1995): 19.

<sup>&</sup>lt;sup>16</sup> Arnold Whittall, "Unsuk Chin in Focus: Meditations and Mechanics," *The Musical Times*, vol. 141, no. 1870 (Spring 2000): 21.

<sup>&</sup>lt;sup>17</sup> Ibid., 22.

<sup>&</sup>lt;sup>18</sup> Biography from

http://www.boosey.com/pages/cr/composer/composer\_main.asp?composerid=2754&ttype=BIOGRAPHY&ttitle=Biography

Miroirs des temps (1999), commissioned by the BBC for the Hilliard Ensemble and the London Philharmonic Orchestra. 19 Xi (1998), a piece for ensemble and electronics, won the Bourges Electroacoustic Music Prize.

Chin's piano etudes Nos. 2, 3 and 4 were composed in 1995 and later revised in 2003 because of their technical difficulties. In 1996, she composed her *Piano Concerto*, commissioned by the BBC National Orchestra of Wales, and Chin states in the composer's notes that "this composition reflects the influences of every epoch in piano literature – from Scarlatti to the present. I wanted to emphasize particularly the vitality, kinetic and virtuoso aspects – in short, the playful side – of the piano."<sup>20</sup> Prior to writing her *Piano Concerto*, Chin stated that she analyzed many virtuosic piano pieces by predecessors such as Scarlatti and Prokofiev. She also discusses her experiments with adding non-European elements, especially the influence of Indonesian Gamelan Music.<sup>21</sup> This kind of compositional procedure has led her to create music in accordance with traditional musical genres such as instrumental concertos, piano etudes, and operas. In particular, the subtitles of etudes within Chin's 12 Piano Etudes reflect traditional genres of piano literature, such as "Scherzo" and "Toccata." Her instrumental concertos are as technically demanding for the orchestra as they are for the soloists. As Noh, editor of Chin's music, comments, "Chin's fine elaboration between the solo instrument and the orchestra seeks a new identity of the solo instrument in contemporary music."<sup>22</sup>

Commissioned by the Hannover Biennale, Piano Etude No. 1, "In C," was composed in 1999. Though this etude was the fourth etude chronologically, Chin designated it as the first etude because it is oriented around the pitch C. In an interview with Kim, Chin explains that the

<sup>&</sup>lt;sup>20</sup> Composer's Notes from http://www.boosey.com/cr/music/Unsuk-Chin-Piano-Concerto/247

<sup>&</sup>lt;sup>21</sup> Seung-Lim Noh, "Cover Story: For the New Identity of the 21<sup>st</sup> Century Piano, Unsuk Chin," *International Piano*, vol. 64 (June 2008): 20. <sup>22</sup> Noh, 21.

idea for this ordering was influenced by Liszt and Chopin's choices of writing their first etudes in C major.<sup>23</sup>

In 2000, Chin completed three works: Piano Etude No. 6, "Grains," which was commissioned by London's South Bank Center on the occasion of Pierre Boulez's 75<sup>th</sup> birthday, and was dedicated to Boulez; *Kala*, a piece for soprano and bass soloists, mixed chorus, and orchestra, premiered in Gothenburg in 2001; and *Spectres Speculaires* (2000), a piece for solo violin and live electronics.

Chin became the composer-in-residence with the Deutsches Symphonie-Orchestra in 2001, resulting in the commission of her *Violin Concerto*, which premiered in January 2002 with violinist Viviane Hagner under Kent Nagano's direction. In 2004, Chin won the world's most prestigious composition prize, the Grawemeyer Award, for her *Violin Concerto* (2001) and attracted more international recognition. This work has been described as "a synthesis of glittering orchestration, rarefied sonorities, volatility of expression, musical puzzles, and unexpected turns." <sup>24</sup>

Unsuk Chin's fascination with Indonesian Gamelan music inspired her to adopt it into three of her works: *Violin Concerto*, her previous concerto work *Piano Concerto*, and *Double Concerto* for prepared piano, percussion, and ensemble, which was written in 2002. She attempted mixing acoustic and electronic sound in *Double Concerto* (2002), and Chin explains that "I tried partly to create an illusion of a single 'Super Instrument.' In this, I was inspired by the Gamelan orchestra. But this attempt also has parallels with my work with electronics. In both media I attempt to blur the differences, the boundaries between the 'Natural' and the

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<sup>&</sup>lt;sup>23</sup> Kim, 15.

<sup>&</sup>lt;sup>24</sup> Program note from http://www.foresthill-sf.com/musicaldays-2006/P-Chin.html

'Artificial'."<sup>25</sup> Her later work from 2007, *Double Bind*, a second work for solo violin, was also written for both acoustic and electronic sound.

In 2003 Chin completed her Etude No. 5, "Toccata," as well as the revision of Etudes No. 2, 3, and 4. Reflecting elements from the toccata genre, Etude No. 5 displays brilliant rhythmic virtuosity and a spontaneous playfulness. In the same year, commissioned by the Los Angeles Opera, Chin wrote another vocal piece for a mezzo soprano and orchestra *snagS&Snarls*, using texts from Lewis Carroll's *Alice in Wonderland*, and it was premiered under director Kent Nagano in 2004; an extended version of the work took place in 2005. In 2005, she continued to work on writing a vocal piece for two sopranos (the Komsi sisters), counter-tenor, and ensemble, *Cantatrix Sopranica*, which was co-commissioned by the London Sinfonietta, the Los Angeles Philharmonic New Music Group, the St. Pölten Festival (Austria), Ensemble Intercontemporain, and Ensemble musikFabrik.

Her teacher Ligeti's preoccupation with Lewis Carroll's "Alice" stories strongly influenced Chin as well and led her to compose another major work, the opera *Alice in Wonderland* that was commissioned by the Los Angeles Opera when Kent Nagano was its director. When Nagano became the director of Munich's Bavarian State Opera, he continued with this project, giving this opera its world premiere on June 30<sup>th</sup>, 2007 at the Bavarian State Opera as the opening performance of the Munich Opera Festival. This piece parodies 18<sup>th</sup>-century Baroque operatic styles, presenting Chin's innovative musical ideas derived from her fascination with the worlds of fantasy and imagination. Her second opera, based on *Through the Looking Glass and What Alice Found There*, is scheduled to open at the same venue in 2013.

Chin has served as composer-in-residence with the Tong-Young International Music Festival in Korea since 2005. She was appointed composer-in-residence with the Seoul

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<sup>&</sup>lt;sup>25</sup> Interview. http://usasians-articles.tripod.com/unsuk-chin.html

Philharmonic Orchestra in Korea in 2006. As the artistic director of its Contemporary Music Series "Ars Nova with Unsuk Chin," she gives lectures, workshops, and master classes. All of these missions have strengthened her ties to her home country.

Rocaná, Sanskrit for "room of light," is a twenty-one minute long orchestral piece, composed in 2008 and premiered by l'Orchestre symphonique de Montréal under the baton of Kent Nagano. In 2009, Chin's great interest in different kinds of music from non-European and diverse cultures inspired her to compose  $\check{S}u$ , a concerto for the Chinese instrument *sheng* and orchestra. Chin is in the vanguard of the  $21^{\text{st}}$ -century composers who blend world music traditions with Western classical music traditions. She frequently brings together diverse musical materials (instruments, scales, rhythms) and synthesizes them into an organic whole. In an interview with David Allenby, Chin said that "In order to develop as a musician, it's necessary to face different kinds of music, whether from non-European or even popular music cultures. But that doesn't change the fact that I am a composer grown within a culture of contemporary classical music."  $^{26}$ 

Chin's most recent achievements include winning two prestigious awards: in September 2010 the composer received the 2010 Music Composition Prize of the Foundation Prince Pierre de Monaco for her 2009 ensemble work *Gougalon*, which was inspired by her childhood memories of Korean street theatre; in November 2010 Chin won a British Composer Award for her *Cello Concerto* which was premiered at the BBC Proms in 2009 with soloist Alban Gerhardt and the BBC Scottish Symphony Orchestra conducted by Ilan Volkov. On April 9<sup>th</sup>, 2011 in London, the BBC Symphony Orchestra celebrated the life and work of Unsuk Chin in a day of concerts, film, and talk. The event entitled "Total Immersion at the Barbican" included

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<sup>&</sup>lt;sup>26</sup> Interview by David Allenby, http://www.boosey.com/cr/news/Unsuk-Chin-interview-about-Cello-and-Sheng-Concertos/11843

performances of ten selected works by Chin, including the UK premieres of *Gougalon* and her concerto for *sheng* and orchestra, Šu.

Chin's central goals as a composer are to achieve communication between the audience and herself, while at the same time writing music with great depth. She expresses herself as follows: "I'm against any form of shallow music. I think the ideal type of music must satisfy two conditions: when music professionals hear it, they should find something special about it, and for the general audience, it should strike an emotional chord."<sup>27</sup>

#### 12 Piano Etudes

Unsuk Chin's *12 Piano Etudes* are the only solo piano works among her compositions. Originally planned as a set of twelve etudes, at this point only six have been completed. According to several interviews, Chin says, in retrospect, that her music career began with a piano that she received when she was two years old. Because of her family's poverty, Chin decided to become a composer even though she wanted to be a pianist. The piano is the instrument for which Chin has the most affection, but she has stated that composing music for piano is more stressful for her because she needs to consider the instrument's distinctive characteristics and its practical problems more than when she composes pieces for any other instrument.<sup>28</sup> Originally Chin intended to compose a set of twelve etudes in a relatively short period of time, following the model of European forerunners such as Chopin, Debussy, Scriabin,

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<sup>&</sup>lt;sup>27</sup> Yong-Wan Park, "Chin Unsuk: At the Forefront of Contemporary Music," *Koreana*, vol. 21, Issue 4 (Winter 2007): 67.

<sup>&</sup>lt;sup>28</sup> Kim, 2.

and Ligeti. However, more recently she has expressed that she wants to compose the rest of the etudes after her style has matured.<sup>29</sup>

Each of Chin's six piano etudes has its own subtitle: Etude No. 1 "In C," No. 2 "Sequenzen," No. 3 "Scherzo ad libitum," No. 4 "Scalen," No. 5 "Toccata," and No. 6 "Grains." Of the six etudes, No. 2 through No. 4 were written first in 1995 upon commission by the Chinese pianist Shiao-Li Ding. They were premiered by Ding in 1995, and were revised in 2003. Etude No. 1, commissioned by the Hannover Biennale, was composed in 1999 and had its first performance at Neue Music in Hannover by the Japanese pianist Hiroaki Ooi on May 25, 1999; it also was revised in 2003. Etude No. 6, "Grains" (2000), was commissioned by the Royal Festival Hall on the occasion of Pierre Boulez's 75<sup>th</sup> birthday and was dedicated to Pierre Boulez. It was premiered in 2000 at South Bank Center in London, performed by Rolf Hind. Finally, Etude No. 5 was written in 2003, also for Hiroaki Ooi. Ooi performed all six etudes, including the revised versions of the first four etudes, at the Tokyo Opera City Hall in December 16, 2003.

In Martin Wilkening' program notes on these etudes, he states that "They reflect fundamental aspects of Unsuk Chin's compositional thinking in their relationship [to each other] as well as in their individual style."<sup>30</sup> He continues, "The subtitles of the etudes refer to different moments of musical practice, sometimes [referencing] genres, like "Scherzo ad libitum" and "Toccata," sometimes [referencing] technique, such as "Sequenzen" and "Scalen." On her process in Etude No. 6, he writes, "The conception of the subtitle of the Etude No. 6 'Grains' corresponds with Chin's electro-acoustic work Xi (1998). Xi refers to the smallest source of unity

<sup>&</sup>lt;sup>29</sup> Moon Jung Kim, "An Analysis of Unsuk Chin's Piano Etudes," (D. M. A. diss., Seoul National University, 2010),

<sup>2.</sup>Martin Wilkening, Program Note from <a href="http://www.boosey.com/pages/cr/catalogue/cat\_detail.asp?site-index.">http://www.boosey.com/pages/cr/catalogue/cat\_detail.asp?site-index.</a> <u>lang=de&musicid=5422&langid=2</u> Author's translation <sup>31</sup> Ibid. Author's translation.

in things, and in both works, a small core idea, a musical 'grain,' is developed through organic processes."<sup>32</sup>

Common features and characteristics displayed in all six etudes will be summarized in the following section with a short discussion of their forms and structures, their harmonic language, and their treatment of rhythm.

### Form and Structure

The formal structures within most of Chin's piano etudes are clear and are easy to perceive by ear because the forms are structured around clear tempo changes (Table 1). These distinctly perceived formal structures indicate her strong sense of organization, and reflect her value of the Western classical tradition. Also, Chin creates variety in this set of etudes by using diverse formal structures. For example, Etude No. 2, "Sequenzen," and No. 5, "Toccata," are written in a symmetrical arch form used frequently in Bartok's works, and No. 6, "Grains," uses a theme and variations form. Most of the pieces end with brief coda sections.

In some of these etudes, Chin introduces several different motives at the beginning of a piece and develops or varies them throughout the piece. This technique, used in No. 3, "Scherzo ad libitum," and No. 6, "Grains," is generated by transformation, expansion, modification, and combination of these motives. In particular, the opening of Etude No. 3 presents two different initial motives, a four-note stepwise ascending figure and a two-note leaping figure. They are varied extensively, using extension, reduction, augmentation, or inversion. These features will be further examined in the analysis of Etude No. 3 in Chapter 3.

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<sup>&</sup>lt;sup>32</sup> Ibid. Author's translation.

Table 1: Formal division of six etudes

	Form									
	A (mm. 1-24)						nm. 25-48)			
No. 1	J = 80-88					J = 108				
	Intro	o A		В	С		B'		A'	Coda
No. 2	(1-14)	(18-29)		(30-49)	(50-60)		(61-82)		(83-91)	(92-101)
	Bridge									
	(15-17)	<b>J</b> = 132		J = 120	<b>♪</b> = 1	44	J. = 120-1	J. = 120-132		J = 132
	J = 112									
	A (1-19)	A (1-19)		Bridge (20	-27)		B (28-89)		Coda (90-97)	
No. 3	♪ = 200-208					<b>♪</b> = 208				
	A (1-96)		A' (9	97-124)		B (125-149) Coda (150-156)			(150-156)	
No. 4	♪. =184		♪. =	152-168		7			44-152	
	A (1-54)			B (55-68)		A' (68-95)		Coda (96-100)		
No. 5	<b>J</b> = 104-116									
	Theme (1-	12) V	Variat	tion I (13-5	5) V	ariati	ion II (56-11	2)	Coda (113	-128)
No. 6	♪ = 184						<b>♪</b> = 192			

## Harmonic Language

Chin's piano etudes are characterized by their harmony derived from the overtone series (see Table 2). Her technique was influenced by Ligeti's treatment of overtones in his later work such as *Hamburg Concerto* (1998-99, rev. 2003). Her elaboration of the overtone series harmony works well in these piano etudes since the piano has a naturally resonant quality created through its many strings. Among her etudes, Etude No. 1, "In C," demonstrates the most extensive use of the C overtone series for its fundamental harmonic framework. In addition, Etude No. 5, "Toccata," is composed of harmony derived from the C overtone series.

Table 2: Overtone series of C



Chin's use of harmonies derived from the overtone system in all of the etudes creates a sense of unity among them, reinforcing Chin's conception of them as a cycle. Individual etudes also share musical characteristics as Chin blends harmonies derived from the overtone series with other harmonic sources such as  $WT_0$ .<sup>33</sup> She uses  $WT_0$  throughout No. 6, "Grains." The notes from  $WT_0$  are frequently emphasized in No. 3, "Scherzo ad libitum."  $WT_0$  and the C overtone series are strongly related each other because five notes (C, D, E, F-sharp, and B-flat) out of the six notes in  $WT_0$  are the partials (7<sup>th</sup> through 11<sup>th</sup>) of the C overtone series (See Table

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 $<sup>^{\</sup>rm 33}$  WT $_{\rm 0}$  is the whole-tone collection that contains pitch-class C.

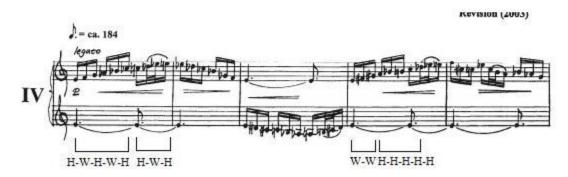
2). In addition, Chin often employs a mixture of whole-tone and chromatic scales, such as the melodic fragments in No. 3 and the prevailing scalar motions in No. 4, "Scalen" (Example 2.1). Thus Chin unifies the etudes both through their shared use of overtone series harmony, and through relationships between particular etudes and their use of other harmonic materials.

Example 2.1: Use of whole-tone and chromatic scale in Etude No. 3 and No. 4



Unsuk Chin, Etude No. 3 "Scherzo ad libitum," mm. 1-4





Unsuk Chin, Etude No. 4 "Scalen," mm. 1-5

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As Whittall notes, Chin's harmony is frequently "constructed around a controlling pitch center." The anchor pitch or sometimes pitches become a center of gravity unifying the entire piece, while other elements serve to intensify or decorate the pitch centers. Generally, Chin's vertical sonorities sound relatively consonant, while the melody lines contain many leaps, often to dissonant intervals. In many places, underlying tonal traits are revealed. For example, a harmony constructed using four lower partials of the C overtone series (C, E, G, and B-flat, the same components of a C major-minor 7th chord) is prominent in No. 1 and No. 5. A major 2nd relationship between C and B-flat forms the long pedal tones in the bass motion in No. 1, and these two pitches create the primary harmonic framework in No. 5 "Toccata." In particular, Chin frequently employs the interval of a major 2nd and the whole-tone collections derived from it. All these features will be further discussed with musical examples in Chapter 3.

In Etude No. 1, Chin's harmony is constructed from a multi-layered polyphonic texture, the use of extreme registers, and long sustained pedal points that provide a tonal axis in the sense of a pitch center for the entire piece. Large contrasts drawn from the extreme registers, intervallic expansion, and great speed contribute to creating sonorous color in her harmony. In addition, Chin draws distinctive sonorities from her aural imagination: prominent use of tone clusters in Etude No. 4, the fast repetitions of a single note in a long duration in Etude No. 6, and various moods created by a skillful manipulation of dynamic contrast throughout all etudes.

Thus, the originality of Chin's harmonic language is based on her exploration of new tone color and its relationships that come in part from the influence of non-European musical elements and from electronic music that extended her musical style in important ways before she returned to composing acoustic music.<sup>35</sup> In summary, Chin's harmonic language synthesizes diverse

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<sup>&</sup>lt;sup>34</sup> Whittall, 22.

<sup>&</sup>lt;sup>35</sup> Yoo, 87.

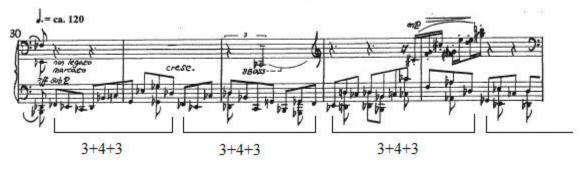
elements, producing a sense of tonal centers in creative ways, while at the same time incorporating a variety of scale materials.

## **Rhythm**

Chin's treatment of rhythm creates technical challenges for the pianist, and demonstrates influences from her teacher Ligeti as well as other composers such as Béla Bartók and Conlon Nacarrow who also were influential on Ligeti's later work. Ligeti's complex polyrhythms in his Études Pour Piano were inspired by Nancarrow's Studies for Player Piano. These treatments of polyrhythm had an enormous influence on Chin's Piano Etudes. These composers were fascinated by rhythmic virtuosity and incorporated many non-European sources into their works. For examples, Bartók often used a folk rhythmic pattern called Aksak. Aksak, Turkish for "limping" or "stumbling," is characterized by combinations of uneven beats combining units of two and three, such as 2+3 or 3+2 and their larger combinations of 2+2+2+3. This concept also includes divisions of the eight-unit figure into unequal subdivisions, such as 3+2+3 or 2+3+3. This influence can be also found in Chin's Etude No. 2, "Sequenzen," and Etude No. 3, "Scherzo ad libitum," but Chin develops this material in varied and altered patterns, distinguishing it from the more fixed treatment in Ligeti's work (Example 2.2).

<sup>&</sup>lt;sup>36</sup> Richard Steinitz, *György Ligeti: Music of the Imagination* (Boston: Northeastern University Press, 2003), 176.

Example 2.2: Chin, Etude No. 2 and No. 3, rhythmic ostinato



Etude No. 2, mm. 30-34

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Etude No. 3, mm. 30-33

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Her six etudes display rhythmic virtuosity in their use of polyrhythm, irregular and asymmetrical metric patterns, and rapid repetitions of a single note or tone clusters at extremely fast tempo. Polyrhythmic complexity between the hands in No. 3 and No. 5, cross-accented notes with *sforzando* in No. 1, and rhythmic ostinati in No. 2 are examples of Chin's rhythmic style, and represent some of the most challenging elements of her piano etudes.

In the following chapter, each etude will be discussed in terms of its form and structure, harmonic language, and rhythm, followed by practice suggestions for mastering the technical challenges in the work.

### **CHAPTER 3: AN ANALYSIS OF SIX PIANO ETUDES**

## Etude No. 1, "In C"

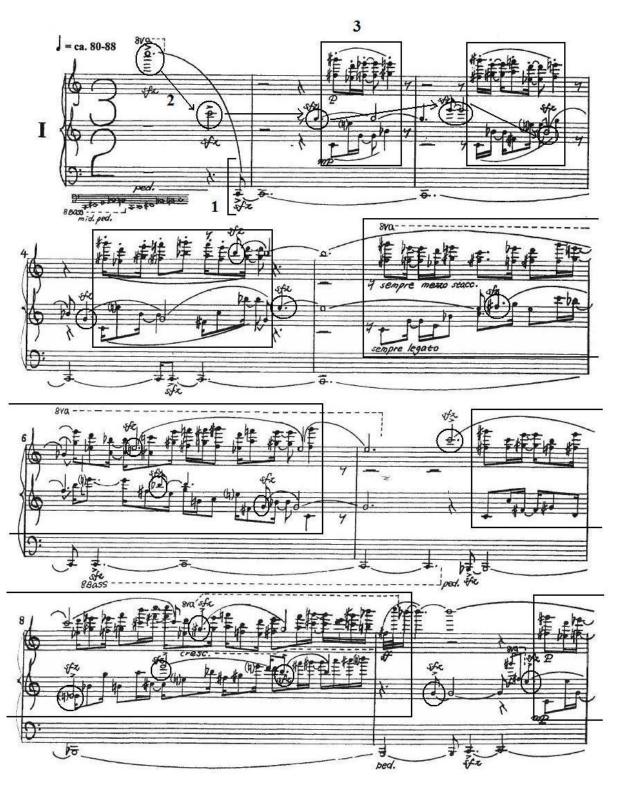
### Form and Structure

This etude can be structurally divided into two sections, A (mm. 1-25) and B (mm. 26-48), simply by the change of tempo between them. The texture reflects the influence of Gamelan music in which each voice maintains its own unique role in the polyphony.<sup>37</sup> The static layers are inclined to resolve to a center tone C and contrast with the active layers. Together, the active and static layers balance the structure.

At first glance, this etude looks vertically very complicated and its multi-layered texture has an almost orchestral quality, but if you look closely at the piece, you can find that the structure of this piece is well organized by three different stratifications (Example 3.1.1). First, the bass line is composed of long sustained pedal tones in the low register. Second, a static layer found in the top and the middle staves consists of structurally significant notes accented with sforzando. Third, a decorative homophonic background is rhythmically active both in the top and the middle staves in identical rhythms; the material in the top staff is notated with *portato* in p and the material in the middle staff is marked with a slur in mp.

<sup>&</sup>lt;sup>37</sup> Yoo, 91.

Example 3.1.1: Etude No. 1, "In C," mm. 1-9



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The pedal tones, which begin with C in the lowest staff, sound the overtones series of C. In the overall framework of the piece, their motion demonstrates a C - B-flat - C motion (Example 3.1.2).

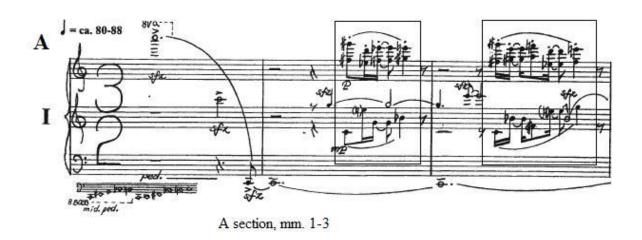
Example 3.1.2: Etude No. 1, reduction of the bass progression

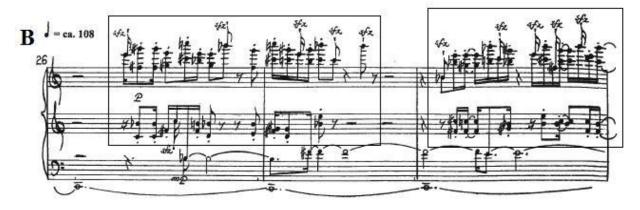


The static layer created through notes marked *sforzando* outlines the C overtone series. It begins with C in m. 1 in the top staff and soon it moves to the middle staff. The structural notes marked *sforzando* are played *legato* in the A section, but in the B section they are played *staccatissimo*. Here, they are layered against an additional single melodic line with no accent marks in the lowest stave above the pedal tone bass line.

Finally, the decorative background level consists of a homophonic chord progression. In the A section, it employs three-voice homophony created from the two-note chords with *portato* in *p* in the top staff and the single melodic line with *legato* in *mp* in the middle staff, both with identical rhythms. The B section uses four-voice chords, all marked *staccato*. This chord progression becomes more complex toward the end as it moves to quintuplets, resulting in an accelerando effect that leads to the moment of climax (Example 3.1.3).

Example 3.1.3: Comparison of the background level of A and B sections





B section, mm. 26-28

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## 1. A section

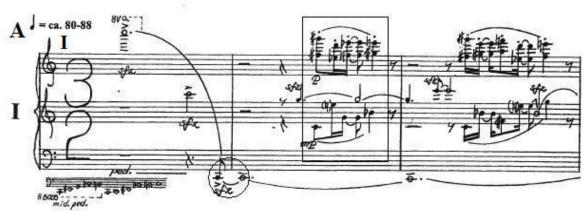
The bass line begins with a *sforzando* C, which is repeated three times over six measures. The A section can be divided into two units (I and II) by the bass motion as well as the recurrence of the initial gesture (indicated with the boxes in Example 3.1.4) in the homophonic background. Unit I (mm. 1-8) employs a simple bass motion which ends on B-flat after the long repeated note C. The bass line in Unit II (mm. 9-25) uses the pitches of the overtone series

extensively. In Unit II, the pedal tones in the bass begin to sound the upper partials of the C overtone series, except for the f in m. 22 (Example 3.1.5). This note is not a member of the C overtone series, and does not seem as functional as the other bass notes because of its voice-crossing above notes in the upper layers. Again, the pedal tones in Unit II which sound the upper partials of the overtone series, such as F-sharp (mm. 12-14 and 24-25), D (mm. 14-18), B-flat (mm. 19-20), and B-natural (mm. 21-22), restate a series of six pitches (C, D, F-sharp, G, B-flat, and B) sustained by the middle pedal from the very beginning of the piece<sup>38</sup> to the end, recreating the resonance of the overtone series.

The structural notes with *sforzando* marks that begin with  $g^2$  in the middle staff in m. 2 sustain the notes and occur mainly in two layers, the top staff and the middle staff. Mm. 1-4 display four structural notes in the order  $c^5$  -  $g^2$  -  $e^3$  - b-flat<sup>2</sup>, including the initial note C in the bass. Here the fundamental harmonic structure of the etude is established through the use of the lower partials of the C overtone series. These four notes in particular are components of a C major-minor 7th chord, demonstrating Chin's affinity for tonality. The composer's tonal tendency will be discussed further in the analysis of harmonic language of this piece.

<sup>&</sup>lt;sup>38</sup> Chin indicated a group of notes to be sustained by middle pedal at the beginning of the music.

Example 3.1.4: Etude No. 1, A section, units I and II



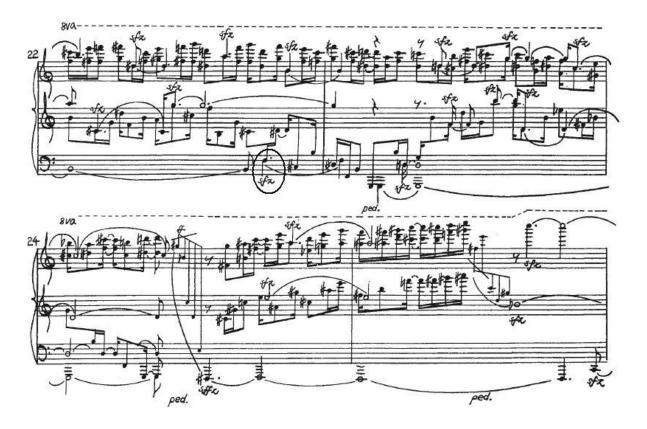
A section, unit I, mm. 1-3



A section, unit II, m. 9

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Example 3.1.5: A section, unit II, mm. 22-25



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## 2. B section

The B section (mm. 26-48) contrasts with the A section as follows: a faster tempo; *sforzando* and *staccatissimo* structural notes; an active progression of homophonic four-note chords with *piano* and *staccato*; and a newly added *legato* melodic line in *mp* in the bottom staff (Example 3.1.6). Here, the pedal tones in the bottom staff include C (mm. 26-31, 34-36, 38, and 43-48), B-flat (mm. 31-33 and 42-43), F-sharp (mm. 36-37 and 41), and B (mm. 38-41), with fewer tones played in longer note values than in the A section.

The B section consists of three units: Unit I (mm. 26-33), Unit II (m. 34 to the first half of m.43), and Unit III (from the second half of m. 43 to m. 48). These divisions are based on

different styles and dynamic contrasts. Unit I includes four subdivided segments (see underlined brackets in Example 3.1.7), each of which is two-measures long ending with a single *sforzando* note in the top register (marked with the boxes in Example 3.1.7); each segment is supported by long sustained bottom layers and longer rests in the top and middle staves (Example 3.1.7). In Unit II, the homophonic progression becomes rhythmically dense, filled with relentless *staccato* chords, with quintuplets leading towards the climactic end of this unit (m. 43) (Example 3.1.6). The middle of m. 43 is a turning point between Units II and III because of the huge dynamic change from the *ff* resulting from *accelerando* and *crescendo* to the *subito pp* that fades away towards the end. Her compositional technique of using a huge dynamic contrast between the sections or units resembles a stylistic tendency of her teacher Ligeti, a technique found in many of his piano etudes (Example 3.1.8).

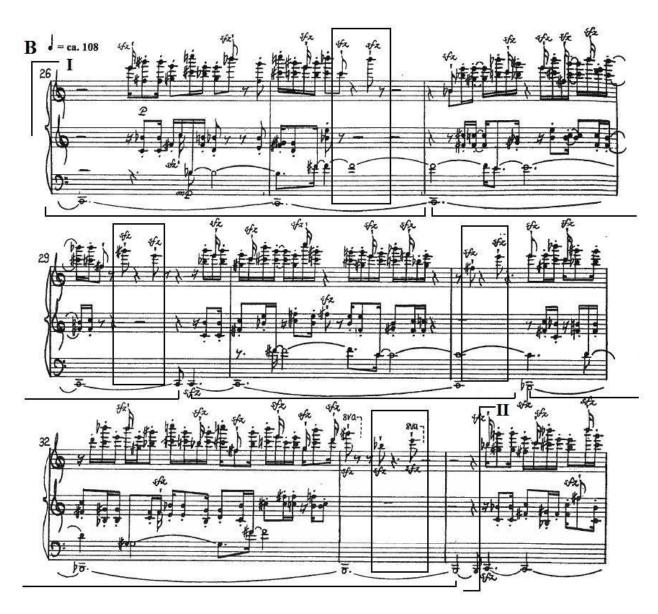
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Example 3.1.6: B section, mm. 43-44

Klavieretude No. 1 by Unsuk Chin

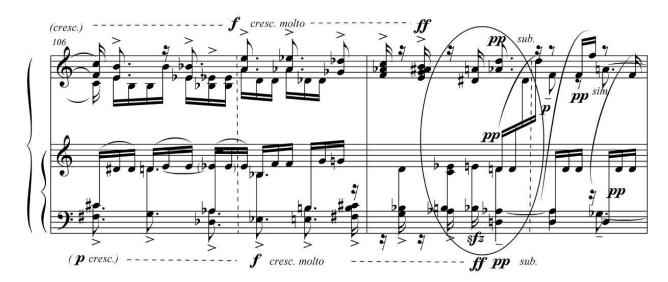
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Example 3.1.7: B section, mm. 26-34

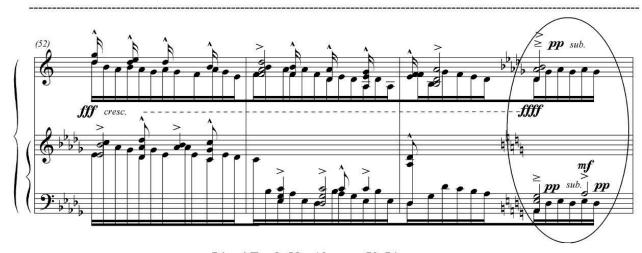


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Example 3.1.8: Ligeti's Etudes No. 6 and No. 12



Ligeti Etude No. 6, mm. 106-107



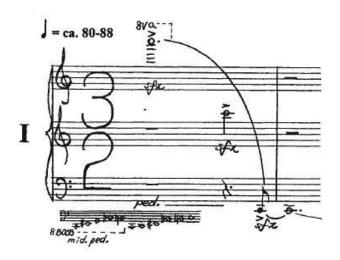
Ligeti Etude No. 12, mm. 52-54

## **Harmonic Language**

Chin's Etude No. 1 is based on the C overtone series as a basic harmonic background creating the effects of natural resonance. The way Chin explores new sound colors in this etude is organized by the treatment of the C overtone series. For example, at the beginning of the score, Chin indicates that the six pitches, C, D, F-sharp, G, B-flat, and B from the C overtone

series are to be depressed (without sounding) and allowed to resonate by depressing the *sostenuto* pedal throughout the music (Example 3.1.9).

Example 3.1.9: Etude No. 1, m.1



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In particular, the resonance of these pitches is enhanced by their appearances in the long sustained static layers, such as in the pedal tones in the bass and in the structural *sforzando* notes which appear throughout the top and middle staves. The effect of resonance is amplified by using the damper pedal as certain structural notes are played. These six pitches are heard more frequently in the static structural line which lies in a relatively lower register than the active chordal background that usually appears in the higher register. Here, it appears that Chin intentionally emphasizes notes in the lower register to obtain more natural resonance. In addition, Chin often embellishes the structural notes with *sforzando* in the later part of the A section and fills the homophonic chordal background with a constant motion to intensify the

mood and to add richness of sound (mm. 18-25). In the A section, for the most part, the structural *sforzando* notes and the homophonic chordal background did not coincide with each other rhythmically. In the B section, however, these two different materials are played simultaneously creating a thicker sound (Example 3.1.10). Hae Young Yoo remarks about this piece that, "Repeating a group of pitches selected from overtones and distributed in rhythmic patterns in which the inner details are too complex to perceive makes the surface sound both static and rich." This etude synthesizes static simplicity with ornate complexity.

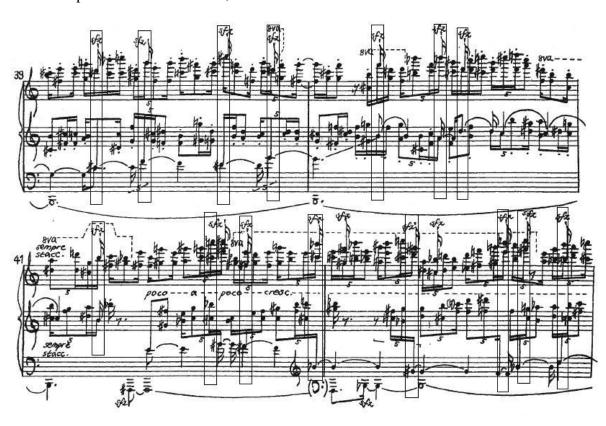
The pitch C, the fundamental and the first partial of the C overtone series, is used as the pitch center throughout the piece as seen in the initial note as well as in the closing note in the bass. As mentioned earlier, the bass motion displays C - B-flat - C in its overall structure and this supports the work's strong emphasis on the interval M2, the building block of the wholetone collection. This whole-tone reference connects this etude with her other piano etudes that use the whole-tone collections for the main harmonic background such as Etudes Nos. 2, 4, and 6. The interval M2 appears not only horizontally in the bass motion, C to B-flat, but also vertically as shown in the interval of the two closing notes, C¹ and b-flat², in the lowest staff (m. 48). The two-note chord composed of f-sharp² and g-sharp³ in the top staff (m. 2), which comes immediately after the structural *sforzando* g², is also composed of a whole-tone. The diverse vertical harmonies in the top register create active chordal progressions that are intensified as the tempo increases and the rhythms become more complex in the B section.

As mentioned earlier, in this etude we can hear strong tonal harmonic moments as Chin uses tertian harmony vertically, such as an incomplete C major-minor 7th chord (C,  $e^2$ , and b-flat<sup>2</sup>) (m. 5) and a C major triad (C<sup>1</sup>,  $e^3$ , and  $g^1$ ) (m. 7), especially at the static moments which make it easier to discern. The components of a C major-minor 7th chord appear horizontally in

33

<sup>&</sup>lt;sup>39</sup> Yoo, 97.

the middle staff in m. 2 and these are played *legato*, while the chords in the top staff play the identical rhythm using *portato*. These two materials are played dynamically in different ways: *mp* for the *legato* part and *p* for the *portato* part. The materials, which include more frequent occurrences of the upper partials of the C overtone series and are played in the higher register, receive less dynamic weight than those that consist of lower partials and are played *legato* in the relatively lower register.



Example 3.1.10: Etude No. 1, mm. 39-42

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## **Rhythm**

The rhythmic patterns that mostly stand out the most are displayed in the homophonic chord progression that moves more actively than the other materials. These patterns, composed of a mixture of eighth notes and sixteenth notes, are widely spread out in the A section and become more complicated by transforming into quintuplets towards the end. The homophonic material that lies in the top and the middle staves is synchronized at the beginning, but from m. 21 onward, these two staves contain different rhythms and the music becomes denser as the phrases are no longer separated by rests. The 3/2 meter is difficult to discern because of the scattered long *sforzando* notes that do not coincide with the strong beats. Chin intentionally dislocates the two static layers with *sforzando* notes so that they are heard independently. Moreover, the static moments between phrases make it harder for listeners to comprehend the regular beats. Due to all these features, this music exhibits no perceivable metric organization and is perceived as "ametric" despite its written meter signature.

The most striking rhythmic complexity can be found in her use of quintuplets in the later part of the B section that generates a dynamic force that drives towards the climax of this piece. It is the most technically challenging moment in this etude because the rhythmic patterns of the quintuplets do not occur simultaneously in the top and the middle staves (mm. 39-48).

#### **Technical Issues and Practice Suggestions**

Chin's etudes are rhythmically complex, full of various rhythmic explorations that demand highly advanced piano skills, and Etude No. 1 is no exception. Among its technical challenges are its broad range of registers, interactive vertical layers, frequent use of large leaps

at a rapid speed, prompt shifting of hands from one register to another, subtle dynamics, and intricate rhythms.

A performer typically confronts these tasks by practicing all the details first rather than focusing on the large-scale form. In order to help understand the overall flow of the sound structure of this music, a performer should isolate the vertical layers and practice each layer separately. After the individual layers are mastered, the total texture must be balanced and focused when the layers are practiced together. Careful attention should be directed to achieve well-balanced sound when the layers are practiced together. In order to get a firm and solid sound, the structural notes marked *sforzando* need to be well-connected and focused. The sudden dynamic shift from *ff* to *subito pp* that appears at the climax of this etude in m. 43 requires careful preparation.

Chin often indicates several different articulations simultaneously. For example, at the very beginning, while a single pedal tone sustains in the lowest register, the right hand plays portato in p holding a sforzando note with one finger at the top staff and the left hand plays legato in mp (Example 3.1.1). In addition, at the beginning of the B section more active motions are articulated with a combination of staccato and staccatissimo while two voices in the lower register sustain notes in legato (Example 3.1.5). The difference in articulation between the staccato and the staccatissimo techniques must be executed precisely. Typically, the staccato technique is divided into three types: finger staccato, wrist staccato, and arm staccato. In the B section, the chords are played staccato and the sforzando notes are played staccatissimo. In this case, I recommend using a wrist staccato for the series of chords. Using a combination of finger and arm staccato for the staccatissimo notes will enable the performer to create a sharp and emphatic sound.

Regarding the complex rhythms, I suggest practicing with the metronome in order not to lose control of the underlying pulse, which is frequently obscured by syncopations and accents off of the regular beat. The quintuplets that appear beginning in m. 39 add speed and tension towards the climax, but they need to be carefully controlled in order not to rush them.

## Etude No. 2, "Sequenzen"

The German term "sequenzen" is translated as "sequence" in English, and usually designates the repetition of a musical motive or pattern on successively higher or lower pitch levels. However, in this etude Chin's treatment of sequence is not limited to traditional harmonic or melodic sequences, but is associated with the idea of the sequence as a means for generating a wide variety of musical material.

## Form and Structure

This etude exhibits a symmetrical arch form: Introduction (mm. 1-14) – Bridge (mm. 15-17) – A (mm. 18-29) – B (mm. 30-45) – Bridge (mm. 46-49) – C (mm. 50-60) – B' (mm. 61-82) – A' (mm. 83-91) – Coda (mm. 92-101). Each section is distinguished by its tempo, register, and figuration. Unlike Etude No. 1, Etude No. 2 is written on a typical grand staff, and is generally less complicated in its vertical texture. However, the introduction consists of four voices stacked vertically, two in the top staff and the other two in the bottom staff. For the fourteen measures of the Introduction (Example 3.2.1), the highest voice sustains a single long pitch, f, while the second-highest voice progresses in a sequential motion (Example 3.2.1a). This sequence consists of an initial intervallic motive, an ascending leap from A to f (m. 2), which is transformed seven times through the addition of notes, rather than by transposition of pitch

levels. This intervallic motive is progressively ornamented, altered, and expanded in its form. It is incessantly developed, and there is no moment where a motive is strictly repeated. The subsequent bridge section employs free imitative stretto with irregular intervallic patterns between two voices (mm. 15-17).

 $\int = ca. 112$ Intro II Bridge

Example 3.2.1: Etude No. 2, "Sequenzen," Introduction and Bridge, mm. 1-17

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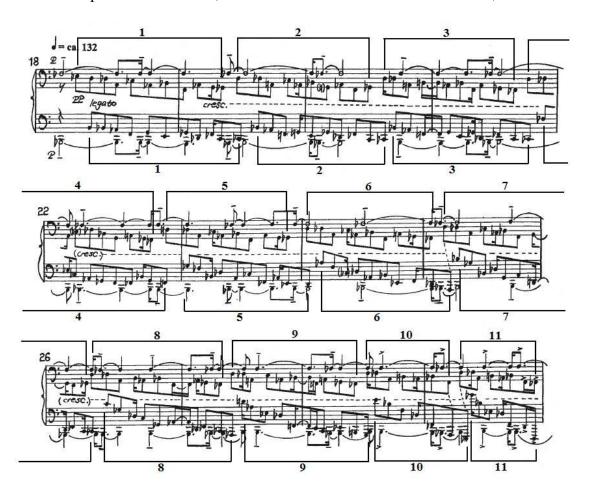
Example 3.2.1a: Separation into two layers of the top staff and sequence, mm. 1-14



## 1. A section

The most striking imitation technique is found in the A section and its parallel A' section. In the two inner voices in the A section (mm. 18-29), as foreshadowed by the preceding bridge section, the inner voice of the bottom staff is juxtaposed in *stretto* imitation and both inner voices are articulated *legato* (Example 3.2.3). This *stretto* imitation occurs in the bottom staff in B<sup>1</sup> at the M3 interval below of e-flat in the top staff (m. 18). The inner voice in the bottom staff gradually moves to a higher register than the one in the top staff that consistently begins with d. A series of ten notes is repeated eleven times in the inner voices, although the last two repetitions employ seven notes (Example 3.2.2). This sequential movement of the inner voices is very similar in the A' section except that the bottom staff stays in the low register and a long bass pedal tone is added.

Example 3.2.2: A section, stretto imitation between two inner voices, mm. 18-29



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In relation to the aspects of the outer voices in the A section, Hae Young Yoo observes in her dissertation that "The etudes, especially No. 2, reflect Chin's fascination with numerical puzzles and symmetry. This is often found in the compositions of many influential European composers such as Bartok, Messiaen, Nono, as well as the Second Viennese School."40 She points out that the outer voices of the A section exhibit gradual diminution of notes in each sequence, from 11 sixteenth notes to 9 sixteenth notes to 7 sixteenth notes to 5 sixteenth notes

<sup>&</sup>lt;sup>40</sup> Yoo, 106.

(Example 3.2.3) (mm. 18-29).<sup>41</sup> It appears that Chin is intended to use this compositional technique as a helpful tool for adding tension and density to build a gradual *crescendo* in this section. In contrast, the A' section uses a gradual augmentation of note values in the outer voices (Example 3.2.4). In contrast to the A section, this is used to release tension in the section along with a gradual *decrescendo* from *fff* to *pp*. In summary, the A and the A' sections present a polyphonic texture with an imitative sequence of the inner voices and repeated pedal tones in the outer voices, although these two sections develop the materials slightly in different ways.



Example 3.2.3: A section, mm. 18-29

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<sup>&</sup>lt;sup>41</sup> Ibid., 112.

Example 3.2.4: A' section, mm. 83-91



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## 2. B section

The B section (Example 3.2.5) is composed of three different elements: sequential ostinati in the left hand, a single tone C-flat<sup>1</sup> that occurs in a low register, and a group of figurations created from fragments of two whole-tone collections. The left hand plays fourteen repetitions of a succession of ascending and descending leaps of ten eighth-notes. The sequential

movement in the left hand is marked with a "non legato" articulation, and gradually uses more octaves and sixteenth-notes.

В .= ca. 120 sequence decresc.

Example 3.2.5: B section, 30-49

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#### 3. C section

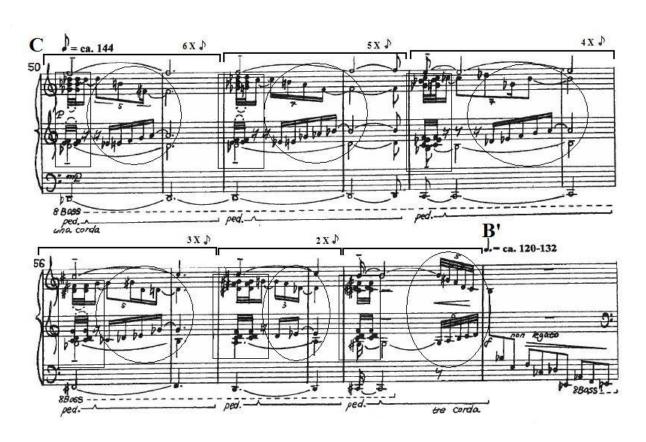
The texture of the C section is quite homophonic, contrasting strongly with the other sections' polyphony. The C section (mm. 50-60) can be divided into six small units. Each unit consists of two measures except for the last one, which is only one measure long. Each unit contains a repetition of a blocked chord (marked with a rectangular box), two melodic lines in contrary motion in two inner voices (marked with a circle), and simultaneous multiple pedal tones in the outer voices (Example 3.2.6). The repetition of these units is yet another way that Chin employs the process of sequence. The pedal tones of each unit gradually diminish their values by one eighth-note, another example exhibiting Chin's mathematical treatment in her composition.

#### 4. B' section, A' section and Coda

The subsequent B' section (mm. 61-82) exhibits a texture similar to the B section, but it is distinct from the B section because there is no specific pattern of sequential movement in the left hand, no single notes in the bass, and the figurations in the right hand are altered (Example 3.2.6). The figurations in the right hand appear visually in different forms from the one in the B section. However, when the figurations in the right hand are aligned with the movement of the left hand, their rhythms are vertically the same as a group of sixteenth-notes even if they are not clearly perceptible to the ear because of their close placement in the low registers (Example 3.2.7). Nevertheless, this gives a certain aural effect that is related to the series of sixteenth-note figurations in the right hand in the B section. In addition, the tied single note A<sup>1</sup> in the top voice can be regarded as a transposition of C-flat<sup>1</sup> in the bass of the B section. Indeed, this is a good

example that reveals Chin's affinity of puzzles and illusions, which are regarded as common characteristics in her many other works.

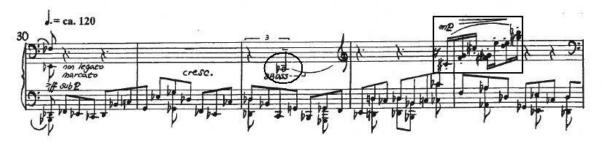
The B' section is followed by sequential ostinati of the A' section (mm. 83-91) that are less fixed in pattern. The subsequent Coda section (mm. 92-101) concludes the piece through the successive descending motions of three upper voices directed towards the pedal tone  $C^1$  in the bass concluding with a single D-flat<sup>1</sup> (Example 3.2.3).



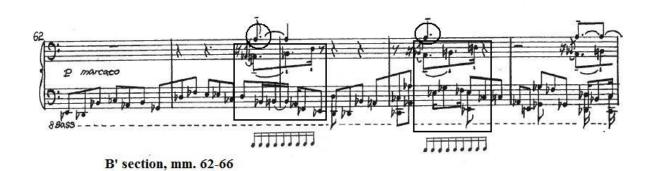
Example 3.2.6: C section, mm. 50-60

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Example 3.2.7: Comparison of B and B' sections, mm. 30-34 and mm. 62-66



B section, mm. 30-34



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## Harmonic Language

The Introduction (mm. 1-14) displays every tone of WT<sub>1</sub>. The note C-flat initiates WT<sub>1</sub> used within this section (C-flat, D-flat, E-flat, F, G, and A). While Etude No. 1 reflects Chin's preference consonance within its vertical texture, Etude No. 2 opens with a dissonant sonority, a dark and intense sound quality created by the tritone between C-flat in the bottom staff (m. 1) and f in the top staff (m. 2). This tritone is also established between two outer voices, B-flat<sup>1</sup> and f-flat derived from WT<sub>0</sub>. These pitches first appear in m. 18 at the beginning of the A section, and are repeated in reduced note values throughout the section while the inner voices display

both  $WT_0$  and  $WT_1$ . The use of the tritone is derived from the whole-tone collections which are used extensively in this piece.

After establishing  $WT_1$  as the main harmonic material of this etude in the introduction, elements of two whole-tone collections are combined to create a unique sonorous color, especially within the B section. In measures 33-45, for example, the groups of rapid figurations in the right hand combine fragments of both whole-tone collections (Example 3.2.8).

Example 3.2.8: B section, mm. 30-44

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On the other hand, in m. 83 in the A' section, with an addition of pedal tone  $C^1$  in the bottom staff, three vertical pedal tones C1, B-flat<sup>1</sup>, and e which are factors of  $WT_0$ , sound simultaneously as an incomplete C major-minor 7th chord in a diatonic harmony (Example 3.2.4). This consonant tertian harmony obtained from the addition of  $C^1$  to a tritone, B-flat<sup>1</sup> and e, intensifies the climactic fff with more stable and supportive sonority. The use of major-minor 7th sonorities, as well as the M2 interval, is also prominent in Etude No. 1, producing strong harmonic links between the two etudes.

Over the course of this etude one of the central sources of contrast is the treatment of textures, especially the contrast between the homophonic textures of the C section and the polyphonic textures dominating the other sections. The texture of the C section itself illustrates homophonic writing but it includes many tone clusters which cause a dissonant sonority. Indeed, the diverse sonorities created through the variety of harmonic materials are an important part of Chin's harmonic language.

## **Rhythm**

As inferred by its title "Sequence," the Introduction displays a sequential movement of a motive in the inner voice, and it also implies a rhythmic variation of a motive. The sequential movement of a motive is generated by transformation and expansion of its rhythms as well as intervals. In addition, this etude makes frequent use of sequential rhythmic ostinati. These rhythmic ostinati create a relatively predictable rhythm in this piece. For example, as Yoo discussed in her dissertation,<sup>42</sup> the composite rhythms of all voices in the A section (mm. 18-29) together create a certain rhythmic ostinato of a repeated group of four, three, or two eighth-notes interrupted by a group of three sixteenth-notes (Example 3.2.9).

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<sup>&</sup>lt;sup>42</sup> Yoo, 113.

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The number of eighth-note in the eighth-note group gradually changes from four to two as the dynamic changes from *pp* to *ff* (mm. 18-30). This change of rhythm narrows the distance between groups of three sixteenth-notes creating a sense of growing energy that along with the dynamic effects increases the tension of this section. Thus, Chin's treatment of rhythm is closely related to dynamic intensity as well as its density and motion. For example, in m. 44, the addition of sixteenth-notes to an existing eighth-note ostinato pattern intensifies the dynamic effect of *fff* because of the denser texture created and its forward motion (Example 3.2.5). In addition, the motion of the pedal tones in the outer voices in both the A and the A' sections, as mentioned earlier, can be explained in the same context.

#### **Technical Issues and Practice Suggestions**

As suggested in the title of the piece "Sequenzen," it is very important for the performer to project the various sequences in all their guises in this etude. This etude is divided into seven sections: Introduction-A-B-C- B'- A'-Coda according to their various tempo marks. Each section is relatively short and the performer must precisely adjust to the change of tempos. In addition, each section varies in their articulation of these sequences. In particular, the sequential progressions are indicated as *legato* in the A/ A' sections and *non legato* and *marcato* in the B/ B' sections.

There are also contrasts of sonorities between the sections. The Introduction requires a dark and intense pp dynamic because the notes occur in a low register. Because the harmonic progression here is not as explicit as in a higher register, performers should pay more attention to express both inner details of sequence and outer voices in tenuto with rich and deep tone colors. All sections except for the A' section begin p or pp. Among the sections, the Introduction and the C section maintain their dynamics at a relatively soft level while the other sections such as A, B, and B' sections intensify their sound from pp to ff. Strictly speaking, the B' section can be excluded because it begins in f in m. 61, but it reflects the trajectory of the other two sections (A and B) since m. 61 reduces its sound from f to p immediately in the same measure and functions as subito p. In contrast to other sections, the A' section diminishes its dynamic from fff, which is the climax of this piece resulting from the huge crescendo of the B' section, to ppp in the Coda. The overarching challenge of this etude is the clear expression of the different sequences throughout the piece along with the contrast of sonorities and articulations in each section.

In addition, there are many places that require highly refined techniques because of the rhythmic features of this etude, such as playing large leaps of notes and octaves at a fast tempo in the sequential ostinati of the left hand in the B and B' sections, along with the figurations of the right hand (mm. 40-45 and 78-81). In particular, the figurations in ascending motion of the right hand are marked *portato*, and the rapid speed demands intensive control of fingers (Example 3.2.10).

Example 3.2.10: B and B' sections, mm. 40-45 and mm. 78-81



B section, mm. 40-45



B' section, mm. 78-81

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In order to practice these rapid motions of notes in an efficient way, the performer should first divide the right hand figurations (consisting of fragmented tone clusters) into several units

which can be played within a 5-finger position. Second, the performer should practice each unit of notes as a blocked form of a tone cluster so as to adjust to different intervals in all voices (Example 3.2.11).

Example 3.2.11: mm. 44-45



The rhythmic features are relatively less challenging in this etude compared to Chin's other etudes because of the repetitive rhythmic ostinato patterns. The A' section, however, is quite challenging rhythmically because of its irregular patterns of sequence in two inner layers and the addition of an off-beat pedal tone in the bass; the combination of the stressed long, sustained outer layers and the successions of sequence of the inner layers create a technically challenging passage.

## Etude No. 3, "Scherzo ad libitum"

#### **Form and Structure**

This etude can be divided into two sections: A (mm. 1-19) and B (mm. 28-89), connected by an eight-measure long bridge (mm. 20-27) and followed by a Coda (mm. 90-97) that is the

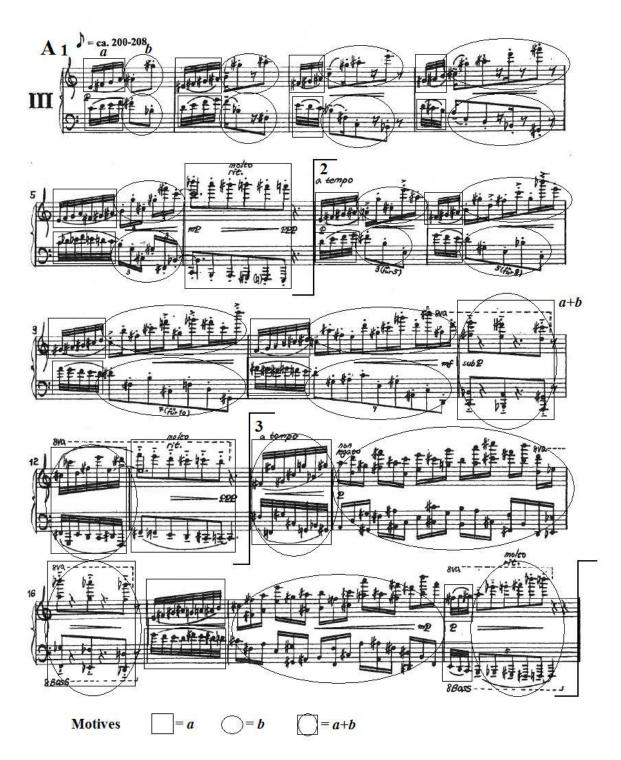
same length as the bridge. Both the bridge and the Coda use materials derived from the motives that are introduced at the very beginning of the piece. However, compared to A and B sections, they are short in length and do not further develop these ideas.

This piece unfolds through various transformations of motives. The focus in this analysis will be on the way that these motives develop within the binary form. Chin presents the motives in various guises in the A section and develops them extensively and freely in the B section.

#### 1. A section

The A section is composed of three phrases, phrase 1 (mm. 1-6), phrase 2 (mm. 7-13) and phrase 3 (mm. 14-19). These phrases are both visually and aurally easy to perceive because each ends *molto ritardando* and is followed by the next phrase that begins *a tempo*. The first measure presents two motives: a four-note figuration with a slur in a stepwise ascending motion marked as motive *a* and a staccato ascending melodic seventh marked as motive *b* (Example 3.3.1). In the subsequent measures, these two motives are subjected to a variety of procedures, including expansion, inversion, and augmentation.

Example 3.3.1: Etude No. 3 "Scherzo ad libitum," A section, mm. 1-19

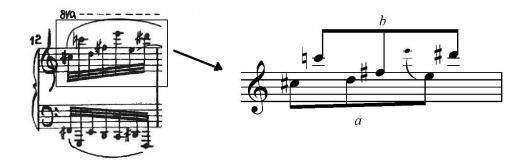


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Chin develops the motives in a distinctive way: the phrases maintain their basic shape (arch-like, upward and downward motions) while the smaller motives are developed and manipulated. In phrase 1 of the A section, both hands play motive *a* in the same direction in mm. 1-2, but in contrary motion in the next two measures (mm. 3-4). In m. 5, motive *a* is expanded to seven notes, with the first four notes in similar motion and the concluding three notes in contrary motion. In addition, Chin transforms motive *b* by adding one note to the original motive *b* in each measure: 2 (m. 1), 3 (m. 2), 4 (m. 3), 5 (m. 4), and 6 notes (m. 5). In particular, m. 5 presents a six-note variation of motive *b* combining the original motive with inverted forms of it. In m. 6, the last measure of phrase 1, the group of six descending notes consist of an augmented and retrograded form of motive *a*. Variations on this group of six notes played by both hands are used to conclude phrases 2 and 3 in the A section (mm. 13 and 19); phrase 2 uses the same downward motion (m. 13), while phrase 3 inverts the motion upwards (m. 19). Motive *b* and its varied forms in phrases 1 and 3 are played in synchronous rhythms between the hands while phrase 2 exhibits polyrhythm between the hands.

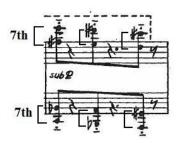
This pattern of motivic development can be found in the second phrase as well. Motive a increases its number of notes gradually from 4 to 7 with the exception of m. 8 that consists of three notes: 4 (m. 7), 3 (m. 8), 5 (m. 9), 6 (m. 10), and 7 (m. 12). An excellent example of her variation procedures can be seen in m. 12. Here, a group of seven  $32^{\text{nd}}$ -notes exhibits a transformation of motive a that can be considered as a compound melodic unit implying two different melodic voices: stepwise notes derived from motive a and leaping notes derived from motive a (Example 3.3.2).

Example 3.3.2: m. 12



In addition, motive *b* expands its length gradually: expanding to 5-8-10-12 notes in the right hand and 3-5-7-9 notes in the left hand (mm. 7-10). At this point (mm. 7-10), the rhythms of two hands do not coincide with each other. This is the first moment that Chin employs polyrhythm in this etude. One noticeable feature of phrase 2 is the stepwise descending harmonic intervals of a 7th in m. 11 added to the existing phrase (Example 3.3.3). Measure 11 presents another motivic variation that combines motives *a* and *b*. The succession of these dyads at the 7th interval is derived from the 7th leaps in motive *b*, while their stepwise motion is derived from motive *a*.

Example 3.3.3: m. 11

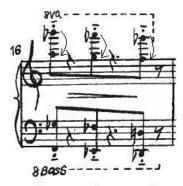


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Phrase 3 is six measures long and displays a further development of the two motives. The transformed motive a in m. 14 exhibits the same gesture as the one in m. 12 and is followed by an extended form of motive b that employs a thicker texture through the addition of octaves. Measure 16 expands the material of m. 11 into a larger intervallic pattern, the 9th. This measure illustrates an interesting feature: these three descending harmonic 9ths use the same pitches of the six descending notes of the right hand in m. 6 (b-flat<sup>3</sup>, a<sup>3</sup>, g-sharp<sup>3</sup>, g-natural<sup>3</sup>, f-sharp<sup>3</sup>, and f-natural<sup>3</sup>) (Example 3.3.4). As mentioned earlier, another noticeable feature is the ending sixnote figuration of phrase 3 that differs from the two previous phrases because of its contrary motion between the hands and its wide range (m. 19).

Example 3.3.4: Unfolding of the figurations in the top staff, m. 16



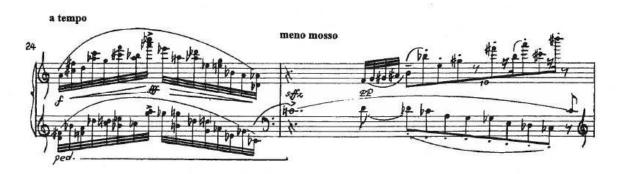
B-flat, A, A-flat, G, G-flat, F

## 2. Bridge

The bridge section is composed of four units characterized by their changes in tempo:  $meno\ mosso\ (mm.\ 20-23)-a\ tempo\ (m.\ 24)-meno\ mosso\ (m.\ 25)-a\ tempo\ (mm.\ 26-27).$  The motivic variation of the first  $meno\ mosso\ unit\ exhibits$  the same systematic arrangement as shown in phrase 2 of the A section; a gradual expansion of motives a and b. Measures 24 and 26

are reminiscent of motive a because of the  $32^{nd}$ -notes connected by slurs, but the pitch contents are derived from motive b, with extensions and added voices (Example 3.3.5). Further, a sudden sonorous contrast arises in these two measures, f to fff, which was not seen in the previous section.

Example 3.3.5: Bridge, mm. 24-25



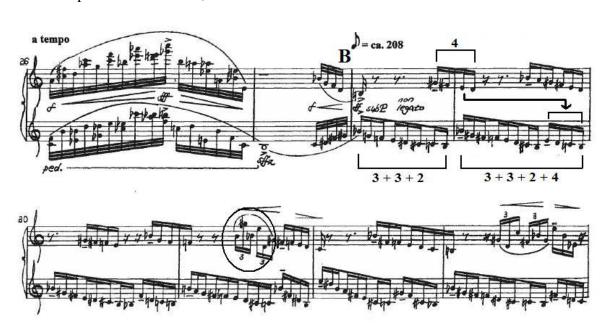
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#### 3. B section

The B section is much longer than the A section and employs motivic development extensively. The double-layered texture in the beginning of this section becomes gradually thicker towards the climax in m. 89. However, the entire B section lies within a narrow range and exhibits a dense texture except for the added notes in the bass in mm. 83-88 (Example 3.3.12). Measure 28 begins with a rhythmic ostinato in the left hand in an asymmetrical rhythmic formula 3+3+2 (Example 3.3.6). This pattern reflects the Bulgarian *aksak* rhythmic patterns that Bartok and Ligeti employed frequently in their music. Soon, a group of four stepwise descending sixteenth-notes emerges in the right hand, recalling a retrograded form of motive *a* (mm. 28-29). The left hand instantly adopts the group of four descending sixteenth-

notes to its original rhythmic formula, 3+3+2, and the rhythmic ostinato recurs in a mixture of those two groups, 3+3+2 and 4 (m. 29). The stepwise motion used by both groups of notes is derived from motive a.



Example 3.3.6: B section, mm. 28-33

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The pattern of the rhythmic ostinato of the left hand does not maintain the initial rhythmic formula. A series of descending ostinati occurs in more varied forms, juxtaposed against the melodic variations with frequent leaps in the right hand. A combination of two sixteenth-note triplets in m. 31 (circled in Example 3.3.6) is derived from the altered motive *b* in m. 5. These triplets occur often in the B section and they frequently alternate with more complex rhythms such as quintuplets, sextuplets, septuplets, octuplets, and even a decuplet (m. 41) (Example 3.3.7).

Example 3.3.7: B section, mm. 38-47



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A two-voiced texture is gradually changed to a multi-layered texture towards the end of the B section. Beginning in m. 46, another voice (marked with brackets in Example 3.3.7) is added in the left hand and by m. 65, several voices join the texture. This multi-voiced texture lies within a narrow range and produces a rich and dense harmony; the interlocking hand position is technically difficult (m. 66) (Example 3.3.8). The gradual crescendo beginning in m. 83 is boosted by additions of the accented notes in the lower register as it builds towards the climax (Example 3.3.12).

Example 3.3.8: B section, mm. 65-69



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#### 4. Coda

The Coda uses a gesture similar to that found in the bridge, but in mm. 91 and 94, the two hands are juxtaposed with different articulations: a *staccato* variant of motive b in the right hand and a *legato* variant of motive a.

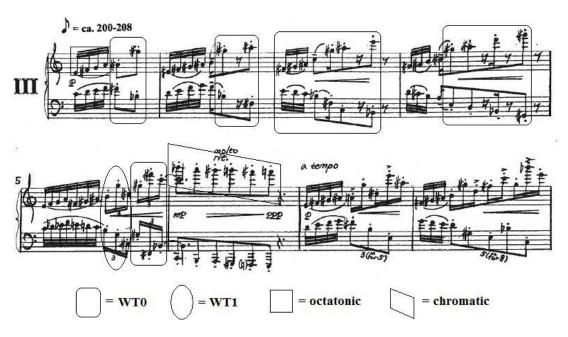
As discussed so far, Chin creates rhythmic and intervallic interplay of two main motives through transformations in various ways. The construction of motives is highly polymorphous in character, but Chin develops her ideas of motives in a systematical approach.

# Harmonic Language

Unlike the first two etudes, Etude No. 3 "Scherzo ad libitum" does not emphasize any specific tonal center. Instead, Chin creates a registral center for the piece. The music mostly stays in the upper register, reflecting a bright and playful sonority. This playful sound is also created through the combination of rhythmic devices such as rapid sweeping series of notes from motive *a* and leaping figures from motive *b*. The use of the low register appears rarely within this etude, and is used only to create a richer sonority as seen in mm. 83-88.

Chin's harmonic language in this etude synthesizes several pitch collections: the whole-tone collections, the chromatic scale, and sometimes octatonic fragments. These materials are presented as motivic fragments in the A section and they are organically developed to construct the fundamental harmony of the music. Motive a, the opening four-note ascending figure of the right hand in m. 1 displays an octatonic scalar motion and motive b, the leaping figures of mm. 1-5, are composed of the notes from the whole-tone collections (Example 3.3.9). The notes of the leaping figures in mm. 1-4 are derived from WT<sub>0</sub>. The leaping figure in m. 5 displays a combination of WT<sub>1</sub> in the first triplet and WT<sub>0</sub> in the second triplet.

Example 3.3.9: mm. 1-8

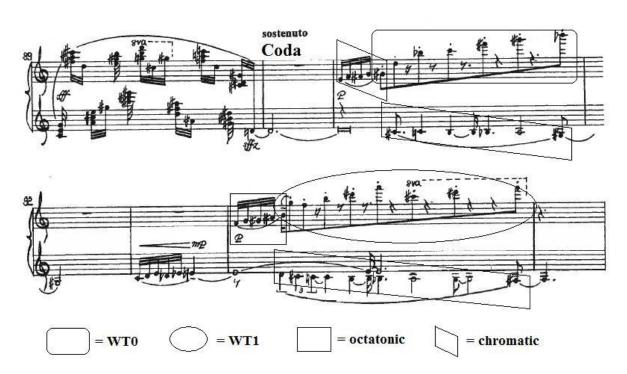


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The descending motion of the right hand in m. 6 consists of a chromatic scalar motion (Example 3.3.9). The chromatic scale is used in measures 91 and 93 in the Coda at the conclusion of the etude (Example 3.3.10). Measure 91 begins with a five-note chromatic figure

followed by a series of leaps displays  $WT_0$  juxtaposed against chromatic descending notes in the left hand. In m. 93, the initial five-note ascending figure in the right hand presents an octatonic scalar motion, and the following notes of the right hand reflect  $WT_1$  against the chromatic scalar motion in the left hand.



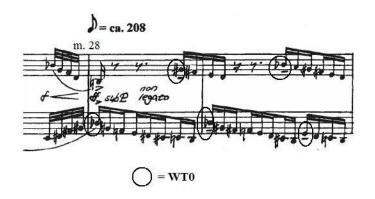
Example 3.3.10: Coda, mm. 90-94

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Despite all of this scalar variety, the etude revolves around  $WT_0$  more than the others. In the B section, the composer intentionally emphasizes pitches from  $WT_0$  with accent marks. For example, the accented b-flat<sup>1</sup>, the first note of the ostinato pattern of the left hand in m. 28, is a pitch from  $WT_0$ , and it keeps recurring as the first note of the ostinato pattern (Example 3.3.11). Most pitches from  $WT_0$  are presented with accent marks and they appear more frequently

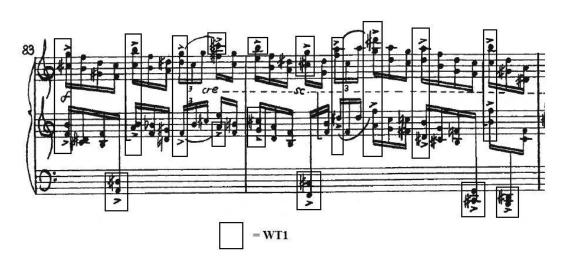
towards the climax in the B section. An exception to the tendency to accent pitches from  $WT_0$  is the succession of accented notes in mm. 83-84, which use pitches from  $WT_1$  (Example 3.3.12). There are also frequent appearances of fragments composed of the notes of the whole-tone collections in the A section as mentioned earlier.

Example 3.3.11: Emphasis on WT<sub>0</sub>, m. 28



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Example 3.3.12: B section, mm. 83-84



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Although Chin emphasizes these notes of  $WT_0$  structurally, the whole-tone sonority does not strongly predominate in the entire harmonic structure. One of the reasons is that the overall weight lies in the upper register with numerous notes moving vigorously within a small range, and these accented notes are not as clearly perceptible by ear as to reveal strong sense of sonority of  $WT_0$ . Secondly, it is because this whole-tone material is elaborately mixed with materials from the other referential collections such as octatonic and chromatic scales. Consequently, it demonstrates one of the distinctive elements of Chin's musical style, the balance between stable and diverse harmonic elements.

Chin's elaboration for achieving sonorous variety in this work is also demonstrated in certain places where she extends the range between the two hands. The harmony between the two hands mostly appears within a narrow range, but in mm. 18-19 the range is extended up to five octaves through contrary motion. The treatment of the intervallic expansion results in an immediate change of sound color at the end of the A section. Similar to the effect of the intervallic expansion, the appearance of the lower register in mm. 83-88 of the B section plays an important role to enrich the *ff* sound towards the climax of the piece.

# Rhythm

As discussed extensively in the form and structure part of this analysis, Chin develops both motive *a* and motive *b* through extension of notes, rhythmic variation, and rhythmic ostinato in asymmetrical *aksak* patterns. In addition, Chin often employs complex polyrhythm between two hands in various combinations, such as 3 against 5, 5 against 8, 7 against 10, and 9 against 12 (mm. 7-10). Since the rhythmic features are closely related to the manipulation of

motives and were explored earlier in the analysis of form and structure regarding the motivic development, these will not further discussed in this section.

### **Technical Issues and Practice Suggestions**

Because of the absence of a metric indication and the changing measure lengths in this etude, performers must keep track of a pulse throughout the piece. The bar lines do not divide the music equally; they only help the performer recognize the units of musical ideas. The introductory four measures present the two motives and their variations which are gradually elongated by adding notes and rests between them. Here, performers should be aware of all the rests and count their values very precisely. Similarly, rests in various values appear between notes in the right hand in mm. 91 and 94 of the Coda section. However, these units require not only attention to an accurate pulse, but also require the performer to express the difference of articulations between two hands, *legato* vs. *staccato*. Besides an absolute rhythmical sense, there is a moment that demands a musical elasticity through the change of the tempo. This moment occurs in the bridge section, from *meno mosso* to *a tempo* back and forth. In particular, this change of tempo in polyrhythmic passages between two hands creates a technical difficulty.

Another technical issue is a rapid shift of hand position which occurs in almost every measure in the A section. The performer must pay close attention to the two adjacent and rapid scalar passages in contrary motion that come after the leaping figurations, using careful control of arm and finger muscles to play the passage precisely.

As both hands are written in treble clef in the B section, playing the adjacent rhythmic ostinato passages between two hands often produces interlocking hand position and results in the transfer of the left hand to a higher register than the right hand. In measure 27, I advise the

performer to place the left hand over the right hand by lifting the left hand's wrist as high as possible in order not to conflict with the motion of the right hand which needs to be kept as flat as possible. The same technical approach can be applied to the subsequent occurrences of the transfer of hand positions.

When playing a succession of rhythmic ostinati in the B section, the dynamic level increases gradually over a long span of time as the texture get thicker towards the climax. It is necessary to plan to distribute a degree of sound progressively. The fact that recurring *tenuto* marks on the first note of ostinati in the earlier part of the B section change to accent marks in the later part reinforces this progression. However, these accents which occur sporadically throughout the several overlapped layers and are appointed to certain voices within a dense texture (mm. 64-88) create technical challenges, particularly when played at a very fast tempo. Playing a succession of chords with accents on only certain voices requires a skillful control of fingers. These series of chords constructed of various intervals superimpose overwhelming technical demands. The performer should first practice only the accented notes in the passage before practicing all of the parts as written. Practicing all layers separately and repeatedly will also be very helpful.

## Etude No. 4, "Scalen"

#### Form and Structure

Like Chin's other etudes, the formal structure of Etude No. 4 is clearly distinguished by tempo changes between sections. The entire piece consists of four sections: A (mm. 1-96), A' (mm. 97-124), B (mm. 125-149) and Coda (mm. 150-156). The A section, which is relatively longer than the other sections, can be subdivided into three units based on where new musical

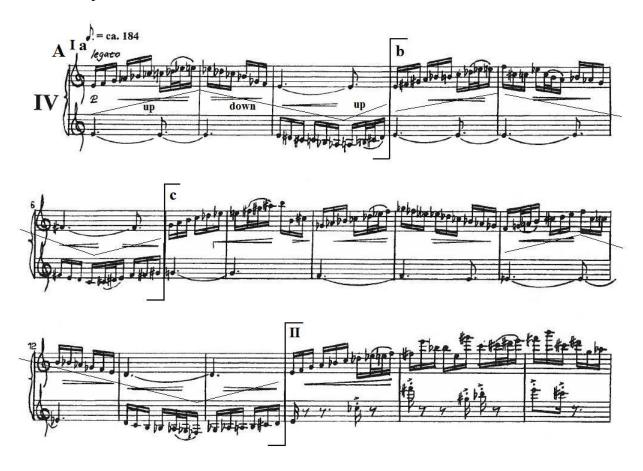
elements are introduced. The first unit of the A section is mm. 1-14 (Unit I). This fourteen-measure long unit can be divided into three phrases, a (3 m.), b (3 m.) and c (8 m.), as 3+3+8 in its compositional pattern. Unit II (mm. 15-38) that also contains three phrases is nearly twice as long as Unit I, composed of 6+6+12 measure phrases. These highly-organized units demonstrate Chin's interest in systematic development as already observed in her Etude No. 3. Unit III can either broadly include measures from 39 to 96 or be divided into two or three shorter units. In my own opinion it seems more reasonable to consider these measures (mm. 39-96) as a single unit composed of several phrases because the musical elements are drawn from the same musical idea and developed organically.

As the title implies, this etude features continuous ascending and descending scalar motion throughout the piece. The scale in this etude is mainly composed of whole tones and semitones in no fixed order, although the later passages also include leaps larger than a whole step.

#### 1. A section

The first phrase of Unit I begins with a common tone between two hands. The right hand plays scale which moves away from the pitch e<sup>1</sup> and returns to the initial tone, while the left hand sustains the single note e<sup>1</sup>. The left hand soon takes over the right hand's scalar motion in a similar gesture as opposed to the static single-note line of the right hand. The overall contour of this phrase can be described as upward-downward-upward, a wave pattern (Example 3.4.1).

Example 3.4.1: Etude No.4, "Scalen," mm. 1-17



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The gesture in this phrase, particularly a second ascending motion preceded by a descent in its wave pattern, can be used to help determine the divisions of the following phrases. For example, a phrase initiating Unit III begins between mm. 37 and 39 (Example 3.4.2), but it could be difficult to determine its exact starting point. The F-sharp<sup>1</sup> with *sforzando* in m. 37 that comes after a short pause could be easily considered as the first note of the next phrase. However, when viewed in the light of the wave-like gestures of the previous two phrases a (mm. 15-20) and b (mm. 21-26) of Unit II, the *sforzando* F-sharp<sup>1</sup> should be considered as the same turning point as the accented D-flat in m. 20 and the accented C in m. 26 between the descending

and ascending motions (Example 3.4.2). Therefore, it is more reasonable to determine measure 39 as the beginning of the new phrase. However, this wave-like gesture that determines phrase divisions in Units I and II is somewhat different from the process in Unit III, which will be further examined later.

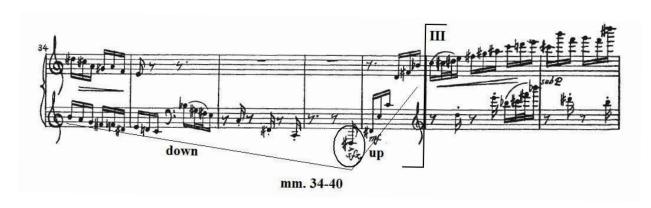
Despite the texture that exhibits contrast between a static line and an active line with scalar passages, <sup>43</sup> Unit I sounds as a continuous scalar motion between two hands. Here, the static line with sustained notes also creates another scalar motion over a longer period, from e<sup>1</sup> to f-sharp<sup>1</sup>, g-natural<sup>1</sup>, f<sup>1</sup>, e<sup>1</sup>, e-flat<sup>1</sup>, d<sup>1</sup>, then back to e<sup>1</sup> (see circled notes in Example 3.4.1).

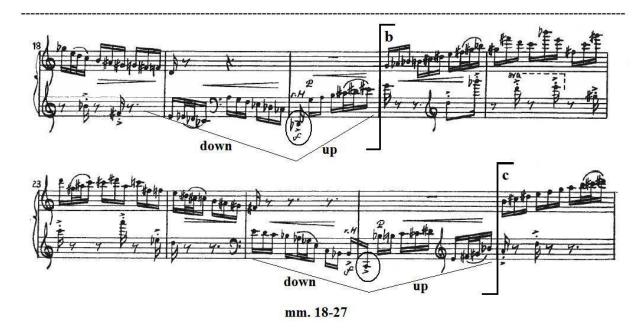
The scale presented in the first two units is composed of two rhythmic patterns: 1) a group of 3 sixteenth notes, 1+1+1; and 2) a group of four notes with a combination of 1 sixteenth note, 2 thirty-second notes, and 1 sixteenth note in order, in 1+2+1 pattern. Both rhythmic patterns are subdivisions of a dotted eighth note which is a basic beat note of the piece. From Unit II through the rest of the piece, Chin employs passages containing non-scale elements, such as larger leaps, more extensively. In addition, she introduces a new element, a series of short accented *staccato* notes in leaps in the left hand (mm. 15-18). In Unit III (mm. 39-97), more rhythmic figures are presented such as 2 sixteenth notes, 4 thirty-second notes, 2 thirty-second notes, and at one point, a use of a sixteenth-note triplet in m. 51 (Example 3.4.3).

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<sup>&</sup>lt;sup>43</sup> Chang, 15.

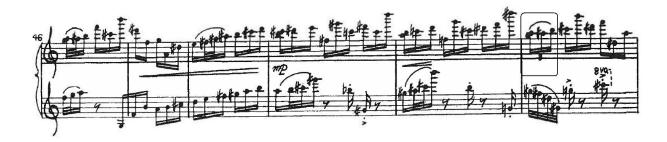
Example 3.4.2: mm. 34-40 and mm. 18-27





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Example 3.4.3: A section, unit III, mm. 46-51



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A cluster-like sound effect is created through the frequent use of groups of two adjacent thirty-second notes at a fast speed. This effect first appears in m. 59 (Example 3.4.4), but is anticipated by similar gestures in sixteenth notes in mm. 54 and 56. It requires the "Slide" technique used in Jazz, in which a performer slides the same finger from a black note cluster to a white note cluster. Unit III demonstrates organic development of the simple introductory scalar motion with newly added materials and elements in addition to extensive use of larger leaps.

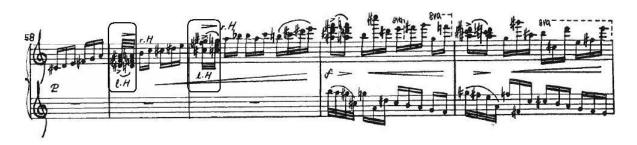
As briefly mentioned earlier, the phrases in Unit III are determined by a somewhat different gesture from the ones in previous units. Frequent appearances of passages that contain non-scale elements interrupt the natural flow of scalar melodic lines, in particular, a succession of ascending and descending leaps. As seen in mm. 69-97, the *sforzando* notes which result from a descending leap to a low register play an important role in determining division of phrases. The *sforzando* note in m. 69 appears as the first note of the measure, but other *sforzando* notes that are in mm. 74, 78, 83, and 97 are presented as the final notes of their respective phrases (see circled notes in Example 3.4.5). The note C-sharp on the first beat in m. 69 creates an elision, closing the preceding phrase while opening the next. The other notes with

<sup>&</sup>lt;sup>44</sup> Kim. 110.

sforzando function as a closing note of phrases, except for the note A<sup>1</sup> in m. 97. The note A<sup>1</sup> in m. 97 can be considered as the initial note of the following A' section because it comes after a fermata on the rest in m. 97, and it is quickly merged into the following scalar line which begins at an octave higher A.

In general, the music of the A section demonstrates a gradual development of its texture. In Unit I, both hands create a sound of one single continuous scalar melodic line. Starting in Unit II, they play two separate musical layers, with the left hand introducing the new gesture of a series of accented *staccato* notes in leaps. In Unit III, more variations emerge in both hands, employing original elements and new materials. For example, the rhythmic pattern 1+2+1, which was originally composed of all stepwise motion in the beginning, is now presented with mostly (and sometimes only) leaps in the left hand (Example 3.4.6). In addition, the melodic cells of the right hand appear in various forms, demonstrating more use of leaps than stepwise motion. Finally, the most prominent feature of this unit is a group of two three-note chromatic clusters in slide technique which was first introduced in one hand (m. 59) but later in both hands (m. 100).

Example 3.4.4: A section, unit III, mm. 58-62



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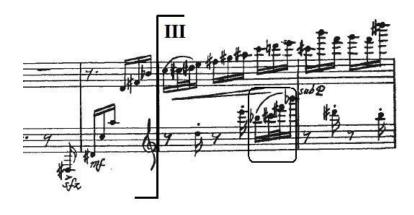
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Example 3.4.5: mm. 69-98



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Example 3.4.6: A section, unit III, mm. 39-40



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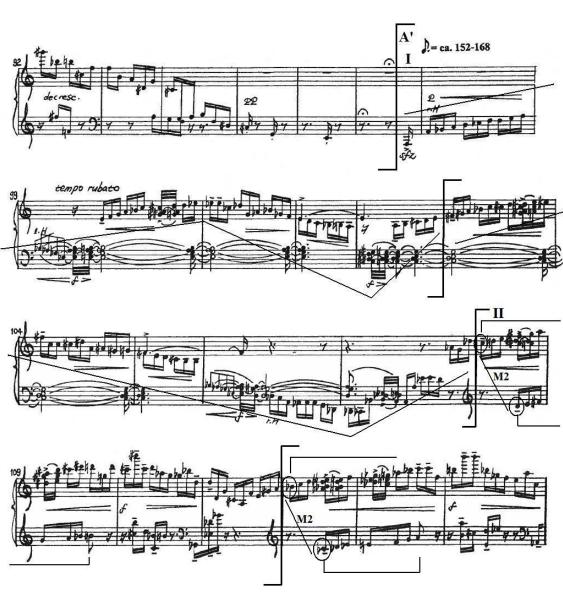
# 2. A' section

The A' section (mm. 97-124) is a concise version of the A section, abbreviating the musical materials presented in the A section. The musical elements extracted from the A section are combined and varied in the course of constructing the A' section. This section can also be divided into two units because of their different treatments of musical elements.

Unit I, from the note A<sup>1</sup> in m. 97 to m. 107, demonstrates a single scalar melodic line created by both hands, echoing the beginning of this etude. In the meantime, the left hand in mm. 99, 102, and 106 combines the left hand sustained note passage from Unit I of the A section and the slide of two chromatic clusters in Unit III of the A section. This feature is also combined with the newly added element of grace notes (m. 99 and 106). One noticeable feature throughout mm. 97-107 is that this unit uses the same melodic contours used in the phrases of first two units of the A section, a wave pattern with upward-downward-upward motions (Example 3.4.7).

Unit II (mm. 108-124) exhibits a sequential progression of two four-measure phrases, each four-measure phrase sequenced down a M2 (mm. 108 and 112), followed by a third

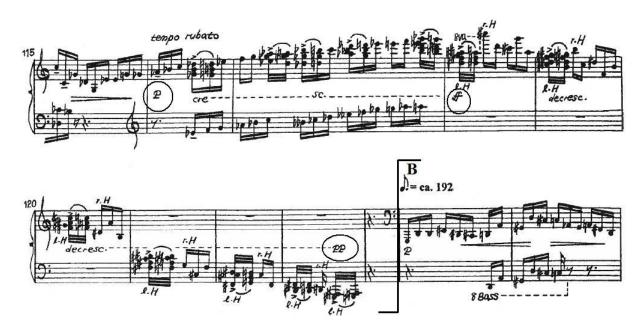
extended eight-measure phrase (mm. 116-123). Each phrase begins with a *stretto* imitation between the hands but is not strict in its pattern (Example 3.4.7). Like the dynamic feature of the conclusion of the A section (mm. 84-96), the A' section increases the dynamic level from p to ff and then diminishes gradually to pp (Example 3.4.8).



Example 3.4.7: A' section, mm. 97-114

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Example 3.4.8: Dynamic feature of the conclusion of A' section



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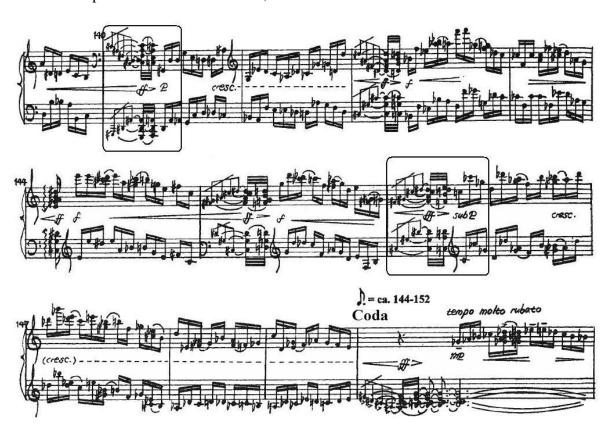
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#### 3. B section and Coda

With the fastest tempo of this piece, the B section is characterized by active and simultaneous melodic lines in both hands. The melodic line is no longer composed of stepwise motion and is often interrupted by rolled chords or chromatic clusters with grace notes which are played *forte*, and are immediately followed by *subito p* (Example 3.4.9).

Chin's use of rolled chords and sliding multi-layered chromatic clusters with grace notes builds the tension towards the climax. The most intense moment occurs in m. 146, from fff to subito p, requiring highly concentrated attention to create this huge contrast. The subsequent Coda section exhibits a texture similar to the beginning of the previous A' section and concludes the piece with a gradual decresendo from fff to pp with chromatic clusters in the left hand (m. 156).

As already discussed, Chin's Etude No. 4 shows her affinity for compositional organization. Sections are clearly delineated through their distinctive tempos and sometimes by rests between sections. The subdivided units are distinguished by their organic development and phrase patterns. There are continuous repetitions of the primary compositional material, a scale, but the material is varied and extended. All these features are integrated into one whole piece to provide variety within a framework of unity.



Example 3.4.9: End of B section, mm. 139-146

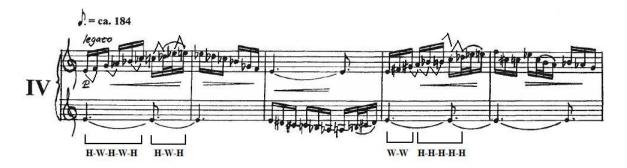
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# Harmonic Language

The tonal construction of Etude No. 4 is typical of Chin's harmonic language which is based on the combination of whole-tone and chromatic scales in melodic lines, emphasizing a tonal center. The music is clearly centered on the pitch E as reflected in the first and the last measures, and uses A as a secondary tone. The music begins with a single tone e<sup>1</sup> and ends with a dyad, E<sup>1</sup> on top and A<sup>2</sup> on bottom. The pitch E also appears as the ending note of the A section (m. 96). The pitch A<sup>1</sup> in the lowest voice is used as a starting note of the A' section which is preceded by long fermata of rests (m. 97). This creates a sense of modulation, from tonic to subdominant, if viewed from the perspective of common practice tonality.

The scalar passages consist of a mixture of half steps and whole steps in a free style. Chin combines chromatic and whole-tone scales in various ways to create her own unique melodic lines. For example, when organized in a certain order such as H-W-H-W-H, an octatonic passage is created, as seen in m. 1 (Example 3.4.10). Another way Chin creates a scalar motion is that one scale is succeeded by the other scale. This can be seen in m. 4 (Example 3.4.10), where a three-note whole-tone passage (e¹, f-sharp¹ and g-sharp¹) is followed by a chromatic scalar motion (g-sharp¹, a¹, b-flat¹, b-natural¹, c², and d-flat²). However, in most scalar passages, Chin combines both scales freely to create the melodic lines of the piece (See Example 3-4.1: mm. 1-5). In addition, the melodic lines frequently employ leaps that are unrelated to the primary scale(s) of the passage.

Example 3.4.10: Etude No. 4, composition of scalar motions, mm. 1-5



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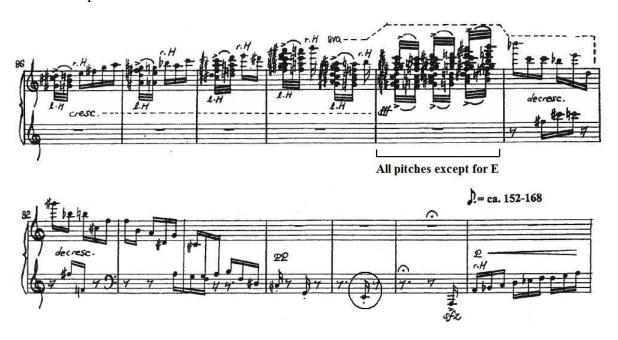
Chin consistently emphasizes a whole-tone harmony by using M2 intervals for the vertical sonorities. A series of leaping figures of the left hand which are introduced from Unit II of the A section (mm. 15-38) present a certain vertical harmonic relationship, a M2 and an octave between two hands (Example 3.4.11). The prominent use of vertical M2 intervals reveals Chin's tendency towards whole-tone harmony in this piece.

This piece expands from a single-layered texture to a double-layered one with frequent interruptions by multi-voiced chromatic clusters in its melodic line. These chromatic clusters play an important role in providing timbral variations in its sonority. This material is fully used at the location of climax in m. 90: a succession of six 32<sup>nd</sup>-note clusters (using the slide technique already established) use all pitches except for the work's tonal center, E (Example 3.4.12). Consequently, the pitch E which was omitted in m. 90 appears in m. 96 (circled note in Example 3.4.12) at the conclusion of the A section as a center-tone, as well as at the end of the piece.

Example 3.4.11: A section, unit II, vertical harmonic relationship, mm. 15-22



Example 3.4.12: mm. 90 and 96

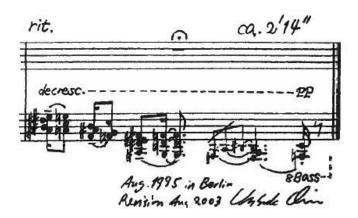


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# Rhythm

This etude's rhythmic framework is formed by the use of a group of three sixteenth notes (1+1+1) as a basic rhythmic pulse. This rhythmic formula is often interrupted by a replacement of the second sixteenth note with two thirty-second notes in the scalar passage (1+2+1). In addition, she provides rhythmic variety through using other rhythmic patterns, such as groups of two sixteenth notes, four thirty-second notes, two thirty-second notes, and two thirty-second notes decorated by grace notes or rolled chords. In particular, Chin's use of rolled chords and decorative grace notes in the melodic passage results in a slight gap within the regular musical flow and demands technical skill. The newly added rhythmic devices which appear at the ending (m. 156) are groups of two notes with two different combinations of one sixteenth note and one eighth note, and a combination of a dotted quarter note and a sixteenth note. The series of four groups of two notes with gradually longer values provides a *ritardando* effect (Example 3.4.13).

Example 3.4.13: m. 156



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# **Technical Issues and Practice suggestions**

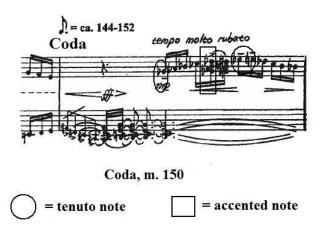
Fingering is the most important issue in this etude, as traditional scale fingering is difficult to apply to this etude and proper fingering will help pianists to execute the accents and achieve secure consistency in the scalar motions. In addition, playing a succession of various kinds of melodic intervals in a passage at a fast tempo demands accuracy and agile shifting of positions. The performer should craft a fingering pattern that allows for comfort and agility in the rapid scale patterns, but also enables them to play the unrelated notes and clusters that frequently interrupt the scale.

It is important to pay attention to details of subtle differences between articulation, such as accented notes and *tenuto* notes used within a single measure or in adjacent measures in the A' section and Coda (Example 3.4.14). There are two intriguing moments where the composer indicates specific articulations that are counterintuitive: a passage with a succession of unison accented notes in m. 131 and a passage that requires *non crescendo* in m. 134 (Example 3.4.15). Because of the natural tendency to apply gradual dynamic changes to ascending and descending scalar motions, reinforced by Chin's direction in other passages, great attention and concentration are needed to avoid using any *crescendo* at the moment marked *non crescendo* in m. 134.

Example 3.4.14: mm. 99-103 in A' section and m. 150 in Coda



A' section, mm. 99-103



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Example 3.4.15: B section, mm. 131-134



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Agility is demanded when performing sudden changes in dynamics. Chin often demands sudden shifts in dynamics, such as f(ff) - p and most dramatically in m. 146, an extreme contrast of  $fff - subito\ p$  within a rapid passage. Performers should practice these passages with special attention. In addition, from Unit II in the A section onwards, figures of the left hand contain large leaps that often require crossing fingers demand the performer's agile finger dexterity. Playing scalar lines with frequent changes in rhythmic patterns is also very demanding. In particular, when the melodic line is interrupted by "sliding" chromatic clusters, sometimes also with rolled chords and chords with grace notes, the musical flow is apt to be interrupted. Therefore, the performer must develop the ability to make the entire melodic line progress smoothly to minimize the gap between this added material and the original scale motion.

## Etude No. 5, "Toccata"

# Form and Structure

Unlike Chin's other piano etudes, Etude No. 5, "Toccata," is played at one consistent tempo indicated at the very beginning of the piece. Therefore, the formal structure will be determined in a different way from the other etudes whose sections were divided by their tempo changes. Changes in texture, articulation and harmony play an important role in creating the form of this piece. The form can be divided into four sections by the change of harmony: A (mm. 1-54) which is based on a C major-minor 7th chord (C, E, G, and B-flat); B (mm. 55-68) based on a D major-minor 7th chord (D, F-sharp, A, and C); A' (mm. 68-95) which returns to a C major-minor 7th chord; and a brief Coda (mm. 96-100). Each section can be subdivided into smaller units or phrases based on the change of articulation, mainly in the left hand. The A section consists of three units, and each unit contains two phrases: Unit I (mm. 1-16) with two

phrases, a in 9 measures and b in 7 measures long respectively; Unit II (mm. 17-34) with two phrases (a and b), 10 measures and 8 measures long; and Unit III (mm. 35-54) with two phrases (a and b), 15 and 5 measures long. The B section is composed of two phrases, a (mm. 55-61) and b (m. 62 through the first quarter-note of m. 68). The A' section begins on the second quarter-note of m. 68 and consists of two phrases with a link between the phrases: mm. 68-76, link (mm. 77-81), and mm. 82-95. The Coda section follows in mm. 96-100.

#### 1. A section

Phrase a of Unit I (mm. 1-9) begins with a single melodic line which contains only four pitches (C, E, G and B-flat) from a C major-minor 7th chord throughout, except for measure 9, which functions as a transitional measure and contains the notes d² and f-sharp² (Example 3.5.1). This phrase a appears to be a single melodic line but contains two layers: a group of accented notes played in *mp* and *staccato* and the remaining notes played in *p*. Several groups of short passages unfold a C major-minor 7th chord in one middle register with frequent pauses between them (mm. 1-8). The pitch b-flat² remains in the highest note and the pitch c² remains in the lowest note as outer voices for the phrase. These two pitches occurring at the beginning of the piece become the main pitch relationship within the entire etude. These two notes were also the primary pitch components of Etude No. 1. After three short accented notes in the transitional measure 9, phrase b (mm. 10-16) presents a continuous melodic line along with a layer of accented notes and occasional dyads in a higher register than b-flat², sometimes reached by larger leaps. Here, the accented notes include pitches beyond C, E, G and B-flat, and this phrase demonstrates all twelve tones during the span of seven measures.

Unit II (mm. 17-34) begins with the two central pitches C and B-flat, and can be divided into two phrases according to the texture of the left hand: a (mm. 17-26) and b (mm. 27-34) (Example 3.5.2). The newly added melodic line in *legato* and *p* in the left hand in m. 17 continues its single layer up to measure 26, with another layer of melody emerging in m. 27. Each of these layers is independent and played at an *mp* dynamic, with few simultaneous notes between them. The right hand melody exhibits a wide register, and as the line develops, it leads into notes in a higher register. Beginning in m. 17, a polyrhythmic idea is introduced into the texture. In each measure, the left-hand performs a quintuplet eighth-note figure against a group of 12 sixteenth notes in the right hand.

Measure 35 establishes a C major-minor 7th harmony on the downbeat and marks the beginning of Unit III (Example 3.5.3). In phrase a (mm. 35-49) of this unit, the left hand employs a series of short accented sixteenth-note chords in *mf*, as opposed to the right hand, which employs the same continuous gestures of two layers from the beginning of the piece to this point. In m. 49, a sudden *sfffz* chord which shifts to a high register marks a transition into the next phrase b (Example 3.5.4). Phrase b (mm. 50-54) uses different articulations in both hands: accented chords in *mp* of the left hand and the right hand figures with the accented notes in *p* with no *staccato* alternating with *pp* notes. In particular, measure 54 presents a new transitional rhythmic figure, a series of *legato* triplets at *subito ff*, a sudden dynamic contrast which transitions to the next section (Example 3.5.5).

Example 3.5.1: Etude No. 5, "Toccata," mm. 1-16



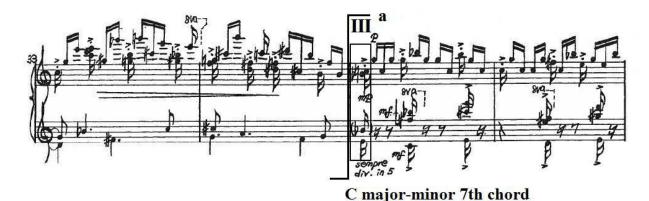
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Example 3.5.2: A section, unit II, mm. 17-28



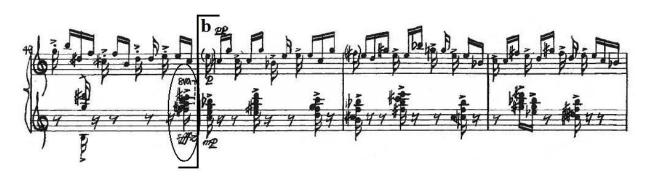
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Example 3.5.3: A section, unit III, mm. 35-36



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Example 3.5.4: A section, unit III, mm. 49-52



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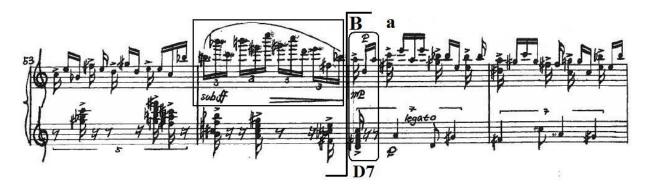
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## 2. B section

Measure 55 marks the beginning of the B section with a change of the harmony to a D major-minor 7th chord (Example 3.5.5). As well as the change of the harmony to a D major-minor 7th chord on the downbeat of m. 55, this B section features the change of the rhythm of the left hand from the group of 5 eighth notes in the previous section to the group of 7 eighth notes, against 12 sixteenth notes in the right hand. The accented notes in the right hand melody

in this section are played without *staccato*, continuing the pattern of the last phrase of the previous section in m. 50 through m. 54. The triplet figure is also used as a transitional material in the left hand in m. 61, creating a distinction between phrases a (mm. 55-61) and b (mm. 62-68) (Example 3.5.6). Phrase a of the B section (mm. 55-61) displays a single melodic line in the left hand, but phrase b (mm. 62-68) uses a two-voiced homophonic texture. Dyads frequently appear as accented notes in the right hand in both phrases a and b. A group of triplets in the left hand in m. 68 establishes a transition to the next A' section by returning to a C major-minor 7th harmony (Example 3.5.7).

Example 3.5.5: Transition to B section, mm. 53-56



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Example 3.5.6: B section, transition from phrase a to phrase b, mm. 61-64



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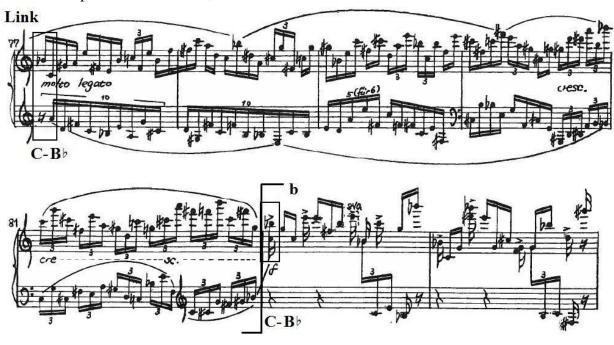
## 3. A' section and Coda

The A' section is composed of three units: phrase a (mm. 68-76), a link (mm. 77-81), and a concluding phrase b (mm. 82-95). The A' section resembles the A section in its underlying harmony. The two important pitches C and B-flat are presented at the beginning of both phrases in mm. 68 and 82 (Examples 3.5.7 and 3.5.8), at the link in m. 77 (Example 3.5.8), and at the climax of the piece in m. 94 (Example 3.5.9). The most noticeable feature of this section is that with the exception of the brief link, there is no longer polyrhythm between the hands. The link uses the same polyrhythmic materials as the A section, 10 sixteenth notes (5 eighth notes) against 12 sixteenth notes (mm. 77-81). In addition, throughout the A' section the triplets are actively used in both hands, not as transitional materials, but as developed rhythmic variations. Phrase b which begins in m. 82 presents accented notes more sporadically in various registers, and increasingly accents the triplet figures as the music moves toward the climax. The subsequent Coda section (mm. 96-100) concludes the piece with a rapid passage with a gradual *decrescendo* after the climax (Example 3.5.9).

Example 3.5.7: A' section, mm. 68-73

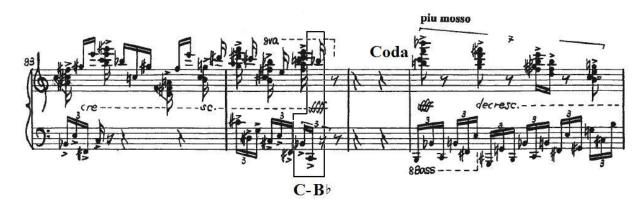


Example 3.5.8: A' section, mm. 77-83



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Example 3.5.9: mm. 93-96



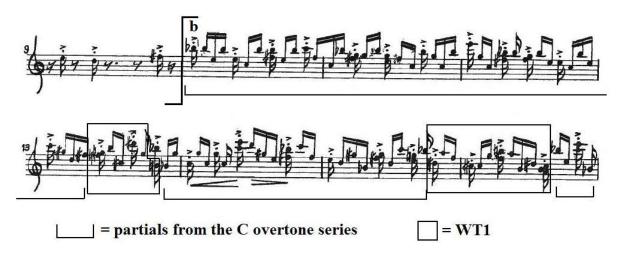
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# **Harmonic Language**

As discussed earlier, the composer emphasizes two pitch centers, C and B-flat, which are the outer voices of a C major-minor 7th chord and frequently used at the formal division of this piece. In addition to the components of a C major-minor 7th chord (C, E, G and B-flat) which are also the lower partials of the C overtone series, Chin employs harmony derived from the upper partials of the C overtone series extensively in this etude. The piece begins with a phrase that only consists of four pitches, C, E, G and B-flat, until measure 9, which adds the notes  $e^2$ ,  $d^2$  and f-sharp<sup>2</sup> derived from the C overtone series. The following phrase (mm. 10-16) uses all twelve tones, emphasizing the partials of the C overtone series and combining it with fragments of WT<sub>1</sub> (Example 3.5.10).

Example 3.5.10: mm. 9-16



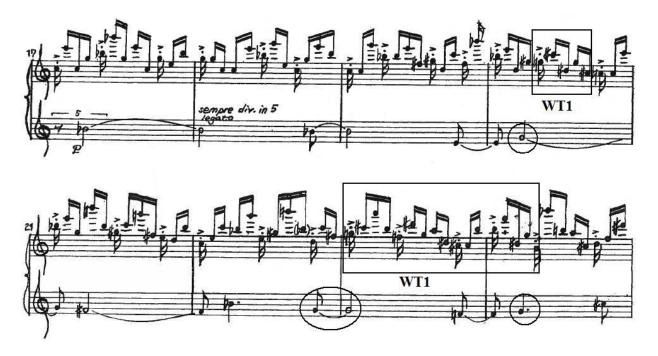
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Unit II of the A section frequently combines two pitch collections. The pitch G (circled in Example 3.5.11) is a common tone between the C overtone series and  $WT_1$ . For example, in measures 20 and 23, at the same time a note  $g^1$  appears in the melody of the left hand, fragments of  $WT_1$  occur in the right hand (Example 3.5.11).

As her only etude whose form is divided through the change of underlying harmony, Etude No. 5 reveals Chin's tonal sense of harmony. The harmonic progression in this piece moves from the C major-minor 7th chord in the A section to the subsidiary harmony, a D major-minor 7th chord of the B section, and returns to the original C major-minor 7th harmony in the A' section. In particular, the D major-minor 7th chord of the B section is created with the notes from the C overtone series and the pitch A derived from WT<sub>1</sub>.

Example 3.5.11: mm. 17-24



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Thus, the piece's sonorous color is created by means of a core interval of the M2 created by the notes, C and B-flat, a chord transposition from a C major-minor 7th chord to a D major-minor 7th chord, and the additional harmonization, WT<sub>1</sub>. In addition, the change of articulation and texture provides variety in this piece. For example, in the A section, a layer of accented and *staccato* notes within a single melodic line at the beginning becomes thicker in texture through an addition of melodic layers in *legato* and other layers of accented notes in the left hand. These accented notes in the upper part are played in *staccato* in the A section, but their articulation is changed to *non-staccato* in the B section. Phrase b of the A section (mm. 50-54) foreshadows the change of articulation to *non-staccato* in the B section. In particular, the *legato* playing of the group of triplets in *sub ff* in m. 54 creates an enormous contrast. These triplets are reflected as active materials in the A' section and they appear in various ways in the two phrases and the

link between them. In phrase b of the A' section (mm. 82-95) towards the climax, the textural change to more agitated and dispersed harmony with many leaps leads to the pitch center of the piece, C and B-flat in m. 94 (Example 3.5.7). Indeed, this etude is a prime example of Chin's harmonic language, combining a pitch center with subsidiary harmonic devices along with various treatments of articulations and textures.

## **Rhythm**

The rhythmic element of this work is primarily based on groupings of twelve sixteenthnotes in each measure. Even though it is equal to an exact 3/4 metric division, the irregular
accents obscure the meter. Most downbeats of each measure have accents, but because the other
accents do not coincide with regular beats in the music, perceiving the metric regularity is
difficult. In addition, the polyrhythmic notation between two hands from measure 17 on,
consisting of five equally divided eighth-notes in the left-hand melody of each measure against
twelve sixteenth-notes of the right hand, creates rhythmic complexity. The irregular accents
further complicate the section. The melodic line of the left hand in the B section becomes more
complicated by being divided into seven equal eighth-notes in each measure while the right hand
maintains the twelve sixteenth-notes. The metric ambiguity and complex rhythms are the most
challenging aspects of the piece.

Besides the polyrhythmic independence between hands, another noticeable rhythmic element is a group of triplets extensively used at transitional passages from one unit or section to another as seen in mm. 54, 61, 68, and 81. This transitional material occurs with indicated dynamic changes such as *crescendo* and *diminuendo* within the passages. Chin also employs these triplets frequently in the A' section to provide dynamic variety and progressive motions in

a section which does not employ complicated polyrhythm between hands except for the link. The link between phrases in the A' section (mm. 77-81) displays a continuous flow of sixteenth notes with a slur, gradually using more triplets towards the next phrase. In particular, the triplets used in phrase b (mm. 82-94) which were not accompanied by accents in previous sections now appear with accents. Here, the triplets with accents convey not only dynamic tensions but also create a rhythmic accelerando towards the climax. In the subsequent Coda section, the polyrhythmic interplay between hands, 7 eighth notes against 6 sixteenth-note triplets, also creates a sense of rhythmic acceleration (Example 3.5.7).

## **Technical Issues and Practice Suggestions**

The rhythmic difficulties caused by the irregular accents and polyrhythm between hands are the most challenging technical issues in this etude. The performer needs to become accustomed to the syncopated rhythm created by the accents at unexpected moments with no perceptible pattern. Three regular metric pulses must be maintained in each measure while playing syncopated accents to prevent any confusion of meter. Thanks to the accents on downbeats of each measure, it is not extremely difficult for the performer to sense the underlying 3/4 meter. Yet, one should be careful not to emphasize particular accents, such as the ones on downbeats, stronger than others.

To examine the polyrhythmic feature from measure 17 on, the melodic line of the left hand with its quintuplet eighth-notes requires *legato* playing in *p* while the right hand continues playing twelve sixteenth-notes with irregular accents. It requires rhythmic independence between hands and demands technical virtuosity to play accurate polyrhythms at a rapid tempo. In particular, large leaps within a layer and accented left hand figures which occur at different

moments from the accented notes of the right hand result in more technical challenges. The repeated practice of each hand separately is suggested to accomplish these technical challenges.

In addition, the performer needs to have a delicate sense of dynamics in order to express the subtle differences among all levels of dynamics, within layers, as well as differences between sections. There are also moments that require sudden dynamic changes, such as mm. 49-50, 54-55, 61-62 and 68. These moments are also accompanied by changes of rhythm (triplets) and articulation (*legato*) which function as transitional passages. Therefore, the performer must be able to adjust all changes of dynamics, rhythm, and articulation quickly. For example, in m. 50, the change of articulations in the layer of the accented notes of the right hand from *staccato* to *non-staccato* results in a transformation from a delicate, pointillistic musical line to a strong, continuous melody in this piece. The sporadic occurrences of accented notes involving a wide range of registers in mm. 82-94 create another technical difficulty due to frequent large leaps and the *poco a poco crescendo* to the extreme dynamic of *ffff*.

An awareness of the central harmonic relationship in this piece, the M2 interval between C and B-flat, should guide the performer's sense of dynamics and articulation. This set of pitch centers is used as a significant formal marker in many places, and through highlighting these tones in performance, the performer can communicate the formal divisions of the work to the audience.

## Etude No. 6, "Grains"

Martin Wilkening states in the program note for Chin's Piano Etudes, "The title 'Grains' refers to a technique of the electronic composition, granular synthesis, which Unsuk Chin has

dealt with in her electro-acoustic piece Xi."45 As Whittall indicates, "'Xi' is a Korean word meaning core, nucleus, the smallest source of unity in things."46 Wilkening also explains that "A computer music technique, 'granular synthesis,' is based on 'grains' which are tiny microsecond sound elements that are derived from the computer output sounds and re-edited. The piano piece takes on these experiences in the electronic music in its own medium."<sup>47</sup> Indeed, Etude No. 6, "Grains" confirms "Chin's fundamentally organicist approach to compositional organization, growing stage by stage from the basic unifying elements which ultimately integrate them." <sup>48</sup> In this analysis of Etude No. 6, all the basic motives which grow and unify the entire piece will be examined in detail.

#### **Form and Structure**

Etude No. 6 applies the principle of continuous variation to a theme comprising short motives—in her system "grains"—separately developed. These short motives are:

- Motive *a*: a single long F-sharp
- Motive *b*': a repeated note E
- Motive *b*: rapidly repeated G-sharp
- Motive c: large leaps marked staccato or staccatissimo
- Motive *d*: rapidly ascending or descending figurations
- Motive e: a group of three  $32^{nd}$ -note chords that consists of repetitions and leaps

Because the music is notated with many rests and fragmentary gestures rather than continuous melodic lines, its formal divisions are not clearly perceived by ear. Instead, the

100

Whittall, 25. Ibid.

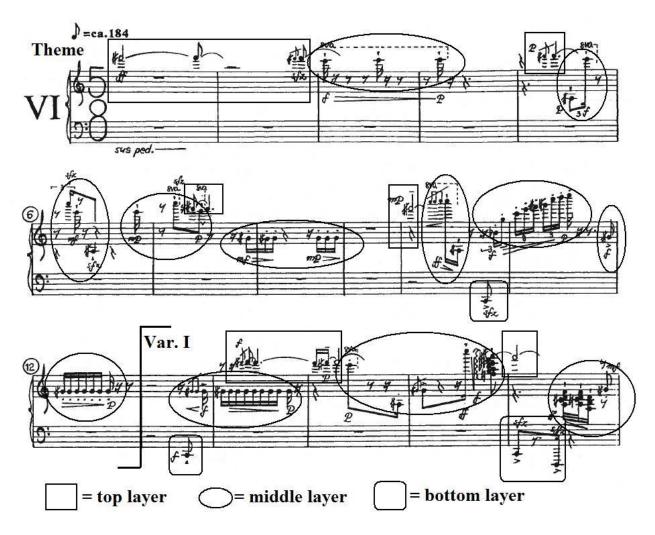
48 Ihid.

<sup>&</sup>lt;sup>45</sup> Wilkening

formal structure is distinguished by changes in tempo and texture. The form can be divided into four sections: the Theme (mm. 1-12) that presents several different motives and musical ideas; Variation I (mm. 13-55) that repeats and varies the motives sporadically; Variation II (mm. 56-112) that develops motives further in a densely woven texture; and the Coda (mm. 113-128) that is reminiscent of the Theme.

This piece exhibits a three-layered texture throughout the piece: a top layer with the initial single note f-sharp<sup>3</sup> which recurs only sporadically, but is sustained with a *sostenuto* pedal for the entire piece; the most active middle layer which is centered on the repeated note g-sharp<sup>1</sup> and is composed of various forms of motives and large leaps that often reach higher register than the initial f-sharp<sup>3</sup>; and a bottom layer that consists of short single notes usually with accents or *sforzando* marks (Example 3.6.1). Among these layers, the middle layer contributes the most variety to the variations, and it will be examined closely later.

Example 3.6.1: Three layers, mm. 1-17



# 1. Theme

The Theme (mm. 1-12) presents several short musical cells that functions as "Grains," which are developed in various ways throughout the piece. The opening f-sharp<sup>3</sup> is struck at *fff* and is sustained through the *sostenuto* pedal for the entire etude as the composer indicates at the bottom of the music score. After a half rest it leaps over to pitch e<sup>4</sup> which is repeated three times

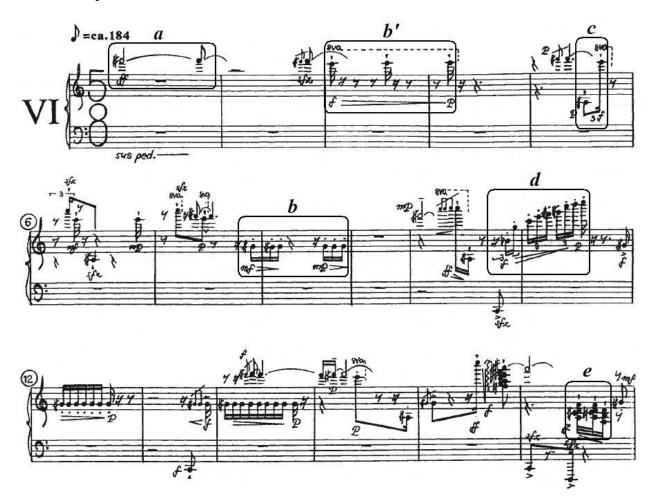
in *staccatissimo* with insertions of rests between them, using a half pedal. Here, the sustaining tone f-sharp<sup>3</sup> is one of the motives of this piece (motive a), a series of repeated notes  $e^4$  is a motive (motive b') that anticipates a significant motive of this etude, the repeated sixteenth-note g-sharp<sup>1</sup> (motive b) in mm. 7-8. Here, although motive b appears later than motive b', it is labeled as b because of its significance as one of the anchor pitches. The subsequent leaping gesture in m. 5 is another motive (motive c). In addition, measures 10-11 feature another prominent motive, a group of rapid ascending figurations (motive d) that sometimes appears in an inverted form as a descending motion and is always accompanied by a gradual dynamic change either from soft to loud or from loud to soft.

Both the large leaps (motive c) and the group of rapid ascending notes (motive d) become the most active features developed in the middle layer of the variations. In particular, motive b plays an important role as the core material of the entire music, along with f-sharp<sup>3</sup> in the top layer which is sustained by *sostenuto* pedal for the whole span of piece. The M2 created by these two pitches, g-sharp<sup>1</sup> and f-sharp<sup>3</sup>, is the basic harmonic relationship in this piece, which will be explored further in the following section on harmony. The motives of Etude No. 6 are illustrated as follows (Example 3.6.2)

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<sup>&</sup>lt;sup>49</sup> Chin wrote particular performance indications in the first page of the music score as "Sus Ped. Für F-sharp durchgehend gedrückt halten" and "Stacc. Stets mit ½ Pedal."

Example 3.6.2: Motives, mm. 1-17



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# 2. Variation I

The first three measures of Variation I (mm. 13-15) demonstrate motive b and c while motive a sustains the pitch f-sharp<sup>3</sup> and the following measure 16 introduces a rolled chord with multiple voices, a blocked form of motive d. Similarly, motive d material is frequently transformed in various ways: as a rolled chord in mm. 26, 35, 39, 47, and 53, a descending motion in mm. 26-27, and as a group of embellishment notes in m. 27 (Example 3.6.3). The newly introduced group of three  $32^{\text{nd}}$ -note chords in m. 17 is indicated as motive e (Example

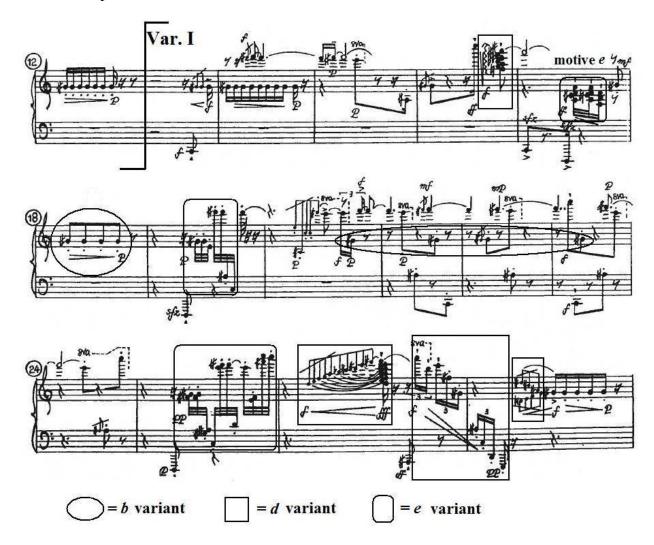
3.6.2). Motive *e* often appears in broken forms with successions of single notes or dyads in mm. 19, 25, 36, and 52.

The middle layer tends to occupy a wide range, often reaching higher and lower than the other two layers. For example, motive e and its varied forms often occur in the low register because of their wide range of motions as shown in mm. 19, 25, 36, and 52. In particular, a descending motion of motive d in mm. 26-27 covers as many as seven octaves by reaching from the highest pitch  $c^5$  to the lowest pitch  $E^1$ . The middle layer creates a multi-voiced texture on its own through various transformations of motives as featured with chords with grace notes and rolled chords based on motive d (mm. 16, 26, 35, 39, 47 and 53) and either blocked or broken forms of  $32^{\text{nd}}$ -note chords (mm. 19, 25, 36 and 52) based on motive e (Example 3.6.3).

The repeated sixteenth-note g-sharp<sup>1</sup> which actually appears in the middle register is the core of both the middle layer and the entire structure. It grows from a three-note repetition which was first introduced in the theme (mm. 1-12) to much longer durations, reaching extremes in Variation II. This repetition idea was originated from three short repeated notes  $e^4$  (motive b') in m. 3. It is varied as appeared in a longer value in m. 18 and appears occasionally with insertions of other notes in mm. 20-23 (Example 3.6.3). In addition, it is transposed to another pitch,  $c^1$ , in mm. 48-50.

The first note C in the bottom layer of m. 13 represent the initial tone of  $WT_0$  as first introduced in the high register in m. 6. The subsequent notes in the bottom layer are components of  $WT_0$  which is the fundamental harmonic background of this etude. This harmonic background will be further discussed in the harmonic language part of the analysis.

Example 3.6.3: Variation I, variants of motives, mm. 13-27



# 3. Variation II

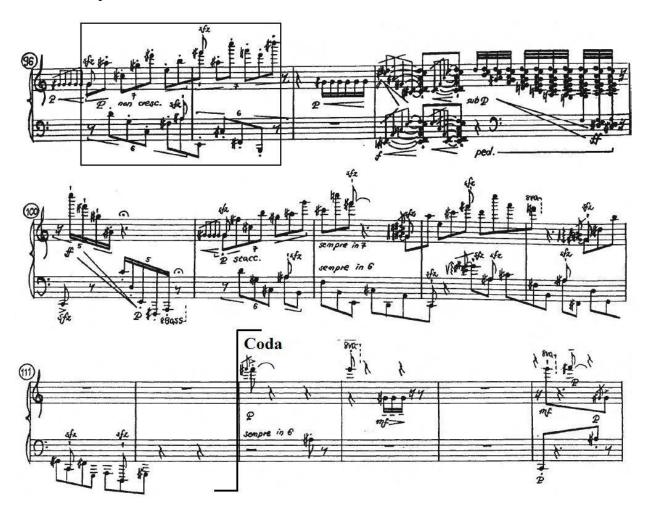
Variation II (mm. 55-112) begins with motive b at a faster tempo following a measure-long rest in m. 55. Throughout Variation II, the core motive b is used extensively (Example 3.6.5). Because of the change to a faster tempo in this section, the repetitions of g-sharp<sup>1</sup> at a rapid speed become more prominent, and extend over longer periods of time. g-sharp<sup>1</sup> is

repeated at various dynamic and is significant not only in terms of sound but also in the overall structure of this etude.

In Variation II, the sustaining tone f-sharp<sup>3</sup> (motive a) seldom appears by itself although the tone is held by *sostenuto* pedal. Instead, the tone f-sharp<sup>3</sup> is often embellished by adjacent notes or appears in rolled chords as a beginning or ending note as shown in mm. 59, 64, 69, 73, 74 (circled in Example 3.6.5), and 92-94. Particularly, the rolled chords and chords with grace notes which move downward to F-sharp or upward from F-sharp provide color and richness not only in texture and sonority. As mentioned, the middle layer itself exhibits a multi-voiced texture. For example, the rolled chords or leaping figures are often played together while the g-sharp<sup>1</sup> is repeated for several measures (mm. 64-70, 73-77, 81-84 and 92-94). In addition, this variation's dense texture is created by means of Chin's skillful transformation of motive e. Motive e is extended in length as seen in mm. 79-80 and is also combined with a repetition idea from motive e, as seen in mm. 90 and 99 (Example 3.6.6). In mm. 90 and 99, motive e takes the form of repeated 32<sup>nd</sup> notes, growing from a single-voiced to a multi-voiced chord as layers are gradually added. This gradual thickening of texture in the middle layer contributes to the frequent changes in timbre within this variation.

Further motivic variation is found in mm. 96-97. This series of leaping notes is derived from motive c and here features movement in a contrary motion between hands (Example 3.6.4). While motive c began as only a few short notes when it was introduced in the theme, this series of leaps is now largely extended in length and range, and serves as a kind of epilogue to Variation II (mm. 101-112). In mm. 101-112, the series of *sforzando* notes which occur sporadically over the wide range of registers outline structurally and harmonically important pitches from WT<sub>0</sub>.

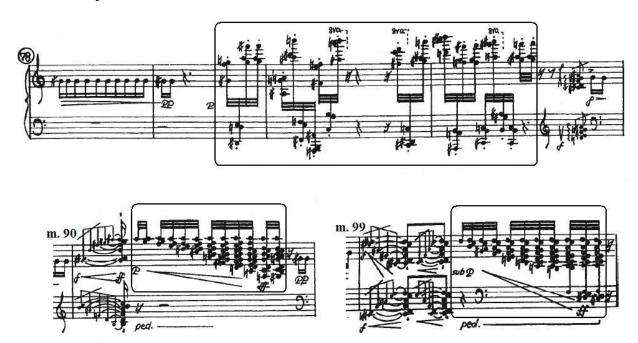
Example 3.6.4: Variation II and Coda, mm. 96-116



Example 3.6.5: Variation II, mm. 56-77



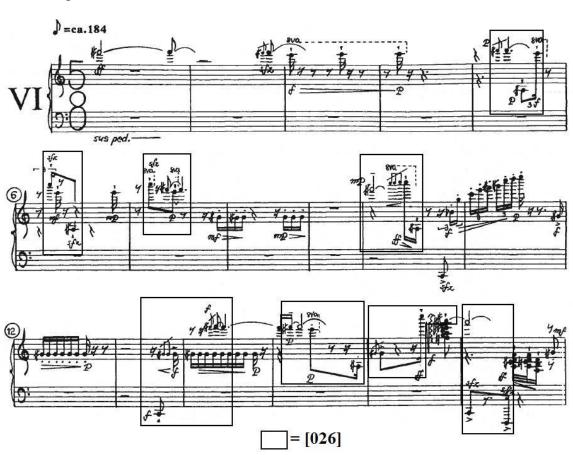
Example 3.6.6: Variation II, motive e in varied forms, mm. 79-80, 90, and 99



## Harmonic Language

The major harmonic basis of Etude No. 6 is WT<sub>0</sub>. The M2 interval, the basic interval content of the whole-tone scale, is strongly emphasized in many places throughout the piece. For instance, the initial tone f-sharp<sup>3</sup> moves up to  $e^4$  in m. 3, forming the melodic interval m7 which inverts to the M2. In addition, the distance from the pitch f-sharp<sup>3</sup> which represents the top layer to the pitch g-sharp<sup>1</sup> which is the core material of the middle layer also creates the interval M2. Within the theme and the first variation, two consecutive pitches frequently form the melodic interval M2 or m7: C and D<sup>1</sup> (m. 17), a-sharp and C (mm. 21-23) in the bottom layer, and  $e^4$  and f-sharp<sup>3</sup>, f-sharp<sup>3</sup> and g-sharp<sup>1</sup> between the middle and the top layers (mm. 20-23).

Chin also makes prominent use of the pitch-class collection [026] for the groups of three adjacent notes as well as consecutive notes, a particular subset of the whole-tone collection (Example 3.6.7). This subset [026] becomes an important unifying device throughout the piece and it shows a characteristic feature of Chin's harmonic writing. As well as [026], pitches from a larger subset [02468] and the entire six tones of  $WT_0$ , [02468T], are frequently grouped together (Example 3.6.8). This repeated emphasis on the whole-tone collection is an organizational principle within this etude.



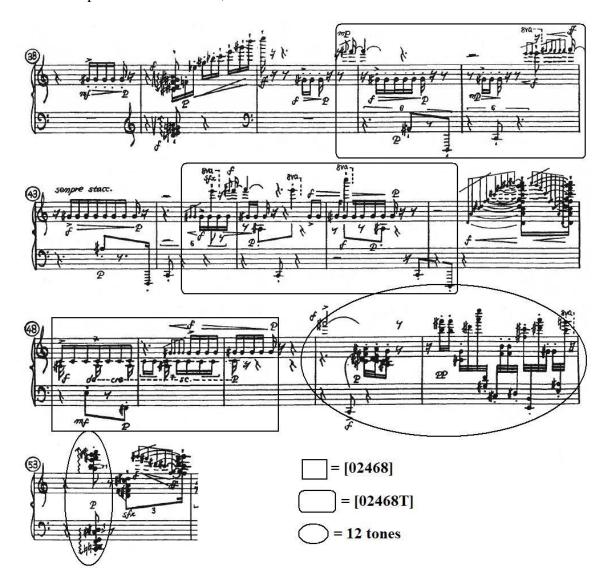
Example 3.6.7: The subset [026] in Theme, mm. 1-17

Klavieretude No. 6 by Unsuk Chin

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Example 3.6.8: Variation I, mm. 38-53



Yet, Chin's harmony is versatile, not always restricted by a certain rule or pattern. She achieves sonorous diversity by often employing pitches outside of WT<sub>0</sub>. In its original form, motive d consists of the pitch  $g^2$  that is not a member of WT<sub>0</sub> (m. 10). Moreover, motive e in m. 17 is mainly composed of elements outside of WT<sub>0</sub> (a, c-sharp<sup>1</sup>,  $f^1$  and b). Several subsequent transformations of motives d and e play important roles in providing additional harmonization to

the music. Both the passage in mm. 51-52 and the rolled chords in m. 53 are notated with all twelve tones (Example 3.6.6). However, the rolled clusters themselves are created out of stacked M2s derived from the whole-tone material. In addition, mm. 90 and 99 demonstrate all twelve notes in one measure.

Chin's careful shaping of tone color is reflected in her meticulous dynamics, with indications on almost all of the notes. Even repeated notes are played at different dynamic levels, marked *crescendo* or *decrescendo*. In addition, the succession of large leaps played over spans of several octaves creates unique sound colors. However, the notes played at continuously varying registers are balanced by both the repeated g-sharp<sup>1</sup> center tone and the tone f-sharp<sup>3</sup> sustained by *sostenuto* pedal for the entire music. Thus, Chin's harmony is consistently controlled by the two anchor tones while the other ornamental materials create sonic variety.

## Rhythm

Although this piece is written in a 5/8 meter, the meter is obscured by the frequent pauses and rests. The meter in this etude functions as an assistant to calculate the pulses. This phenomenon can be observed in Etude No. 1 as well.<sup>50</sup> Chin's rhythmic devices used in this etude are closely associated with the way she employs motives. Each motive is composed of a different rhythmic material: motive a with a long value of a single note; motive b with a succession of thirty-second notes; motive c with two detached leaping eighth notes; motive d with a succession of sixteenth-note triplets; motive e with a group of a and a-note chords. Since these motives are varied in forms as the music progresses, their rhythms are transformed and extended.

\_\_\_

<sup>&</sup>lt;sup>50</sup> Etude No. 1 has a written meter 3/2, but it is not perceptible aurally because the series of *sforzandos* notes create syncopations that displace the normal metric accents.

The general rhythmic demands in this etude are generally less challenging than Chin's other etudes, but polyrhythm between hands is occasionally used, mainly in Variation II and the Coda, for example, 5 against 6 (mm. 58, 65-70, 82-84, and in the Coda) and 7 against 6 (mm. 96-97 and 101-111).

## **Technical Issues and Practice Suggestions**

One of the most difficult technical problems a performer confronts in this etude is playing the rapidly repeated notes while precisely changing the dynamics. The succession of rapidly repeated notes is reminiscent of the passages in Ravel's "Scarbo" from *Gaspard de la Nuit*, which is recognized as one of the most virtuosic piano pieces in the music history. Repeated note passages in Chin's Etude No. 6 may be more difficult than passages in Ravel's because they are played with changing dynamics and need fine finger dexterity for adapting to different levels of dynamics on one re note. I strongly suggest that the performer should switch from the right hand to a finger of the left hand when playing the accented note within a repetitive passage. The performer should delicately express the dynamics meticulously indicated by the composer.

Another technical problem occurs with the swiftly moving large leaps, some of which span up to seven octaves. Shifting the hand position from one extreme to the other at a fast tempo is overwhelming and demands exceptional technique for performers. It requires agile and accurate technique. For example, the series of descending figurations in mm. 26-27 encompasses seven octaves and requires a quick dynamic change from fff to pp. This extremely virtuosic passage can be successfully achieved through using focused and firm fingers along with relaxed arms. Another feature that requires a performer's accuracy is precisely counting the time value of the rests that frequently occur between notes. Practicing with a metronome will also be

very helpful to precisely time intermediate rests within a phrase. The polyrhythm in this etude is not as extensive as that used in Chin's other etudes. However, it is more intricate especially when the polyrhythm happens between the passages that are combined with rests, such as mm. 41-42 and mm. 65-70. Etude No. 6 is a work that requires extensive multitasking, with attention given to multiple technical challenges, such as subtle expression of tones, accurate rhythmic sense, agility, and endurance.

## **CHAPTER 4: CONCLUSION**

One of the primary purposes of this detailed study of Unsuk Chin's 12 Piano Etudes is to stimulate a greater appreciation for their musical diversity and their value both to performers and composers. Influenced by many other contemporary composers, including Ligeti, who were attracted to virtuosic piano composition, Chin's etudes demand an extreme level of technical skill. It exposes those who challenge performing virtuosic piano etudes to a variety of techniques. In addition, Chin's etudes exhibit a wide variety of new compositional styles, and would be a valuable repertoire for composers and theorists to analyze.

From a pianist's viewpoint, prior to practicing the etudes, the pianist must have a good understanding of technical difficulties presented by each etude. In this respect, one of the purposes of this thesis is to help pianists to comprehend Chin's distinctive compositional style, examining the characteristics of her harmonic language, as well as her meticulous treatment of dynamics and articulation indicated in her compositions.

The diversity of her composition can be seen in the following overview of these six etudes. Etude No. 1, "In C," which is composed in a multi-layered texture emphasizes the C overtone series as a fundamental harmony. In particular, the main bass motion (C to B-flat to C) which is comprised of M2 interval is closely related to other etudes that employs the whole-tone collection extensively. Etude No. 2, "Sequenzen," centers on the compositional technique of sequence, using transformative processes in various ways. Its harmonic relationship between voices that focuses tritone and M2 is derived from the whole-tone collections used throughout

the piece. Etude No. 3, "Scherzo ad libitum," demonstrates various transformations of motives within a systematic treatment of individual phrases. Etude No. 4, "Scalen," uses whole-tone derived scales with tone clusters that combine the whole-tone and semi-tone. Etude No. 5, "Toccata," is a brilliant technical piece constructed from the partial tones of the C overtone series combined with fragments from WT<sub>1</sub>. Etude No. 6, "Grains," presents a theme comprised of several motives, followed by two variations, featuring organic development of the motives, with WT<sub>0</sub> as the primary harmonic collection.

As stated in the introduction chapter, due to increasing interests in Unsuk Chin's compositions, her music is frequently performed worldwide by many prestigious musicians and ensembles. As she continues publishing new works, I believe her work will be performed even more frequently. I hope this study helps pianists to embrace the diverse musical styles in Unsuk Chin's compositional style, and stimulate further research on her many compositions.

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#### **APPENDIX**

## **Chronological List of Unsuk Chin's Works**

Gougalon (final version) (Scenes from a Street Theater) (2009) for ensemble

Fanfare chimérique (2010-11) for two ensembles of wind and brass with electronics

Scenes for Alice in Wonderland (2004-07/2010-11) for soprano, mezzo soprano and orchestra

Gougalon (Scenes form a Street Theater) (2009) for ensemble

 $\mathbf{\check{S}u}$  (2009) concerto for Chinese sheng and orchestra

Rocaná (Room of Light) (2008) for orchestra

Concerto for Cello and Orchestra (2006-08) for cello and orchestra

Alice in Wonderland Prelude to Scene V (2007) for orchestra

*Alice in Wonderland* (2004-07) Opera in eight scenes

**Double Bind?** (2007) for violin and electronics

Cantatrix Sopranica (Soprano Singer) (2004-05) for two sopranos, countertenor and ensemble

snagS&Snarls (2003-04) for soprano and orchestra

Piano Etude No. 6 "Toccata" (2003) for solo piano

Double Concerto (2002) for piano, percussion and ensemble

Violin Concerto (2001) for violin and orchestra

Spectres Speculaires (2000) for solo violin and live electronics

Piano Etude No. 6 "Grains" (2000) for solo piano

*Kalá* (2000) for soprano and bass soloists, mixed chorus and orchestra

Piano Etude No. 1 "In C" (1999, rev. 2003) for solo piano

Miroirs des temps (1999, rev. 2001) for ATTB soloists and orchestra

Miroirs des temps (alternative version) (1999, rev. 2001) for ATTB soloists and orchestra

Ma fin est mon commencement (1999) for ATTB soloists and ensemble (third movement of Miroirs des temps)

**Xi** (1998) for ensemble and electronics

ParaMetaString (1996) for string quartet and tape

Piano Concerto (1996-97) for piano and orchestra

Piano Etude No. 4 "Scalen" (1995, rev. 2003) for solo piano

Piano Etude No. 3 "Scherzo ad libitum" (1995, rev. 2003) for solo piano

Piano Etude No. 2 "Sequenzen" (1995, rev. 2003) for solo piano

Allegro ma non troppo (1994) Version for solo percussion and tape

Fantasie mécanique (1994, rev. 1997) for five instrumentalists

Allegro ma non troppo (1993-94) for tape

Santika Ekatala (1993) First purely orchestra work

El Aliento de la Sombra (1992) for tape

Akrostichon-Wortspiel (Acrostic-Wordplay) (1991, rev. 1993) for soprano and ensemble

Gradus Ad Infinitum (1989) for tape

Die Troerinnen (Trojan Women) (1989) for 3 female singers, women's choir and orchestra

Canzone II (1986, rev. 1988) for solo instrument

Spektra (1985) 3 cello piece

Gestalten (Figure) (1984)