

Eastern and Western Concepts in Two Taiwanese Contemporary  
Works for Clarinet

by

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A dissertation submitted to the Graduate Faculty in Music in partial fulfillment of the requirements for the degree of Doctor of Musical Arts, The city University of New York

2011

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## Abstract

### Eastern and Western Concepts in Two Taiwanese Contemporary Works for Clarinet

by  
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Advisor: Professor Joseph Straus

In this dissertation, I examine in detail two contemporary clarinet works, *Three Fantasias* for solo clarinet (2006) by Yu-Hui Chang and *All But Not At All* for solo clarinet (2001) by Wei-Chieh Jay Lin, through the lens of performance practice. Each work reflects the composers' culture and training, and each combines Western and Eastern musical concepts. Through the use of Western compositional techniques, Chang and Lin exhibit various Chinese musical idioms, including pentatonicism, folk song quotation, traditional Chinese instrumental ornamentations and styles, and even Chinese philosophical ideas. In *Three Fantasias*, Chang vividly conveys her stories through a fusion of Taiwanese pentatonic folk song elements and the Western whole-tone and major scales. And in *All But Not At All*, Lin employs a trichordal set in various musical and conceptual dimensions through modeling the "trichordal array" techniques of his teacher Milton Babbitt. Besides theoretical and musical analyses, I include commentary from my interviews with the composers, interpretive suggestions from my own performing experience, and a CD of live performance recordings of these pieces.

## **Acknowledgements**

I would like to express my sincere gratitude to my advisor Professor Joseph Straus, my readers Prof. Bruce Saylor and Charles Neidich, and the chair of my defense committee, Prof. Norman Carey. They generously contributed their knowledge and helped me with many details of this dissertation. Of course, this dissertation would not have been possible without the two composers and their works. Through the interviews and private communications, my thinking and imagination has grown, which growth I express in my music making. Finally, I am heartily thankful to my family and my friends, who have encouraged and supported me in so many ways during the completion of this dissertation.

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## Introduction

Since the 1950s and the beginnings of post-modernism, the terms “fusion” and “confluence” have been used to describe the mixing of genres and styles. The composer Chou Wen-Chung stated in 1969 that we were undergoing a fusion of Eastern and Western musical concepts and practices.<sup>1</sup> David Tseng notes, “To Chou, building a mainstream requires a process of cross-pollination that transcends cultural colonialism and chauvinism...his music is part of the inevitable confluences that leads into such a future.”<sup>2</sup> The composer Toru Takemitsu,<sup>3</sup> once stated that “I have recognized my own culture through studying modern Western music.”<sup>4</sup> His words remind me that as a performer, the study of the music of the East and West is valuable for interpretation and performance as it must have been for these composers.

Through my clarinet playing, I am eager to explore Eastern and Western musical idioms. I will examine two clarinet works by two young Taiwanese composers in this dissertation. The Taiwanese repertoire for clarinet remains modest compared to that for strings and piano. Recently, more clarinet works have been composed and performed as younger composers have learned to write for the flexible ranges and

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<sup>1</sup> See Chou Wen-Chung. “East and West, Old and New”, *Asian Music*, Vol. 1, No. 1, (Winter, 1968-1969), pp. 19-22. A Chinese-American composer, Chou was born in 1923 in China and emigrated in 1946 to the U. S. He was chairperson of the Music Department at Columbia University.

<sup>2</sup> See David Tseng’s program notes for *The Music of Chou Wen-Chung*, Albany records, Troy 155.

<sup>3</sup> Takemitsu (1930-1996) is a Japanese composer, and also a writer of aesthetics and music theory.

<sup>4</sup> See <http://www.soundintermedia.co.uk/treeline-online/biog.html> (Date visited: 23 January, 2008).

extended techniques of the instrument. But very little research has been devoted to Taiwanese clarinet music, and what there is is mostly in Chinese.<sup>5</sup> In addition, because very little of this music is published, individual works are difficult to find either in scores or recordings.<sup>6</sup>

I will focus both on the virtuosic clarinet techniques and the fusion of East and West. The two composers were trained in the West, and found themselves interested in bridging Eastern and Western cultures. Both are well known in Taiwan, though not yet in English-speaking countries. In order to better understand these works and to introduce them to a wider audience of musicians and listeners, I include performances of these two pieces as an Appendix.<sup>7</sup> My own experience performing these two works was and remains very special to me, as I have come to realize the important differences and similarities between East and West. The works have proved to be unusual and interesting to Western audiences, as well.

Each of the two works I discuss here reflects their composer's cultural background in varied ways. The works exhibit Taiwanese and general Asian topics, which include pentatonicism, folk song quotation, traditional Chinese instrumental gestures, like a copious use of ornamentation, pitch inflections, coloristic

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<sup>5</sup> Most of the research on clarinet works by Taiwanese composers' are Master theses, for example, Hsian-Hen Fu's "Lei De-Ho's *Sonata for Clarinet and Piano*" (in Chinese, Master thesis, Taipei National University of Arts 2007), and Chien-Hua Hsu's "Exploration of Chao Chin-Wen's *Pale Fire II* for Clarinet and Electronic Devices" (in Chinese, Master thesis, Soochou University, 2005).

<sup>6</sup> One of the two pieces in this dissertation, Yu-Hui Chang's *Three Fantasias* is published in 2010.

<sup>7</sup> These are my own live recordings of the two solo pieces (Chang's and Lin's pieces) at my Carnegie recital debut, March 29, 2008 in New York.

embellishments, etc, and Chinese philosophical and aesthetic ideas. Because of their different styles and compositional techniques, each composer synthesizes Eastern and Western musical ideas differently, even within their own work. Hence, my analytical approach will vary from piece to piece.

In performance of these two pieces, the specifically Chinese topics depicted in the music allow me to imagine that I am playing in another situation or environment. The act of imagining outside the concert hall transports me to a different time and space, one in which I can extend more of the richness of atmosphere, tone color, and flexibility in the music. When thinking about the compositional and instrumental technique, however, it is necessary to think more theoretically and logically because of my Western instrumental and musical training. These complementary ways of thinking about the music have only recently been approached in scholarship, but as yet remain little understood.

A review of the scholarship shows the ways in which Eastern and Western complementary concepts have been fused in both Eastern and Western compositions. Jiang Jing, professor at China Central Conservatory” briefly discusses the influences of traditional music on mainland Chinese composers, beginning with the distinctly Chinese conservative nationalistic style in the 1930s to the increased application of

twentieth century Western compositional techniques in the 1940s.<sup>8</sup> Jing refers to specific aspects of traditional Chinese music, including melody, orchestration, and timbre, that have influenced Chinese composers from 1930-1960. In an article in 1971, Chou Wen-Chung, the Chinese-American composer and former chair of the music department at Columbia University, described how many Asian concepts and aesthetics have played a significant role in the musical world of the West, and provides many examples, such as the texture of heterophony, which comes from Chinese ancient court music, that has influenced Western composition, like Debussy's *La Mer*.<sup>9</sup> However, these articles do not provide analysis nor do they discuss issues of performance practice, which I hope my study will remedy.

Two works that treat topics in contemporary Taiwanese music stand out:

Su-Huang Yui's *Exploring the Development of Taiwanese Contemporary Music From 1945 to 1975* (in Chinese, Taiwan: Music and Rhyme Publishing, 2000) and Tien-Yi Chiang's dissertation "A Study of Piano Works By *Formusica: The New Taiwan Music Piano Works, Volumes I-VII*" (DMA diss. City University of New York, 2006).

Although they provide analyses, they do not cover Taiwanese contemporary woodwind music. I hope my analysis of aspects of clarinet performance issues within works that incorporate Eastern and Western idioms will contribute to a more rigorous

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<sup>8</sup> See Jiang Jing, "The Influence of Traditional Chinese Music on Professional Instrumental Composition," *Asian Music*, Vol. 22, No.2, 1991, pp. 83-96.

<sup>9</sup> See Chou Wen-Chung, "Asian Concepts and Twentieth-Century Western Composers," *The Musical Quarterly*, Vol. 57, No. 2. 1971, pp. 211-229.

and comprehensive discussion of the literature.

### **Introductions to the composers and their works:**

*Three Fantasias for solo clarinet (2006)*. A native of Taiwan, Yu-Hui Chang (b. 1970) began her musical training in piano, voice, and music theory at the age of six, and began to pursue composition as a career at the age of fourteen in her secondary school “music class.”<sup>10</sup> After graduating from the National Taiwan Normal University, she came to the United States in 1994 and received her graduate degrees from Boston University (MM) and Brandeis University (Ph.D.). Chang was assistant professor at the University of California, Davis and co-director of the Emyrean Ensemble from 1999 to 2006. She is now a professor of composition and theory at Brandeis University in Boston. In March of 2006, the Works & Process series at the Guggenheim Museum in New York presented three of her works, highlighting her as a new talent of the younger generation. According to her website, “[t]he most essential aspect of Chang’s music communicates an aesthetic and philosophical view of humanity that is timeless and reaches beyond cultural boundaries.”<sup>11</sup>

*Three Fantasias* was commissioned by clarinetist Wen-Shin Chang<sup>12</sup> of the

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<sup>10</sup> The “music class” is one of the classes for special talents. The classes are established in several secondary schools and sponsored by the government.

<sup>11</sup> See Yu-Hui Chang’s website, <http://yuhuichang.com/bio> (Date visited: 1 October, 2010)

<sup>12</sup> Taiwanese clarinetist Wen-Shin Chang is one of my former teachers in Taiwan, and the composer Yu-Hui Chang’s elder sister as well. She premiered *Three Fantasias* in her recital in 2006.

Taipei Symphony Orchestra. In this piece, Chang uses three popular Taiwanese folk songs that Taiwanese listeners generally feel nostalgia in surprising ways. In addition to evoking memories, she unpredictably mixes the traditional Taiwanese music with modern Western sounds. The three miniatures vividly convey their stories in music through a fusion of Taiwanese pentatonic folk song elements and the Western whole-tone and major scales. Chang successfully combines these songs with a fresh modern setting, and she adds humorous titles for each. Her virtuosic clarinet writing has proven successful with performers and audiences.

The second work I will examine is *All but not at all* for solo clarinet (2001) by Wei-Chieh Jay Lin (b. 1982). The works of both composers are rich in their use of ornamentation, which derives from their Chinese background. In addition, the works utilize changing tone colors from extended clarinet techniques. (These issues will be discussed in Chapter III.)

Born into a musical family, Lin began violin lessons with his father at age seven and composition lessons with Tin-Lien Wu at age eleven. In 1997 he entered the Walnut Hill School of Arts in Natick, Massachusetts, majoring in composition under the tutelage of Christopher Malloy.<sup>13</sup> At the time of this writing, Lin is still a doctoral student at The Juilliard School, where he received Bachelor's and Master's degrees.

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<sup>13</sup> The bio information about Wei-Chieh Lin is directly from the composer himself.

Wei-Chieh Lin has already received important commissions<sup>14</sup> and has won the Palmer-Dixon Award at Juilliard. Recently he has won several composition awards in Taiwan.<sup>15</sup> In *All But Not At All*,<sup>16</sup> Lin employs pitch-class cells in various musical dimensions, including rhythm, register, phrasing, and articulation. At the same time his music reflects aspects of Mandarin, the official language of Taiwan. Despite its freedom and spontaneity, the musical phrases flow continuously and model the “trichordal array” techniques of his teacher, Milton Babbitt.

Although the work sounds Western on the surface, according to the composer, it exhibits many contrasts of register, dynamics, and articulation implying Yin and Yang, the two Chinese principles representing opposing forces of the universe. Both the title of the work and its symmetrical use of a distinct pitch collection at the beginning and end, are meant to reflect the balance of Yin and Yang. Lin’s Eastern background is at the root of his work. He has used the Chinese proverb “Even a tiny bird contains all the necessary organs” (麻雀雖小, 五臟俱全) to indicate that this short three-and-half-minute piece is a musical universe unto itself. Moreover, Lin suggests the Chinese idea of “presence in absence.”<sup>17</sup> Other Chinese concepts abound in this

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<sup>14</sup> Lin’s chamber ensemble work *Dialogues* (2004), which was commissioned by Joel Sachs for the New Juilliard Ensemble, premiered in Alice Tully Hall in November 2004.

<sup>15</sup> One of the awards is for Lin’s another chamber work *A Flourishing Centennial* for flute, clarinet and cello, which won the chamber composition award hosted by National Symphony orchestra of Taiwan. This piece was commissioned by me in 2009 for the chamber concert at the Trinity Church in New York City.

<sup>16</sup> This piece has been praised by Babbitt and the clarinetist Charles Neidich.

<sup>17</sup> In Chinese philosophy, “Yin and Yang,” are interdependent, even if one of the two forces may not seem apparent; no phenomenon is completely devoid of its opposite state because one principle

piece but always implicitly.

Chapter One examines Yu-Hui Chang's *Three Fantasias*, including the pitch organization and the elements derived from the three folk songs; Chapter Two analyzes Wei-Chieh Lin's *All But Not At All* using a different approach from Chang's piece, including an examination of Lin's trichordal array technique in its relationship to Chinese topics. Chapter Three discusses and compares the use of Eastern and Western ornamentations in these two pieces. It reveals how the works have been influenced by Chinese instrumental music and some Western clarinet repertoire.

## Chapter I: *Three Fantasies* by Yu-Hui Chang

### The elements from traditional Taiwanese folk song

Taiwanese folk songs are arguably the most important representations of Taiwan's traditional culture in their simple and natural music, text and form. In various settings they can portray a particular nostalgic mood or atmosphere, displaying Taiwanese traditional life and their (conservative) thought, and even evoking the national spirit. Hearing them, older generations will remember and cherish the old times. In her *Three Fantasies*, Yu-Hui Chang adapts the characters, motives and texts of three popular Taiwanese folk songs.

### I-1 **Diu-Diu-Bu-Liao (Diu-Diu never ends)** 丢丢不了

This piece is based on a well-known Taiwanese folk song, *Diu-Diu-Dang* (Ex.1-1), which first appeared in the 1920s on the east coast of Taiwan, where the local people were perhaps influenced by the modern sounds of rhythms made by the train, and the sound of water from the mountain gaps dripping down on it as it passed under. The water-drops are rendered onomatopoeically in Taiwanese as “Diu-Diu-Dang.” Chang accelerates the tempo of the original folk song and changes

the title to *Diu-Diu-Bu-Liao*, which means “Diu-Diu never ends.” Not only quoting the motives but also exploiting the onomatopoeic lyrics, Chang exaggerates the train’s sounds and renders the train journey as a roller-coaster ride.

Ex. 1-1. The original folk song, *Diu-Diu-Dang*.

┌ Wheel motive ─┐

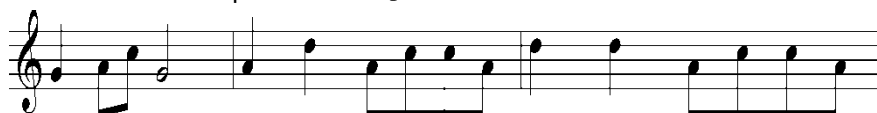


火 車 行 到 伊 都 末 阿 伊 都 丟 唉 啲

Translation: The train goes through (with colloquial conjunctions and exclamations added)

Transliteration: hui chia gia gao yi do mue a yi do diu ai yo

┌ Water drops and their rebounds ─┐



磅 空 裡 磅 空 的 水 伊 都 丟 丟 銅 阿 伊 都

the tunnel. The water in the tunnel Diu - Diu - Dong ah i do (conj.)

bon kang lai bon kan ge tsui yi do diu diu dang a yi do



末 阿 伊 都 丟 阿 伊 都 滴 落 來

(colloquial conjunctions and exclamations) drops down.

mue a yi do diu a yi do di lo lai

## The Fusion of East and West: Pitch Organization

### The first motive: the balance of pentatonic<sup>18</sup> and whole-tone scales

The Eastern pentatonic elements from the folk song are fused with the Western whole-tone scale elements suggested by the opening wheel motive of the song (m. 1, Ex. 1-1). Fig. 1-1 provides a table of pentatonic and whole-tone collections for the following analysis.

Fig. 1-1. Chang. Table of scalar pitch collections between PENTs and WTs.

a. Six odd numbered PENTs with WTs

	Whole-Tone Scale-WT <sub>1</sub>			WT <sub>0</sub>	
PENT <sub>1</sub>	Db	Eb	F	Ab	Bb
PENT <sub>3</sub>	Eb	F	G	Bb	C
PENT <sub>5</sub>	F	G	A	C	D
PENT <sub>7</sub>	G	A	B	D	E
PENT <sub>9</sub>	A	B	C#	E	F#
PENT <sub>11</sub>	B	C#	D#	F#	G#

b. Six even numbered PENTs with WTs

	Whole-ToneScale-WT <sub>0</sub>			WT <sub>1</sub>	
PENT <sub>0</sub>	C	D	E	G	A
PENT <sub>2</sub>	D	E	F#	A	B
PENT <sub>4</sub>	E	F#	G#	B	C#
PENT <sub>6</sub>	Gb	Ab	Bb	Db	Eb
PENT <sub>8</sub>	Ab	Bb	C	Eb	F
PENT <sub>10</sub>	Bb	C	D	F	G

<sup>18</sup> The pentatonic scale in this dissertation refers to the one used in ancient China. It starts from one of the five pitches, 宮(Gong), 商(Shang), 角(Jue), 徵(Ji), 羽(Woe), to represent five keys. The Chinese pentatonic scale is similar to the movable-do system: Gong=Do, Shang=Re, Jue=Mi, Ji=Sol, Woe=La, and the five pitches are generated from the circle of fifths, a method called 三分損益法 in China.

There are twelve pentatonic scale collections, which are marked from PENT<sub>0</sub> to PENT<sub>11</sub>. In Fig. 1-1a, the six odd numbered PENTs, the first three pitches belong to the whole-tone scale WT<sub>1</sub>, while the last two belong to WT<sub>0</sub>.<sup>19</sup> By contrast, in Fig. 1-1b, the first three pitches of the even numbered PENTs belong to WT<sub>0</sub>, and the last two belong to WT<sub>1</sub>.

Because Taiwanese people would generally be familiar with the original folk tune, the wheel motive (F-G-F-E $\flat$ ), quoted at the beginning of Chang’s piece, leads the ear primarily to the pentatonic flavor and suggests a melody in PENT<sub>3</sub> < E $\flat$ , F, G, B $\flat$ , C >, <sup>20</sup> instead of WT<sub>0</sub>. However, the G $\flat$  in m. 5, breaks from the pentatonic context.

Ex 1-2. Chang, *Diu-Diu-Bu-Liao*, mm. 4-6.

┌ PENT<sub>3</sub> < E $\flat$ , F, G, B $\flat$ , C > ..... ↓ alien G $\flat$  ..... ┐

└            ↑ alien E $\flat$             ↑            ↑            ↑            in WT<sub>0</sub> < C, D, E, F $\sharp$ , G $\sharp$ , A $\sharp$  >            ┘

<sup>19</sup> This is, of course, because there are only two types of whole-tone scales as their notes in transposition are duplicated enharmonically. The whole-tone collections are usually labeled “even” or WT<sub>0</sub> <C, D, E, F $\sharp$ , G $\sharp$ , A $\sharp$ > vs. “odd” or WT<sub>1</sub> <C $\sharp$ , D $\sharp$ , F, G, A, B>. See Joseph Straus, *Introduction to Post-Tonal Theory*. 3rd ed. Pearson Education, Inc., N.J., 2005. p. 147-149.

<sup>20</sup> From the original folk song Ex. 1-1, the wheel motive (D, E, D, C) leads the song to the <C, D, E, G, A> pentatonic collection, when G and A appear later in the melody. Based on this, the wheel motive (F-G-F-E $\flat$ ) in m. 4 leads the ear to PENT<sub>3</sub>.

As Ex. 1-2 shows, following the dissonant  $G\flat$ , the D-E in m. 6 are all foreign to the  $PENT_3$  area, but those pitches derive from the same whole-tone scale  $WT_0$   $\langle B\flat, C, D, E, F\#, A\flat \rangle$ . This  $WT_0$  is generated from the last two pitches of  $PENT_3$   $\langle E\flat, F, G, B\flat, C \rangle$  that exist in the original folk tune, but do not appear in the first five measures. These two common tones transform the folk material into  $WT_0$  fragments, where listeners familiar with the folk song might expect the complete  $PENT_3$ . Therefore, the  $G\flat$ , though alien to  $PENT_3$ , is an anticipation that leads to  $WT_0$ , and it should be played in a way that surprises the audience, to show the incoming color change from the pitch collections. The intersection of  $PENT_3$  and  $WT_0$  generate intervals of minor seconds/ major sevenths (which belong neither to  $PENT_3$  nor  $WT_0$ ) and augmented fourths/diminished fifths (which only belong to  $WT_0$ ), adding an impressionistic Western color to the simple folk tune (Fig. 1-2).

Fig. 1-2. Chang. Table of intervals in PENT and WT.

Interval:	m2/M7	M2/m7	m3/M6	M3/m6	P4/P5	A4/d5
PENT	X	✓	✓	✓	✓	X
WT	X	✓	X	✓	X	✓

The descending thrust at m. 7 shows the clash of Eastern and Western scales, with its sudden halt on  $A\flat$ . The final two notes at the abrupt end of the passage,  $B\flat$

and,  $A^b$ , together with the surprisingly quiet low E at m. 8, guides listeners towards  $WT_0$   $\langle C, D, E, F\#, G\#, A\# \rangle$ , but instead, the E brings back the familiar Eastern folk melody with the wheel motive in  $PENT_7$   $\langle G, A, B, D, E \rangle$ . The E at m. 6 (Ex. 1-2) is also foreign to the  $PENT_3$  collection, but, because it is a member in  $WT_0$ , it helps to bring about this sudden modulation.

Ex. 1-3. Chang, *Diu-Diu-Bu-Liao*. Descending thrust at m. 7, a transition to  $PENT_7$  from m. 8, mm. 7-9.

┌ PENT<sub>7</sub> <G, A, B, D, E> ┐

└ WT<sub>0</sub> ↑ ┘

The E from  $WT_0$ , generated from the last two pitches of  $PENT_3$  in mm. 4-6

In Chang's setting the wheel-motive modulates from one pentatonic section to another in a remarkable use of the whole-tone collection. The pivotal E at m. 8 (see Ex. 1-2), generated from the last two pitches of  $PENT_3$  and one pitch in  $PENT_7$ , shifts the context from  $PENT_3$   $\langle E^b, F, G, B^b, C \rangle$  to  $PENT_7$   $\langle G, A, B, D, E \rangle$ . The two scales consist of different pentatonic collections (with G as their only common tone), but the upper dyad of each belong to the same whole-tone collection— $WT_0$ . Similarly, the lower trichord of each belong to  $WT_1$ . (Any modulation between odd-numbered PENTs would display this identity, as would any modulation between even-numbered

ones.)

Besides alternating between the Eastern and Western scales, Chang transforms the motives in characteristic ways. From m. 10 (see Ex. 1-4), the wheel motive (A-B-A-G) repeats but temporarily modulates to (E<sup>b</sup>-F-E-D<sup>b</sup>), then quickly spins back in m. 11. The tritone modulation, from (A-B-A-G) to (E<sup>b</sup>-F-E-D<sup>b</sup>), breaks the PENT<sub>7</sub> area <G, A, B, D, E>, but not randomly. The diminished fifths/tritones heard in these two wheel motives, A-E<sup>b</sup>, B-F, and G-D<sup>b</sup>, recall the previous whole tone collection WT<sub>1</sub>. In Fig. 1-1, we see the PENT<sub>1</sub> (E<sup>b</sup>-F-E-D<sup>b</sup>) is part of WT<sub>1</sub> <G, A, B, C<sup>#</sup>, D<sup>#</sup>, F>, which this time is generated from the first three notes of PENT<sub>7</sub> <G, A, B>. From here, the obscured transformation of the motive becomes apparent: The lower trichords of PENT<sub>1</sub> and PENT<sub>7</sub> provide the entire WT<sub>1</sub> collection. The four-note wheel motive, quoted from the original folk song, serves to generate whole-tone collection and the temporary modulation at m. 10 can now be interpreted as a motive transformation from pentatonic scale to whole-tone scale.

Ex. 1-4. Chang, *Diu-Diu-Bu-Liao*. Transformed wheel motives in mm. 10-12.

Original:  $\Gamma$  PENT<sub>7</sub>  $\neg$   $\Gamma$  PENT<sub>1</sub>  $\neg$   $\Gamma$  PENT<sub>7</sub>  $\neg$

Transform to:  
 $\perp$  WT<sub>1</sub>  $\neg$

From the previous discussion, although the context transforms from pentatonic to whole tone in Ex.1-4, the wheel motives still have their pentatonic origins that the player should make clear in performance. The E $\flat$  on the fifth beat of m. 10 already has an accent, showing the sudden shift from PENT<sub>7</sub> to PENT<sub>1</sub>. However, the motive in PENT<sub>1</sub> is linked to the E of PENT<sub>7</sub> on the first note in m. 11. Here, the E is not only the end of the short PENT<sub>1</sub> phrase but also the beginning of the next PENT<sub>7</sub> collection. Therefore, the performer might show the elision between the two phrases.

#### The second motive: the balance of Eastern pentatonic and Western major scales

In addition to whole tone scales, Chang uses another Western scalar collection to mix with the pentatonic folk elements. Figure 1-3 shows the relationships between these two collections. In the circle of fifths arrangement, the pitches of three pentatonic collections form a major scale. For example, the seven pitches of G major scale can be generated from PENT<sub>0</sub>, PENT<sub>7</sub>, and PENT<sub>2</sub>; and, certainly, the pitches from PENT<sub>7</sub>, 2, and 9 belong to the D major collection. In *Diu-Diu-Bu-Liao*, instead of using the included PENTs to suggest a major scale, Chang intriguingly put the major scalar elements with non-related PENTs to show the incompatible elements, as I show in examples to follow.

Fig. 1-3. Chang. Table of scalar pitch collections between PENTs and Major scales.

Maj.	G	PENT <sub>0</sub>	C		D		E			G		A				
		Maj.	PENT <sub>7</sub>			D		E			G		A		B	
A Maj.	Maj.		PENT <sub>2</sub>			D		E		F#			A		B	
		Maj.	E	PENT <sub>9</sub>		C#			E		F#			A		B
F# Maj.	Maj.		B	PENT <sub>4</sub>		C#			E		F#		G#		B	
		PENT <sub>11</sub>		C#		D#			F#		G#			B		
Eb Maj.	Maj.	Db	PENT <sub>6</sub>		Db			Eb			Gb		Ab		Bb	
		Ab	PENT <sub>1</sub>		Db			Eb		F			Ab		Bb	
Eb Maj.	Maj.	Maj.	PENT <sub>8</sub>	C				Eb		F			Ab		Bb	
			Bb	PENT <sub>3</sub>	C				Eb		F		G			Bb
C* Maj.	Maj.	Maj.	F*	PENT <sub>10</sub>	C				D			F		G		Bb
			PENT <sub>5</sub>	C					D			F		G		A

\* The last two lines, PENT<sub>10</sub>, PENT<sub>5</sub> with the first line PENT<sub>0</sub> are included in F Maj.; the last line PENT<sub>5</sub> with the top two lines, PENT<sub>0</sub> and PENT<sub>7</sub>, are included in C Maj.

The second characteristic motive, water drops from the tunnel and the sounds of the water rebounds (mm. 4-5 of the original folk song, Ex. 1-1), appears in the second section in m. 26 (Ex. 1-5). The water drops are sung in shorter durations in the original song, in imitation of the rhythmic character of the words in Taiwanese. Noticeably, the detached sixteenth-notes are not in step-wise motion, which differentiates them from the wheel motive. As shown in m. 26 of Ex. 1-5, the repeated rhythmic patterns of the water drops utilize a perfect fourth, and the bouncing minor-third intervals depict the rebounding water drops in mirrored sixteenth notes.

Ex. 1-5. Chang, *Diu-Diu-Bu-Liao*. Water-drops motive, m.26.

┌ The water drops..... and their rebounds ┐

molto      molto      pp

Based on the folk song melody, the water-drop section (beginning in m. 26) is in the PENT<sub>10</sub> area <B<sup>b</sup>, C, D, F, G>, written a fifth higher than the PENT<sub>3</sub> of the opening of the piece. Starting from m. 28, pitches foreign to PENT<sub>10</sub> are: G<sup>b</sup> in m. 28, D<sup>#</sup> in m. 29, E and C<sup>#</sup> in m.30 (Ex. 1-6).

Ex. 1-6. Chang, *Diu-Diu-Bu-Liao*. The collage passage of PENT<sub>10</sub> and E-major elements, mm. 27-30.

┌ PENT<sub>10</sub> <B<sup>b</sup>, C, D, F, G> ┐

┌ WT<sub>0</sub> ┐  
┌ circled E major elements ┐

┌ PENT<sub>10</sub> <B<sup>b</sup>, C, D, F, G> ┐

┌ circled E major elements ┐

f

The comparatively new minor-third intervals of the rebounding water drops (m. 26 of Ex. 1-5) extend to major-thirds in mm. 28-29 (Ex. 1-6), suggesting WT<sub>0</sub>, but following this, the G<sup>b</sup>, with other pitches outside PENT<sub>10</sub> (circled in Ex. 1-6), suggest E major. The passage shown in mm. 27-30 sounds like a collage of PENT<sub>10</sub> and E-major scale pitch collections, arguably based on the PENT<sub>10</sub> with E-major fragments layered over. Because there is no common tone between PENT<sub>10</sub> and E-major scale (see Fig. 1-4), the E-major elements stick out from this melody. In this reading, the three raised notes—F<sup>#</sup> (enharmonic of G<sup>b</sup>), C<sup>#</sup> and D<sup>#</sup>—need another G<sup>#</sup> to complete the E-major scale.

Fig.1-4. *Diu-Diu-Bu-Liao*. Table of PENT<sub>3</sub>, PENT<sub>10</sub> and E Major relationship.


PENT <sub>3</sub> , mm. 19-24 of wheel motive section	<b>E<sup>b</sup></b>		F		G			B <sup>b</sup>		C		
PENT <sub>10</sub> , mm. 26-29 of water-drop motive section			F		G			B <sup>b</sup>		C		D
<b>E Major elements (mm. 21-25, mix with PENT<sub>3</sub>, mm. 28-33, collage on PENT<sub>10</sub>)</b>	<b>D<sup>#</sup></b>	<b>E</b>		<b>F<sup>#</sup></b>		<b>G<sup>#</sup></b>	<b>A</b>		<b>B</b>		<b>C<sup>#</sup></b>	

Before this, G<sub>s</sub> (or A<sub>s</sub>) occurs five times in mm. 21-24 (Ex. 1-7). The G<sup>#</sup> appears first in m.21, following an A major chord—C<sup>#</sup>, E, C<sup>#</sup>, A—which can also be seen as a sub-dominant chord of the E major a few bars later in the collage passage,

mm. 28-30. The short bridge that connects the first and second sections (m. 25) could also be construed in E-major, but this pentatonic phrase prepares the next motive and is derived from mm. 2-3 of the original song. Here, it is best understood in the context of PENT<sub>2</sub> <E, F#, G#, B, C#>, which is not a new key but a pentatonic collection that belongs to the anticipated E-major scale.


Ex. 1-7. Chang, *Diu-Diu-Bu-Liao*. The modulation from PENT<sub>3</sub> to PENT<sub>10</sub>, and the anticipation of E-major elements, mm. 19-26.

┌ PENT<sub>3</sub> <E $\flat$ , F, G, B $\flat$ , C> ┐




└ E major ┘

┌ circled Gs from PENT<sub>3</sub> ┐



└ E major ┘

┌ Bridge in PENT<sub>2</sub> ┐ ┌ PENT<sub>10</sub>, water-drop section ┐



└ Bridge in E major ┘

As shown in Fig.1-4, four common tones relate PENT<sub>3</sub> with PENT<sub>10</sub>. The E<sup>b</sup> of PENT<sub>3</sub> is enharmonic to the D<sup>#</sup> of the E-major scale. Therefore, the two D<sup>#</sup>s appearing before and after the second section serve to link the collections. The E<sup>b</sup> changes to E<sup>n</sup> in m. 21, and the D<sup>#</sup>s in mm. 29-33, change to D<sup>n</sup>s. The E-major scale brings instability to the pentatonic scales by creating minor seconds, major sevenths, and augmented fourths and fifths, intervals generated from the mixture of the pentatonic and whole-tone scales in the wheel-motive section as well. These intervals are considered dissonant in tonal music; in post-tonal music they are prevalent, balancing both modern East and West.

Minor seconds (D<sup>#</sup>-D<sup>n</sup>) and major sevenths (D<sup>n</sup>-C<sup>#</sup>) clash intensely from mm. 31-33, pushing to the climax at m. 34 with the highest register and dynamic in the entire piece. Surprisingly, the climax (Ex. 1-8) simply quotes the original—the water drops, from m. 4 to the middle of m.6 of the folk song. The pitch collection is in PENT<sub>7</sub> for two and half measures, an exact transposition of the folk song.



Ex. 1-9. Chang, *Diu-Diu-Bu-Liao*. Final quotation in PENT<sub>6</sub> from the folk song, with the “combined motive,” mm. 37-40.

┌ Quotation in PENT 6 ----- ↓( clashing E's, creating d5) ↓ -----

↑ “combined motive” ↑

----- ↓

↑ ↑ “combined motive”

But the two quotations, one in PENT<sub>7</sub> (mm. 34-36) and the other in PENT<sub>6</sub> (mm. 37-40), are one semitone apart. They are connected by a whole-tone collection: The lower trichord of PENT<sub>6</sub> and the upper dyad of PENT<sub>7</sub> belong to WT<sub>0</sub>. The modulation is similar in method to the first wheel-motive section, and this time the two clashing pentatonic scales are connected with one whole-tone scale. Fig. 1-5 (extracted from Fig. 1-1) shows the relationship between the three scales (mm. 34-40).

Fig. 1-5. Chang, *Diu-Diu-Bu-Liao*. Table of PENT<sub>7</sub>, PENT<sub>6</sub> and WT<sub>0</sub> relationship.

PEN7	G	A	B		D	E
WT <sub>0</sub>	G $\flat$	A $\flat$	B $\flat$	C	D	E
PEN6	G $\flat$	A $\flat$	B $\flat$		D $\flat$	E $\flat$

The collection modulates from the PENT<sub>7</sub> (mm.34-36) to WT<sub>0</sub> (mm.36-37) using common tones D and E at m. 36. The WT<sub>0</sub> generates G $\flat$ , A $\flat$  and B $\flat$  as other common tones in order to modulate to PENT<sub>6</sub>. Although different from the first section's modulation (both the two PENTs are connected with last two notes of the WT<sub>0</sub>), these two PENTs, with no common tone, can also be considered in the same scale area as the WT<sub>0</sub>. Chang's device not only makes the modulation smooth and successful, but also makes possible a modulation from one pentatonic to any other through a whole-tone scale that shares pitches with both.

Furthermore, in m. 38, the E from WT<sub>0</sub>, not present in PENT<sub>6</sub>, creates a diminished fifth with the B $\flat$ . The music pauses each time after the E and after two iterations of the diminished flavor, the water-drop motive transforms into the circular motion of the wheel motives (m.40) and harks back to PENT<sub>7</sub>. This striking modulation is created by using both motives. The thirds of the water-drop motive serve again to contrast the step-wise wheel motive. The two motives are combined

together in the recapitulation, having both major-second and the minor-third intervals.

The “combined motive” <G, A, G, E> at m. 35 (Ex.1-8), has the character of wheel motive, “driving” to the next section and has the same contour as the <B $\flat$ , D $\flat$ , B $\flat$ , A $\flat$ > in m. 37. The short transition from the end of mm. 40 to 43 transforms PENT<sub>6</sub> collection back to PENT<sub>7</sub> via the “combined motive.”

In the Coda (Ex. 1-10), the PENT<sub>3</sub> collection starts softly in the home pitches after a dramatic flourishing of the wheel motive—from *pp* to *fff*, following a long rest. Before coming to rest, the music seems to wander slightly, the phrases getting shorter and shorter, with longer and longer intervals of rest. In the middle of m. 49, a decisive moment, the thirds, derived from all of the previous scales, pile up in the guise of the water-drop motive and quickly rise to the altissimo A in m.51.

Ex. 1-10. Chang, *Diu-Diu-Bu-Liao*. Mm. 46-53 of the Coda.

PENT<sub>3</sub>, home pitch collections

↑ The A from PENT<sub>3</sub>

↳ wheel motive ↳

↳ WT<sub>0</sub>      ↑ The pivotal E from WT<sub>0</sub> ↳

The extended high A plummets precipitously into the lower register, ending the piece using a striking pitch organization. The Eastern wheel motive at the end of m.52 is followed by a low E from the Western  $WT_0$ , including four pitches of  $WT_0$ . This pattern recalls the diminished fifth ( $B^b$ -E) from mm.38-39, and through the highest and lowest notes, recalls the E-major from the second section.

To conclude, whole tone scales provide a matrix for modulation between any two pentatonic collections in Chang's *Diu-Diu-Bu-Liao*. Every pentatonic scale can be connected to another via a whole tone scale or a major scale. A new sound, created by the use of different musical languages, blurs the boundary of Eastern and Western music.

## **I-2 Flying Away White Egret 飛去的白鷺鷥**

The original Taiwanese folk song “White Egret” (白鷺鷥) is a traditional “reciting song,” meaning the lyrics are recited in a way to sound very close to specific musical intervals. For example, when saying “White Egret” in Taiwanese the three Chinese characters form the relationships of an ascending major sixth (M6) from the second to the third words, with repeated pitches of the first and second. In traditional agricultural communities, white egrets were often seen in the farms. The lyrics

describe a white egret walking and slipping into a gutter. But his misfortune turns out to be a lucky occurrence as he finds a coin inside. The story illustrates both the humorous imagination of our ancestors, and the positive nature of the Taiwanese people.

As with the first fantasy of the work, *Diu-Diu-Bu-Liao*, Chang portrays the story from the original lyrics in characteristic music. In *Flying Away White Egret*, she focuses particularly on the elegant movements of the bird, and the story's humor. Chang says this piece is like a Chinese water-ink painting of nature and suggests that the player use a very gentle but nimble technique to play the fast notes in this piece, reflecting the agile movements of egrets.<sup>21</sup> Her musical painting expresses a peaceful mood, viewing the white egret from some distance. The following is the first part of the original folk song that inspired Chang to compose her own setting.

---

<sup>21</sup> Yu-Hui Chang Interview, March 12, 2008.

Ex. 1-11. *White Egret* (白鷺鷥), traditional folksong.

臺灣北部童謠

白鷺鷥 車糞箕 車到溪仔 墩

Transliteration: bei leng si chia pun ki chia kau ke-a gi

Translation: A white Egret drags a dustpan to a brook bank.

跌一倒 拈著一先 錢

bua jit do kio dio jit sien ji

Suddenly trips and falls, but found one dollar.

### **Intervallic structure in Chang's *Flying Away White Egret*:**

The interval of a perfect fifth pervades the piece and portrays different gestures in the story. The original song opens with a major sixth interval (C-A), but in the second phrase (m. 5) the A becomes a grace note that quickly flips down to G, emphasizing the perfect fifth. The fifth plays an important role in both the Eastern pentatonic scale and, of course, in Western harmony. This folksong also describes the stretching motions of the white egret in a musical abstraction. One pentatonic collection embeds four perfect fifths and two triads. For example, in  $PENT_0 \langle C, D, E, G, A \rangle$ , there are four perfect fifths: C-G, D-A, G-D and A-E. It also contains the major triad, C-E-G, and the minor triad, A-C-E. Although two triads can be found in

any pentatonic collection, their meaning and function differ from that of the Western common practice period. A long history of cultural exchange between East and West, of course, has resulted in many harmonizations of Eastern folksongs in a Western manner. When mixing Western scalar collections with pentatonic elements, Chang stirs in pitches from outside of the pentatonic collection in use, which provides her with rich harmonic colors.

### **East-West, coexistence through melody-harmony**

The white egret appears at the beginning of Chang's setting as a whispering G, which represents its first appearance. The bird first stretches its wings with the perfect fifth on G-D, and then closes them in a descending major seventh (Ex. 1-12). The very few notes and many rests immediately spawn a quiet and peaceful atmosphere. The slow and lyrical melodic line suggests the naturally elegant movements of the egret.

In the first fantasy, Chang combines the elements of the pentatonic and whole tone scales. In the second, East-West associations are extended to include melodic and harmonic relationships. The beginning G and the perfect fifth (G-D) in m. 2 are articulated in the stretching gesture. Taiwanese audiences might be reminded of the characteristic perfect fifth (C-G) throughout the original folk song, which is

customarily set in PENT<sub>5</sub> <F, G, A, C, D> (Ex. 1-11 is only the first part of the original folk song).

With the E $\flat$  at m. 3, and the A $\flat$ , B $\flat$  in the following measures, one might be tempted to hear the key of E $\flat$  established. Within the first phrase, the five pitches of another pentatonic collection, PENT<sub>8</sub> <A $\flat$ , B $\flat$ , C, E $\flat$ , F>, are clearly shown (mm. 4-5), but the C-A $\flat$ -E $\flat$  major triad in m. 4 is also heard, an example of how Chang uses implications of Western harmony against an Eastern melody. It is clear from Fig. 1-6 and Ex. 1-12 below that the two pentatonic collections (PENT<sub>10</sub> and PENT<sub>8</sub>) include all the notes of the E $\flat$ -major scale, a detail that Chang exploits to blur the boundaries between the two systems. A table listing the relationship between all the pentatonic and major scales is shown in section I-1, Fig. 1-3. Moreover, the PENT<sub>10</sub> is displayed in m. 6, in thirty-second notes, but the last note (E) of the group is aligned with the two perfect fifths, as if the egret keeps stretching its wings before starting to fly (see Ex. 1-12).

Fig. 1-6. Chang, *Flying Away White Egret*. Eb major with its related PENTs (extracted from Fig. 1-3).

Eb Maj.	PENT <sub>8</sub>	C		Eb	F		Ab	Bb
	PENT <sub>3</sub>	C		Eb	F	G		Bb
	PENT <sub>10</sub>	C	D		F	G		Bb

Ex. 1-12. Chang, *Flying Away White Egret*. Coexistence of (Eastern) PENT<sub>10</sub> and (Western) Eb major, mm. 1-7.

Perfect fifth of the original song,  $\gamma$  PENT<sub>8</sub>.....

*pp* *poco* *pp* *p*

┌ Eb major ─┐

.....┐ ┌ Echo ─┐ ┌ PENT<sub>10</sub> ─┐ ┌ P5 ─┐ ┌ P5 ─┐

5 *pp*

┌ Eb major ─┐

Also in Ex. 1-12, at the end of the first phrase (m. 5), the (B, F#, and G#) echo the previous phrases (Ab, Eb, and F) and (Eb, Bb, and C), relieving the tensions and also revisiting the intervallic pattern. The last note (F#) of the phrase sounds like a sigh, and elides to the next phrase a rapid arpeggiation of the PENT<sub>10</sub> pitches. (I return

to a discussion of Chang's use of inflection and ornamentation later in Chapter IV.)

As shown in Ex. 1-13, beginning at the end of m. 7, the two perfect fifths (E-B and A-E) add tension as the egret stretches its wings, and its body trembles in the fast flurry of PENT<sub>10</sub> <B $\flat$ , C, D, F, G> pitches. The two perfect fifths change the harmonic color immediately from the PENT<sub>10</sub> and unfold an A major chord (m. 7). While the major triad is still in mind, the C $\sharp$  moves to C $\natural$  (m. 8), shifting from major to minor. The mood returns to the melancholy opening melody. But two more ornamented major triads follow immediately (mm. 8-9): C-(D)-E $\flat$ -A $\flat$  and E $\flat$ -(A $\flat$ )-B $\flat$ -G, where the pitches in the parentheses may be considered to be passing tones. The short appearance of the A major triad in m. 6 provides a contrasting color to the E $\flat$  major collection. The A $\flat$  major chord moves to E $\flat$  major at the downbeat of m. 9, which is the peak of the second phrase. From mm. 6-10, the melody starts from PENT<sub>10</sub> <B $\flat$ , C, D, F, G> and moves to PENT<sub>8</sub> <A $\flat$ , B $\flat$ , C, E $\flat$ , F> with the added Western harmonic color. As mentioned before (Fig. 1-6), the two pentatonic collections are related to form the E $\flat$  major scalar pitches. The A $\flat$  major triad goes to E $\flat$  major triad in mm. 8-9, thus, could be seen as the subdominant to tonic harmonic progression. The Eastern melody sings meanderingly, and the implied Western harmonies layer it with different colors, contributing to the rich expression I feel in the music.

The harmonic rhythm speeds up beginning in m. 9. The major triad (E $\flat$ -G-B $\flat$ ) changes to minor (E $\flat$ -F $\sharp$ -B $\flat$ ) and then splinters into (E $\flat$ -F $\natural$ -B $\flat$ ), against the perfect fifth E $\flat$ -B $\flat$  of the previous measure, which is retained in our ears because of being expressed strongly with a crescendo. In the fast, descending inner voice, the F $\natural$  continues to descend chromatically to E then E $\flat$  (mm. 9-10). The chromatic scale, apparent here in an Eastern style gesture, is also a feature of Western music, where it is often used to express strife or struggling.

Ex. 1-13 Chang, *Flying Away White Egret*. Mixture of pentatonic melody and Western harmonic structure, mm. 6-10.

<B $\flat$ , C, D, F, G>  
 [PENT<sub>10</sub>] ↗ ↗ (two upward P5s)

pp  
 E $\flat$  major A-C $\sharp$ -E triad

<A $\flat$ , B $\flat$ , C, E $\flat$ , F>  
 [PENT<sub>8</sub>.....to PENT<sub>10</sub>.....back to PENT<sub>8</sub>]  
 [P5↗(E $\flat$  to B $\flat$ )] ↓ chromatically descending notes (G., F $\sharp$ , F, E, and E $\flat$ )

mp p pp ppp  
 A $\flat$ -C-E $\flat$  (IV) to E $\flat$ -G-B $\flat$  (I) in E $\flat$  major

The implied harmonies create a blurred effect like the colors in certain abstract paintings. At m. 16 of Ex. 1-14, the first climax of the piece, Chang quotes the original folk song in the clarinet's high register in PENT<sub>9</sub> <A, B, C#, E, F#> (mm. 16-17). Interestingly, although the note A does not appear here, I hear an F-sharp minor chord clearly in performance. This may be because of my familiarity with the original folk song, where the A occurs in the following measure, (that Chang does not include), or because of my Western musical training.

In m. 18 (Ex. 1-14), the music sails up to a high D. The harmonic progression may be understood by extending the melody from high to low register: a B-diminished triad transforms into a B minor chord (G<sup>b</sup>=F#) and back to the B-diminished seventh chord (B<sup>°7</sup>) in the end of m. 19. The adjustment from minor to diminished chords sounds surprisingly natural, perhaps because the pitches in the broken chords are also related to pentatonic collections. PENT<sub>2</sub> is hinted at in the fast, winding run (m. 18). The F# appears again as an echo in m. 20. The echo figure that begins in m. 20 (F#-G#) extends to m. 23, calming itself in PENT<sub>4</sub>. We also have an implication of PENT<sub>9</sub>, realized as F-sharp minor. Figure 1-7 illustrates how the F-sharp minor scalar pitches are included in three pentatonic scales, PENT<sub>2</sub>, PENT<sub>9</sub>, and PENT<sub>4</sub> (in circle of fifths order). All three PENTs are included in this F-sharp harmonic passage (mm. 16-23). The natural F in m. 18, clashing with the three PENTs,

is an enharmonic spelling of the leading tone E# of the F-sharp minor, delaying the reappearance of F# in m.20.

Fig. 1-7. Chang, *Flying Away White Egret*. F-sharp minor with its related PENTs (extracted from Fig. 1-3).

<b>A</b>	PENT <sub>2</sub>		D	E	F#		A	B
Major	PENT <sub>9</sub>	C#		E	F#		A	B
and <b>F#</b> minor	PENT <sub>4</sub>	C#		E	F#	G#		B

Ex. 1-14. Chang, *Flying Away White Egret*. East-West harmonic combinations, mm. 16-23.

Quotation from the original folk song, in PENT<sub>9</sub>

┌ PENT<sub>2</sub> <D, E, F#, A, B> ┐

┌ F# minor, F#-A-C# (I) ..... ┘

┌ ...B-D-F(vii<sup>o</sup>).....┐B-D-F#...B-D-F-G# (vii<sup>o</sup>).....┘

(Ex. 1-14 is continued on next page)

┌ PENT<sub>4</sub> <E, F#, G#, B, C#>      ┌ ↓ Ending inflection

21

*p*

.....back to F# natural minor .....

Finally, the pitch organization of the last phrase in Chang's *Flying Away White Egret* might convey the white egret flying up into the sky (Ex. 1-15). Under the marking *with subtone*, six WT<sub>1</sub> pitches are heard at m. 55: The last one (F) of this group is delayed to be mixed with the next pentatonic group. The inflections of E $\flat$  to E and D $\flat$  to D chromatically transform the WT<sub>1</sub> into the next pentatonic group PENT<sub>7</sub>, smoothly connecting the two systems with the method mentioned in the first *Fantasy* (Fig. 1-1a). The five pitches of PENT<sub>7</sub> are displayed from the last two notes in m. 55 to the first sextuplet of m. 56. The final notes of this PENT<sub>7</sub> passage, A-E, form a perfect fifth, which has been used throughout the piece. The perfect fifth (A-E) forms part of the major triad (A-C#-E) in the next sextuplet, and other fifths form the foundation of several more triads here. The fifth A-E moves up a semitone to B $\flat$ -F, then to an augmented fifth B $\flat$ -G $\flat$ (F#) at the end of m. 56, where depicts the white egret stretching its wide wings and flying high into the sky. The three notes of the augmented triad at m. 56 belong to WT<sub>0</sub>, which continues to the

final measure. The move from WT<sub>0</sub> to WT<sub>1</sub> might depict the motion of the egret's wings, or, perhaps, the egret disappearing into the sky.

Ex. 1-15. Chang, *Flying Away White Egret*. Pitch organization, mm. 54-57.

The musical score for Ex. 1-15 consists of two staves. The first staff (measures 54-57) is in treble clef and contains a melodic line with various ornaments and dynamics. Above the staff, the text "<G, A, B, D, E> [PENT<sub>7</sub>]" is written. Below the staff, there are annotations for "with subtone", "pp", and "WT<sub>1</sub>". The second staff (measures 56-57) is also in treble clef and contains a more complex melodic line with ornaments and dynamics. Above the staff, the text "[PENT<sub>7</sub>]" is written. Below the staff, there are annotations for "6", "5", "4", "poco", "ppp", "Upward P5s", "!(A5)", "WT<sub>0</sub>", and "C# minor triad WT<sub>1</sub>".

Chang's *Flying Away White Egret* differs from other settings and arrangements in the ways that it combines Eastern and Western harmonies. The monophonic line suggests a background harmonic structure against the chromatic alternations and juxtapositions between the whole tone or diatonic elements and pentatonic collections. This technique recalls the Chinese phrase “畫龍點睛”: “to bring the painted dragon to life by putting in the pupils of its eyes.” Chang blurs the boundaries of the Western and Eastern pitch organization as she creates her own unique sound world.

### I-3 Darkening Dark Sky 天黑又黑

The last of the *Three Fantasias* is a very rhythmic movement inspired by the famous Taiwanese folk song “The Dark Sky” (天黑黑). Chang changed the title to *Darkening Dark Sky*, as she musically exaggerated its humorous story through repeated motives and rhythms.

Ex. 1-16. “The Dark Sky” 天黑黑, Taiwanese folksong.

┌Motive a ┐



天黑 黑，欲落 雨， 阿公仔舉鋤 頭仔 要掘 芋。 掘啊 掘，掘啊 掘

Transliteration: ti oh oh, be lo ho, a gon-a yagi tao-a be goot oh. goot-a goot, goot-a goot,

Translation: The sky is dark, and it's going to rain. Grandpa holds the hoe and digs taro. Digs and digs,



掘著 一尾 游鱸 鼓， 伊 呀嘿都 真正 趣味。 阿公 仔要煮 鹹 ，

goot dio tzi mue suan liu go, yi-a- hey-do gingia tsu bi. a gon-a be zu gia-m

he finds one loach<sup>22</sup>. (with happy exclamations) It is fun! Grandpa wants to make the loach salty,



阿 媽仔要煮 淡 ， 阿公 仔 要煮 鹹 ， 阿 媽仔要煮 淡 ，

a ma-a be zu zian a gon-a be zu gia-m a ma-a be zu zian

but Grandma wants it lighter; Grandpa wants to make the loach salty, but Grandma wants it lighter.

<sup>22</sup> During the agricultural time, there might be some loaches and field snails in the farm, where has a lot of water and soft soils. Loach, also called oriental weather-fish, drills or digs into the soft soils like earthworm. It is tasty and contains high protein and low fat.



兩人相打 弄破鼎 弄破鼎， 伊呀嘿都啷當鏘當 噲，哇哈哈。

len-e shio pa lon pua dian lon pua dian, yiaheydo longdongchindongchiang, wahaha.

The two fight and break the pots, (with exclamations and clanging pot sounds), and erupt into laughter.

Like the other Taiwanese folk songs in Chang's set, "The Dark Sky" (天黑黑) reflects daily life for our Chinese ancestors. In the last line, the grandfather and grandmother fight over the flavoring of the loach, and clanging pot sounds follow: *long-dong-chin-dong-chiang*, and then they erupt into laughter: *wahaha*. This delightful tale dates to the 1930s, an era where men held more power over women, but it depicts a drama that subtly defies this dynamic. Grandfather is searching for taro, and unexpectedly finds a loach (a small fish). He happily brings it home as a gift to his wife and plans to cook it with plenty of salt, but Grandmother lets him know she prefers a lighter touch with the seasoning. Their ensuing conflict shows how they resist traditional gender roles where men do not even step into the kitchen, and women always cook for men, never vice versa. The story pushed against these roles in the 1930s, but it is considered somewhat radical even nowadays.

As with the previous songs Chang selected for her fantasias, this one is another example of a reciting song (唸謠), where musical pitches reflect the lyrics in recitation almost exactly. For example, the first three words, 天黑黑 (ti-oh-oh in

Taiwanese dialect) are set to the pitches A-G-A, thereby imitating the recited tones of the lyrics, and making the melody easy to remember.

### Pitch organization

#### Avoid note

Chang fuses Western and Eastern pitch collections in an altogether different way in this work.. The pentatonic pitches from the original folksong remain, and although the opening notes are set in a series of possibly jazz-influenced (swinging) rhythms, they quote from the original “motive *a*” (Ex. 1-16). Meanwhile, Chang’s unusual and unpredictable accented notes, G# and C#, add a quirky and humorous flavor (see Ex. 1-17).

Ex. 1-17. Chang, *Darkening Dark Sky*. Opening “motive *a*” (an Eastern element) and accented notes (non-Eastern element).

The musical notation is a single staff in treble clef, 2/4 time signature. It begins with a piano (*p*) dynamic marking. The melody consists of a series of eighth notes, mostly beamed in pairs. The notes are: G4, A4, B4, A4, G4, F#4, E4, D4, C#4, B3, A3, G3, F#3, E3, D3, C#3, B2, A2, G2. Above the staff, a bracket labeled "Motive a" spans the first six notes (G4 to F#4). Two downward-pointing arrows with exclamation marks (!) are positioned above the F#4 and C#3 notes, indicating their accent. Below the staff, there are three L-shaped symbols: one at the beginning, one under the F#4 note, and one at the end. The text "PENT<sub>7</sub> <G, A, B, D, E>" is centered below the staff, indicating the pentatonic scale used.

The accented G# and C#, almost symmetrical to the repeated A-B: G# is in a major sixth above B; C# is in a minor sixth below A. They confuse and blur the tonality,

which Taiwanese audiences who are familiar with the original folk song wonder how this piece reflects the original folksong; by contrast, Western audiences unfamiliar with the original might start to guess which diatonic key that contains G#-A-B-C# tetrachord of the beginning passage.

Based on the folksong melody, the folksong “motive *a*” of *Darkening Dark Sky* belongs to PENT<sub>7</sub> <G, A, B, D, E>. But this motive consists of only two notes from PENT<sub>7</sub>; the collection becomes more obvious as other notes are later added onto this two-note motivic base. The accented notes G# and C# seem to be emphasized here to convey Chang’s reinterpretation of the original folksong. As shown in Ex. 1-18 below, the last note of m. 11 (F) refers to a pentatonic color with the notes in m. 12—PENT<sub>1</sub> <C#, D#, F, G#, A#>. In this short transition (mm. 11-12), the “motive *a*” in PENT<sub>1</sub> connects to G# to become “motive *b*” (D#-C#-D#-G#), which recalls the two accented notes in the beginning. The coexistence of the “motive *a*” and “motive *b*” in different PENTs is made through the whole-tone transition, WT<sub>1</sub> in mm. 11-12. The whole-tone passage is not only a transition, but includes another “motive *w*” (B-A-F) that joins the swing later. The two very remote pentatonic flavors (with no common tone) alternate with each other through WT<sub>1</sub>, a compositional technique explained in Fig. 1-1. Fig. 1-8 shows that each of PENT<sub>7</sub> and PENT<sub>1</sub> has three common tones with WT<sub>1</sub>. These alternations distort the traditional song.

Ex. 1-18. Chang, *Darkening Dark Sky*. Coexistence of motive *a* and motive *b* through motive *w* in WT<sub>1</sub>, mm. 11-15.

The musical score shows a single melodic line on a treble clef staff. Above the staff, three pentatonic scales are indicated: PENT<sub>7</sub> (C, D, E, F, G), PENT<sub>1</sub> (C#, D#, F, G, A), and PENT<sub>1</sub> <C#, D#, F, G#, A#>. Motives are circled: 'reversed motive a' (measures 11-12), 'motive b' (measures 12-13), 'motive a' (measures 14-15), and 'motive b' (measures 15-16). A 'motive w' is indicated by a bracket under measures 11-15. A 'sub p' dynamic marking is present in measure 12. The staff ends with a fermata and a repeat sign.

Fig. 1-8, Chang, *Darkening Dark Sky*. Relations between PENT<sub>7</sub>, WT<sub>1</sub>, and PENT<sub>1</sub>.

PENT <sub>7</sub>	C		D			G		A		B
WT <sub>1</sub>		C#		D#	F	G		A		B
PENT <sub>1</sub>		C#		D#	F		G#		A#	

After modulating from PENT<sub>7</sub> to PENT<sub>1</sub>, Chang sets off with a *subito forte* on C in m. 15 (Ex. 1-19 shows its second time appearance in m. 17 for a clearer layout), which is alien to WT<sub>1</sub> and PENT<sub>1</sub> and has been avoided from the beginning. She has been avoiding C up to this point in a way that recalls the “avoid note” technique in jazz.<sup>23</sup> This C offers an additional surprise as Chang uses it to introduce another new element: syncopated rhythm. I believe that the avoid C and the syncopated rhythm both stem perhaps unconsciously from Western jazz. Moreover, the motives *a*, *b* and

<sup>23</sup> An avoid note is a note in a jazz scale that is considered (in jazz theory and practice) too dissonant to be played against the underlying chord, and so is either avoided or chromatically altered. See Carl Humphries, *The Piano Handbook* (2002), p.262.

w join the syncopated C in this lively bebop passage (mm. 16-20).

Ex. 1-19. Chang, *Darkening Dark Sky*. WT<sub>1</sub> follows PENT<sub>1</sub>, emphasizing appearance of “avoid note,” C, mm. 16-20.

┌ PENT<sub>1</sub> <C#, D#, F, G#, A#> ┐

└ WT<sub>1</sub> <C#, D#, F, G, A, B> .....↑connect to the C! ↑┐

The short phrase at m. 19 begins with E $\flat$  and D $\flat$ , derived from the PENT<sub>1</sub>, then immediately changes harmonic color with WT<sub>1</sub>. The example above again clearly shows that motive *a* extends to motive *b*, and the color changes from Eastern to Western through the motive *w*, which is made from the common tone of PENT<sub>1</sub> and WT<sub>1</sub>, F, linked to B-A. Chang uses a similar technique in *Diu-Diu-Bu-Liao*, rapidly changing from one collection to the other.

In *Darkening Dark Sky*, Chang places the avoided note C off the beat, to emphasize it with an aggressive syncopation that appears three times and initiates the complementary whole tone scale WT<sub>0</sub> in mm. 21-22 (Ex. 1-20). The WT<sub>0</sub> collection appears one bar after its complementary WT<sub>1</sub>. The short quote in mm. 27-28 is from the first two measures of the original folksong (Ex. 1-16). Here, the opening motive *a*

is clearly supported in its Eastern context through the appearance of all the five pitches in PENT<sub>7</sub>.

Ex. 1-20. Chang, *Darkening Dark Sky*. WT<sub>0</sub> connecting to PENT<sub>7</sub> and the quotation from the original folksong (mm. 21-27).

The image displays two staves of musical notation. The first staff, starting at measure 21, contains a melodic line with various ornaments (accents, slurs, and ties) and dynamic markings including *mp* and *ff*. Above the staff, the text "PENT<sub>7</sub> <G, A, B, D, E>" is centered, with a Γ symbol above the first measure and a 7 symbol above the last measure. Below the staff, "WT<sub>0</sub>" is written between two L-shaped symbols. The second staff, starting at measure 27, shows a rhythmic pattern of eighth notes. Above it, "PENT<sub>7</sub>" is written between two Γ symbols, and "Quotation of the original folk song (mm. 1-2)" is written to the right.

After the repetitions of the syncopated C (mm. 21 and 22), a combination of the motives and rhythms result in mixed sonorities that escalate the music into the scene of quarrelling.

The Quarrel scene

Beginning at m. 48 (Ex. 1-21), the old man and woman struggle over how to cook the loach. The low B $\flat$  represents the male voice, and the high D the female voice. The “quarrel” starts with a single note from each register. Chang depicts their

deranged argument by adding notes to each voice to extend their words. At m. 51, the high D abruptly brings back a motive from the first movement—the water-drop quote (m. 6 of the folksong *Diu-Diu-Dang* 丟丟銅). The reminiscence describes a quarrelling couple who throw some previous grievances at each other, escalating the conflict and making the situation worse. Here, the old woman, as it were, “shouts out” the water-drop motivic pitches from the first movement in the home  $PENT_7$  throughout the quarrel (mm. 51-61); while the old man grouches about another perceived slight.

The low  $B\flat$  becomes associated with the lower E (m. 53), furthering the distance between the warring factions. The augmented fourth (E- $B\flat$ ) joined by the  $A\flat$  (motive *w* combination) seems musically to force the old man into the  $WT_0$  area. The low E, functions as a common tone between  $PENT_7$  and  $WT_0$ , and represents the connection between the two characters.

Ex. 1-21. Chang, *Darkening Dark Sky*. The quarrel scene with two characters represented in different register and collections, mm. 48-64.

The image displays a musical score for the 'quarrel scene' from Chang's *Darkening Dark Sky*, measures 48-64. It features three systems of music:

- Top System:** Shows the vocal entries. The grandmother's voice is in a high register, marked with a circled 'A' and a triangle above the staff. The grandfather's voice is in a low register, marked with a circled 'B' and a triangle below the staff. Dynamics include *f* and *pp*.
- Middle System (Measures 50-55):** Labeled 'Motivic pitches from "Diu-Diu-Bu-Liao", in PENT7'. It shows instrumental motifs with circled 'A' and 'B' notes. Dynamics include *f*, *pp*, *f*, *p*, and *f*. A note in measure 53 is labeled 'In WT-0'. Measures 54 and 55 are labeled 'From WT-0'. Measures 54 and 55 also have 'From PENT7' labels.
- Bottom System (Measures 60-64):** Labeled 'Quotation from the original folksog "The Dark Sky"'. It features a prominent *ff* dynamic marking.

The “quarrel scene” (mm. 48-61) begins with a single note in both grandfather and grandmother’s voices. Additional notes with each contrasting register and corresponding collection unfold the “quarrel.” The low notes (m. 53) show the WT<sub>0</sub> area, but the E<sup>b</sup> in m. 54 lies outside of either PENT<sub>7</sub> or WT<sub>0</sub>. The G in m. 55

actually belongs to the “grandmother’s voice,” PENT<sub>7</sub>. The second iteration of this G (m. 57) seems to confirm G as the right arguing point, justifying the initial foray to Eb as not a good idea. The quarrelers are apparently reaching for quick excuses. The low voice links to the G that belongs to PENT<sub>7</sub> (from m. 55), while the high voice links to F# (from m. 57) belonging to the WT0. Is this Chang’s depiction of a move toward compromise? From mm. 62-64, she quotes the original pitches of the folksong, but separating the quotation into two remote registers and changing the rhythm, foreshadowing the next scene. The quotation here reaches the highest pitches of this movement.

The “quarrel” seems not to be quite over, however. Beginning at m. 68 (Ex. 1-22c) the argument turns into an unspeaking “cold war.” Only the regular eighth-note “heartbeats” of the old couple are heard in the silence. The heartbeats are fast and uneasy after the spat and always begin on a weak beat, to depict the nervous chemistry between couple. This heartbeat rhythm derives from mm. 12-13 of the folksong, associated with the point at which the couple breaks the pot. The two bracketed Ds of m. 12 and m.13 in Ex. 1-22a would usually be notated only as a single quarter note on D, with the grace note E as an inflectional ornament. The rhythm of the repeated Ds is heard twice in consecutive measures 12 and 13, which is adapted by Chang to the low G with the inflected grace note A in grandfather’s low

voice (mm. 63-64) in the quotation (Ex. 1-22b). Chang replaces the downbeat with a rest and repeating the G three times in m. 63. She adapted this offbeat rhythm of the repeated notes to depict anxious feelings in the heartbeat rhythms throughout this “cold war” section (mm. 68-85). In the excerpts below we see how Chang adapts the quotes to the “quarrel scene” and the “cold war” scene, where the “heartbeats” break in.

Ex. 1-22. Chang, *Darkening Dark Sky*. Rhythm adaption and comparison of the original folk song and Chang’s setting.

- a. Mm. 12-13 from the original folksong, “The Dark Sky.” The rhythms with inflection effect in the brackets will be changed and adapted.



- b. Mm. 62-64 from Chang’s *Darkening Dark Sky*. In this quotation (from the excerpt above), the rhythm of E-D above is changed to the one of A-G, having similar effects of inflection and repeating.



(Ex. 1-22 is continued on next page)

- c. Mm. 68-75 from Chang's *Darkening Dark Sky*. The rhythm of the "heartbeats" is adjusted to have only the repeated F#s. Like the rhythm of m. 63 above, the heartbeat rhythm always starts on a weak beat, alternated with quotations of m. 12 from the original.

The image shows two systems of musical notation. The first system, measures 68-70, consists of a treble clef staff with a key signature of one sharp (F#). The melody is a series of repeated F# notes. Dynamics are marked as *f* and *pp*. A bracket below the notes is labeled "Heartbeats". The second system, measures 70-75, also has a treble clef and a key signature of one sharp. The melody is a series of repeated G notes. Dynamics are marked as *mf* and *pp*. Brackets below the notes are labeled "Quotation" and "Heartbeats".

### *The Final Scene*

The final scene starts with a kind of "hiccup" (Ex. 1-23) in my interpretation.

Chang depicts them with offbeat rhythms, wide leaps, and accents that are typical of jazz rhythms. Following this, the two characters erupt into laughter that ends their quarrel. The nuances of the couple's mood change are shown in the rhythm and dynamics of a steady stream of repeated Gs. From m. 110 through m. 112, the off-beat Gs with *sforzato* within *piano* portray a hesitation at first, and then the Gs accelerated and grow to *fortissimo* at the end of the phrase. After a moment of silence, an improvisatory-sounding phrase (mm. 115-120) concludes the movement with a flourish: the low F# heartbeat is transferred to the raucous high F#, with the quotation

from the first three notes of the original folksong.

Ex. 1-23. Chang, *Darkening Dark Sky*. Hiccups and laughter, mm. 109-113; flourish after outburst, mm. 115-end.

The image shows three staves of musical notation. The first staff, starting at measure 109, features a treble clef and a 2/4 time signature. It begins with a *p* dynamic and a slur over the first two notes, labeled 'Laughter'. This is followed by a series of notes with *sf* dynamics, labeled 'Hiccups'. The staff ends with an *accel.* marking and a 2/8 time signature. The second staff starts at measure 113, with a 2/4 time signature and a *ff* dynamic. It includes an *accel.* marking and a 'a tempo' instruction. The third staff starts at measure 117, with a *f<sub>p</sub>* dynamic and a *ff* dynamic. It includes a 'Heartbeat F#' marking and a 'with quotation' marking.

Chang uses pitches and rhythms to retell the folktale vividly in music, and reiterates certain notes in different sections to express its drama, reinforced over a stable structure. The low B $\flat$  (the grandfather's voice) at the quarrel scene (m. 48) descends through A, and then to the low G (m. 63), perhaps representing distances from the grandmother's much higher range. The clarinet descends to the soft, low F $\sharp$  heartbeats from mm. 68-86 in the cold war scene, and descends to F (m. 91) indicating that the old man and woman have now re-opened their hearts to each other.

The lowest note of the clarinet—low E at m. 98—recalls the home pentatonic scale PENT<sub>7</sub> from folksong (mm. 27-28) to show that the couple has returned to the good humor of the opening. The final flourish finishes the story with reconciliation as it connects the two characters' registers.

## Chapter II: *All But Not At All* by Wei-Chieh Lin

### II-1 Compositional Organization

#### Pitch Organization

The following discussion is based on interviews with the young Taiwanese composer Wei-Chieh Lin, and on my study of Joseph Straus's discussion of Babbitt's trichordal arrays.<sup>24</sup> Lin composed his solo piece for clarinet, *All But Not At All* while studying with Milton Babbitt at the Juilliard School. After he analyzed Babbitt's *Composition for Four Instruments*, and read Andrew Mead's *Introduction to the Music of Milton Babbitt*, Lin decided to use trichordal arrays in his blueprint for the piece.

Lin wanted to express his compositional voice from the perspective of Western contemporary music, and also to allow his Taiwanese background to enter into the music. In the trichordal array (Fig. 2-1), twelve pitches in one octave can be arranged into the four classical transformations<sup>25</sup> of trichordal sets and organized in different ordering on every line in the array. It seemed a suitable way to combine both Eastern and Western styles, as order and balance play important roles in the aesthetics of both cultures. For example, in the Chinese *I-Ching*, 易經, Yin 陰 and Yang 陽 are the

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<sup>24</sup> See Joseph Straus, "Babbitt and Trichordal Arrays" in *Introduction to Post-Tonal Theory*, 3<sup>rd</sup> ed. (New Jersey: Upper Saddle River, 2005) 240-244.

<sup>25</sup> See Andrew Mead, "Mapping Trichordal Pathways" in *An Introduction to the Music of Milton Babbitt*, (Princeton University Press, 1994) 54-76.

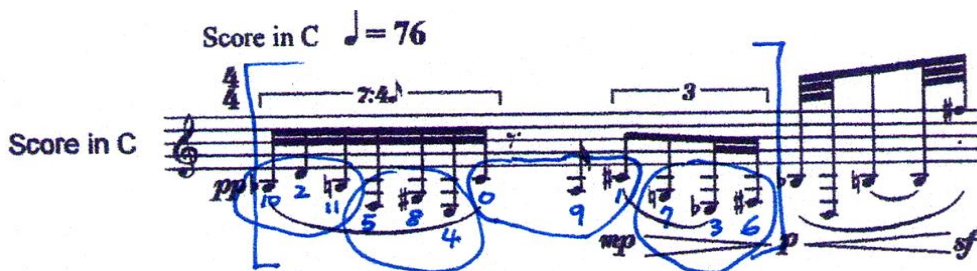
two opposite but balanced elements that make up every relationship in the cosmos.

These relationships might be illustrated by setting Yin and Yang symbols in different orders or combinations, for example, the trigram or Ba-gua 八卦. In traditional conceptions regarding structure, form, orchestration, harmony, and so on in Western classical music, balance is sought in creating a well-designed and detailed order.

Lin's *All But Not At All* sounds neither Eastern nor Chinese on the surface; rather the pitch organization and texture align closely to Babbitt's compositional method. But in a closer reading, the phrasing, articulation, and virtuosic octave shifts reveal patterns that simulate a modern Chinese dialogue, full of fast intonation changes and exaggerated expressions. The many rests between phrases also refer to the blank spaces favored in Chinese painting and calligraphy. Lin has deliberately kept his mind in the world of Chinese aesthetics, a topic that I explore further in this chapter.

In terms of pitch organization, Lin's piece derives from the pitch-class set (0,1,4), and its four classical transformations form an aggregation. As shown in Ex. 2-1, the opening twelve notes are derived from four sets of (0,1,4) with four different interval patterns: B $\flat$ -D-B has the intervals  $\langle +4 -3 \rangle$ , F-G $\sharp$ -E has  $\langle +3 -4 \rangle$ , C- A-C $\sharp$  has  $\langle -3 +4 \rangle$ , and G-E $\flat$ -F $\sharp$  has  $\langle -4 +3 \rangle$ . To write the four sets in the integer notation of pitch class, they are 10-2-11, 5-8-4, 0-9-1, and 7-3-6.

Ex. 2-1. Lin, *All But Not At All*. Opening twelve notes, displaying the four classical transformations of the pitch-class set (0, 1, 4), m. 1.

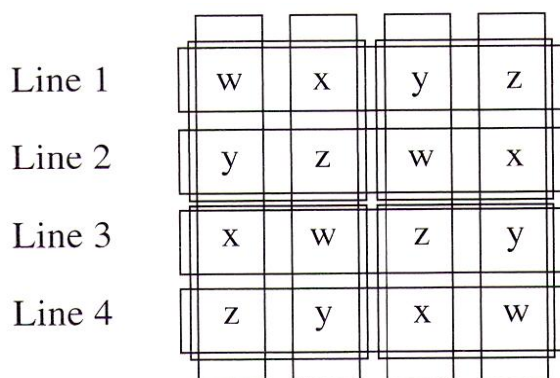


Analytical reduction: 10-2-11 = <+4 -3>, 5-8-4 = <+3 -4>, 0-9-1 = <-3 +4>, and 7-3-6 = <-4 +3>.

### Trichordal Arrays

Straus defines a typical trichordal array as consisting of four lines, all of which contain a derived series.<sup>26</sup> For instance, in Fig. 2-1, trichords W, X, Y, and Z are the four classical transformations that belong to the same set class, and they appear in the four serial orderings (P, I, R, and RI).

Fig. 2-1. Trichordal array.<sup>27</sup>



Lin followed Babbitt’s trichordal array format in designing three trichordal arrays for *All But Not At All* (Fig. 2-2 is the first one). The top line of Lin’s array (Line 1)

<sup>26</sup> See Straus, “Babbitt and Trichordal Arrays” 241-242.  
<sup>27</sup> Ibid.

opens the piece with these twelve notes from four trichordal sets of (0, 1, 4), as shown in Ex. 2-1.

Fig. 2-2. Trichordal Array in Lin's *All But Not At All*.

	A	B	C	D
1)	10 2 11	5 8 4	0 9 1	7 3 6
2)	6 3 7	1 9 0	4 8 5	11 2 10
3)	1 9 0	6 3 7	11 2 10	4 8 5
4)	5 8 4	10 2 11	7 3 6	0 9 1

1) Line P10 sets up the prime row interval patterns: +4 -3 +3 -4 -3 +4 -4 +3.

2) Line R6 retrograde patterns from P10: -3 +4 -4 +3 +4 -3 +3 -4

3) Line I1 inversion pattern from P10: -4 +3 -3 +4 +3 -4. +4 -3

4) Line RI5 retrograde inversion of P10: +3 -4, +4 -3, -4 +3, -3 +4

The top line of the array horizontally shows the first twelve notes of Lin's piece, but he has also thought to combine the notes in a vertical way. In order to provide more variety for a solo piece, the four lines of the array also read as four-part polyphony. Each column in Fig. 2-2 is also combinatorial: for instance, column A has four parts—10-2-11, 6-3-7, 1-9-0, and 5-8-4, which spread out from the last beat of m. 1 through m. 2 (Ex. 2-2). Hence, the single clarinet line is made up of four voices, distinguished in different registers; the highest notes in this passage, F#-Eb-G (6-3-7) form the second voice of column A; the third voice, C#-A-C (1-9-0), form the middle

part; and the lowest notes, F-G#-E (5-8-4) form the bass. Strikingly, the first voice of this column, B $\flat$ -D-B (10-2-11), is placed in front of the three voices, a distribution idea which I discuss later.

Because of the polyphonic writing, the F# in the high voice is hung in the air, picked up by the E $\flat$  that is also at the end of a slur, and goes to the G. Similarly, the low voice sounds a mirroring figure F-G#-E. We can see that these musical fragments serve to unify the texture by means voice leading, and contrasting dynamics. The performer's job would be to adhere to this scheme and to make each unit sound like a different character.

Ex. 2-2. Lin, *All But Not At All*. Four voices with different registers, following the column A in Lin's first trichordal array from Fig. 2-2, mm. 1-2.

Column A extracted from Fig. 2-2: I, First leading voice  
 II, Second (higher voice)  
 III, Third (middle voice)  
 IV, Fourth (lower voice)

10	2	11
6	3	7
1	9	0
5	8	4

## The Distribution of the Trichordal sets

Using the ideas and structure of the *I-Ching* 易經, Lin designed a figure of the distribution of trichords as a pre-compositional device. However, he also explicitly referred to concepts from the *I-Ching*'s texts, which address profound yet practical questions of existence. For example the "All" of the title is associated with the principal of the universe as a whole, whereas "Not At All," connects with the empty space. It also reflects an attitude of flexibility. For example, if a host asks a Chinese person, "Would you like coffee or tea?" when he or she is visiting, the person might say, "Whatever is convenient," or "Please don't bother" out of politeness, and would not reveal to the host what he or she really wanted to drink. This idea or concept of flexibility applies not only to visiting, but also to larger principles or ideals of human interaction. Although following his pre-compositional plan, Lin's *All But Not At All* displays this flexibility in its flowing, singing, and improvisatorial melodies, echoing Babbitt's critical point about twelve-tone music:

Twelve-tone rows are abstractions that determine the nature of relationships found within a composition over a wide variety of time spans. They do not necessarily have to be fully embodied within the surface aggregates of a composition in order to exert a strong influence over their structure and progression.<sup>28</sup>

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<sup>28</sup> See Andrew Mead's *Introduction to the Music of Milton Babbitt*, (Princeton University Press, 1994) 65.

Beyond the trichordal array for pitch organization, Lin also composed the music out of different distributions, systematically exploring the eight ways of partitioning four trichords into one or two groups.<sup>29</sup> The eight units in Fig. 2-3 are each subdivided into columns. The first seven of them have two columns, representing two groups, whereas the eighth column collects the four trichords into a single unit. This arrangement is reminiscent of the changes in the *I-Ching (The Book of Changes)*, composed with sixty-four sets of hexagrams. As shown in Ex. 2-2 above, trichords I, II, III and IV stand for [10, 2, 11], [6, 3, 7], [1, 9, 0], and [5, 8, 4]. The first column shows that the first voice is separated from the other three and appears first. The remaining three voices interweave in the phrase, distinguished by register.

Fig. 2-3. Lin, *All But Not At All*. Distribution of four voices in columns.

1.	2.	3.	4.	5.	6.	7.	8.
I	I	I	I	I	I	I	I
II	II	II	II	II	II	II	II
III	III	III	III	III	III	III	III
IV	IV	IV	IV	IV	IV	IV	IV

In the first four columns of Fig. 2-3 above, one (bordered) Roman numeral stands out from the others as it does not combine or mix with the other three numbered voices. The fifth to seventh columns form two-and-two combinations whereas the last column mixes the four numerals together.

<sup>29</sup>Ibid, 61.

The distribution of column 5 appears in m. 5 (Ex. 2-3), where the four trichords are divided into two groups, I and III; II and IV. But there are few changes. First, the beginning note at m. 5 (F) is also the overlapping note that belongs to both the previous column (4) and to the current column (5) of Fig. 2-3. Two trichordal sets, III [0, 9, 1] and I [10, 2, 11], are combined with slurs, distinguished by register after the F. The first F in a higher register expressively holds through the two sets and becomes part of II [5, 8, 4], combining with IV [7, 3, 6] by passing the melody to it. When the latter two trichordal sets in column 5 are combined, [5, 8, 4] and [7, 3, 6], the E (4) is played three times, the second one with flutter tongue effect at the end of a swell to *fortississimo*. In addition, the emphasized E combined with the first two notes of [7, 3, 6] results in another (014) set, E-G-E $\flat$ . Because of the two-and-two grouping, the phrase is longer, and the mood changes from calm to excited. The sets I and III are intertwined within two slurs, which directs the music from the first to the second slurs. This expressive phrase with big leaps goes on with a written-out *accelerando* in a strong dynamic, pushes set II to set IV from one slur to another. The performer is encouraged to find specific articulations for the variety of (014) sets on the musical surface.

Ex. 2-3. Lin, *All But Not At All*. Column 5 of Fig. 2-3, with two groups: [10, 2, 11]-[0, 9, 1] and [5, 8, 4]-[7, 3, 6], and a newly generated (014) set [4, 7, 3] from the context, m. 5.

F in trichord II F-G#-E holds through in the high voice and pushes to IV G-Eb-F#

Trichord I C-A C# in the low voice mingles with the middle voice III Bb-D-B

Column 5:

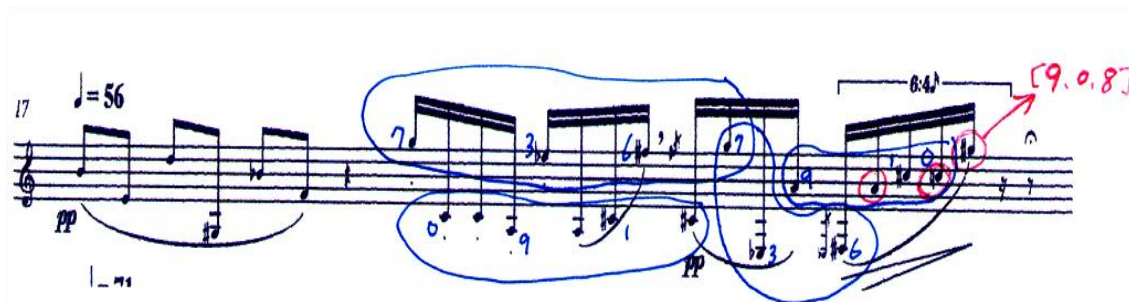
I [10, 2, 11]	II [5, 8, 4]
III [0, 9, 1]	IV [7, 3, 6]

### Transformation of Trichordal Set

The four trichordal sets in Lin's array, [10, 2, 11], [5, 8, 4], [0, 9, 1], and [7, 3, 6] are the four classical transformations of set (014) to form the twelve-tone pitches in the melody. But as in the previous Ex. 2-3, other (014) sets would be produced within the local musical context. The following discussion shows clearly that through various combinations of the original sets in different phrasing and articulation, the melodic pitches would gradually grow into another set which is not found in the array. From the fifth beat of m. 17 (Ex. 2-4), the register clearly separates two trichordal sets, [7, 3, 6] and [0, 9, 1]. The F#, C# and G in these two trichords extend the voices to the next

phrase by appearing again after a breath. The G (7) reveals another [7, 3, 6] set with the anticipated A (9) of another [9, 1, 0] set in between. After these second appearances of these two sets, the G# (8) is added to the end of the phrase, as if the composer or the player has suddenly discovered yet another (014) set, [9, 0, 8], which is not found in the trichordal array. The A-C from the original trichordal sets [0, 9, 1] combines with this added G# and becomes A-C- G# at the end of the phrase. The upward ending gesture of this “new” trichord might seem a surprise and the fermata on the eighth rest might depict doubt or disbelief.

Ex. 2-4. Lin, *All But Not At All*. Two trichordal sets, G-E $\flat$ -F# and C-A-C#, mingle and transform into another (014) set, A-C-G# [9, 0, 8], not found in the array but produced by the musical context, m. 17.

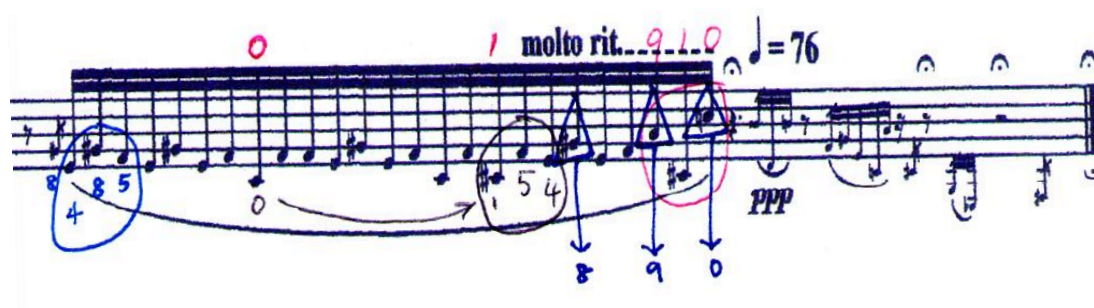


The other example of this kind of gradual transformation comes immediately after the fermata of previous Ex. 2-4 (m. 17). The G, perhaps a correction for the G# at the end of m. 17, appears as a grace note before the trichordal set B $\flat$ -D-B. But the G joins with the B and B $\flat$  to transform into yet another new set



register. Instead of showing the ambiguity the added note created in m. 17 (Ex. 2-4), the *molto rit.* at the end of this passage conveys a peaceful mood with the emphasis of the diminished-octave interval (or m2). Within this serpentine melody, the original [E, G#, F] set transforms into [C#, F, E], two mirrored sets again, and finally leads back into one of the original sets, III [A, C#, C]. The leading G# to A, including the C at the end, reads as another (014) set separating at the end of the phrase. Hence, there are four (014) sets in this one transformational phrase, which, sounds natural and musical to the Western ear on three levels: first, the leading-tone direction from G# to A; second, the tension from C to C# and the release from C# back to C octave higher; last, the retained (014) sonority throughout (Ex. 2-6).

Ex. 2-6. Lin, *All But Not At All*. Lyrical transformation from an original set to another, passing through two created (014) sets, m. 18.



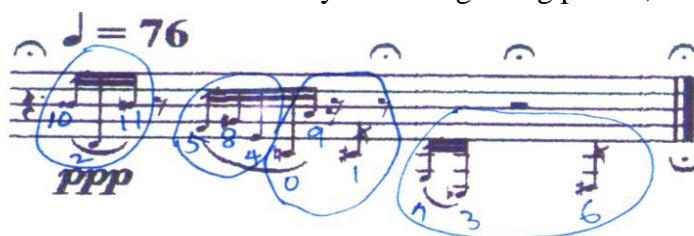
### Conclusion of the Pitch Organization

Lin composed the end of his piece using the first line of the array, allowing us to hear this particular progression again. The ending phrase (Ex. 2-7) might seem

unimportant as it consists of little grace-note figures and the *ppp* dynamic marking. It is presented as a reminiscence that recalls the opening phrase, where Lin uses the same twelve pitches in the same ordering, but on their reappearance they become ornaments. After the various kinds of combinations and transformations, he reminds his listeners of this twelve-note melody (with four trichordal sets), balancing the end with the beginning, hence it refers to his symmetrical title, ALL but not at ALL. Lin explains the title thusly:

The word "All" equals the first 12 notes. Everything from the piece can be derived from the first 12 notes. But that is not all that is to the piece. There are also other things happening in the music besides those 12 notes. Moreover, the 12 notes are not presented in a [...] [unified] order in the piece. The order is changed and moved around all the time. Therefore, the 12 notes are not at all related in the traditional 12-tone music as one would expect, but rather, using it as a reference, a guide to the rest of the piece.<sup>30</sup>

Ex. 2-7. Lin, *All But Not At All*. Ending phrase in grace note figures showing the same first line of trichordal array of the beginning phrase, m. 18 (see Ex. 2-1).



The first line of the array, extracted from Fig. 2-2:


10-2-11	5-8-4	0-9-1	7-3-6
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<sup>30</sup> Personal interview, Jan. 26<sup>th</sup>, 2010

## Tempo Organization

In my discussion of pitch organization, I demonstrate how the concept of the title “All But Not At All” is evident in a variety of ways throughout the piece, including the trichordal array structure, transformational technique and some *I-Ching* concepts. The (014) sets not only can be found in the pitches, but is also involved in tempo organization, which my discussion turns to now. As illustrated in Fig. 2-4, if we view the seven tempo markings of the piece, the tempos themselves also relate to (014). In the following analysis, I will show how this original set, which informs the entire piece, also possesses mathematical relationships to tempo. In my interpretation, because the seven tempos are related to (014) and they change the mood of the music, they imply the characteristic meaning of the title as well.

Fig. 2-4. Lin, *All But Not At All*. Tempo organization referring to (0, 1, 4).

Title	All	But	Not	At	...	...	All
Measure	m. 1	m. 5	m. 13	m. 16	m. 17	m. 18	m. 18
Tempo  =	76	84	108	76	56	71	76
(0, 1, 4) relations	76 + (8 x <b>0</b> )	76 + (8 x <b>1</b> )	76 + (8 x <b>4</b> )	76 + (-5 x <b>0</b> )	76 + (-5 x <b>4</b> )	76 + (-5 x <b>1</b> )	76 + (-5 x <b>0</b> )

The seven tempo markings illustrate the title theoretically and musically:

1) ♩ = 76 at the beginning. As mentioned before in the context of pitch organization, the opening twelve notes represent ALL<sup>31</sup> in Lin's title, because they form the four trichordal sets, which in turn form the arrays and structure of the whole piece.

2) ♩ = 84 (m. 5). From here, the four trichordal sets are grouped by two in the arrays, as shown in the second to fifth columns in Fig. 2-3. The two-and-two groupings form longer musical phrases and gestures, and show mood shifts to warmer and more lyrical passages. This change represents the BUT in Lin's title.

3) ♩ = 108, *Ad libitum* (m. 13). The tempo with *Ad libitum* marking already represents the concept of uniqueness, as the tempo becomes a reference for the player's interpretation. The trichordal sets are arranged in increasingly complex ways and the climax occurs with ornaments in *sf* and *sff* (m. 15). Unusual phrasings abound that should be played with attention to groupings. In terms of playing time of the whole piece, this section, mm. 13-16, is in the middle of the piece, balanced but also including unusual patterns, illustrating the middle word, NOT, in Lin's title.

The Coda section includes the following four tempos:

4) ♩ = 76 (m. 16). The tempo marking comes after sustained key clicking, which starts the Coda section before the tempo marking. The key clicking, with fermata and

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<sup>31</sup> Ibid.

diminuendo, calms the mood and leads to Lin's expressive ending of reminiscence.

The four tempo changes in the Coda together form retrograde relations of (014) (Fig. 2-4). The first three tempos (tempo 4, 5, and 6) in this section together represent the AT in Lin's title, a preposition that describes a relation between other "sections."

5)  $\text{♩} = 56$  at m. 17. A new set is transformed from the original trichordal sets. The phrase is extended by two prolonged (014) sets and the mingled sets transform into a new (014) set by adding an extra note (Ex. 2-4).

6)  $\text{♩} = 71$  at m. 18. To continue the lyrical transformation, Lin continually extends the phrase by alternating one set to the other while the tempo and tension increase. It slows down at the end of the transformation.

7)  $\text{♩} = 76$  after the first fermata of m. 18. Following the three different tempos in Coda section, the music comes back to the final phrase that contains the same pitches and ordering from the opening phrase. The light grace-note figures recalls and mirrors the ALL of the beginning.

These seven sections of varying tempos articulate Lin's interpretation of his title, and if we calculate their mathematical differences by subtraction, the sums also form a relation of (014). Fig. 2-4 shows the equations: 8 (84-76), 24 (108-84), 32 (108-76), 20 (76-56), 15 (71-56), and 5 (76-71). In other words, tempos 1, 2, and 3 are separated by 8 and its multiples, or  $76 + (8 \times 0)$ ,  $76 + (8 \times 1)$ , and  $76 + (8 \times 4)$ , referring to the

0-1-4 set. Tempos 4, 5, and 6 have a difference of -5 and its multiples, or  $76 + (-5 \times 0)$ ,  $76 + (-5 \times 4)$ , and  $76 + (-5 \times 1)$ , referring to 0-4-1. When adding the last tempo, tempos 4, 5, 6, and 7 reflect the set 0-4-1-0. Moreover, if we add tempos 1 through 7 together, their results show 0-1-4-0-4-1-0, remarkably forming symmetrical and mirrored sets.

Theoretically, Lin's structural device intrigues, but performers might find it challenging to locate his exact tempos each time they shift. Lin responded to my inquiry about this challenge, saying that his tempo markings are merely suggestions, and that he had thought less from a performer's perspective when he composed this piece (at a young age).<sup>32</sup> While maintaining the controlled (014) tempo fluctuations, the complex tempo and rhythmic variety lend an improvisational character throughout *All But Not At All*.

## II-2

### Chinese Aesthetics and Speech in *All But Not All*

“I feel I am speaking Mandarin, my beautiful mother language, when writing this piece.”<sup>33</sup> –Wei-Chieh Lin

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<sup>32</sup>Personal communication, March 5<sup>th</sup>, 2010. Lin composed this piece when he was 19.

<sup>33</sup>Personal interview, April, 2, 2010.

When rehearsing *All But Not At All*, I detected the sounds of Mandarin<sup>34</sup> speech, and listeners also commented on its opening, which, they said, recalls a Mandarin soliloquy. After the leading melody showing the twelve-tone organization, the music grows into a dialogue between different voices, as rhythms and patterns become more complicated and mixed within the piece. Then, after the silent moment, it returns to the soliloquy for conclusion. The speculative nature of the connections between this piece and Chinese language below are based on my interpretation when rehearsing and performing this piece, which are approved by Lin, the composer. The integration of the Eastern ideas below and the discussed Western pitch organization inspire me to interpret more the phrasing and articulation, and help me feel even more of the directions of the notes or trichords in the melody.

### **Melody:**

#### The “space”

In the following paragraphs, my discussion will focus on several special features of Mandarin Chinese shown in Lin’s piece, including its usage, grammar, and phonetics. I begin with a discussion of Chinese language aesthetics and how they affect Lin’s artistic conception. The short and long pauses in *All But Not All* reflect the use of space in other Chinese arts, reflected in music by the use of silence. Composer

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<sup>34</sup> Mandarin is the official language in Taiwan and China. It is also called Mandarin Chinese. In this dissertation, Chinese language is referring to Mandarin, unless specified with other dialects.

Tan Dun has explained this in terms of his own music: “silence, too, has its dynamics.

This idea is similar to the Taoist concept that the greatest sound and the deepest meaning might be in silence, and that nothingness might be all.”<sup>35</sup> From the opening

of Lin’s piece (Ex. 2-8), the brief rests between phrases clearly articulate a sentence.

In Chinese calligraphy, too, separations of space divide each stroke of the character, and each stroke has a different direction and gesture.

Ex. 2-8. Lin, *All But Not At All*. Clear pauses and separations between phrases in first “sentence,” mm. 1-2.

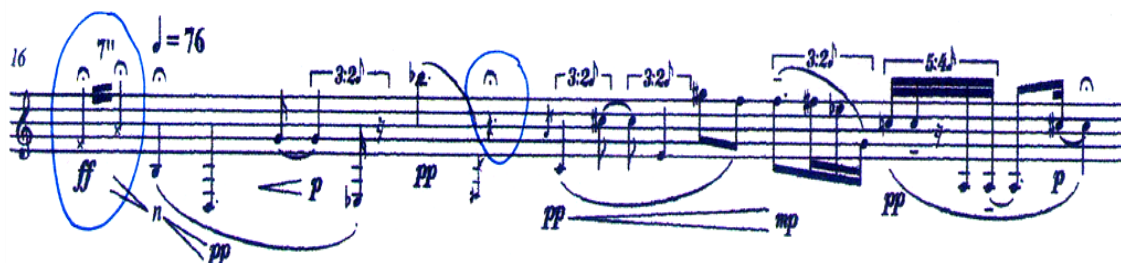


Another effective use of silence in *All But Not At All* comes after climax (Ex. 2-9, m. 15). This is not a case of absolute silence, but a relief from pitched sounds. The seven-second space is filled with quiet clicking sounds made by pressing and releasing the keys. There is the notion of “leaving blank (留白)” in Chinese art. This clicking device provides a respite from the previous energetic phrasing and also allows the reverberations of those sounds in the imagination. Lin’s esthetic purpose

<sup>35</sup>From his program notes for *Circle with Four Trios, Conductor and Audience*, in the concert of The Nieuw Ensemble (from the Netherlands), on April 13<sup>th</sup>, 2010, at the Chinese University of HK.

here may have been inspired by a famous line by the Chinese poet Wang Ji (王籍) from the Nan dynasty (around 502-589 A.D.), “鳥鳴山更幽,” which loosely means “if the birds sing, the mountain will sound even quieter.” Here Lin uses the key clicking sounds to as it were amplify the silence, to create a context for emptiness. Lin’s treatment of sound and silence shows how the ideas of the Nan Dynasty have survived over fifteen hundred years.

Ex. 2-9. Lin, *All But Not At All*. 7-second silence, m. 16, enhanced by key clicking sounds. Contrast with dotted-quarter rest under fermata, m. 16.



After reading my analysis above, Lin agreed and added some explanation for the seven-second silence at m. 16<sup>36</sup>: In one sense, he explained, he wants listeners to believe the piece has not come to an end. In another, he wants both audience and performer to imagine the reverberation and feel the energy is still playing itself out, as both, of course, see/know the fingers are still playing but without pitch, only the memory of the music behind them. Finally, he explains, this emptiness provides a transition to the last section of the piece.

<sup>36</sup>Personal interview, May 29, 2010.

### Tone-shaping of Chinese speech

The second feature Lin exploits is the tonality of Chinese speech. In Mandarin, every Chinese character uses one of five tones, or tonal shapes, to match its syllable, illustrated in the zhu yin pin-yin 注音拼音 system (Mandarin phonetic symbols) in Taiwan. Different from other Chinese dialects, Mandarin, the official language in China and Taiwan, has five tones, while there are nine nuanced ones in Cantonese.

The following explains the symbols for these five kinds of tones.

1. First Tone: no marking on the right side of pin-yin, but could be marked as 「 — 」 .

This is straight tone with high-pitch. If notated, it might sound around a G for one beat, for a middle-ranged person.

2. Second Tone: marked 「 ´ 」 on the right side of pin-yin. It leaps from middle to high pitch and is notated as a smoothly sliding sound from E to G for one beat.

3. Third Tone: marked 「 ˇ 」 on the right side of pin-yin. Like its shape, its lower pitch bends lower, returning to the original pitch. It is notated as a sliding curved sound of D-C-E, as its marking shape.

4. Fourth Tone: marked 「 ` 」 . The fast and straight pitch leaps from high to low, for example, G-C for half a beat.

5. Fifth Tone: marked 「 · 」 on the top of pin-yin. It is a soft and short note, used for ending a question or to link words and phrases. A staccato note sounds approximately

on an A.

Taking a particularly ubiquitous syllable in Mandarin as an example we can see where it contains characteristics from several tones. “Ma” is used with all five tonal shapes, and in the order I have just delineated, it could be written thus in each: 1. 媽, mother, 2. 麻, numbness, 3. 馬, horse, 4. 罵, blame, and 5. 嗎, (an ending word used to indicate a question). The example of the various uses of “ma” in the language shows the tonal underpinning of Mandarin, and the variety of Chinese characters using the same sound, similar to but not quite the idea of the homonym in English. Therefore, in conversation, the meaning of a sound depends on the words around it and how it combines with them in a given context, which explains why tone shape is so important in the Chinese language.

Lin emphasizes this contour concept in *All But Not At All* when explaining the influence from Mandarin in particular. Because of the different tone shapes, phrases in Chinese move up and down in pitch much more than other languages, especially English and Japanese. Lin and I agreed that his opening resembles a Chinese soliloquy, a lone voice of the clarinet in Mandarin (Ex. 2-10). Its moving tone-shapes without stepwise motion (or stepwise contouring) at all appear in the first line. Further, in this first phrase, the melody begins at the lower register and stops on a thirty-second note in the higher register (m. 1), very close to the fifth tone-shape of Chinese language

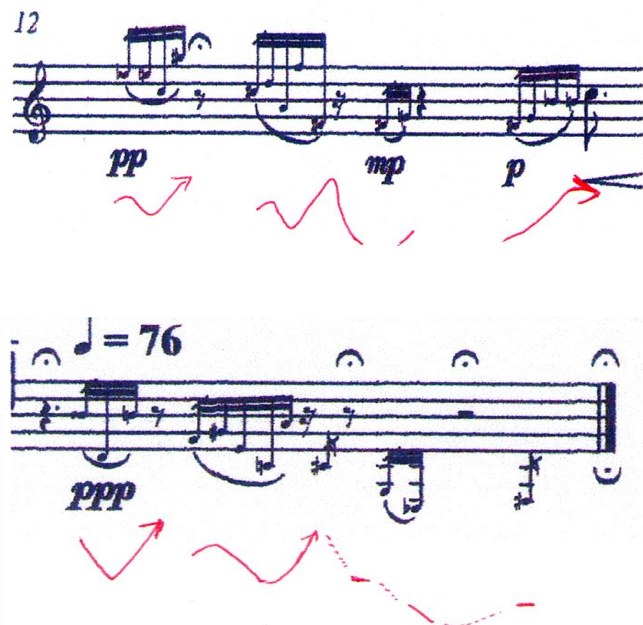
tonality.

Ex. 2-10. Lin, *All But Not At All*. Red lines below the excerpt showing two interesting contours in two phrases, both moving from low and ending at high registers with no stepwise motion, mm. 1-2.

The image shows a musical score for a piece in 4/4 time, starting with a key signature of one sharp (F#). The score is divided into two phrases. The first phrase (mm. 1-2) consists of a series of grace notes, with a red contour line below it showing a wavy, non-stepwise upward movement. The second phrase (mm. 3-4) also consists of grace notes, with a red contour line below it showing a similar non-stepwise upward movement. The score includes various musical notations such as dynamics (pp, mp, p, sf, mf, sub.p, f), articulation (accents), and phrasing slurs. A red arrow points to the final note of the second phrase, which is marked with a fermata and the word '(Niente)'. Above the staff, there are annotations including '↓ (5th Tone)', '7:4', '3', '27/16', '3:2', and '3:2'.

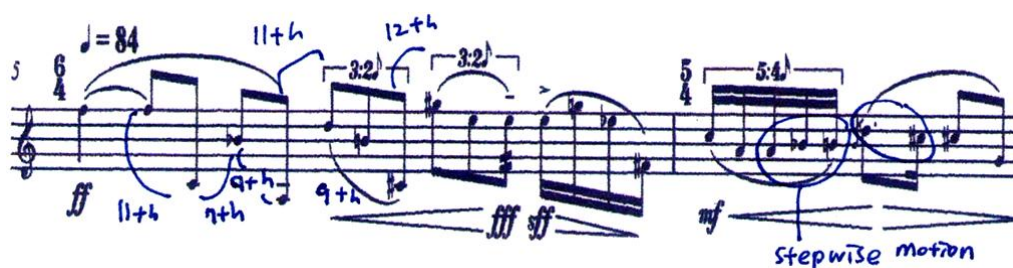
Recalling the opening twelve notes from four different (014) sets that form the trichordal array, the final twelve grace notes of the piece use the same pitch classes with alternative pitches. Like those of the opening collection, these grace notes are played in very short succession, separated by rests of various durations. The contours of these grace notes move up and down in interesting intervals, resembling the Chinese language, because in Chinese, even short phrases use many separate pitches that move in abrupt and unpredictable contours, rarely stepwise. Besides in the ending of Lin's piece, this is shown in m. 12 as well.

Ex. 2-11. Lin, *All But Not At All*. Grace-note contours with various intervals in brief phrases, m. 12 and final measure.



Aside from the variable Chinese contours, what Lin seeks to express is the singing qualities of the Chinese language. Like the phrase in mm. 5-6 (Ex. 2-12), showing large leaps in interval, the melody remains lyrical.

Ex. 2-12. Lin, *All But Not At All*, expressive line with big leaps, mm. 5-6.



### Continuous phrasing and its constructional method

There are many long phrases in *All But Not At All*, relating to the continuous phrasing in Chinese speech. A terse Chinese meaning would be continuously

connected without conjunctions in short phrases, and these phrases are usually put in order of their occurrence. For instance, the Chinese prose: “唯中午時分，校園冷靜，用過飯後，才敢蹲著走出教室，靠著枝幹壯碩的榕樹，享受綠蔭下的陽光空氣。”<sup>37</sup> translates word for word in English: “Only in the afternoon, campus is quiet, after eating, [omitted subject] dare to squat and walk out of the classroom, depend on the strong banyan, enjoy the sunshine and the air under the shade of the tree.”

Grammatically unsound in proper English, this prose is correct and common in proper Chinese. Chinese phrases can be like running water, floating and continuous, often omitting the subject, and requiring few conjunctions.

The other basic usage involved in continuous phrasing with strong connections to the ideas communicated in Lin’s composition is the flexible word ordering. As I mentioned before, each Chinese word/character has only one syllable, therefore, two or more words make up a phrase, and one or more phrases form a sentence. But Chinese is also quite flexible in word order, which might seem illogical or non-grammatical to speakers of Chinese as a foreign language. For example, there are at least three ways to write or say “I don’t eat lamb.” in Chinese: “我不吃羊肉” (which are pronounced: wo bu chih yang rou<sup>38</sup>), “羊肉我(可)不吃” (yang rou woke

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<sup>37</sup> 游達裕, “白話文要訣” (香港: 匯智出版, 2005), 頁 11- 23.

You, Da-yu, *BaiHuaWun Yao Jyue (The important tricks for learning common spoken Chinese)*, (Hong Kong: HueiJhieh publication, 2005), 11-23.

<sup>38</sup> The Chinese spelling system used in this dissertation is 通用拼音 (Tung Yong Ping Yin), which is one of the most popular phonetic spelling systems used in Taiwan.

bu chih), and “我羊肉不吃” (wo yang rou bu chih).<sup>39</sup>

Based on these, Lin's (014) sets resemble three Chinese characters that share similar meaning—the three notes in the sets having flexible orderings to form a trichordal array and make up longer musical phrases (as discussed in Chapter II-1). In using this trichordal concept, Lin's melodies no longer follow the traditional rules of Western European music, i.e. tonal harmonic functions and regular phrasing, instead breaking into a freer style of dialogue. The following Ex. 2-13 shows how the two columnar trichordal sets are organized in an *Ad libitum* phrase. Its notes appear continuously, which sounds like chattering in Chinese with flexible orderings of the same four sets. By focusing attention on the sets, the performer can tend to the directions and groupings of the notes, can phrase the music with intelligent tone-shaping, and learns to “speak” every “word” clearly in this irregular passage.

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<sup>39</sup>李家樹, 林耀基, “漢語的特性和運用”, (香港大學出版社, 1994), 頁 85.

Li, Jia-shu and Lin, Yao-ji, *Han Yu De Te Sing He Yun Yong (The features and applications of Chinese)*, (Hong Kong University Press, 1994), 85.

Ex. 2-13. Lin, *All But Not At All*. Two columnar trichordal sets organized in a way similar to a chattering Chinese phrase, the end of mm. 12-13.

The image shows a musical score for a piano piece. The score is in treble clef and includes a tempo marking of quarter note = 108 and the instruction 'Ad libitum'. The music is marked 'pp' (pianissimo). The score is divided into two measures, 12 and 13. Trichordal sets are indicated by Roman numerals III, IV, II, II, IV, and I above the notes. Two trichordal sets are circled in red. A bracket labeled 'Set I' is placed below the first measure. The notes in the circled sets are E, G, and Eb.

Set I: B $\flat$ -D-B; Set II: E-G-E $\flat$ ; Set III: C-A-C $\sharp$ ; Set IV: F $\sharp$ -E $\flat$ -G

Two circled (014) sets generated from the context: E-G-E $\flat$

Another continuous phrase with the flexible combinatorial sets is shown in Ex. 2-14 (m. 3-8), where the four (014) trichordal sets have greater variety in pitch organization and articulation, connecting seven columns of trichordal aggregates to form this long melody, even when the tempo changes at m. 5. By placing the columns over the bar line (mm. 3-4), overlapping the note in two columns (F in m. 5), and using a written-out accelerando over different columns (mm. 5-6), the melody continues to flow and aurally resembles a long phrase in modern Chinese.

Ex. 2-14. Lin, *All But Not At All*. Continuous melody, organized with seven columns of trichordal sets in various combinations. Every line of the score is followed by a detailed set distribution, mm. 3-8.

Column 2 | Column 3 | Column 4

3  $\text{pp} \leftrightarrow \text{mp} \text{---} \text{mf}$   $\text{fp} \leftrightarrow \text{pp}$

Column 2 | Column 3 | Column 4

Column 5 | Column 6

5  $\text{ff}$   $\text{fff ff}$   $\text{mf}$   $\text{p}$

Column 5 | Column 6

Column 7 | Column 8

7  $\text{mp}$   $\text{pp mf}$   $\text{mp}$   $\text{sub pp}$   $\text{fff}$

Column 7 | Column 8

With the fusion of Western and Eastern cultures, Chinese has changed into the modern language it is today. Influenced by Western grammar and usage, Chinese phrases have grown longer, extended to show more complex thought. But the language retains its formal features. The changeable order in Lin's use of set (014) resembles the flexible word order of Chinese. The appearances of the seven columnar aggregates of a trichordal array seen in the excerpt above translate to similar musical meaning and tell a story in order as thoughts or events occur. Moreover, in Ex. 2-14, the F on beat 1 of m. 5 functions as both the end of the fourth column and the beginning of the fifth, similar to Chinese practice where it is not uncommon to omit repeating words, or the subject. The grammar and usage of Chinese has now incorporated Western structures.

Though the continuous phrase is formed by the logic of trichordal arrays, Lin's use of pauses allows the phrase to be understood over time, making it clearer and easier to understand. Besides the pauses or rests, dynamic changes also convey brief pauses as, technically speaking, the player must stop the air very quickly to achieve their effects. This is seen, for example, in the swift change of air between the accented C and the *pianissimo* at the beginning of the third column (Ex. 2-14, in the middle of m. 4), also between the *pianissimo* and the *mezzo forte* in m. 7. With the influences of both cultures, this modern Chinese phrase sounds flowing and somewhat

improvisational, finally resolving at m. 8 with the echo of B $\flat$ -D-B set.

### **Rhythm:**

#### Repeated patterns

Although the rhythms are complex in Lin's piece, there are some regular patterns that could be seen as the influences from the Chinese language. In Chinese, words are often phrased in even numbers—to use repeated words or combined words for idiomatic phrases. These are found, for example, in structures of two repeated words in a four-word phrase, 喋喋不休 (die-die-bu-shio, people keep on talking), and in combined two-word nouns, like 衣服 (yi-fu, clothes) and 椅子 (yi-zih, chair), whose simpler meanings are depicted in one character, 衣 (yi, with the first tone, straight and high) and 椅 (yi, with the third tone, lower and bent). Additionally, between phrases, the numbers of words are usually incorporated to balance the structure. For example, the punctuation marks of the following Chinese sentence, (with phonetic spelling), separates each short phrase and their rhythmic patterns:

Fig. 2-5. Balanced rhythmic patterns in Chinese sentences.

“圍著湖緣綠叢叢的，遍是楊柳，馬櫻，馬尾松，銀白楊……  
(wei jhe hu yuan lyu cong cong de , bian shih yang lio , ma ying , ma wei song , yin bai yang……  
花木也多: 碧桃，櫻花，丁香，木槿，榆葉梅，太平花……都長得旺的很。”<sup>40</sup>  
Hua mu ye duo: bi tao , ying hua , ding siang , mu jin , yu ye mei , tai ping hua...dou jhang de wang de hen 。 )

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<sup>40</sup>Yang, Shuo “Yang Shuo Prose selections” in Li, Jia-shu and Lin, Yao-ji, *Han Yu De Te Sing He Yun Yong (The features and applications of Chinese)*, (Hong Kong University Press, 1994), 69.  
節錄李家樹，謝耀基“漢語的特性和運用”中節錄楊朔散文選，頁 69.

I have underlined the paired two-word nouns and three-word nouns in this sentence to identify similar sounding characters or words. Again, in Chinese pronunciation, every character possesses only one syllable corresponding to a tone shape and might have various meanings when combining with other characters, therefore, the number of words within a sentence can be flexible, by adding an extra word or choosing other replaceable terms. But to make a phrase flow musically and rhythmically, there are many traditions and usages to draw from.

Lin's music reflects the relationships between rhythmic pattern and tone shape in Chinese. In the opening measure of *All But Not At All* (Ex. 2-15), the septuplet describes a seven-word phrase, and the next two beats show another seven-word phrase in expanded rhythm. This is also counted as seven if one counts the dotted-eighth rest as 3 sixteenths plus a fourth sixteenth on A in the second beat, then three for the third beat triplet. Because these two totals of seven are counted in different tempos, the rhythm shows the later one as elongated.

Ex. 2-15. Lin, *All But Not At All*. Beat 1 of m. 1, with smaller divisions and beats 2 and 3 in elongated divisions of seven.

Score in C ♩ = 76

The image shows a musical score for a piece in C major with a tempo of ♩ = 76. The time signature is 4/4. The first measure contains a septuplet of eighth notes, with a bracket above it labeled '7:4'. The notes are: G4, A4, B4, C5, B4, A4, G4. The second measure contains a triplet of eighth notes, with a bracket above it labeled '3'. The notes are: G4, A4, B4. The third measure contains a triplet of eighth notes, with a bracket above it labeled '3'. The notes are: G4, A4, B4. The score includes dynamic markings: *pp* for the first measure, *mp* for the second measure, and *p* for the third measure. A large blue bracket spans across the three measures, indicating the overall structure. Above the notes, there are handwritten numbers 1, 2, 3, 4, 5, 6, 7, which correspond to the seven notes of the septuplet and triplet.

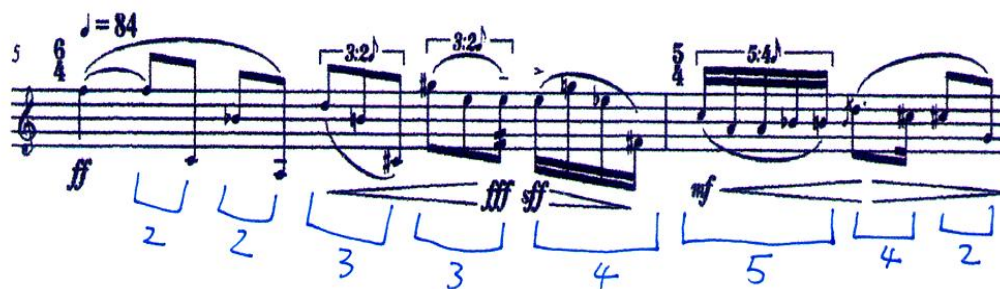
Another example of paired phrases follows immediately (Ex. 2-16), where the similar bent tone-shaping patterns, the third tone-shape in Mandarin phonetic system, appear twice, followed by an echo.

Ex. 2-16. Lin, *All But Not At All*. First and second gestures below showing similar tone-shaping patterns within a phrase, mm. 1-2.

The image shows a musical score in 4/4 time. The first phrase (mm. 1-2) consists of a quarter note followed by a dotted quarter note, with a dynamic marking of *pp*. The second phrase (mm. 3-4) consists of a half note followed by a dotted half note, with dynamic markings of *mp*, *p*, and *sf*. The third phrase (mm. 5-6) consists of a half note followed by a dotted half note, with dynamic markings of *mf*, *sub. p*, and *f*. The fourth phrase (mm. 7-8) consists of a half note followed by a dotted half note, with dynamic markings of *f* and *n <> n* (Niente). The score is annotated with blue circles and brackets to highlight the tone-shaping patterns and dynamics. Below the score, the phrases are labeled: 1st Original, 2nd Augmentation, and Echo.

In Ex. 2-16, the second phrase has a similar pitch direction as the first, but is expanded both melodically and rhythmically—the second gesture lasts three and three-quarter beats, while the first one lasts only one beat. Not only do the (014) sets skillfully connect the whole phrase, the dynamics also help to shape the bent-tone phrasing. For instance, the *sforzato* defines clearer gestures for the larger intervals, the *subito piano* forms an echo of the paired phrases, and the longer phrase ends with a blurry echo sonority marked *n <> n*. One more example of paired rhythm appears in m. 5, where the rhythm also expresses a written-out *accelerando* and *ritardando*.

Ex. 2-17. Lin, *All But Not At All*. Paired rhythmic patterns and expressions, m. 5.



Separated patterns

There are, of course, various ways that Chinese phrasing can convey more complicated ideas or nuances, while still attending to rhythm and balance (Fig. 2-6).

Fig. 2-6. More complicated Chinese sentence with translation and phonetic spelling, showing the balanced structure. Excerpt from Ho Chi-Fang, “How to revise an article” 何其芳<談修改文章>.<sup>41</sup>

現在的事物和我們對於事物的看法都比古代複雜，下筆以前多思考，多醞釀，

Now things and our view of things are more complicated than the ancient time, before starting to write, thing more and incubate more,

(sian zai de shih wu he wo men duei yu shih wu de kan fa dou bi gu dai fu za , sia bi yi cian duo sih kao , duo yun niang , )

仍常常只能完成一個圖樣，一個計畫，(還是需要) 下筆以後邊寫邊改

often we still can only complete a pattern or a plan, after starting to write, (we still need) to revise while writing,

(reng chang chang jih neng wan cheng yi ge tu yang , yi ge ji hua , (hai shih syu yao ) sia bi yi hou bian sie bian gai )

(Fig. 2-6 is continued on next page)

<sup>41</sup> “Si Yuan Ji (trans: The collection of the West Garden)” in Li, Jia-shu and Lin, Yao-ji, *Han Yu De Te Sing He Yun Yong* (trans: *The features and applications of Chinese*), 70. 李家樹，謝耀基 “漢語的特性和運用” 中節錄西苑集，頁 70.

來充實，來修正，(還是需要) 寫完以後根據自己的審查和別人的意見

to enrich, to fix, after finishing, (we still need) to review according to ours and other people's views,

(lai chong shih' lai siou jheng' (hai shih syu yao) sie wan yi hou gen jyu zih ji de shen cha he bie ren de yi jian )

來再三修改，來最後寫定。

to modify repeatedly, and to finalize.

(lai zai san siou gai' lai zuei hou sie ding °)

I have underlined, parenthesized, and framed words that echo each other even as they are separated in this long sentence. These two-, three-, and five-word patterns always use the same one or two words with other words that are interlaced with rhythmic and tone varieties. Some patterns make rhythmic flow in both English and Chinese, for instance, after starting to write 下筆以後 (sia bi yi ho, after starting to write) and after finishing 寫完以後 (sie uan yi ho, after finishing). In English, the two short phrases both have the word “after,” and in Chinese they share two words, the third and fourth, while, to vary the pattern, the first and second differ. While some phrases only have the similar patterns in Chinese, for example, in the second line, 邊寫邊改 (bian sie bian gai, revise while writing) have the same character 邊 twice before the two verbs.

Figure 2-6 reveals that in Chinese phrasing, sometimes the even patterns are separated by other non- or odd-patterned words. Interestingly, the odd-numbered word patterns in between make the even patterns sound even more rhythmic. Example 2-18

shows a particular repeated-note pattern with grace notes that appears separately three times in the phrase. The pattern becomes more and more expressive each time.

Ex. 2-18. Lin, *All But Not At All*. Three particular patterns respond to each other within a phrase, mm. 9-11.

The image shows a musical score for two staves, measures 7 through 11. The first staff starts at measure 7 in 7/4 time, with dynamics *mp*, *pp*, *mf*, *mp*, *mf*, *sub. pp*, and *ppp*. It features various rhythmic groupings: 3:2, 5:4, 3:2, and 3:2. A blue bracket groups measures 9-11, with a circled '1' above measure 11. The second staff starts at measure 10 in 4/4 time, with dynamics *pp*, *ppp*, *mf*, *sub. mp*, *mf*, *mp*, *ff*, and *ppp*. It features rhythmic groupings: 3:2, 5:4, 5:4, 10:8, and 3:2. Blue circles labeled '2' and '3' highlight specific patterns in measures 10 and 11 respectively. A large blue bracket encompasses the entire second staff.

The following example shows further development of separated but similar rhythmic patterns found within different gestures of the phrase, similar to the more complicated Chinese examples mentioned above. In this dramatic phrase, Lin uses three repeated patterns three times in a row, to push the tension to the climax, resulting in patterns with both three repeated notes, three repeated double-notes, and three unusual leaps in pitches and dynamics. Beyond these examples, I have also circled another paired group of the phrase in the middle of m. 15 of Ex. 2-19, both of them are (014) trichordal sets. In the three repeated figures, the trill descends from a

*sforzato* grace note, an unusual gesture. It is interesting to note that the first trill is on a dotted-eighth note and the second one is shortened to an eighth note; although the second gesture is almost an exact repetition, the slightly shorter rhythm depicts a growing urgency.

Ex. 2-19. Lin, *All But Not At All*. Separate “threes” in rhythmic patterns and gestural rhythmic trill patterns, mm. 14-15.

↓ Three repeated notes

Two trichordal sets

↓ Three two-repeated-note pattern

↓ Three dramatic leaps with B-D-B $\flat$  at top with *sff*

The above examples illustrate musical relationships involving tone-shaping and rhythmic patterns in Chinese speech. Instead of the traditional rest or pause, Lin uses these patterns of rhythms, pitches, and dynamics to form musical sentences that are at once more flexible, stable and balanced. In *All But Not At All*, the suggested and frequently changing time signatures and tempo markings demand that expressions flow musically and rhythmically within the melody, which is actually phrased by the

melodic trichordal sets in the array. Lin observes that, "It's not in any meter, and it's free yet has some control."<sup>42</sup>

However, besides its relationship to Chinese, one might also find passages reflecting patterns and usage of other languages. But to my ear Lin's piece "sounds" in modern Chinese with that language's new terms, phrasings, and pitch combinations. Some unusual patterns he used are like some words considered scurrilous or forbidden before, but used daily now. For example, 爽 (shuang: to be cheerful or comfortable) is previously used only by lower classes, but it has recently become more acceptable because of its ubiquitous use on TV. With cultural exchange through the Internet, more borrowings and new terms have appeared from transliterations. For example, 熱狗 (re-gou) is the translation for "hot dog" and 沙發 (sha-fa) is now used to mean "sofa" by means of transliteration. Furthermore, there now appear the direct use English terms such as "CD" and "OK." Many new terms have been introduced by the younger generation, such as 壓馬路 (ya ma-lu: pressing roads or window-shopping), depicting the road being pressed when shoppers stroll down commercial streets. Lin's *All But Not At All* sounds like modern Chinese because his music represents the times he lives in.

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<sup>42</sup> Interview, April 2, 2010.

## Chapter III: Ornamentation

### Introduction

Chang and Lin's solo pieces demonstrate the melding of Eastern and Western techniques perhaps most apparently through ornamentation. According to Lloyd-Watts and Bigler, "Ornaments must be realized according to the composer's intentions and conventions of the era in which the music was written."<sup>43</sup> My analysis shows how ornaments in specific Chang and Lin solo works fall within both Eastern and Western traditions. In particular, their ornaments show the influence of Chinese woodwind ornamentation practice. I will briefly define and compare Western and Eastern ornamentation and explore two Chinese instruments, the Don-Xiao and the Di-Tze, to show common and popular ornamentation in Chinese woodwinds. I argue that the essence of ornamentation in these two composers' compositions reflect a dialogue between their traditional Chinese background and their Western training.

In a way similar to stylized Baroque ornamentation, Chinese and Taiwanese folk musicians commonly add various kinds of ornaments in performance, along with some free improvisation, in accordance with different expressions of the music. Chinese or Taiwanese folk music, like that elsewhere in the world, is transmitted orally or with a simplified score mostly notating only the melody, both practices

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<sup>43</sup> See Valery Lloyd-Watts and Carole L. Bigler, *Ornamentation: A Question & Answer Manual* (Alfred Music Publishing, 1995), 12.

allowing flexibility in ornamentation. Well known Chinese and Taiwanese folksongs are found in print with various ornaments depending on the characteristics of specific instruments or an editor's personal interpretation.

### **Eastern ornamentation**

Like its Western counterpart Eastern ornamentation focuses on melody, but it also focuses on tone quality, color, rhythm and dynamics. The ornaments Chinese musicians might use include several kinds of decoration that explore tone color, for example, sliding fingers on the holes of Di-Tze on a sustained note. Because ornaments are not usually notated on the score and because, like Baroque musicians, Eastern folk musicians use their knowledge and skill to decorate the music, they must develop a judicious sense of “good taste”, which includes the musical style, the artistic conception, and even a sense of artistic sincerity and honesty.

### **洞簫 Don-Xiao and clarinet**

The Chinese woodwind, the Don-Xiao (洞簫), closely resembles the clarinet in a number of important ways. Both are played in a position straight out in front of the performer and both have a mellow sound. The Don-Xiao has fewer holes and no metal keys. It remains one of the most popular Chinese wind instruments used in 南管

(Nan Guan), one of Taiwan's folk music styles.

There are four approaches for ornamenting with the Don-Xiao:

1. 引 (Yin)      To lead      Play one or two notes before the main notes
2. 塌 (Ta)      To fill<sup>44</sup>      Play filling notes between two main notes;
3. 貫 (Guan)    To connect    Play a long note: sustain the sound<sup>45</sup>
4. 摺 (Ze)<sup>46</sup>    To fold      Play staccato for melodic accents or pauses

These four approaches are used by Don-Xiao players and also players of string instruments. Chiu Wei has observed that, “The [four] approaches give more flexibility and liberty to the use of ornamentation skills so that different musicians can give rich interpretations of music...”<sup>47</sup>

### 笛子 Di-Tze

Often those who have learned the Don-Xiao also learn the Di-Tze (笛子) (or Chinese flute) because the embouchure for these instruments is similar. Because more techniques have been developed for the Di-Tze (than for the Don-Xiao) to express its diverse character, it has developed its own ornamentation palette. Fig. 3-1 is a Di-Tze

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<sup>44</sup> 塌 (Ta) could be taken to mean “to fall down,” or “to fill.”

<sup>45</sup> 貫 (Guan) is used especially when the Pipa (琵琶), plucked instrument in 南管 Nan-Guan, plays repeated notes.

<sup>46</sup> See Elizabeth Yuan-I Chiu Wei's dissertation, *The research of Nanguan Donxiao's Ornamentation with the reference to the four popular suites “Si- Mei- Zou- Gui”* (in Chinese) (Soochow University, 2004), 29.

<sup>47</sup> See Chiu Wei, 6.

ornamentation chart that lists common symbols with Chinese explanations.

Fig. 3-1. Chinese flute, Di-Tze ornamentation list.<sup>48</sup>

1	tr	颤音	用上方的邻音和本音以快速交替出现。三度以上颤音,可在上方标音名为 $\overset{tr}{f}$ 。
2	$\overset{\sim}{\text{e}}$	倚音	有单倚音 $\overset{\sim}{\text{e}}$ 和双倚音 $\overset{\sim}{\text{e}}$ 。吹奏时,宜干脆利索,音量比本音轻。
3	$\overset{\sim}{\sim}$	上波音	又称涟音。如 $\overset{\sim}{3}$ 即 $\overset{34}{\sim}3$ 。类似双倚音,但比倚音稍慢而清晰。
4	$\overset{\sim}{\sim}$	下波音	如 $\overset{\sim}{3}$ 即 $\overset{32}{\sim}3$ 。类似双倚音,但比倚音稍慢而清晰。
5	$\times$	叠音	当乐句连续出现两个以上的同度音,刚吹后一个同度音时,将按在上方二度或三度音位上的按指,迅速地向上抬立即按下。
6	*	打音	将本音的按指,迅速地在指孔上虚打一下即抬起。也可在上方指孔虚打。
7	*	花舌	也称“打嘟噜”。吹奏时,舌尖在口腔内不断打滚。
8	↖	上历音	从比本音低若干度的音,快速级进上行到本音。
9	↘	下历音	从比本音高若干度的音,快速级进下行到本音。
10	↗	上滑音	由比本音低的音,滑行到本音。
11	↙	下滑音	由比本音高的音,滑行到本音。
12	^	刹音	强烈的气冲音和叠音手法相结合,出音干脆利落。
13	o	指震音	在指孔开着的最前一指或几指,作连续快速开按颤动,但不将指孔按没。
14	~	飞指	用下把位手指在开着的指孔上左右来回飞速抹动。

Some symbols are similar to those of Western ornamentation; for example, No. 1 is a trill, Nos. 3 and 4, upper and lower mordents, and Nos. 10 and 11, ascending and descending slides or glissandos. By using special marks more variety can be articulated in Chinese ornamentation. In order to save space, some marks are

<sup>48</sup>Di-Tze, *song book for level exams in Shanghai Conservatory* (Shanghai Conservatory exam committee, 1994) 38.(In Chinese.)

abbreviations or small portions of a Chinese character. For example, No. 5 叠音 (Die-Yin) is used for repeating notes. The moment the second repeated note is executed, the player quickly changes fingering to play notes one or two steps above or below the written note before repeating it. This should be executed even faster than Nos. 2, 3, and 4, and should emphasize or enhance the relationships between the two repeated notes by skillfully separating them. The effect of No. 5 sounds like one note overlapping another; indeed, “overlap” is the meaning of the word 叠 (Die). (Further discussion of Chinese ornamentation will follow in my analysis of Chang and Lin’s pieces.) The four approaches of Don-Xiao and the many symbols used in notating ornaments for Di-Tze are also commonly used for a variety of other Chinese instruments.

I now turn to a discussion of the confluence of Eastern and Western ornamentation in Chang’s *Three Fantasias* and Lin’s *All But Not At All*.

### III-1

#### **Ornamentation in Chang’s *Three Fantasias***

##### ***Diu-Diu-Bu-Liao***

In her *Three Fantasias*, Chang utilizes ornamentation in both Western and Eastern styles, based on the characters of each movement. In the first,



Different usage from previous example, Chang uses grace notes that decorate their main note by upper or lower thirds, an echo of the Western practice of arpeggiation. These occur near the end of the first piece (Ex. 3-2) and help to provide a strong ending to the movement.

Ex. 3-2. Chang, *Diu-Diu-Bu-Liao*. Ornaments in thirds, mm. 49-50.



### ***Flying Away White Egret***

In *Flying Away White Egret*, Chang uses ornamentation to depict an Eastern atmosphere. Sometimes grace notes are similar to the acciaccatura: quick single grace notes, usually a major or minor second above the main note, indicated by a small note with its stem crossed through; these were defined as short appoggiaturas in the 18th century by Quantz (1752) and C.P.E. Bach.<sup>49</sup> Western acciaccatura gives more importance on pitch, as its short dissonance enhances the consonance of the main note.

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<sup>49</sup> See "Acciaccatura" in both *The Oxford Dictionary of Music*, 2nd ed. rev., edited by Michael Kennedy, Kennedy, *Oxford Music Online*, <http://0-www.oxfordmusiconline.com.lib.hkapa.edu/subscriber/article/opr/t237/e63>, and Robert E. Seletsky, "Acciaccatura" in *Grove Music Online*. *Oxford Music Online*, <http://0-www.oxfordmusiconline.com.lib.hkapa.edu/subscriber/article/grove/music/00101>, accessed 14 February 2011.

For the most part of Chang’s piece, I argue, grace notes in this movement are Chinese acciaccatura, as tone color and gestures of the grace notes are emphasized more than their pitch, like the No. 5 叠音 (Die-Yin) in Di-Tze ornamentation chart mentioned above. Because listeners hear things differently, defining a grace note as either inflected in the Eastern or Western manner can be subjective. The following examples show how the elements of both performance practices and usages are present in a fusion of East and West.

A. Distant grace notes

In her *Fantasias*, Chang uses large-interval grace notes, for instance, a perfect fourth in m. 5, and a minor sixth in m. 12.

Ex. 3-3. Two excerpts of distant grace notes from Chang’s *Fly Away White Egret*, mm. 5 and 12.

a) Mm. 4-5

The image shows two musical excerpts. The first excerpt (left) is in 4/4 time, marked *p*, and features a grace note on the fifth line of the staff. The second excerpt (right) is in 5/4 time, marked *p*, and features a grace note on the fourth line of the staff. Both excerpts include triplets and are annotated with 'P4' and 'ending reverberation'.

┌ PENT<sub>8</sub> <A<sup>b</sup>, B<sup>b</sup>, C, E<sup>b</sup>, F> ─ ─ ending reverberation ─

(Ex. 3-3 is continued on next page)

b) Mm. 12-13



Based on interviews with the composer and my own feelings regarding these ornaments, the leaping grace notes depict gestures of graceful wing motions of the white egret. In Western music, large-interval grace notes are often arpeggiations of an implied harmony. This kind of ornament is also found commonly in Chinese instrumental music, for example, in the widely known Chinese folk song for Di-Tze (笛子), *The Shepherd Boy* (小放牛) in Ex. 3-4. In the Ex. 3-3a above, the grace note on B $\natural$  changes the harmony from the previous PENT $_8$  <A $\flat$ , B $\flat$ , C, E $\flat$ , F> to another, with F $\sharp$ , G $\sharp$ , and F $\natural$  as a sigh at the ending reverberation (m. 5). The grace note B $\natural$  gently brings out the echoing B-F $\sharp$ -G $\sharp$  in a very different color from the previous E $\flat$ -B $\flat$ -C in the pentatonic melody. In Ex. 3-3b, however, the grace note D does not constitute consonant skip within a harmony. The grace note D to the main note F $\sharp$  seems, to my ear, to smooth out the diminished fifth dissonance of the main notes C-F $\sharp$  (m. 12). In the Di-Tze excerpt below (Ex.3-4), the grace notes D and E form a seamless transition from the color of C major to A minor. Chang's use of the ornaments here is similar to those used by the Chinese flute.

Ex. 3-4. Chinese folk song *The Shepherd Boy* (小放牛)<sup>50</sup>, arranged by Di-Tze master Lu Chunling 陸春齡. Large leap (P5) from double grace notes to main note, mm. 87-92, with staff- notation transcription.

### B. Emphasized grace notes

In a similar but more dramatic example, Ex. 3-5, Chang also indicates grace notes to be played on the beat by placing arrows above them. (Chang describes her arrow-ornament-notation in the explanatory notes to the score.) This kind of grace note implies emphasis more than decoration, and should be played with a small accent on the first grace note. Chang's use of on the beat grace notes tend to be found within the phrase, rather than beginning a new one. In Ex. 3-5, as in Yin (弓|, to lead), (one of the four approaches of Taiwanese folk music ornamentation), these two middle points of the phrase/ refresh the listeners' ear and also appear to generate the next string of notes. This gesture might be imagined as the flying curves of the white egret as it flutters and soars high in the wind.

<sup>50</sup> Excerpt from *Di-Tze, songbook for level exams in Shanghai Conservatory* (Shanghai Conservatory exam committee, 1994), 5.

Ex. 3-5. Chang, *Flying Away White Egret*. Circled arrows show emphasized grace notes, mm. 13 and 15.



### C. Coexistence of emphasized and ornamental grace notes

In the next Ex. 3-6a, the grace notes on the beat and before the beat are placed adjacent to each other. A similar gesture appears later in Ex. 3-6b. The second set of ornaments in Ex. 3-6b possess more notes than the first, however, they should be played faster than because playing on the beat requires shorter durations for each note. These two uses of grace notes are meant to illustrate the elegance and nimbleness of the egret—and of the clarinet, as well.

Ex. 3-6. Chang, *Flying Away White Egret*. Two uses of grace notes placed adjacently, mm. 29 and 40.

a) Mm. 29-30



b) M. 40



### Unusual Ornamentation:

In this movement, Chang composes some unusual and highly expressive ornaments that don't fall into neat categories. These ornaments are written as full-valued notes within the score and thus provide performers with more information than the standard symbols of ornamental grace notes.

#### 1. Notes before the phrase

According to the four approaches of ornamentation in the Taiwanese folk music style known as Nan Guan (南管), the fast notes at m. 6 (circled in Ex. 3-7) are counted as Yin (引|, to lead), as they start the phrase and initiate the main note B into a

long phrase (mm. 6-11). This written-out ornament contains six notes. Chang intends the fast notes at m. 6 to be played clearly and lightly with some flexibility<sup>51</sup> in order to depict a meandering shape in the air.

Ex. 3-7. Chang, *Flying Away White Egret*. Six fast notes as written-out ornament incorporated into melody, mm. 6-10.

The image contains two musical staves. The top staff shows a single measure (measure 6) in 4/4 time. It features a six-note ornament circled in red, with a bracket above it labeled 'Yin (ㄩㄣˊ)'. The notes are: G4 (quarter), A4 (quarter), B4 (quarter), C5 (quarter), B4 (quarter), A4 (quarter). The dynamic marking 'pp' is placed below the circled notes. The bottom staff shows a larger melodic phrase from measure 8 to 10. Measure 8 is in 3/4 time and starts with a grace note (V) on G4. Measure 9 is in 4/4 time and contains a triplet of notes: G4, A4, B4. Measure 10 is in 4/4 time and contains a six-note ornament circled in red, with a bracket above it labeled 'Yin (ㄩㄣˊ)'. The notes are: G4 (quarter), A4 (quarter), B4 (quarter), C5 (quarter), B4 (quarter), A4 (quarter). The dynamic markings 'mp', 'p', 'pp', and 'ppp' are placed below the staff with arrows indicating the dynamic contour across the measures.

2. Grace notes in the middle of the phrase.

As shown in Ex. 3-8, the thirty-second notes circled within the phrase at m.10 belong to the Ta (塌) approach, embellishing the phrase by filling the space between two main notes. These notes are passing in character. This more complex ornamentation uses turning motion together with leaps. It recalls the melismatic singing of Western music from the Middle Ages. These melismas often appeared in the middle or before the end of a melodic phrase. Melismatic lines are used, of course,

<sup>51</sup> Personal interview in New York, Jan. 2008. At this interview, I played *Three Fantasias* for Ms. Chang.

in many folk music genres, including Taiwanese opera. There, singers are encouraged to add improvisational melismas to decorate the melody. In *Flying Away White Egret*, the septuplets exemplify this melismatic practice (mm. 10, 13 and 15). These ornaments evoke the quick and graceful motions of the bird's wings.

Ex. 3-8. Chang, *Flying Away White Egret*. The mixed concept of Ta (塌, to fill) and melismas connect two main notes, mm. 10, 13 and 15.

The image displays a musical score for three staves of music. The first staff starts at measure 8 in 3/4 time, marked *mp*. It features a triplet of eighth notes and a dynamic shift to *p* and then *pp*. The second staff begins at measure 11 in 4/4 time, marked *pp*, and includes a septuplet of eighth notes with a handwritten annotation "Ta/Melisma" above it. The third staff starts at measure 14 in 5/4 time, marked *poco* and *pp*, and contains two septuplets of eighth notes, each annotated with "Ta/Melisma". The score includes various musical notations such as slurs, accents, and dynamic markings.

### 3. Sustained-note ornaments

Chang utilizes a number of different ornamental types on sustained notes. The “timbre trill” (Ex. 3-9, mm. 24-28, also in mm. 48-50) is a common Chinese instrumental ornamentation. This is the practice of changing tone color while sustaining a single pitch. Chang’s notation is rhythmically explicit and calls for specific timbral effects. This sustained-note ornament is used often for wind

instruments like the Don-Xiao 洞簫 and Di-Tze 笛子 appearing as no. 13, 指震音, “finger-trill,” in the Chinese flute ornamentation list (Fig. 3-1). For clarity, Chang indicates this device as “timbre-trill.” The player presses or releases fingers on the tone holes that allow the pitch to be retained while changing the tone color. A similar effect is found in no. 14 of Fig. 3-1, “flying fingers” (飛指), where the player slides fingers quickly over the open tone holes. In both nos. 13 and 14, tone color changes during the sustained note, but in different ways. The ornament indicated in no. 14 is impossible to execute on clarinet and other western woodwinds because the keys and pads on the holes inhibit sliding movement. Chang uses a variety of note head shapes to denote different tone colors to mimic the effect of the ornament listed as no. 13. Although it is likely that players will need to find their own individual fingerings for the trills, I have provided some possible fingerings for these two sections below in Ex. 3-16.

Ex. 3-9. Chang, *Flying Away White Egret*. First timbre-trill section, various note head shapes indicate different tone colors, mm. 24-29.

The musical score consists of four staves of music in treble clef. The first staff (mm. 22-24) shows a melodic line with various note head shapes (triangles, circles, squares) and a trill marked with an asterisk and 'ppp'. The second staff (mm. 25-26) features a trill with 'p' and 'ppp' dynamics. The third staff (mm. 27-28) continues the trill with 'ppp' and 'p' dynamics. The fourth staff (mm. 28-29) shows a trill with 'ppp' and 'pp' dynamics, followed by a melodic line with a downward arrow indicating a finger movement.

\*) Timbre trill. Use a different fingering for each shape of notehead.

The following two timbre-trill (指震音) examples from two well-known Chinese flute pieces show the color changes when sustaining notes. In Ex. 3-10a, *The Shepherd Boy* 小放牛, the horizontal lines in mm. 87 and 88 indicate the use of a timbre trill achieved by moving fingers (as in no. 13 of Fig. 3-1). In m. 85, there appears another type of Chinese flute ornament, what might be called double grace notes. In m.86 the small circle indicates that the note should change to the harmonic one octave higher. In *The Flying Partridge*<sup>52</sup> (鷓鴣飛) (Ex. 3-10b), the timbre trills

<sup>52</sup> Excerpt from *Di-Tze*, *songbook for level exams in Shanghai Conservatory* (Shanghai Conservatory exam committee, 1994), 33. The folksong from Hu-Nan 湖南 is arranged by Lu Chunling 陸春齡.

played on Do and Sol (circled in mm. 2 and 4; marked with numerals 1 and 5) change colors but not pitch, while the trill marks in mm. 1 and 3 refer to alternating pitches.

Ex. 3-10.

a) *The Shepherd Boy* 小放牛. Timbre-trill ornament, mm. 85-88, with staff-notation transcription.

↓grace notes                      ↓harmonic                      ↓timbre trill (指震音)                      ↓timbre trill

mf                      pp

↑grace notes                      ↑grace notes

mf                      pp

b) *The Flying Partridge* 鷓鴣飛. Timbre-trill ornament, mm. 1-4, with staff-notation transcription.

鷓鴣飛

1=F

全按作2

【引子】

湖南民间乐曲  
陆春龄改编

fingerings: 1, 2, 3, 5

trills: tr

#### 4. Beyond the final note

In Chinese musical practice, the final note carries the idea that its sound continues beyond the ensuing silence. This allows listeners the opportunity to have the final gesture remain alive in their imagination. The Chinese character 餘音, means the “remaining sound”. The Chinese idiom, 餘音繞樑, refers to the “remaining sound” circulating between the beams of the house, which brings to mind the unbounded nature of musical sound. In *The Shepherd Boy* (小放牛) (Ex. 3-11a), three closing gestures call for trills, a typical gesture in Chinese music, embellishing the phrase at hand before drawing breath for the next. The descending motion in m. 13 inflects as a sigh. In Ex. 3-11b, at the final note of the folksong, the fast ornaments passing from 2 to 5 (Re-Sol) contain notes ascending in step-wise motion (no. 8 上歷音 in Fig. 3-1). This ornament, happening after the final main note, acts as an ending gesture.

Ex. 3-11.

a) Three ending ornaments in *The Shepherd Boy* 小放牛 on the first and third lines, mm. 5, 13 and 17, with transcription.

# 小 放 牛

1=D(筒音作5)

民间乐曲  
陆春龄改编

【引子】

2/4 3 3 5 | 6. 1 2 3 | 1 2 1 6 | 5 . 5 6 | 1

稍慢

Ending trill

自由地 Beginning ornaments

2 1 6 1 | 5 .

自由地

6 5 | 3. 2 3 5 | 6 i2 3 5

pp

Ending inflection

mf

2 3 2 1 | 2 3 2 1 | 2321 2321

Ending trill

中板

3. 2 3 5

(Ex. 3-11 is continued on next page)

b) Ending ornament at the last measure in *The Shepherd Boy* 小放牛.

The image shows guitar tablature for the ending of 'The Shepherd Boy'. The notation includes fret numbers (5, 0, 0, 6, 5, 6, 5, 3, 2, 3, 5, 6, 3, 5, 2, 3, 1, 6, 5, 6, 5, 3, 2, 3, 1, 2, 5) and a trill (tr) over the final note (5). A 'ritardando' (渐慢) marking is placed above the final measure. To the right, a diagram shows an ascending ornament with a trill over a note, labeled 'Ascending ornaments after the final note'.

The image shows a musical staff in treble clef with a key signature of one flat and a 4/4 time signature. The melody consists of eighth and sixteenth notes, ending with a trill over the final note. A long horizontal line is drawn under the first part of the staff.

Chang also uses Western notation to show the flying direction of the bird at the end of *Flying Away* (Ex. 3-12). After the sustained G $\flat$  in mm. 56-57, the egret flies off in a pair of ascending aural curves, leaving an echo circulating in the air. (The performer's stillness after playing this passage enhances this effect.)

Ex. 3-12. Chang, *Flying Away White Egret*. Ending two beats of the movement vividly describe the bird's motions in pitch, rhythm, and dynamics.

The image shows a musical staff in treble clef with a key signature of one flat and a 4/4 time signature. The notation includes sixteenth-note runs, a sustained G $\flat$  (marked with a fermata), and a final melodic phrase. Performance markings include 'poco' (poco) and 'ppp' (pianissimo). Measure numbers 56, 6, 5, 4, 6, and 7 are indicated.

### Western ornamentation in Chang's *Flying Away White Egret*

Chang's ornamental effects recall similar usages in solo clarinet passages of Western orchestral works. These passages also depict scenes from Nature, and birds in

particular. One of the most famous of these is the clarinet solo melody from the second movement of Beethoven's Symphony No. 6 in F Major, the *Pastoral*. The first ornament-group in m. 71 (third measure after rehearsal letter D in Ex. 3-13) includes three notes, repeated two measures later. This three-note ornament is unlike typical ornaments of the classical period. The ornament, a kind of turn is elevated to motivic status here. Similarly, Chang's ornament-groups constitute essential features of the melodic line. Generally, the more notes that an ornament-group contains, the quicker they should be played, whether before or on the beat. Beethoven's ornament is not an easy one for clarinet: It is not easy to play in time, nor is it easy to perform elegantly.

Ex. 3-13. Beethoven, Symphony No. 6, *The Pastoral*, mvt. II, mm. 68-77. Clarinet solo passage with ornaments.

The image shows a musical score for a clarinet solo passage. The tempo is marked "Andante molto moto" and the key signature is "in Bb". The score consists of four staves of music. The first staff begins with a rehearsal letter "D" and includes dynamic markings "cresc. f" and "p". The second and third staves feature complex ornamentation, including trills and grace notes, with a "cresc." marking. The fourth staff includes a trill marking "tr" and a dynamic marking "f".

Although the tempo is very fast, the trills in "Variation de l'oiseau de feu" of Stravinsky's *Firebird Suite* (1919) are written out in the first two beats as

thirty-second notes, clearly showing the connection to the third beat (Ex. 3-14). Two other ornament groups follow: the first a chromatic scale in sixteenth triplets leading to F# and next a set of four thirty-second notes leading into the C-trill. All of these serve to describe the swift, delicate movements of the firebird (Ex. 3-14).

Ex. 3-14. Clarinet passage from Stravinsky's *Firebird Suite* (1919), first three measure of rehearsal number 9.



└Trill figure ┘

## Chang's Ornamentation in Performance

### Phrasing

Chang's melismatic ornaments in *Flying Away White Egret* convey specific expressive meanings. For example, in the septuplet of the Ta figure (mm. 13 and 15 in Ex. 3-8) the meandering shapes float like waves. An understanding of the expressive significance of each ornament is the key to successful phrasing.

### Embouchure and Register

Elegantly rendered grace notes require that the embouchure should be very flexible. When playing from the low (chalumeau), or first register to the middle (clarion) or second register, and to the high, (altissimo), or third register,<sup>53</sup> the player should move the lower teeth and lip slightly lower on the reed, gradually stretching the jaw and raising the back of tongue to push the air stream to a higher place in the embouchure.<sup>54</sup> Contrariwise, when moving from higher to lower registers, the player should support the air well and slightly nod the head, so the air stream will move down directly to the lower part of the embouchure.

In Ex. 3-3, the grace notes are at a wide distance from the main notes (mm. 5 and 12). For both musical and technical reasons, grace notes with large leaps should be played a bit slower and articulated clearly. For example in Ex. 3-15, m. 40 (reproduced below) the quick register shifts between grace and main notes are technically challenging. Although the C is normally taken in second register, it also serves as a bridge between second and third registers. Furthermore, the D $\flat$  immediately before also belongs to the third register. Thus, it is best for this passage if both grace notes C and E are taken in third register embouchure position. However,

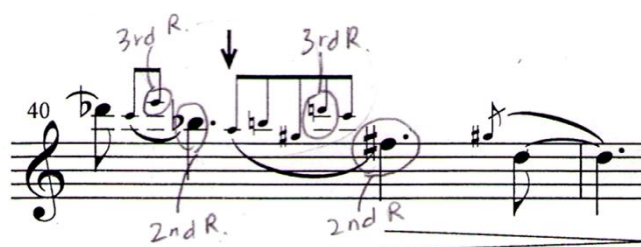
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<sup>53</sup> The lowest clarinet register begins at the bottom note E to B-flat above middle C. The second register begins at B above middle C and spans over an octave to the C two octaves above middle C. The left thumb then has to press the register key from the second register. The third register consists of the notes above the C two octaves above middle C.

<sup>54</sup> Based on the harmonics of the clarinet, there are fourth and even fifth registers (many advanced players use these), which demand the use of other embouchures, but are not relevant to my discussion.

the next eighth note B $\flat$ , is in second register. In order to link the third register E to the second register B $\flat$ , the player might try nodding quickly while playing the B $\flat$  because for the brief period of shifting registers, nodding will change the direction of the air, and move the mouthpiece slightly out of the mouth. In the following “on the beat” melisma the third note is a second register G $\sharp$  and the fourth is a third register D. To link these smoothly I suggest gradually pushing the mouthpiece further into the mouth. This motion should in fact begin at the first grace note, A. Care should be taken to retain the position of the top teeth by holding the mouthpiece tightly against them, because when the lower teeth and lip move, the mouthpiece requires a firm anchor on which to rest in order to maintain a steady pressure in the air stream.

Ex. 3-15. Shifting registers in Chang’s *Flying Away White Egret*, m. 40.



### Fingering

The two timbre-trill sections (mm. 24-28 and mm. 48-50) should be played very smoothly, perhaps imagining the egret flying into the wind. The fingerings notated in

the example are based on standard fingerings, adding one or two extra keys. My suggestions are based on intonations and economy of movement, although, of course, other fingerings are possible, depending on the player's preferences and instrument set-up. For example, the low Bs with a triangle note head (m. 26) could be played by the standard B fingering with the right fifth finger added either on B or on C to make the pitch a bit lower.<sup>55</sup> Though both ways could work, as long as listeners can distinguish the different tone colors, it is better to maintain intonation as close as possible (Ex. 3-16). In another fingering, the E $\flat$  timbre-trill (m. 27) and the B $\flat$  timbre-trill (m. 49), were it not for the register key difference, could both be executed with the same fingers (in the clarinet 12<sup>th</sup> harmonic system<sup>56</sup>). But since the B $\flat$  has a louder dynamic and higher register, the fingerings I have indicated are easier and more effective. Note, however, they are not as effective in the soft dynamic and lower register for the E $\flat$ .

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<sup>55</sup> The fifth finger on B or C means the right fifth-finger to press one of the four fifth finger keys, which is used for the B or C above middle C. Clarinet players usually call the fifth-finger keys by the specific note's letter-name.

<sup>56</sup> Because of the shape of clarinet, a cylindrical tube open to the end, the harmonic system the overblown note sounds up an interval of a 12<sup>th</sup> rather than the usual octave in harmonic systems of other instruments. For example, when executing a middle C and then overblowing it (or adding the register key), the note will become the high G, which is the 12<sup>th</sup> higher.

Ex. 3-16.

a) Chang, *Flying Away White Egret*. Fingering chart for the first timbre-trill section. “L” and “R” refer to left and right fifth fingers,<sup>57</sup> and “S” refers to the side keys controlled by the right index finger.<sup>58</sup> Numbers over different pitches refer to the various colors as Chang has indicated, mm. 24-28.

The image displays a musical score for a clarinet piece, specifically the first timbre-trill section of 'Flying Away White Egret' by Chang. The score is presented in three staves of music, with corresponding fingering charts below each staff. The first staff (measures 22-24) features a melodic line with a trill starting at measure 24, marked with 'ppp' and an asterisk. The second staff (measures 25-26) shows a rhythmic pattern of eighth notes with 'p' and 'ppp' markings. The third staff (measures 27-28) continues the rhythmic pattern with 'ppp' and 'p' markings. Below each staff are fingering charts: the first staff has two charts labeled 'L' and 'LR'; the second staff has two charts labeled 'R'; the third staff has three charts labeled 'R'.

(Ex. 3-16 is continued on next page)

<sup>57</sup> Left and right fifth fingers control various keys. The right fifth finger basically controls the four keys below the right hand's three wholes, and the left pinky controls the three or four keys depends on the models of the clarinet. In the fingering chart here, the left pinky controls three keys.

<sup>58</sup> There are four side keys. It only requires the lowest one at m. 48 and 49 in Chang's second piece.

Musical score for measures 28-30. Measure 28 features a series of seven eighth notes with a *ppp* dynamic. Measures 29 and 30 contain a timbre-trill. A downward-pointing arrow is positioned above the first note of the trill in measure 29. The dynamic for the trill is *pp*. Below the score are two fingering charts, labeled ① and ②, each showing a vertical sequence of notes with a heart-shaped symbol at the bottom and the letters 'LR' below it.

b) Chang, *Flying Away White Egret*. Fingering chart of the second timbre-trill section, mm. 48-50.

Musical score for measures 47-50. Measure 47 consists of two eighth-note triplets. Measure 48 begins with a *mf* dynamic and contains a series of seven eighth notes. Measures 49 and 50 feature a timbre-trill. Below the score are four fingering charts. The first two are labeled ① and ②, with 'R' and 'R+S' below them respectively. The last two are labeled ① and ②, with 'R' below them. A *ppp* dynamic is indicated at the end of the score.

## III-2

### Ornamentation in Lin's *All But Not At All*

Nearly all of the notes in Lin's *All But Not At All*, including the ornaments have a significance in the array that functions as a pre-compositional idea. Although every ornamental note is structural, belonging to the array, the ornaments are emphasized in different functions depending on the context, for example, some build up particular trichordal sets, and some may be described as less essential tones that connect one set in the array to another. These inessential notes nonetheless serve the overall aesthetic aims of the work: As Lin explains, "the singing expressions in the long phrases are very important musical gestures in my music." Lin had two simultaneous aesthetic aims; to have a continuously floating melody that sounded like spoken Mandarin, and to incorporate the structure of the trichordal arrays. In the following paragraphs, I demonstrate the different functions of ornamentation in Lin's Eastern and Western approaches to *All But Not At All*.

#### **Prolonged Sound**

Some ornamental notes serve the purpose of prolonging main notes. They either simply duplicate the main notes or they prolong sounds in some other way. Of the first type, consider Ex. 3-17, mm. 3-4. Here the grace notes reiterate the previous main

note. Such idioms are unusual in the Western music. Ornaments that duplicate the main note are most frequently found in the context of anticipations, quite unlike the ones here. The continuance of sounds for their re-articulated effect resembles ancient Chinese heterophony, where instrumental voices play one basic melody together, but with different embellishments. Each instrument has its own unique set of idiomatic ornaments, and, in this way, the heterophonic ensemble creates a complex monophony. The repeated-note ornaments in *All But Not At All* prolong the sound of the melodic notes and enrich the texture through this allusion to a heterophony in which each melodic note is executed by different instruments at slightly different times.

Ex. 3-17. Lin, *All But Not At All*. Grace notes functioning as prolonged sound creating effect of heterophony, mm. 3-4.



Not every grace note appearing after a common main note functions quite the same way. A second iteration of the grace note (high F#; m. 17) appears after a breath mark (Ex. 3-18). The trichordal array here shows that this F# connects two [G, E $\flat$ , F#] sets. The set in the higher voice before the breath mark is prolonged by the F# after the breath, and the second set is led by the grace note into the lower register.

Ex. 3-18. Lin, *All But Not At All*. Grace note of prolonged function (after the breath mark) leading to the next set (connects two sets in different registers), m. 17.

Two [G, Eb, F#] sets

The grace note repeats the pitch from the previous set and appears after the breath mark.

Similar to prolonging and leading functions, the grace notes in the following two examples also connect sets over the bar line. However, in Ex. 3-19, the two grace notes here (A-C#) are an inverted form of the interval just played (C#-A) that belong to the set [C, C#, A]. The two grace notes prolong these two elements of the set and extend the melody and, leading it into the set [E, G#, F] of the next section

Ex. 3-19. Lin, *All But Not At All*. Grace notes connect two sets and provide smooth transition to next section, m. 4, with its relevant columns of the array.

Two grace notes prolong the [C, A, C#] set and link to the [E, G#, F] set.

Column 3

Column 4

Both of the circled grace notes in m. 8 of Ex. 3-20 exhibit two distinct functions: They repeat and prolong the trichord notes: low F and low G# of the set [F, G#, E] in mm. 7-8. Also, both of the grace notes have accent marks (on the top of the staff), creating a unified rhythmic gesture.

Ex. 3-20. Lin, *All But Not At All*. Accented grace notes prolong the sound, and create coherent rhythm that emphasizes array pitches, mm. 7-8.

The image shows a musical score for a piano piece. The score is on a single staff with a treble clef. It features several measures of music. Two specific notes are circled in yellow and labeled as 'Accented grace notes'. Above these notes are brackets with the ratios '5:4' and '3:2'. Below the staff, there is a bracket labeled 'Set [F, G#, E]'. The dynamics are marked as 'mp' (mezzo-piano), 'mf' (mezzo-forte), and 'sub pp' (sub-pianissimo).

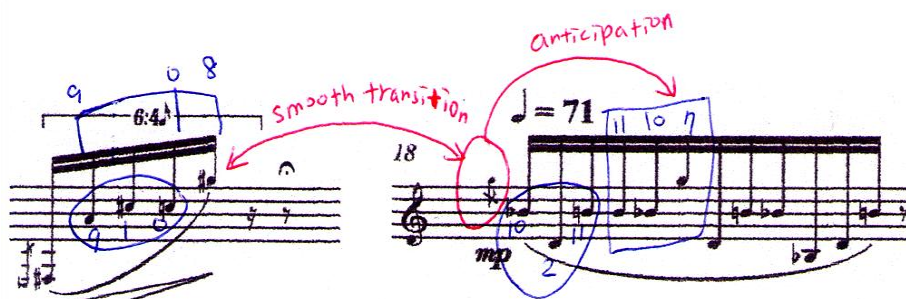
Relevant columns of the array in mm. 7-8, extracted from Ex. 2-14:

The image shows a musical score for a piano piece, labeled 'Column 8'. It features a single staff with a treble clef. The score shows several measures of music, with notes connected by lines, indicating a sequence of pitches. The notes are mostly eighth and sixteenth notes, with some accidentals.

Example 3-21 shows a further modification of this idea. The grace note on G $\sharp$  in m. 18 connects the sound of the previous G $\sharp$ , which lingers after the fermata, into the next phrase, providing a rounder introduction to the B $\flat$ . The G $\sharp$  also can be read as a non-harmonic tone, a kind of anticipation for the next set. As discussed in Chapter II-1 (Ex. 2- 4 and 5), the G $\sharp$  grace note does not belong to the trichords of the array,

but it gradually transforms into another (014) set [G-B-B $\flat$ ] in the local context. The three functions of the G grace note at m. 18—leading, connecting, and anticipating, all lend to the sense of continuity or prolongation.

Ex. 3-21. Lin, *All But Not At All*. Grace note on G-natural has multiple functions, mm. 17-18.



### Chinese ornamentation

Lin's ornamentation shows the influence of Chinese practices discussed in the four approaches of Hsiao (簫), and from the Di-Tze (笛子) ornamentation chart referred to earlier. For example, the directing function of the grace note G in Ex. 3-21 resembles the idea of 弓 Yin (to lead or to direct). The idea of 塌 Ta (to fill) describes the function of the grace notes in Ex. 3-19, where last two grace notes fill the space between two main notes. Correspondingly, the heterophonic structural effect in Ex. 3-17 is made from these different and very delicate ornamentations of Di-Tze: No. 5 叠音 Die-Yin (where at the moment of repeating the second note, the player quickly changes fingering to one or two steps above or below it before sounding the second

note), and in No. 6 打音 Da-Yin (using the same fingering to press lightly and quickly before replaying the main note). Ex. 3-22 below shows these ornaments from an excerpt of a well-known Di-Tze solo piece, *A trip to Su-Chou*. The first circled grace note appears on high C (1, with a dot above it showing the registration change; m. 16). With the mark 扌, which is one part of No. 6 打音 Da-Yin, the repeated high C should be played with a very quick grace note on the same note by depressing the fingers twice. In m. 16, the circled ornament 又(simplified from No. 5 叠音 Die-Yin) is played as a grace note on B, one note above the holding A (6) with a trill to make some varieties of color and to link to G (5). These examples of Chinese ornaments closely resemble the repeated grace notes in Lin's piece in the ways that they invoke the character of Chinese heterophonic effects. It should be pointed out, however, that the appearance of grace notes that repeating after main notes is not in keeping with the practice of Di-Tze.

Ex. 3-22. 叠音 Die-Yin and (simplified by the mark, 又) and 打音, Da-Yin (simplified by the mark, 扌) in Di-Tze piece, 姑蘇行 *A trip to Su-Chou*, mm. 13-20, with staff-notation transcription.

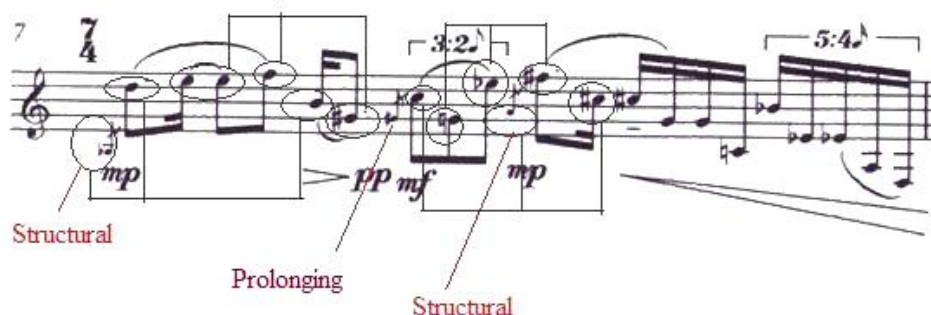
中板 ♩ = 84

The image displays a musical score for 'A Trip to Su-Chou' (姑蘇行). It features two staves of simplified notation at the top, followed by a two-staff staff notation transcription. The simplified notation includes various ornaments and marks such as 'tr', '又', and '扌'. The staff notation transcription shows the corresponding notes on a treble clef staff. The tempo is marked '中板' (Moderato) with a quarter note equal to 84 beats per minute.

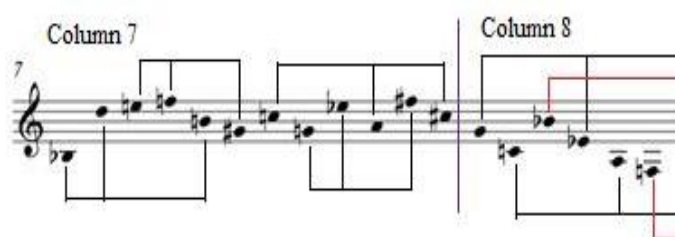
### Structural Function

Some ornaments in Lin's piece are the representatives of notes in the trichordal arrays and thus are as structurally significant as main melodic notes. Lin, nevertheless, even mixes some of these ornaments with Eastern idioms. In Ex. 3-23, four (014) sets intertwine to form the aggregate, and the main and the grace notes are equally essential to the array. The grace notes B $\flat$  and A are the sole representative of structural pitches, whereas the grace note G $\sharp$  duplicates the non-ornamental G $\sharp$ , and both prolongs the previous sound and connects the first pair of sets with the second pair of the trichordal array.

Ex. 3-23. Lin, *All But Not At All*. Structural and continual grace notes, m. 7, with its relevant columns of the array.



Relevant columns of the array in m. 7, extracted from Ex. 2-14:



In Western music, ornaments decorate the melody or harmony. Here, structural grace notes are also aligned with rhythm and register to make certain trichords salient.

In Ex. 3-24, both rhythm and register serve to bring out the inversive relationship between the grace notes C, A, and C#, which constitute the trichordal set (0, 9, 1), and B-D-A# in the (11, 2, 10) set. The three notes, B-D-A#, appear at the end of each dotted rhythm are shown in boxes. Furthermore, the grace notes C, A, and C# initiate the three implied harmonies created by the mixture of the four trichordal sets.

Ex. 3-24. Lin, *All But Not At All*. Three structural grace notes (circled) are arranged in the same rhythm and register to imply the harmonic change. (Refer to the chord implication below the excerpt), m. 13.

The image shows a musical staff with several notes. Three grace notes are circled. Above the staff, three boxes labeled 'set (7, 3, 6)', 'set (5, 8, 4)', and 'set (10, 2, 11)' are connected to the notes by lines. Below the staff, dynamic markings 'mp', 'mf', and 'f' are shown with arrows pointing to the notes. Below the staff, the text 'Grace notes from (0, 9, 1) set' is written.

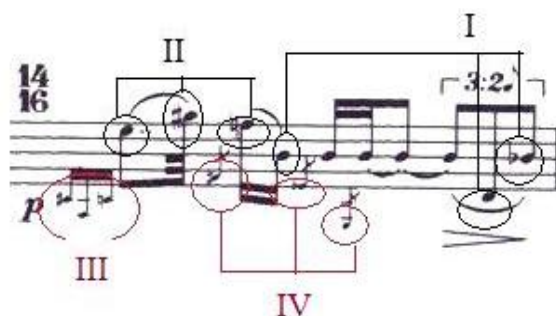
Implied chords:

	D	
B	B	F#
G	G	C#.....A#
E-flat	→ E-natural	
C	C	
	A	

Other examples show more grace notes articulating array elements. In m. 9 of Ex, 3-25, two groups of grace notes make up (014) trichords. The first group of the three grace notes, C#-A-C, are temporally adjacent, whereas the trichord F#-Eb-G is articulated by three low-register grace notes that each lead upward to a member of the dyad, B-F. In Ex. 3- 26, three structural grace notes are strongly emphasized with dynamic accents (m. 15), and lead to much softer main notes. The opposition of dynamics emphasizes the mirroring contour of main notes and grace notes. Because of the unusual dynamics, the grace notes should be played on the beat,<sup>59</sup> expressing the emotional pinnacle of the climax. This is only compounded by the fact that the grace notes form a structural trichords whereas the main notes do not.

<sup>59</sup> Lin approved of my reading here, Interview (Feb. 2010).

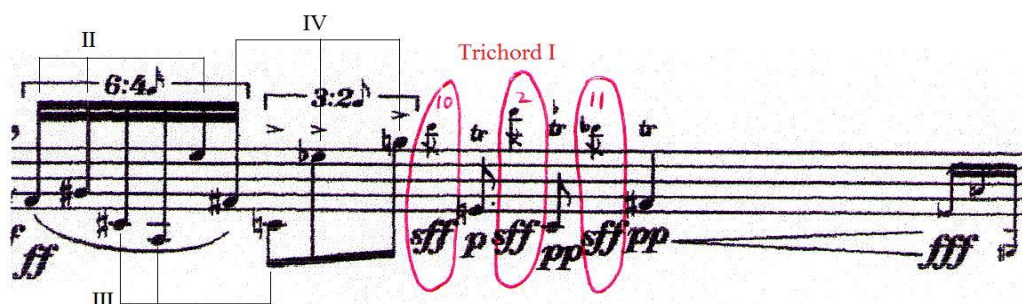
Ex. 3-25. Lin, *All But Not At All*. Two grace-note groups build up two trichordal sets in the melody, m. 9.



Grace-note sets: III [C, A, C#], IV [G, Eb-F#]

Main note sets: II [F, G#, E], I [Bb-D-B]

Ex. 3-26. Lin, *All But Not At All*. Three grace notes marked *sff* show (014) melody in higher register, m. 15.



Grace-note sets: I [Bb-D-B]

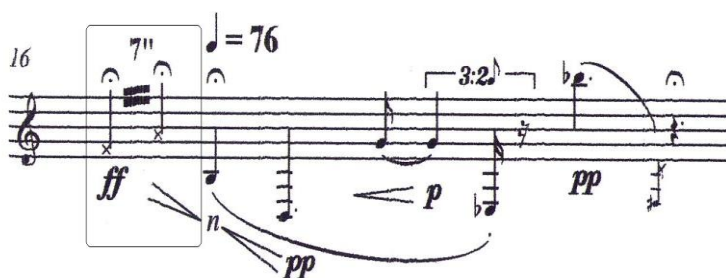
Main note sets: II [F, G#, E], III [C, A, C#], IV [G, Eb-F#]

### Unusual ornamentation

Lin utilizes extended clarinet techniques for more unusual ornamentation. In Ex. 3-27, m. 16, the seven second fermata, notated with x marks on F and A directs the performer to employ *tremolando* key clicks on these two notes (G and B in clarinet

score) while blowing air into the clarinet. Lin has explained that the extended moment of air and key clicks work “to sustain the sound after the climax at m. 15, letting the audience know the piece does not end yet, and it is a transition to the next section, coda, ... which starts from nothing.”<sup>60</sup> Such “air notes” have an antecedent in Hsiao ornamentation: 貫 (Guan, to continue through), signifies to play a long air note for the purpose of prolonging the memory of a previous sound. The use of air notes here serves as a deliberate fusing of the two traditions.

Ex. 3-27. Lin, *All But Not At All*. Transition marked by air notes and key clicks on the two notes marked with x, extended techniques used in the Chinese ornamentation concept Guan (貫), beginning of m. 16.

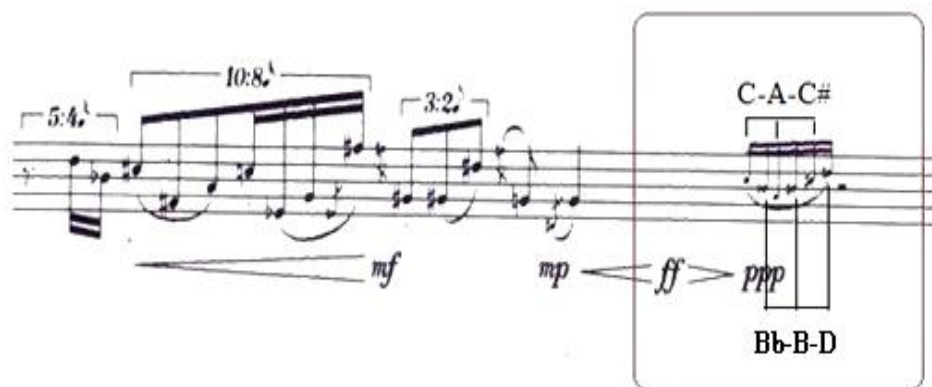


Another unusual ornamentation technique appears in grace-note grouping shown in Ex. 3-28, mm. 11-12. (The same device appears again at the end of piece.) Even as they avoid decorating main notes, these grace-note figures seem to float in the air. The first group [grace-note phrase *a*] functions as an ending ornament of a phrase, its six notes derived from two (014) sets. Adding one or two inflected notes at the end of a

<sup>60</sup>Personal communication, March 13, 2010.

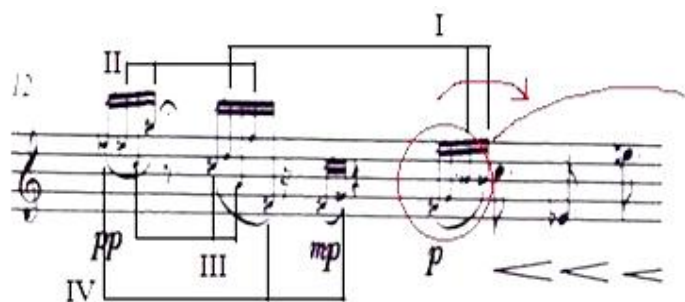
phrase to depict reverberation is common in Di-Tze (笛子) and other Chinese instrumental performance practice, but the sextuplet is an unusual adaptation of this embellishment idiom. After the two-beat rest at the end of m. 11, several grace-note groups (in m. 12) bring out contrasting contours from the four original trichordal sets. Without main notes to decorate, nor tempo markings, these groups float about in a kind of stasis. The fourth and final grouping leads to another lyrical phrase. Audiences are not likely to perceive these figures as grace notes, so it is recommended that the player adopt a less formal attitude in executing them: A light, easy approach would be the most effective. These ornamental figures have the effect of a kind of good-natured respite, having a bit of fun before returning to the task. The performer might communicate this sensibility by her physical stance or movement.

Ex. 3-28. Lin, *All But Not At All*. Ending grace-note phrase, end of m. 11, and the floating grace note passages, m. 12.



Ending grace-note phrase  $\alpha$

(Ex. 3-28 is continued on next page)

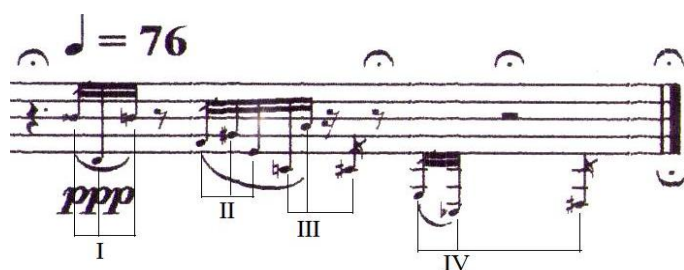


Floating grace notes formed from the four original trichordal sets and lead to next phrase

Grace-note sets: I [B $\flat$ -D-B], II [F, G $\sharp$ , E], III [C, A, C $\sharp$ ], IV [G, E $\flat$ -F $\sharp$ ]

The final twelve grace notes in Ex. 3-29 also function as floating ornaments, serving no main notes. They balanced the opening trichordal array,<sup>61</sup> sounding as recollections. Their appearance as small figures separated by rests and fermatas evoke the sense of memory fragments. These grace-note figures might lend both player and listeners an open-minded attitude for the ending.

Ex. 3-29. Lin, *All But Not At All*. The nostalgic grace-note groups at the finish—structural and lending openness.



Grace-note sets appear in order, as the first line of the array:

I [B $\flat$ -D-B], II [F, G $\sharp$ , E], III [C, A, C $\sharp$ ], IV [G, E $\flat$ -F $\sharp$ ]

<sup>61</sup> See Chapter Two on pitch organization.

## Conclusion

Chang's ornamentation embodies a fusion of East and West. It serves to awaken visual imagery and to contribute to the emotional impact of the work. It is a kind of Chinese water-ink painting, rendered in clear Western notation and techniques as may be seen in its use of emphasized ornaments and the timbre-trills.

Several important functions in Lin's ornamentation have emerged in the analysis. In their function of prolonging sound, the ornaments are to be understood as leading, connecting and anticipating. When they serve as structural notes, the ornaments have coherent rhythm, register position, and may add harmonic color to the melody. In Chinese aesthetics, the ornaments create a nuanced heterophonic effect and extend the reverberation of final sounds. The multiple-functioned ornaments in *All But Not At All* enable the melodic line to float, to promote the use of tone-shaping contours, which recall the influence of Mandarin speech patterns, as discussed in Chapter II-2. At the same time, these embellishments function as a distinctly Chinese component of the music and express a Chinese aesthetic. From the perspective of Western compositional practice, the abounding ornaments give the piece a more improvisatory freedom in its organization of musical pitch.

As a traditional Chinese saying has it: "one must not forget one's origin."

This sentiment is also reflected in the Chinese adage, 飲水思源: "when drinking

water, think of its source.” Chang and Lin have each developed unique compositional solutions for the problem of fusing Eastern and Western compositional techniques aesthetics. These solutions are not a simple overlay or simultaneity of opposites, but a true fusion that gives rise to an altogether new creative language that I have described. A renowned Taiwanese composer and professor, Ma Shui-Long, once said, “To promote the development of musical culture, the continuous cycle of compositions, interpretations, appreciations, and reviews are required.”<sup>62</sup> It is my hope that this thesis will contribute to this dialog in its examination of Chang and Lin’s works, and further, that this study may lead to a larger discussion of the issue of stylistic fusing. Finally, I hope readers and listeners will be inspired to a greater appreciation of an East-West confluence in contemporary composition, particularly as that confluence manifests in the works of Taiwanese composers.

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<sup>62</sup> 曾道雄, <音樂走出象牙塔>, 台北市, 東和音樂出版, 1990, 3.

Dao-Hsiung, Tseng, *Music Out of Ivory Tower*, Taipei, Don-He music publication, 1990, 3.

Ma Shui-Long (1939- ) is a Taiwanese composer and professor at the Taipei National University of the Arts. Accessed November 18, 2010,

[http://www.culture.tw/index.php?option=com\\_content&task=view&id=526&Itemid=157](http://www.culture.tw/index.php?option=com_content&task=view&id=526&Itemid=157).

# Appendix 1: Score of *Three Fantasias*

## *Three Fantasias*

### 三首奇想小品

#### I. Diu-Diu-Bu-Liao 丢丢不了

張玉慧  
Yu-Hui Chang  
(2006)

Clarinet in B-flat

$\bullet = 130$  **Vivo**

*N* *fpp* *molto*

*fpp* *molto* *fpp* *mp* *p*

*fff* *subpp* *molto* *f*

*p* *mf* *mf* *p* *mf*

*p* *ff* *fp* *ff* *fp*

*p* *ff*

19 *f* *p*

22 *f* *p* *f* *mp*

25 *molto* *molto* *pp*

27 *p*

29 *f*

31 *mp* *f* *mp* *f*

33 *mp* *ff*

35   
*dim.*

37   
*mp* *mp* *mp*

40   
*pp*

43   
*pp* *fff*

46 

49   
*cresc.*

51   
*fp* *ff*

## II. Flying Away White Egret 飛去的白鷺鷥

$\text{♩} = 72$  *Gentile*

The musical score consists of six staves of music in 5/4 time, marked *Gentile* with a tempo of 72 beats per minute. The piece features a variety of dynamics and articulations:

- Staff 1: *pp* (pianissimo) with a *poco* (poco) hairpin, followed by *pp* and *p* (piano). Includes a triplet of eighth notes.
- Staff 2: *pp* with a triplet of eighth notes.
- Staff 3: *mp* (mezzo-piano) with a triplet of eighth notes, followed by *p*, *pp*, and *ppp* (pianississimo) dynamics.
- Staff 4: *pp* with a grace note marked with an asterisk (\*). Includes a 7-measure rest.
- Staff 5: *pp* with a *poco* hairpin, followed by a 7-measure rest.
- Staff 6: *mf* (mezzo-forte) with a triplet of eighth notes and a *poco* hairpin.

\*) Play the grace note(s) on the beat.

18

7 *pp* *poco* *p*

22

7 *ppp*

\*) Timbre trill. Use a different fingering for each shape of notehead.

25

7 7 7 7 7 *p* *ppp* *pp* *ppp*

27

7 7 7 7 *ppp* *p*

28

7 7 7 *ppp* *pp*

31

3 5 *p* *pp*

33

7 7 *mp* *pp*

36 *poco* 3 *pp* *poco* 3 *pp* *mp*

40 *pp* *molto* *p*

44 *pp* *pp* *poco* *pp*

47 *mf*

49 *ppp*

51 *p*

54 with subtone *pp*

56 *poco* *ppp*

### III. Darkening Dark Sky 天黑又黑

♩ = 118 *Leggiero*

1

6

12

16

21

26

31 Musical staff 31-35: Treble clef, 7/8 time signature. Measures 31-35 contain a complex rhythmic pattern with many sixteenth notes. Dynamics: *subp* (measures 31-34), *ff* (measures 34-35).

36 Musical staff 36-40: Treble clef, 7/8 time signature. Measures 36-40 continue the rhythmic pattern with various articulations and slurs.

41 Musical staff 41-45: Treble clef, 7/8 time signature. Measures 41-45 feature a more melodic line with slurs and accents. Dynamics: *f* (measures 43-45).

46 Musical staff 46-50: Treble clef, 7/8 time signature. Measures 46-50 show a change in dynamics and articulation. Dynamics: *pp* (measures 46-48), *f* (measures 48-49), *pp* (measures 49-50).

51 Musical staff 51-55: Treble clef, 7/8 time signature. Measures 51-55 include accents and dynamic shifts. Dynamics: *f* (measures 51-52), *pp* (measures 52-53), *f* (measures 53-54), *p* (measures 54-55), *f* (measures 55).

56 Musical staff 56-60: Treble clef, 7/8 time signature. Measures 56-60 conclude the passage with various rhythmic and melodic elements.

60 

64 

69 

74 

80 

85 

90 *fp*  $\longleftarrow$  *f*

94 *fp*  $\longleftarrow$  *f* *mp*  $\longleftarrow$  *f*

98 *ff*

103 *sf*

108 *p* *sf*

112 *sf* *accel.* ..... *a tempo* *ff* *p*

116 *fp*  $\longleftarrow$  *ff*

# Appendix 2: Score of *All But Not At All*

## All But Not At All

Wei-Chieh Lin (b. 1982)

Score in C  $\text{♩} = 76$

Score in C

3

5  $\text{♩} = 84$

7

10

12

*pp* *mf* *sub p* *f* *n* *n* (Niente)

*mp* *p* *sf* *pp* *mf* *fp* *p* *ff* *sf* *mf* *p* *mp* *pp* *sub pp* *ppp* *mf* *mp* *ff* *ppp* *mf* *pp* *sub mp* *ppp* *mf* *mp* *sf* *p* *mf* *mf* *f* *mf* *fp*



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