

The Use of Traditional Chinese Elements in Selected Saxophone Works by Lei Liang

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Abstract

The purpose of this study is to examine the use of traditional Chinese elements in two of Lei Liang's saxophone works, *Peking Opera Soliloquy* and *Xiaoxiang*, and to analyze how Liang incorporates such elements into compositions written largely with Western musical techniques and vocabularies. Traditional Chinese elements identified in these pieces include Peking Opera singing, Peking Opera accompaniment, traditional Chinese melodies, one-note polyphony, and other Chinese artistic elements such as negative space and calligraphy.

This study also explores how the traditional Chinese musical and artistic elements are reproduced or alluded to with western musical notation, genres, saxophone performance styles and techniques in creative and innovative ways. It is hoped that this research can inspire further investigations on works of saxophone or works of other musical instruments with embedded Chinese elements.

Keywords: saxophone, *Peking Opera Soliloquy*, saxophone concerto *Xiaoxiang*, Chinese music elements, negative space

梁雷薩氏管作品選曲中 中國傳統音樂元素的運用

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摘 要

本研究旨在分析梁雷的兩部薩氏管作品《京劇獨白》和《瀟湘》對中國傳統元素的運用，並探討梁雷如何將這些中國元素融入西方音樂框架中。在這兩部作品中識別出的中國元素包括京劇演唱、京劇伴奏、中國傳統旋律、一音多聲和其他中國藝術元素，如留白和書法。

本研究亦探討作曲家如何在西方音樂記譜法、樂類、薩氏管演奏風格與技巧的界限內，運用創造性與創新的手法，模仿或影射這些中國傳統音樂與藝術元素。希望本研究能引發對於薩氏管作品或其他帶有中國傳統元素之器樂作品的進一步探究。

關鍵詞：薩氏管、《京劇獨白》、《瀟湘》薩氏管協奏曲、中國音樂元素、留白

1. Background of the Study

Lei Liang is one of the most influential living Chinese-American composers. In his pieces he integrates Eastern and Western musical cultures, which reveals that the composer has a variety of cultural backgrounds and is a scholar with deep cultural attainments.¹ So far, Liang has completed nearly 70 works, including symphonies, concertos, chamber music, national instrumental music, electronic instrumental music, and works in other various genres. His works have been performed by well-known musicians and orchestras all over the world.² Liang has received many awards, including a Pulitzer Prize finalist nomination in 2015 for his piece *Xiaoxiang* for saxophone and orchestra.

The two pieces discussed in this study, *Peking Opera Soliloquy* and *Xiaoxiang*, depict a story from the countryside of Hunan during the Cultural Revolution. In this story the husband of a local woman was killed by a local village official and there was no way to avenge his murder. The widow then went to the forest behind the official's home to wail like a ghost every night, and finally both the woman and the official went insane.³

Many of Liang's saxophone works share similar musical elements and draw from this tragic story. These theme works can be considered a series called the *Xiaoxiang* series and both *Peking Opera Soliloquy* and *Xiaoxiang* are part of this series. In these pieces the composer connects Chinese culture and Western music theory systems, then transforms them using original musical ideas, and interprets this newly integrated style of music through saxophone performance.⁴

¹ 班丽霞,〈一位拥抱世界的行者—旅美作曲家梁雷创作与观念评析〉,《人民音乐》2008年第1期:40(Lixia Ban,“A Traveler Embracing the World: A Comment on the Creation and Ideas of Lei Liang, a Composer in America,” *People's Music*, 2008/no. 1: 40)。

² Lei Liang, “Biography,” *Lei Liang, Composer*, Google Sites, accessed April 13, 2021, <https://sites.google.com/site/leiliangcomposer2/biography>.

³ Lei Liang, *Memories of Xiaoxiang* (New York: Schott Music, 2003), i.

⁴ 班丽霞,〈回返歌之源头让当哭者哭—梁雷萨克斯协奏曲《潇湘》音乐评析〉,《人民音乐》2016年第12期:22(Lixia Ban, “Back to the Source of the Songs, Let the

Although Lei Liang's works for saxophone are becoming increasingly well known by performers and audiences alike, there are yet few published critical analyses of these works, especially outside of China. This paper intends to create an analysis of the traditional Chinese elements used in *Peking Opera Soliloquy* and *Xiaoxiang* and discuss how they have been integrated into Western musical idioms. These two pieces were selected for this study because they are the first and last of Liang's saxophone works in the Xiaoxiang series and are among his most representative saxophone pieces.

2. Objectives

1. To introduce the traditional Chinese elements in two of Lei Liang's saxophone works: *Peking Opera Soliloquy* and *Xiaoxiang*.
2. To analyze and discuss how Lei Liang incorporates these traditional Chinese elements into Western musical idioms.

3. Literature Review

Lei Liang was born in 1972 in Tianjin, China, began to study piano at the age of 4 and later began to study composition at 6. In 1988, he was admitted to the Central Conservatory of Music Middle School, where he studied theoretical composition. At the age of 17, he went to the United States to study and obtained his bachelor's and master's degrees from the New England Conservatory of Music. He later earned a doctorate from Harvard University.⁵ Currently he is the Chancellor's Distinguished Professor of Music at the University of California, San Diego.⁶ In 2011 Liang was awarded the Rome Prize by the American

Weepers Cry: The Musical Analysis of Liang Lei's Saxophone Concerto *Xiaoxiang*," *People's Music*, 2016/no. 12: 22)。

⁵ 刘琛,〈梁雷室内乐《迷楼》的创作观念与技法研究〉(上海師範大學博士論文, 2017), 4 (Chen Liu, "Research on the Creative Concept and Techniques of Lei Liang's Chamber Music *Milou*" (PhD diss., Shanghai Normal University, 2017), 4)。

⁶ Liang, "Biography."

Academy of Rome, and was also the recipient of a Guggenheim Fellowship, a Koussevitzky Foundation Commission, and a Creative Capital Award. His piece *Xiaoxiang* was a finalist for the 2015 Pulitzer in Music and his piece *A Thousand Mountains, A Million Streams* won the prestigious Grawemeyer Award for Music Composition in 2021.⁷

Liang's works include symphonic works, concertos, chamber music, chamber operas, instrumental music, and electronic music and film soundtracks, among others. Regarding Liang's overall compositional style, Lixia Ban stated that Liang's unique comprehension of music, his broad cultural vision, and his quiet, free, and poetic artistic temperament have left a profound impression on performers and listeners.⁸ Influenced by Buddhist ideas and literati music, Liang's works completed during 1996 to 2000 mainly pursue a state of meditation, and the music is calm and detached as if to show a process of meditation. During 2001 to 2008, Liang has broken through his original state of calmness and began to find a new, almost maniac experience between static and dynamic, sound and silence, strong and fragile.⁹

In Liang's works we can often find strong influences of Chinese culture. In an article from 2012, Liang stated that he has several signature compositional techniques developed from Chinese concepts, such as *one-note polyphony* and *shadowing*.¹⁰ His concept of one-note polyphony comes from the ancient plucked Chinese instrument *guqin* (古琴), which is able to make sounds with different timbres. In Liang's works this takes the form of individual notes played across different instruments which create a single musical line with various timbres. Shadowing is a technique inspired by the antiphonal style in Mongolian and Japanese traditional music where the roles of lines may be exchangeable, and

⁷ Liang, "Biography."

⁸ Ban, "A Traveler Embracing the World," 40.

⁹ Ban, "A Traveler Embracing the World," 40.

¹⁰ 梁雷,〈对我深有影响的几个体验和一些创作想法〉,《人民音乐》2012年第1期: 10-11 (Lei Liang, "A Few Experiences and Some Creative Ideas That Have Had a Profound Impact on Me," *People's Music*, 2012/no. 1: 10-11)。

do not necessarily follow the same pace or be synchronized. This concept can be extended to “melody shadow,” “harmony shadow,” “timbre shadow,” “rhythmic shadow,” and “time shadow.”

Liang has been very interested in the tragic story that occurred in the city of Xiaoxiang during the Chinese cultural revolution and has composed several pieces for saxophone that were influenced by this story. Table 1 lists all his works for saxophone and shows which of these pieces are in this Xiaoxiang series and thus related to the tragic story.

Table 1. Lei Liang’s Saxophone Works and Those in the Xiaoxiang Series.

Title of the Work	Year of Composition	Xiaoxiang Series
<i>Peking Opera Soliloquy</i>	1994	Yes
<i>Garden Six</i> for six saxophones	1996	Yes
<i>Lake</i> for two saxophones	1999, rev. 2013	No
<i>Lake</i> for alto saxophone and a string instrument	1999, rev. 2013	No
<i>Extend</i> for guanzi and alto saxophone	2000	Yes
<i>Parts for a Floating Space</i> for saxophone and percussion	2001	Yes
<i>Memories of Xiaoxiang</i> for alto saxophone solo and tape	2003	Yes
<i>Yuan</i> for saxophone quartet	2005	Yes
<i>Parallel Gardens</i> for twenty-four saxophones	2006	No
<i>Xiaoxiang</i> , concerto for alto saxophone solo and orchestra	2009, rev. 2014	Yes
<i>Messages of White</i> for erhu, sheng, yangqin, pipa, percussion, and saxophone quartet	2011	No

The origin of *Peking Opera Soliloquy* was that the composer was moved by hearing the saxophonist Shyen Lee playing a pitch sliding technique when warming up on the saxophone mouthpiece and began to think about how to integrate this sound into his works. At the same time, Liang was also very

interested in Peking Opera. He listened to a lot of Lanfang Mei's Peking Opera, and later used the mouthpiece to imitate elements of Peking Opera in his works.¹¹

Peking Opera Soliloquy was composed in 1994 for unaccompanied saxophone. The composer provided the following program note in the original unpublished saxophone part:

Peking Opera Soliloquy was written for and premiered by Shyen Lee in Jan, 1994. Its opening material is inspired by the declamatory style singing in Peking opera. This material penetrates the whole piece, while other layers of drama are gradually unfolded. It's a piece about agony and extrication. Ideally, the piece should be performed on a stage covered by red light when all other lights are turned off. One important factor of the piece is the dramatic performance. The notation is flexible in the sense that after the piece being internalized by the performer, he(he) should develop his(her) own personal sense of time, dynamics and drama, so that the piece should sound improvisatory.¹²

Regarding *Xiaoxiang*, the first version of the piece was composed in 2003 and called *Memories of Xiaoxiang* for Alto Saxophone and Electronic Sounds. It was composed and premiered in July of that year for saxophonist Chien-Kwan Lin at the World Saxophone Congress XIII in Minneapolis, MN, USA.¹³ Liang rewrote the piece in 2009 for saxophone and orchestra and changed the title from *Memories of Xiaoxiang* to simply *Xiaoxiang*. The new work was then revised in 2014.¹⁴ The composer wrote the following program note for *Xiaoxiang*:

Xiaoxiang refers to the region in Hunan Province, China where the rivers Xiao and Xiang intersect. A tragic event took place in that region

¹¹ Xin Gao, "Project China: A Resource of Contemporary Saxophone Music Written by Chinese-Born Composers" (PhD diss., University of North Carolina at Greensboro, 2016), 24.

¹² Lei Liang, *Peking Opera Soliloquy* for Alto Saxophone (New York: Schott Music, 1994), i.

¹³ Liang, *Memories of Xiaoxiang*, i.

¹⁴ Lei Liang, *Xiaoxiang*, Concerto for Alto Saxophone and Orchestra (New York: Schott Music, 2009/2014), i.

during the Chinese Cultural Revolution: a woman's husband was killed by a local official. Without the means to seek justice, she decided to take revenge on the official by wailing like a ghost in the forest behind the official's residence every evening. Months later, both the official and herself went insane. I composed *Memories of Xiaoxiang* (for alto saxophone and electronics, 2003) to commemorate this story through the use of electronically transformed sounds. The concerto re-synthesizes the electronic sounds through the means of an orchestra. Instead of displaying technical virtuosity, the soloist in this piece portrays the protagonist's inability to articulate or utter. The soloist's music is marked by silences. In that sense, the work may be perceived as an anti-concerto.

Xiaoxiang was commissioned by and dedicated to Chien-Kwan Lin who gave its premiere at the World Saxophone Congress XV in Bangkok with the Thailand Philharmonic Orchestra, conducted by Allan McMurray. The revised version was premiered by the Boston Modern Orchestra Project (BMOP), conducted by Gil Rose with Chien-Kwan Lin as the soloist, in Jordan Hall, Boston on March 28, 2014.¹⁵

The saxophone part in the revised version shares much of the musical material from the original version. In 2015, this piece was nominated for the Pulitzer Prize in Music. Although electronic sounds are not used in this work, the composer hoped to re-synthesize the electronic sounds of the previous work *Memory of Xiaoxiang* through the means of an orchestra.¹⁶

Lixia Ban's analysis of Liang's saxophone concerto *Xiaoxiang* notes that this work features many creative techniques.¹⁷ At the beginning of the work, *Xiaoxiang* does not follow the traditional exposition for concertos, nor does it begin with the orchestra providing a sort of emotional setting. Instead, the

¹⁵ Liang, *Xiaoxiang*, i.

¹⁶ Liang, *Xiaoxiang*, i.

¹⁷ Ban, "Back to the Source of the Songs, Let the Weepers Cry," 22.

saxophone makes the first sound, using pitch sliding on the mouthpiece. In this solo saxophone opening, the musical lines played by the saxophone mouthpiece in *Xiaoxiang* are inspired from the patterns in Peking Opera which are called *yunbai* (韻白). Also, this melody in *Xiaoxiang* basically retains the same melodic form as the opening of *Peking Opera Soliloquy*. This kind of beginning not only surprises the listener but also very strongly infuses the music with a sense of sadness. Although the notes are different, the sounds and rhythms are close to the traditions of Peking Opera.¹⁸

4. Methodology

Regarding the analysis of traditional Chinese elements, the first step was to identify Chinese musical elements that can be found in these two pieces, which include Peking Opera singing, Peking Opera accompaniment, traditional Chinese melodies, and one-note polyphony. After this, non-musical elements like Chinese calligraphy and negative space were identified in the two works. The composer is known to use concepts from these Chinese artistic styles in his music as well.

The composer's incorporation of these Chinese elements into Western musical idioms were then analyzed according to the composer's use of musical genres, as well as the ways he imitates or alludes to traditional Chinese elements within the boundaries of Western music notation and performance styles/techniques in the two works. As both above objectives are related to each other, the following discussions frequently present both objectives together.

5. Chinese Elements in the Works

In Liang's two saxophone works discussed in this study, we can find five major categories of traditional Chinese elements. These include 1) Peking Opera singing, 2) Peking Opera accompaniment, 3) traditional Chinese melodies, 4) one-note polyphony, and 5) other Chinese art concepts. Background information

¹⁸ Ban, "Back to the Source of the Songs, Let the Weepers Cry," 23.

about each of these five elements and their use within these saxophone works will now be discussed in turn.

(1) Background of Peking Opera Singing

Peking Opera, also known as Ping Opera or Beijing Opera, is the most common and influential type of opera in China. Peking Opera features a number of different singing styles, and *xipi* (西皮) and *erhuang* (二黃) are the two most prominent of these singing styles.

Xipi comes from the Ming and Qing Dynasties (1368-1912), where Qin Opera was spread from west to east and evolved with the folk tunes of the Hubei province. Hubei dialect calls singing *pi*, and *xi* is the word for west, hence the name *xipi*. The melody of *xipi* fluctuates greatly, the rhythm is fast, and the register is on the high side overall. It is often used to express lyrical pleasure.¹⁹

Erhuang is a style of singing that originated from Huanggang (黃岡) and Huangpo (黃破) in the Hubei province, hence the name. The melodic tone of *erhuang* is dark and dignified, and the overall register is low. It is often used to express melancholy, sad, and indignant plots as well as the melancholy mood of the characters.²⁰

There are four main character roles in Peking Opera: 1) *sheng* (生), 2) *dan* (旦), 3) *jing* (淨), and 4) *chou* (丑). The *sheng* is the main male role in Peking opera. The *dan* refers to any female role in Peking opera. The *jing* is a painted face male role. Depending on the repertoire of the particular troupe, the *jing* character will play either a primary or secondary role. The *chou* is a male clown or jester role. The *chou* usually plays a secondary role in a troupe.²¹

¹⁹ 曹宝荣,《京剧唱腔板式解读》,下册(北京:人民音乐出版社,2010),1
(Baorong Cao, *Interpretation of Jingju's Singing Style*, vol. 2 (Beijing: People's Music Publishing House, 2010), 1)。

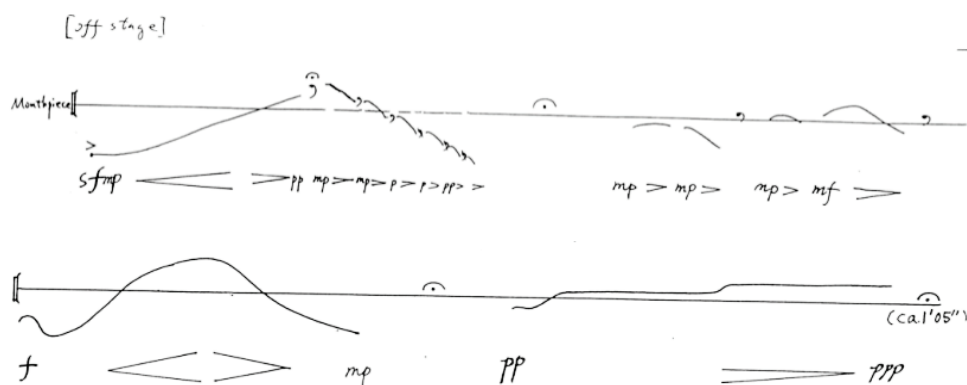
²⁰ 陆杨,〈声乐作品中京剧唱腔的运用实践〉(上海音乐学院博士论文,2010),2
(Yang Lu, "Vocal Practice in the Use of Peking Opera" (PhD diss., Shanghai Conservatory of Music, 2010), 2)。

²¹ 李心钰,〈京剧唱腔艺术与歌剧演唱艺术的比较研究—兼谈具有中国韵味的中国声

(2) The Use of Peking Opera Singing in the Two Works

The first use of Peking Opera singing style can be found in what we have identified as Theme A in *Peking Opera Soliloquy*. The type of saxophone playing featured in this theme imitates the singing style of Peking Opera. Specifically, it imitates a combination of the two main singing styles. From *xipi* style it takes the overall high tone, and from the *erhuang* style it takes the melancholy character mood. This style of singing might be done by a *dan* role, or a female role in Peking Opera. In *Peking Opera Soliloquy*, this type of singing can be found in a number of sections throughout the piece: the first and second systems of page 1, the fourth system of page 2 to the first system of page 3, and the fifth system of page 5, respectively. The first of these sections is shown in Example 1.

Example 1. Liang, *Peking Opera Soliloquy*,²² first two systems of page 1, theme A, imitating Peking Opera singing.



乐艺术的设想》(中國音樂學院博士論文, 2018), 8 (Xinyu Li, “Influence and Comparison between Beijing Opera and Bel Canto: And Talks about the Possibility of China Vocal Arts with Beijing Opera Charistic” (PhD diss., China Conservatory of Music, 2018), 8)。

²² Liang, *Peking Opera Soliloquy* for Alto Saxophone. Copyright © 1994 Schott Music Corporation, New York, NY. All Rights Reserved. Used by permission. The authors would like to thank Schott Music Corporation, New York, NY for their kind permission to publish excerpts from the score.

In *Peking Opera Soliloquy*, the singing style of Peking Opera is reflected in the mouthpiece playing parts. These sections are written on a single-line staff and are played with only the saxophone mouthpiece using pitch sliding. The influence of Peking Opera singing is notable here, as pitch sliding is a common singing technique within this style.

In these sections there are no indicated pitches, only lines that give a general shape of the pitch inflection. The composer very carefully manages the shape of the lines with added rests and dynamics. It can be argued that the design of these saxophone lines sets the mood for the story of Xiaoxiang and imitates what a Peking Opera singer would do in the same situation of the story.

In the *Xiaoxiang* concerto, the influence of Peking Opera singing can also be seen in the saxophone mouthpiece playing (see Example 2). This saxophone figure, which we have identified as thematic material A, occurs at the beginning and the end of the work.

Example 2. Liang, *Xiaoxiang*,²³ mm. 1-11, thematic material A, detailed notation of pitch sliding.

The musical notation for Example 2 is presented on two staves. The top staff, labeled 'mouthpiece' and 'A', is in 4/4 time and begins with a tempo marking of '♩ = 60 Slowly and Intensely'. It features a series of notes with a wavy line above them indicating pitch sliding. Dynamics include *fp* (fortissimo piano), *espress.* (expressive), *f* (forte), *ff* (fortissimo), and *pp* (pianissimo). A double bar line with a '2' indicates a repeat. The bottom staff, labeled 'B', starts at measure 8 and contains five measures of eighth notes with accents (>). Dynamics here are *f*, *mf* (mezzo-forte), *mp* (mezzo-piano), and *p* (piano). A triplet of eighth notes is marked with a '3' and a bracket.

In *Peking Opera Soliloquy*, the composer did not give clear pitches or rhythm for the sections of saxophone mouthpiece playing. In *Xiaoxiang*, however, the

²³ Liang, *Xiaoxiang*, Concerto for Alto Saxophone and Orchestra. Copyright © 2009/2014 Schott Music Corporation, New York, NY. All Rights Reserved. Used by Permission. The authors would like to thank Schott Music Corporation, New York, NY for their kind permission to publish excerpts from the score.

composer instead provides specific pitches and rhythm. Since *Xiaoxiang* is written for saxophone and orchestra, this change to a more detailed notation seems necessary to allow the saxophone soloist to better coordinate with the orchestra and gives a stronger sense of temporal organization to these sections. On the other hand, since *Peking Opera Soliloquy* is a solo unaccompanied work, the composer's notation allows more freedom to the performer in these respects.

(3) Background of Peking Opera Accompaniment

In addition to the sung music performed by the four types of characters, Peking Opera music also has another very important component, which is the accompaniment of the singers. Accompaniment of Peking Opera is called *wenwuchang* (文武場), which is a combination of strings, winds and percussion instruments. The *wenchang* (文場) is mainly composed of Chinese string and wind instruments, while the *wuchang* (武場) is mainly composed of percussion instruments.²⁴

Accompaniment of Peking Opera is an important part of the performance, to express different emotions and create different atmospheres on the stage. At the beginning of a Peking Opera and at the first appearance of characters, there is typically a big musical introduction. Usually, the entire ensemble accompanies the entire opera performance, from beginning to end, although a single instrument is sometimes used to accompany the appearance of certain characters.²⁵

In both *Peking Opera Soliloquy* and *Xiaoxiang* there are numerous passages in which a traditional Chinese folk percussion instrument called the *bangu* (板鼓, or *danpi* 單皮, see Figure 1) is imitated. The *bangu* has a distinctive sound

²⁴ 崔岩,〈论京剧中器乐伴奏的创新发展〉,《戏剧之家》2017年第9期:95(Yan Cui, "On the Innovation and Development of Instrumental Accompaniment in Peking Opera," *Home Drama*, 2017/no. 9: 95)。

²⁵ 冯传祥,〈略谈京剧打击乐伴奏〉,《剧作家》2019年第3期:132(Chuanxiang Feng, "Briefly Talk about the Percussion Accompaniment of Peking Opera," *Playwright*, 2019/no. 3: 132)。

that is both crisp and dry. According to Huan Dou, the *bangu* usually consists of a skin drum about 25 cm wide and 10 cm high.²⁶ It has a pair of drumsticks made of rattan or bamboo. The *bangu* is usually played along with a *paiban* (拍板), another Chinese percussion instrument made of wood. A skilled player can play both instruments simultaneously.

Figure 1. *Bangu*, an instrument commonly used in classical Chinese Opera and chamber music.



The *bangu* player holds a unique position in the Chinese music ensemble of Peking Opera. In Peking Opera performances, composers use different rhythms and techniques according to different plots and characters. The *bangu* player thus uses certain techniques to strike different positions on the drum to produce

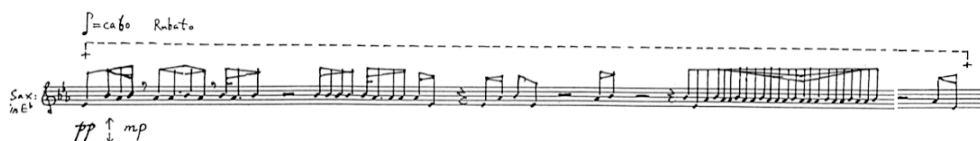
²⁶ 窦寰，〈浅谈板鼓在京剧中的运用〉，《艺术科技》，2019 年第 6 期：135（Huan Dou, “On the Application of Bangu in Peking Opera,” *Art Science and Technology*, 2019/no. 6: 135）。

different sound effects. At the same time, the *bangu* player also plays the role of conductor in performance by controlling the tempo. As part of the accompaniment in Peking Opera, the bright, rhythmic sound of the *bangu* is also used to enhance the effects of the on-stage singing.

(4) The Use of Peking Opera Accompaniment in the Two Works

In *Peking Opera Soliloquy*, the style of Peking Opera accompaniment can be mostly found in themes from the third and the beginning of the fourth system of page 1, and from the fermata in the fourth system of page 1 to the second system of page 2. The type of saxophone playing in these excerpts imitates what a drum might play in a typical Peking opera. One feature of this accompaniment is that the notes gradually change speed, getting faster and slower. To notate this the composer uses feathered beaming notation as seen in Example 3.

Example 3. Liang, *Peking Opera Soliloquy*,²⁷ page 1, third and beginning of fourth systems, accompaniment pattern.



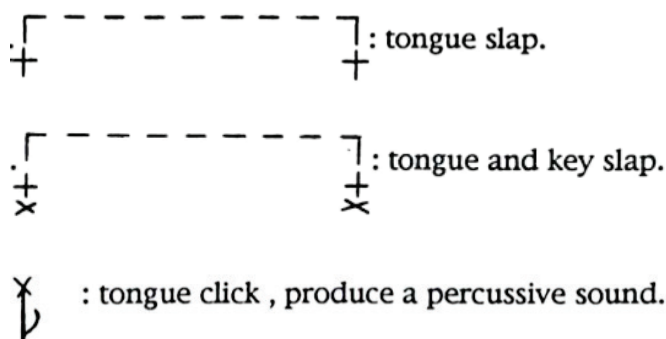
This implied percussion accompaniment in *Peking Opera Soliloquy* is mostly imitated using three saxophone techniques: tongue slap, key slap and tongue click. Tongue slap occurs when the tongue pulls the reed away from the mouthpiece and is released to create a slap sound as it hits the mouthpiece. Key slap is made by pressing the keys as loudly as possible, which can imitate hitting the edge of the drum. A tongue click is made by pulling the tongue away from

²⁷ Liang, *Peking Opera Soliloquy* for Alto Saxophone. Copyright © 1994 Schott Music Corporation, New York, NY. All Rights Reserved. Used by permission.

the upper pallet with the mouthpiece in the mouth to produce, through the saxophone bore, an amplified percussive sound.

In order to make this section sound like the crisp and dry sound of the *bangu*, the composer asks the saxophone player to use the tongue slap and key slap techniques together. The directions from the composer about these techniques are shown in Figure 2.

Figure 2. Liang, *Peking Opera Soliloquy*,²⁸ “About the Notation” section, notes about tongue slap and key slap.



In the *Xiaoxiang* concerto, there are similar percussion passages to that in *Peking Opera Soliloquy*. In terms of rhythm, the notation in *Peking Opera Soliloquy* is less precise and requires a great deal of practice to produce rhythmic cohesion. In *Xiaoxiang*, on the contrary, the composer subdivides each beat clearly. Compare Example 3 to Example 4 to see how similar passages are notated differently in the two pieces.

²⁸ Liang, *Peking Opera Soliloquy* for Alto Saxophone. Copyright © 1994 Schott Music Corporation, New York, NY. All Rights Reserved. Used by permission.

Example 4. Liang, *Xiaoxiang*,²⁹ mm. 44-55, saxophone part, Chinese drum accompaniment.

The musical score for Example 4 consists of three staves of music for saxophone. The first staff (measures 44-46) begins with a 'horn' and 'tongue slap' articulation. It features a triplet of eighth notes, a half note, and another triplet of eighth notes, with dynamics *f* and *mf*. The second staff (measures 47-51) includes a boxed letter 'M' above a triplet of eighth notes, followed by a half note and another triplet. A boxed letter 'N' appears above a half note. The third staff (measures 52-55) starts with a boxed letter 'O' above a half note, followed by a triplet of eighth notes, a half note, and a triplet of eighth notes. The dynamics range from *f* to *mp*.

(5) Background of Traditional Chinese Melodies

With 56 ethnic groups, the music traditions in China are diverse. The material and music elements in each region also vary. In general, however, Chinese traditional music uses a modal scale based on pentatonic scale patterns. Also frequently used are hexatonic and heptatonic scales, which are based on the pentatonic scales and added additional notes.

The ancient Chinese scale is formed with five notes: *gong* (宮), *shang* (商), *jue* (角), *zhi* (徵) and *yu* (羽). These notes are circled in Example 5. The notes *qingjue* (清角), *bianzhi* (變徵), *qingyu* (清羽), and *biangong* (變宮) are the additional notes added to the pentatonic scale.³⁰ These other scales are discussed below.

²⁹ Liang, *Xiaoxiang*, Concerto for Alto Saxophone and Orchestra. Copyright © 2009/2014 Schott Music Corporation, New York, NY. All Rights Reserved. Used by Permission.

³⁰ 周复三,《音乐基础理论教程》(濟南:山東大學出版社,2018),181-184 (Fusan Zhou, *Basic Music Theory* (Jinan: Shandong University Press, 2018), 181-184)。

Example 5. The name and notes of the three Chinese traditional scales/modes.



The hexatonic scale has six notes, with one added to the standard pentatonic scale. The added note is usually the *qingjue* (minor second above the *jue*) or the *biangong* (minor second below the *gong*). The heptatonic scale mode is formed by adding two partial notes based on the pentatonic mode.³¹

It is also important to note that in Chinese traditional music, the octave is divided similarly to Western music; there are 12 equal notes, similar to the Western chromatic scale. By changing the initial *gong* note, it is possible to start any of the Chinese scales on any of these 12 notes.

In addition to the use of the pentatonic, hexatonic and heptatonic scales, the rhythm in Chinese melodies is generally basic. Added to this, especially in folk songs, is the use of grace notes, which are said to bring more national charm and artistic value to music. This is a technique that modern composers often use to create the sound of traditional Chinese music. In the melody of *Xiaoxiang*'s folk songs, Liang adopts this method, and precisely notates how he wants these grace notes to sound.

(6) The Use of Traditional Chinese Melodies in *Xiaoxiang*

The two Chinese melodies in *Xiaoxiang* are here to serve a purpose. They were collected by the composer during a visit to the Jianghua Yao Autonomous County in Hunan province, near the cross of the Xiao and Xiang rivers, which is the location of the *Xiaoxiang* story. The nature of these songs is best described by Liang himself in his lecture "The Inspiration of Chinese Traditional Painting and Poetry to My Music Creation." He said:

³¹ Zhou, *Basic Music Theory*, 181-184.

When words lose their meaning and only “songs” can express people’s heart, the heroine’s crying becomes the beginning of “music.” The song I quote in *Xiaoxiang* comes from the place where the story takes place, and it also symbolizes the special status and role of “song” in the human spirit.³²

The first Chinese traditional melody to appear in the work is played by trumpet in bars 37-40 (see Example 6). The circled notes are the main notes of the scale.

Example 6. Liang, *Xiaoxiang*,³³ mm. 37-40, trumpet solo.

The musical score for Example 6 consists of two staves. The top staff is in bass clef and the bottom staff is in treble clef. The top staff begins with a 'mute solo' marking and a 'p' dynamic. It contains a triplet of eighth notes, a sextuplet of eighth notes, and a triplet of eighth notes. The bottom staff begins with a 'f' dynamic and contains a triplet of eighth notes and a quintuplet of eighth notes. Several notes are circled in red: E-flat (B-flat staff, first measure), F (B-flat staff, second measure), G (B-flat staff, third measure), A-flat (B-flat staff, fourth measure), B-flat (B-flat staff, fifth measure), and C (B-flat staff, sixth measure). The score also includes a crescendo marking and a 'JP' marking at the end.

The scale of this melody is a hexatonic scale which is formed by E-flat, F, G, A-flat, B-flat, and C, as shown in Example 7. It can also be found in the melody played by saxophone and woodwind section later in the piece.

³² 陈鸿铎，〈一曲充满人性力量的悲歌—《潇湘—为中音萨克斯与管弦乐队而作》评析〉，《音乐研究》2016年第5期：67（Hongduo Chen, “A Tragic Song Full of Human Power: A Review to *Xiaoxiang*, for Alto Saxophone and Orchestra,” *Music Research*, 2016/no. 5: 67）。

³³ Liang, *Xiaoxiang*, Concerto for Alto Saxophone and Orchestra. Copyright © 2009/2014 Schott Music Corporation, New York, NY. All Rights Reserved. Used by Permission.

Example 7. Hexatonic scale from the trumpet and saxophone solos.



The second traditional Chinese melody to appear in *Xiaoxiang* is for the saxophone (see Example 8). Like the previous trumpet melody, it uses a similar Chinese hexatonic scale.

Example 8. Liang, *Xiaoxiang*,³⁴ mm. 105-109, saxophone melody.



The saxophone melody is accompanied by the woodwind group with the clarinet playing the same melody in imitation while the other woodwinds play Chinese traditional music patterns, especially with the use of grace notes. According to Yi Zhang, here the composer uses a “shadow” effect where the clarinet appears after the saxophone theme and forms a shadow of the first layer.³⁵ This effect is then duplicated by other instruments to create more shadow layers (see Example 9).

³⁴ Liang, *Xiaoxiang*, Concerto for Alto Saxophone and Orchestra. Copyright © 2009/2014 Schott Music Corporation, New York, NY. All Rights Reserved. Used by Permission.

³⁵ 张懿，〈梁雷音乐创作研究：以《幽光》和《潇湘》两首协奏曲为例〉（上海音樂學院博士論文，2020），65（Yi Zhang, “Researches on the Lei Liang’s Two Concertos” (PhD diss., Shanghai Conservatory of Music, 2020), 65)。

Example 9. Liang, *Xiaoxiang*,³⁶ mm. 105-113, Chinese melodies in woodwind section.

The musical score for Example 9, measures 105-113, is written for a woodwind section. It consists of two systems, DD and EE, separated by a double bar line. The instruments are Flute 1, Flute 2, Oboe 1, Oboe 2, Clarinet 1, Clarinet 2, and Bassoon. The score features complex melodic lines with various dynamics (pp, p, f, mf, ff) and articulations (lyrically, bend, disbigliando, bend). The score is divided into two systems, DD and EE, with a double bar line in between.

³⁶ Liang, *Xiaoxiang*, Concerto for Alto Saxophone and Orchestra. Copyright © 2009/2014 Schott Music Corporation, New York, NY. All Rights Reserved. Used by Permission.

(7) Background of One-Note Polyphony

Liang has described one of his self-titled compositional techniques as *one-note polyphony* and notes that this technique was inspired by the *guqin*, an ancient Chinese plucked instrument (see Figure 3).³⁷ The instrument is played by plucking the strings with the right hand and controlling the pitch and tone color with the left hand. By manipulating the finger movement touching the strings, this allows for a change of tone color. In Liang's compositions this technique is applied by writing single notes in different instruments that, when played in time, make a single musical line with varying timbres.

Figure 3. *Guqin*, a Chinese plucked instrument.



(8) The Use of One-Note Polyphony in *Xiaoxiang*

Regarding the two pieces in this study, one-note polyphony only appears in *Xiaoxiang*, where an example can be found in mm. 50-53 (see Example 10). In this example, marimba, vibraphone, harp, and alto saxophone play single notes or chords in succession to create a musical line with different timbres. As Liang said, “The melody is not only decided by the pitch but also by the timbre.”³⁸

³⁷ Liang, “A Few Experiences and Some Creative Ideas,” 10.

³⁸ Liang, “A Few Experiences and Some Creative Ideas,” 10.

Example 10. Liang, *Xiaoxiang*,³⁹ mm. 50-53, marimba, vibraphone, harp, and alto saxophone, use of one-note polyphony.

The musical score for Example 10, measures 50-53, features four staves: Marimba (Mar.), Vibraphone (Vib.), Harp (Hp.), and Alto Saxophone (Alto Sax.).

- Marimba (Mar.):** Measures 50-53. Dynamic markings include *mf* and *f*. It features a melodic line with a trill in measure 51.
- Vibraphone (Vib.):** Measures 50-53. Dynamic marking is *sfz*. It features a melodic line with a trill in measure 51.
- Harp (Hp.):** Measures 50-53. Dynamic markings include *f* and *ff*. It features a glissando in measure 50 and a pedal trill between A and A# in measure 51, with a note indicating "to create buzzing sound".
- Alto Saxophone (Alto Sax.):** Measures 50-53. Dynamic marking is *mp*. It features a melodic line with a trill in measure 51.

(9) Background of Other Chinese Art Concepts in the Two Works

In addition to the traditional Chinese musical elements discussed in the preceding sections, there are two concepts of traditional Chinese art the composer references in the two pieces in this study. The first is *liubai* (留白), or negative space, and the second is from the brush strokes of traditional Chinese calligraphy.

Negative space is a technique commonly used in traditional Chinese painting and simply means a space where there is nothing. It is a concept also found in traditional Chinese arts of other kinds. In traditional Chinese painting, the layout and presentation are important. The concept behind negative space is that the clever and appropriate use of negative space can make the picture flow, be full of life, stimulate the imagination, and add a sort of unspeakable artistic conception that can transcend the picture. As an important form of Chinese

³⁹ Liang, *Xiaoxiang*, Concerto for Alto Saxophone and Orchestra. Copyright © 2009/2014 Schott Music Corporation, New York, NY. All Rights Reserved. Used by Permission.

artistic creation, negative space also has its own characteristics in other artistic categories, such as poetry, opera, and garden architecture.⁴⁰

In modern musical works like those of Liang, negative space is used as a structural element to highlight and frame the contents of the story, as well as provide points of rest for contemplation. A well interpreted and executed performance can bring out these artistic elements to an audience. This is done by carefully planning the story and acting it out through playing and body motion with the use of negative space. This type of performance shows the beauty of music, with negative space left to the beauty of imagination.

The second Chinese art form alluded to in these saxophone works is Chinese calligraphy, which has developed since the birth of the Chinese characters four or five thousand years ago. Certain aspects of calligraphy are closely related to Chinese music, painting and architecture. In calligraphy, the expression of emotion is very important. Through the overall layout of calligraphy, strokes, line composition and chapter structure, calligraphy expresses emotion and creativity. The beauty of Chinese calligraphy is in the beauty of lines. In the writing of calligraphy, the action of writing is very characteristic to the art form.⁴¹

(10) The Use of Other Chinese Art Concepts in the Two Works

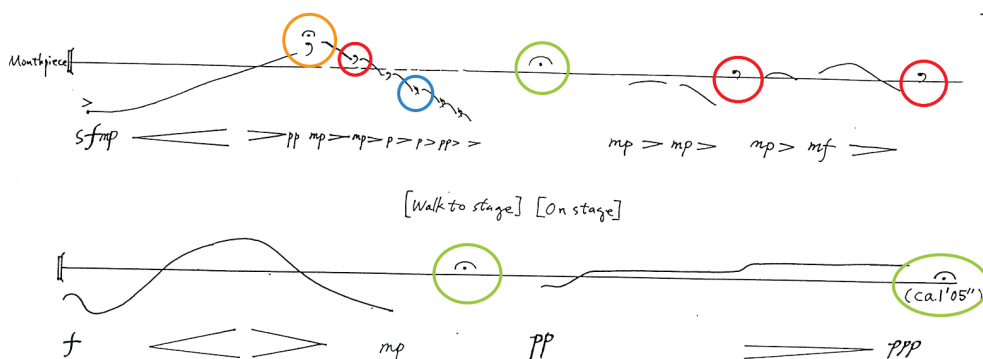
The concept of negative space is evident throughout *Peking Opera Soliloquy*. The first use of negative space can be found in the opening section of the piece. As shown in Example 11, the composer uses four different types of rests to indicate where to take a rest and for how long. Liang notes that:

⁴⁰ 高京伟,〈乐韵「留白」:谈音乐休止的意境之美〉,《佳木斯职业学院学报》2019 年第 10 期:145 (Jingwei Gao, “Musical Rhyme ‘Liubai’: On the Beauty of the Artistic Conception of Music Resting,” *Journal of Jiamusi Vocational Institute*, 2019/no. 10: 145)。

⁴¹ 罗玲,〈探讨中国书法和舞蹈的美学共性〉,《北方音乐》2016 年第 16 期:163 (Ling Luo, “Explore the Aesthetic Commonalities between Chinese Calligraphy and Dance,” *Northern Music*, 2016/no. 16: 163)。

The range of hearing is like a canvas and the sound is the picture on the canvas. The “silence” is the “blank” in the picture. Every sound has its place in the space of the picture. Therefore, the music could also be seen as the art of space.⁴²

Example 11. Liang, *Peking Opera Soliloquy*,⁴³ first two systems of page 1, use of *liubai*.



These “blanks,” as Liang puts it, help to immediately imbue the music with a profound sense of tension, which can then be felt throughout the piece. The composer therefore uses silence as a means of expressing emotions.

Example 11 also illustrates the influence of Chinese calligraphy found in *Peking Opera Soliloquy*, as instead of creating a computer-generated print score, the composer chose to handwrite the score to give the performer an impression of calligraphy. This kind of writing appears in the opening two lines of music, and every other time the woman’s wailing from the Xiaoxiang story is alluded to musically. Instead of a traditional brush used in calligraphy, the composer uses the tool of a pen to imitate the artistic flow of the brush.

⁴² 梁雷，〈借音乐提问〉，《人民音乐》2000年第12期：12（Lei Liang, “Ask Questions through Music,” *People’s Music*, 2000/no. 12: 12）。

⁴³ Liang, *Peking Opera Soliloquy* for Alto Saxophone. Copyright © 1994 Schott Music Corporation, New York, NY. All Rights Reserved. Used by permission.

Interestingly, the art of calligraphy is often compared to music. According to Zezhou Chen, the lines and shapes of calligraphy have a sense of melody and rhythm.⁴⁴ He further states that in the process of writing, the use of the pen mainly depends on the speed control, heavy and light, broken and continuous, thus asserting artistic concepts that can be compared to music.

In *Xiaoxiang*, the concept of negative space seems very different from that in *Peking Opera Soliloquy*, as there are only a few locations in this later work where neither the orchestra nor soloist play. Negative space can nevertheless be felt in the work's rather thin textures. The entire orchestra only plays together a few times, and there are also many excerpts in which only a single instrument family may play, for example the string or woodwind sections.

The most explicit use of negative space can be found in the solo saxophone part, however. The soloist only plays for about half of the work which follows the composer's ideas stated in his program notes:

Instead of displaying technical virtuosity, the soloist in this piece portrays the protagonist's inability to articulate or utter. The soloist's music is marked by silences. In that sense, the work may be perceived as an anti-concerto.⁴⁵

6. Conclusions

The saxophone works *Peking Opera Soliloquy* and *Xiaoxiang* demonstrate the creative and innovative ways in which Lei Liang incorporates traditional Chinese elements into the framework of Western musical compositions. This study has introduced and analyzed a number of traditional Chinese elements in these pieces, including Peking Opera singing, Peking Opera accompaniment,

⁴⁴ 陈则周,〈线条在书法艺术中的运用〉,《中国书法报》(北京),2020年2月18日,A07(Zezhou Chen,“The Application of Lines in the Art of Calligraphy,”*Chinese Calligraphy Newspaper* (Beijing), February 18, 2020, A07)。

⁴⁵ Liang, *Xiaoxiang*, i.

traditional Chinese melodies, one-note polyphony and other Chinese artistic elements such as negative space and calligraphy.

The first Chinese element to appear in the two works is Peking Opera singing, and this technique appears prominently throughout both works. It is represented by the saxophone mouthpiece, playing wide glissandos as often found in Peking Opera singing. In *Peking Opera Soliloquy*, it is represented with hand drawn lines on a single-line staff, while in *Xiaoxiang* it was composed on traditional Western five-line staff notation with precise notes and rhythms. Despite the differences in notation, in both works this style of playing represents the wailing of the widow who has lost her husband in the story of *Xiaoxiang* by drawing upon the traditions of Peking Opera singing.

The traditional accompaniment rhythms of Peking Opera are also prominent in both works and act as interludes between sections. In *Peking Opera Soliloquy* they are notated with feathered beaming notation and can be played quite freely, while in *Xiaoxiang* they were represented through standard notation, with the traditional speed increases and decreases of Peking Opera accompaniment being written out. Liang intended for these accompaniment sections in both works to sound like the *bangu*, a traditional drum in Peking Opera percussion sections. To imitate the *bangu* sound on saxophone, Liang asks the saxophonist to use slap tongue, key slap, and tongue click techniques. These three techniques all create a somewhat dry and percussive sound.

The *Xiaoxiang* concerto further incorporates traditional Chinese musical elements using Chinese traditional melodies and Liang's technique of one-note polyphony. The composer states that the traditional Chinese melodies appearing in *Xiaoxiang* were inspired by the music of the Yao people in the Hunan province of China. The melodies were written in the hexatonic scale of traditional Chinese music and feature characteristic grace notes. One-note polyphony also alludes to traditional Chinese music by referencing the *guzhen*, an ancient Chinese plucked instrument.

In addition to the musical elements described above, these two saxophone works draw upon Chinese artistic elements such as negative space and

calligraphy. Regarding *liubai*, or negative space, Liang uses a different concept for each piece. In *Peking Opera Soliloquy*, moments of silence in the music can be observed throughout the work and these silences construct a framework of time and space that not only imbues the music with a profound sense of tension but is also a means of expressing powerful emotions. In *Xiaoxiang*, the blank spaces are only for the saxophone player and as the composer states, appear as large durations of silence that represent the inability to speak. These silences demonstrate the composer's concept of this piece as an "anti-concerto."

In *Peking Opera Soliloquy*, the writing of the saxophone mouthpiece playing also resembles Chinese calligraphy, particularly in the handwritten pen strokes of the composer on the score. A saxophone performer can communicate these imitated pen strokes to the audience by moving the mouthpiece and body following the direction of the pen strokes and corresponding pitch changes, illustrating the almost "musical" qualities of calligraphy.

In all, the two saxophone works discussed here demonstrate Lei Liang's skillful and creative incorporation of traditional Chinese musical and artistic elements into the frameworks of Western musical notation, genres, as well as performance styles and techniques. Furthermore, Liang's evolving compositional techniques and approaches illustrate the varied means by which he creates cross-cultural artistic integrations that appeal to and inspire performers and audiences alike.

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