Analysis of *The Vivid Reflection:* A Composition for Modern Konghou

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Abstract. The modern konghou, a traditional Chinese instrument, is a modern refinement and improvement of the ancient konghou, which disappeared during the Qing Dynasty. Due to the historical interruption of the modern konghou, research has primarily focused on its historical and cultural dimensions, with comparatively limited studies dedicated to the modern konghou. This paper analyzes the structure and playing techniques of the modern konghou musical composition *The Vivid Reflection*, supported by musical examples and accompanying figures and tables. Building on this, it compares its shape and playing techniques with those of the harp and the guzheng to highlight its unique characteristics. The analysis reveals that the modern konghou's innovative shape, coupled with its absorption and flexible application of harp and guzheng playing techniques, contributes to its irreplaceable value. Just 45 years after its creation, the modern konghou continues to evolve, with ongoing refinements in both its construction and playing techniques. The author anticipates that ongoing advancements in instrument manufacturing will contribute to further improvements in the modern konghou's volume and intonation, enhancing its artistic potential.

Keywords: Modern konghou, Chinese instrument, Chinese traditional music.

1 Introduction

Existing literature on the modern konghou primarily focuses on its origins and evolution, as well as its historical transformations across different eras, exploring its historical status and social influence in ancient Chinese musical culture. In addition, some studies examine the physical form and manufacturing techniques of the modern konghou, revealing its historical and cultural value through analysis of unearthed artifacts and murals. Furthermore, a smaller body of research explores the structural design and playing techniques of the modern konghou, comparing it with guzheng techniques to reveal their correlations.

Existing literature primarily focuses on the historical and cultural aspects of the modern konghou. Also, research on the modern konghou, including its structure, instrumental performance, applications, instrument construction, and technological innovations, remains limited. Moreover, the musical compositions created by many contemporary composers for the modern konghou and their playing techniques are yet to be fully

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analyzed and studied. To help bridge this gap, this paper investigates the unique characteristics of the modern konghou by analyzing *The Vivid Reflection* (Qing Ying), focusing on its musical structure and the integration of guzheng and harp techniques within modern konghou performance.

2 About the Composition *The Vivid Reflection*

2.1 The Creation of The Vivid Reflection

The Vivid Reflection is a modern konghou composition by Li Haihui. This modern-style piece draws inspiration from the lyrics of a traditional Chinese Ci (a form of Chinese lyric poetry), the *Prelude to Water Melody* (*Shui Diao Ge Tou*) by Song Dynasty's Romantic Poet Su Shi. The title of the musical composition, *The Vivid Reflection*, is derived from the phrase "dancing with my shadow, where is this like the world of mortals?". This phrase contrasts the joy of the human world with the loneliness of the immortals, blending the real and the surreal. In line with the original poem, the musical work combines the real and the surreal, presenting a sense of unrestrained freedom and boldness with delicate beauty [1].

2.2 Early Career of the Composer

Mr. Li Haihui is one of the earliest prominent composers for the modern konghou and has been a consistent advocate for the advancement of the instrument's art form. Throughout his career, he has frequently partnered with renowned modern konghou performers, including Cui Junzhi and Wu Lin, to produce new works.

2.3 Reception of *The Vivid Reflection* within the Konghou Community

The Vivid Reflection is widely considered a classic work. It blends the real and the surreal elements to create strong contrasts. The intense tension of the lento sections, coupled with the technically demanding passages in the allegro sections, enhances the music's vibrancy, driving the piece to a climax through a dynamic interplay of motion and stillness. Since its debut, the work has gained significant popularity among both professional modern konghou performers and amateur enthusiasts. The resurgence of the modern konghou not only represents a revival of the instrument's ancient legacy but also embodies the fusion of Chinese and Western musical cultures, serving as a model for the modernization and innovation of traditional Chinese instruments. Renowned performers such as Cui Junzhi and Wu Lin have also brought the modern konghou to the world stage through international tours.

3 Music and Performance Analysis

3.1 Structure and Pitch Organization

The thematic motif of this work is a musical group comprised of a dotted rhythm and a syncopation (as shown in Figure 1).
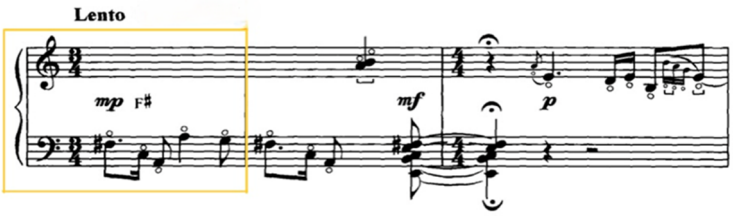
Fig. 1. Thematic Motif [2].

This melodic pattern is repeatedly varied throughout the piece. As shown in Figure 2, the single-note motif is transformed into a chord here.
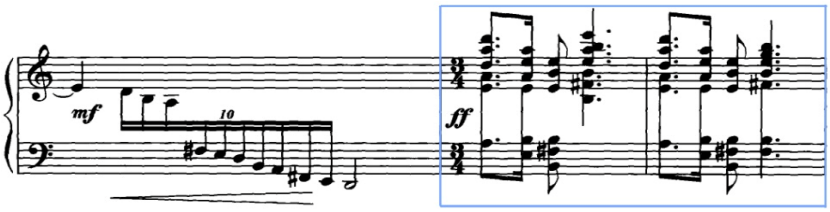
Fig. 2. Variation 1 [2].

Variation 1, which is part of the introduction and also serves as an early restatement of the coda, utilizes dotted rhythms and syncopation, accompanied by an "ff" dynamic. It represents the "real" element in the blend of the real and the surreal in the composition.
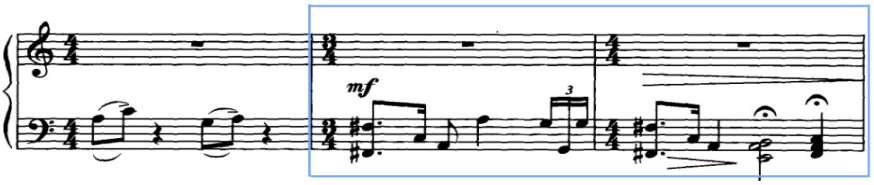
Fig. 3. Variation 2 [2].

As shown in Figure 3, the musical material in the last two bars echoes the variations of the first two bars.
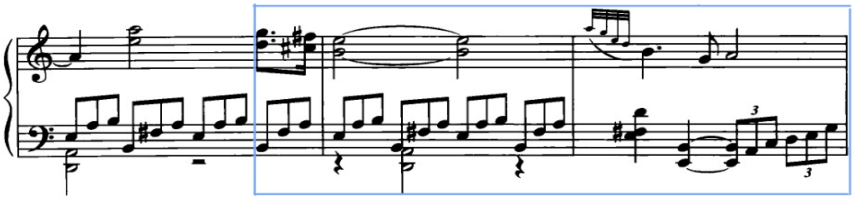
Fig. 4. Melody A [2].
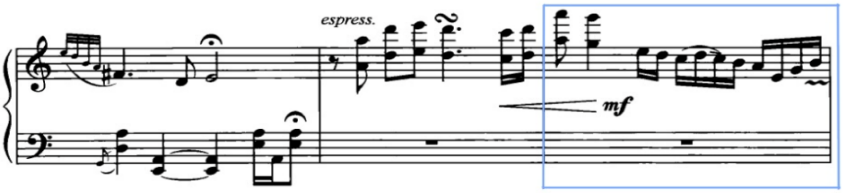
Fig. 5. Melody B [2].
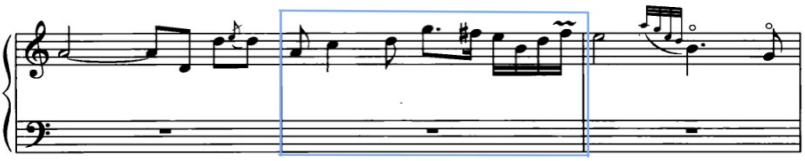
Fig. 6. Melody C [2].

In Figures 3, 4, 5 and 6, the main rhythm melodic pattern in the main melody section has been utilized, thus propelling the melody forward.

Most of this work consists of parallel phrases, which are often complemented but differ somewhat from traditional phrase divisions. Based on the different textures used, the entire piece is divided into the following sections.

Table 1. Schematic structure of the piece.

Section	Introduction	A	Transition	B						Coda
Number of Bars	1-9	10-41	42-48	49-58	59-67	68-74	75-83	84-90	91-100	101-110
Tonality	E mode	E mode	E mode	E mode	E mode	E mode	E mode	A mode-E mode	E mode	E mode - A mode

Introduction (mm. 1-9). The introduction section (bars 1-9) features repeated dotted rhythm and syncopation. The tonality of E is established as the main tonality of this musical composition at the beginning. As shown in Table 1, the “E” and “A” refer to the traditional Chinese scales “E Yu Qing Yue” and “A Yu Qing Yue.

Section A (mm. 10-41). Section A can be divided into four parts: bars 10-23 (the juxtaposition of two phrases); bars 24-28 (which further develops the content of bars

10-23); bars 29-36 (a brief use of broken arpeggios, serving as a prelude to the following sections); and bars 37-41 (which features a restatement of the introduction's content and utilizes free-form arpeggios).

Transition (mm. 42-48). The transition section, a partially omitted restatement of the introduction section, serves as a link to section B.

Section B (mm. 49-100). Section B is divided into six parts: bars 49-58 (E mode); bars 59-67 (E mode), a varied restatement of the first part, with the same starting section and a different closing section; bars 68-74 (E mode), an omitted restatement of the first part, internally restating segments within itself; bars 75-83 (E mode), identical to the second part; bars 84-90 (A mode), with a change in mode, but quickly returning to the E mode; and bars 91-100 (E mode), a restatement of the fourth part.

Coda (mm. 101-110). Bars 101-102 contain a brief restatement of the introduction's closing section. Bars 103-110 utilize the broken arpeggio material from the preceding sections. Through sequence, this passage presents a supplementary summary of the entire musical composition. Eventually, it concludes in the A mode, echoing the mode modulation that begins at bar 84.

3.2 Analysis of playing Techniques: The Application of Harp Techniques in *The Vivid Reflection*

Chinese plucked instruments commonly utilize the overtone technique, though different instruments employ varying playing techniques depending on their construction. Since the modern konghou shares a similar instrument shape to the harp, its overtone technique is informed by the harp's methods [3]. The harp employs the thumb and index finger to control timbre and sound quality when playing overtones [4]. Similarly, the modern konghou utilizes the thumb, positioned at 1/2, 1/3, or 1/4 of the string length, while the index finger presses the string; both fingers are then used in plucking [5]. In essence, their overtone techniques are the same.

The Vivid Reflection frequently employs the overtone technique, as demonstrated in Figures 7 and 8. Through contrasting overtones with bass chords and varying dynamics, the lento section is charged with musical tension.
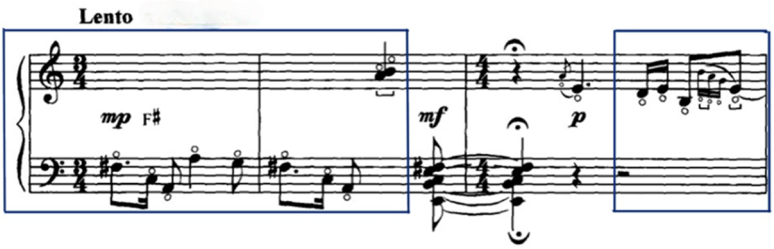
Fig. 7. Overtones A [2].

Serving as the opening of the musical composition, the overtones in Figure 7 create a sense of haziness, depicting a mysterious and alluring scene of the moon in the sky, evoking an ethereal beauty reminiscent of a palace in the clouds.

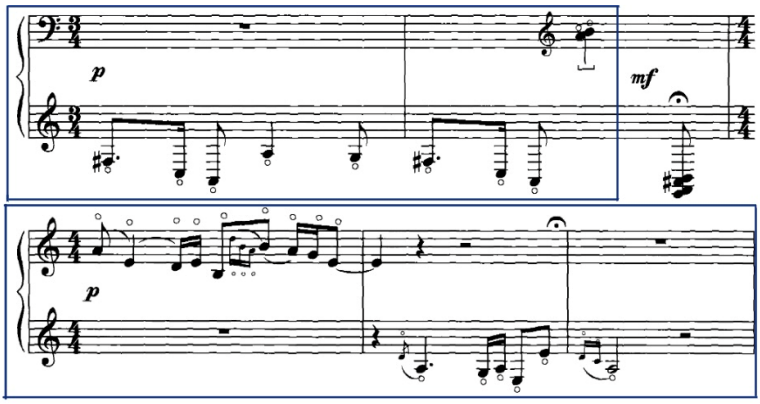

Fig. 8. Overtones B [2].

The overtone section shown in Figure 8, which precedes the allegro and follows the lento section's strong dynamics, functions as a transition. Its stark contrast between the ephemeral and the complex realities perfectly demonstrates how the piece blends the real and the surreal.

3.3 The Adaptation of Guzheng Techniques in Konghou Playing

To replicate the vibrato effect of the guzheng, the modern konghou employs a special bridge similar to that of the guzheng based on its double-rail string axis system. Although the two instruments differ in shape, with the modern konghou being vertical and the guzheng horizontal, the vibrato technique used in the modern konghou is directly adapted from the guzheng. In practice, the modern konghou's vibrato is achieved by plucking a note with the right hand, before pushing the corresponding strings of the left row to the right in a parallel motion. This movement causes the strings to vibrate through inertia, thus generating the vibrato effect.
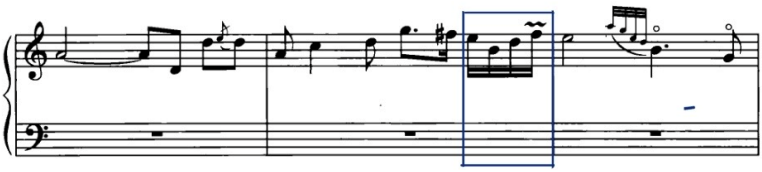
Fig. 9. Vibrato [2].

In the section of Figure 9, the rhythm is relatively free, and the vibrato adds a sense of elongation to the melody, enhancing its charm and sophistication.

4 Instrumental Features and Performance Advantages of Modern Konghou

Based on the documented history of the ancient konghou, its origins can be traced back to the 8th–7th centuries BC. The earliest records of the ancient konghou are found in the *Records of the Grand Historian* (*Shi Ji*) during the Han Dynasty. Following the Song and Yuan Dynasties, the ancient konghou gradually declined, and it eventually disappeared during the Qing Dynasty [6]. Starting from the 1950s, ethnomusicologists initiated the reconstruction of the ancient konghou based on materials such as the Dunhuang murals and Tang Dynasty artifacts from the Shosoin Treasure Repository in Japan. The ancient konghou features diverse shapes, while the modern konghou evolved specifically from the vertical konghou through continued refinements.

During its revival, the modern konghou drew inspiration from the harp and traditional Chinese instruments such as the guzheng and the pipa. In April 1980, the first modern konghou (see Figure 10), a non-transposing konghou, made its official debut, representing a significant milestone in the instrument's development [5]. Following extensive technical development, Professor Zhao Guangyun successfully created China's first full-transposing double-rowed string konghou in 1984, which is now widely used by professional performers.

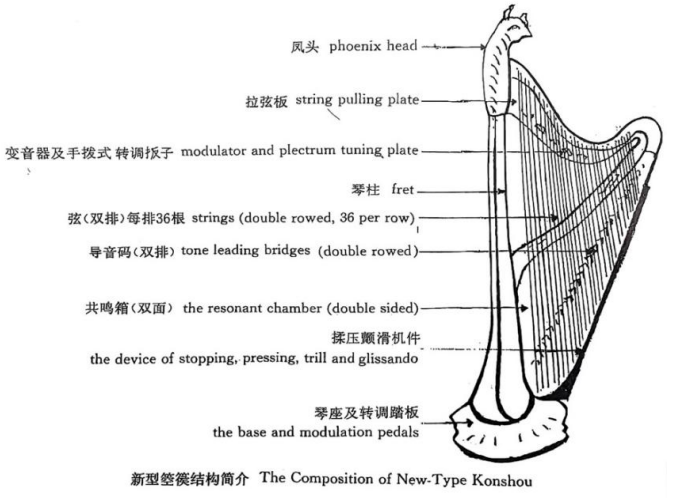

Fig. 10. The first non-transposing konghou developed in 1980 [5].

This konghou's shape blends features of the harp's triangular frame structure and pedal arrangement, alongside the guzheng's bridge and the pipa's pear-shaped sound box [7]. In terms of its construction, it features double-rowed strings. Inside the instrument, there is a pressure rod device connecting each pair of strings of the same pitch, along with some bridges (see Figure 11). The strings are made from a combination of steel wire and nylon.

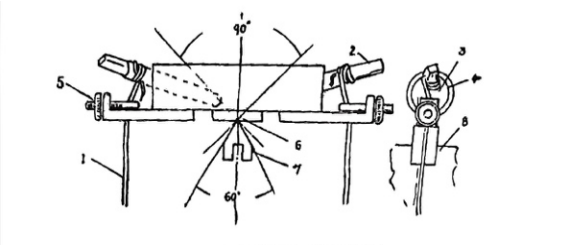

Fig. 11. Schematic diagram of the pressure rod device, fourth draft, by Shenyang Musical Instrument Factory (Note: 1. string 2. string axis 3. compressed wood 4. copper axis shell 5. fine tuner 6. knife pad 7. knife blade 8. knife bracket) [8].

In contrast, the harp features a single row of strings made of catgut and a larger sound box with a wider range [9]. These differences in shape and strings result in differences in timbre between the harp and the konghou. The former's timbre is brighter and more penetrating, while the latter's timbre is a blend of the guzheng and the harp.

The playing techniques of the konghou are similar to those of the harp. However, the former can perform vibrato, Yao Zhi (a fingernail plucking technique), and Sao Xian (a sweeping strings technique), which the latter cannot. These techniques are also found in guzheng performance. While performing some musical compositions, performers use a plectrum to achieve a better timbre for single-melody sections. However, due to its double-row string design, the konghou does not need to avoid enharmonic notes during performance, making performance more convenient. Moreover, the konghou achieves more remarkable sonic effects than the single-row strings of the harp when performing repeated notes, double notes, and alternating three-note chords in the same position. The unique shape of the konghou enables these distinct playing methods, giving the instrument ample performance space, thus presenting its unique charm of Chinese traditional music [10]. Even though the konghou borrows the bridge from the guzheng, the two have significant differences. Compared to the guzheng, the konghou offers greater flexibility during performance. It can quickly modulate by stepping on pedals when performing works, whereas the guzheng requires either pressing the strings to a specific pitch, moving the bridge for tuning, or changing to instruments of different keys. In addition, the konghou has a wider range than the guzheng, and the double-row strings also give the it richer harmony. Therefore, in recent years, the konghou has been increasingly used in some Chinese traditional orchestras.

5 Conclusion

By collecting and organizing relevant literature and personal performance analysis, this paper has analyzed the structure and playing techniques of *The Vivid Reflection* performed on modern konghou, in order to explore the instrument's unique characteristics.

As a modernized instrument revived after the founding of the People's Republic of China, the modern konghou primarily draws inspiration from the harp and the guzheng for its shape and playing techniques. Through integration and innovation, Chinese folk

music practitioners have imbued it with distinct and irreplaceable qualities. Analysis of *The Vivid Reflection* demonstrates the instrument's wide range, multi-layered harmonic colors, and diverse playing techniques, setting it apart among Chinese traditional instruments. However, the instrument's relatively brief development has resulted in unresolved manufacturing challenges, including insufficient volume stemming from the thickness of the sound box board glue and intonation inaccuracies following pedal modulation. Despite being classified as a Chinese traditional instrument, the modern konghou remains relatively obscure within China. Nevertheless, with ongoing refinement and development, future innovations in modern konghou manufacturing are anticipated to garner increased domestic attention and recognition.

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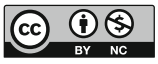
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