

Exploring Indeterminacy in Huachai Gong and Drum Ensemble: A Pathway to Creative Freedom and Harmony

Fan Jia^{1,a,*}, Lee Chie Tsang Isaiah^{2,b}

¹Faculty of Music, Jiangxi Science and Technology Normal University, Nanchang, China/Academy of Arts & Creative Technology (ACT), University Malaysia Sabah, Kota Kinabalu, Malaysia

²Academy of Arts & Creative Technology (ACT), University Malaysia Sabah, Kota Kinabalu, Malaysia

^afanjia1014@gmail.com, ^bchie_tsang@ums.edu.my

*Corresponding author

Abstract: This article investigates the indeterminate musical elements within the Huachai gong and drum ensemble, a significant aspect of traditional Chinese music, highlighting its role as a catalyst for fostering creative freedom and harmony in the preservation and evolution of traditional music. By analyzing the variable rhythmic forms, melodic development methods, and indeterminacy improvisational timbre within the ensemble, this study demonstrates how indeterminacy can nurture a creative and harmonious atmosphere, enabling performers to innovate within the constraints of traditional forms. This research offers fresh perspectives on the exploration and transmission of traditional musical genres, proposing that embracing the indeterminacy of musical elements can lead to richer, more varied and inclusive musical experiences, and underscores its importance in both educational and practical contexts.

Keywords: Indeterminacy; Harmony; Rhythm; Timbre

1. Introduction

Traditional Chinese instrumental ensembles are intricately linked to age-old philosophical and aesthetic doctrines, granting them a distinctive artistic identity. Significantly shaped by Confucian and Taoist ideologies, Chinese folk music reflects deep philosophical influences that fundamentally inform its aesthetic guidelines and the practices of its musicians^[1]. The Huachai Gong and Drum Ensemble (HGDE) holds a significant place in traditional Chinese instrumental music, with strong cultural roots in the central Jiangxi Province. This musical form, characterized by its use of gongs, drums and wind instruments, not only upholds traditional musical frameworks but also embraces adaptation during various ceremonial occasions. It showcases a variety of musical forms that exemplify local cultural traits and a performance style marked by freedom and harmony. This harmony is the balance between the changing musical elements, which is consistent with the harmony advocated by ancient Chinese Taoist philosophy and can be understood as an open process^[2].

In the HGDE, the concept of determinacy encompasses the ensemble's adherence to traditional such as modes, instrument combinations and scores. Indeterminacy is a personal artistic expression of changing rhythms, melodic development and timbre changes in the process of inheritance and performance. This element of indeterminacy not only enhances the vividness, flexibility and variability of HGDE music, but also provides a free and harmonious creative space, providing impetus for the inheritance and innovation of traditional music. In HGDE, from free rhythmic variations on traditional tunes to improvisational collaboration, this is a unique artistic creative process. This process not only requires the performer to have an accumulation of traditional music elements and local culture, but also requires creativity that can respond and interpret immediately. Embracing indeterminacy increases the appeal of HGDE which is not only a continuation of traditional music, but also a breakthrough point for innovative inheritance.

This study delves into the dynamic rhythmic forms and melodic variations within the HGDE, alongside the improvisational treatment of timbre characterized by indeterminacy. It examines the role of indeterminacy in enriching the interplay between traditional musical practices and contemporary innovations. By highlighting how indeterminacy can foster a harmonious interplay among musical

components and collaborative efforts, this research underscores the potential for traditional music forms to evolve and adapt within modern musical landscapes, thereby ensuring their continual relevance and revitalization.

2. Cultural and historical background of HGDE

2.1. Origin and Development

Originating from the Qing Dynasty and steeped in over three centuries of history, HGDE, also known as Chuida, derives its name from the rich variety of patterns produced through its cymbal, gong and drum performances [3]. Predominantly popular in the central Jiangxi region, this musical form has evolved significantly, intertwining with the everyday lives of the local communities. Over the centuries, Huachai Gong and Drum music has not only become an integral element of regional festive traditions but has also developed a complexity in rhythm and technique. Today, performers blend traditional rhythms with personal artistic interpretations, ensuring that the performances are not merely reiterations of folk traditions but vibrant, evolving expressions of cultural heritage.

2.2. Overview of Art Forms

The HGDE showcases a distinctive traditional blow-and-beat style, characterized by its specific combination form, and types of Qupai¹, and unique timbre characteristics. The ensemble primarily features the suona alongside an array of gongs and drums, typically involving seven musicians playing ten instruments. (Table 1) This prescribed setup of instruments and players not only highlights an adherence to traditional performance forms but also demonstrates flexibility and unity among the performers and their instruments.

Table 1: Configuration of instruments and players

Instrument	Suona	Kind drum Small drum Umpan	Big cymbals	Big gong	Small gong Yun gong
Number of performers	2	1	2	1	1

The performance of HGDE is in two distinct forms: seated and marching. The seated form is reserved for static events like weddings, funerals, and celebratory banquets, where musicians are arranged around a central table in a hall. (Figure 1) In contrast, the marching style is employed during lively, moving events such as the Lantern Festival and deity processions. To facilitate mobility, a specially designed portable drum rack is utilized, enabling performers to move freely and maintain vibrant rhythms as they navigate through various activities.

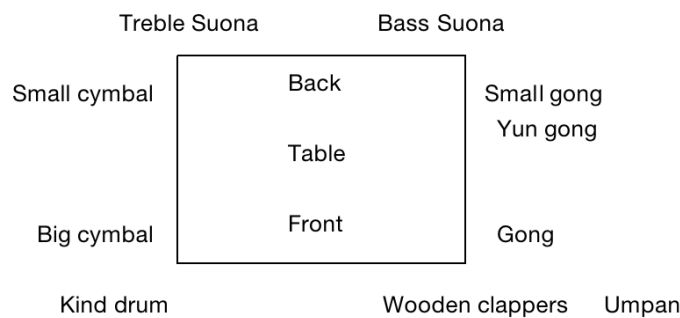


Figure 1: Seated form Chart

¹ Qupai, a unique musical form in traditional Chinese music, comprises independent musical compositions each with a fixed structure, mode, and tonality, and serves as an integrated art form encompassing literature and performance. Based on a single qupai, new variations can be created, generating a dynamic network of musically related works that continually evolve [4].

2.3. Cultural Significance and Social Function

Shaped by the surrounding folk music, customs and dialects, HGDE exhibits unique stylistic and performance characteristics. This genre is especially prevalent in rural settings where performances typically occur outdoors or in communal areas, aligning with local social events like weddings, funerals, and religious ceremonies. More than just providing entertainment, HGDE performances resonate with the local community's emotional landscape and cultural aesthetics, deeply embedding the ensemble into the fabric of rural life.

The HGDE is deeply rooted in Daoist principles, which influence its musical expressions and emphasize harmony and balance in aesthetics. In performances, the ensemble showcases a seamless interplay of melodies around central pitches, exemplifying a harmonious integration within the group. Simultaneously, the ensemble embodies the Daoist appreciation for naturalness and improvisation by adapting performances fluidly to fit various storytelling contexts. This flexible approach results in music that is both organized and spontaneous, adapting its expression to reflect different cultural emotions. This distinctive fusion significantly boosts the ensemble's expressive power and emotional resonance.

By blending improvisational changes and the inherent unpredictability of its performances with established traditional structures, the ensemble crafts a harmonious tableau. This approach deftly integrates traditional musical elements with the emotional needs of the community, illustrating the richness and diversity of Chinese musical culture.

3. Indeterminate rhythmic forms and melodic development techniques

Huachai Gong and Drum music is known for its repertoire of 109 Qupai, of which 87 are commonly used. Within these melodic frameworks, performers have the flexibility to freely combine short phrases (single) and longer, composite phrases (multiple). One of the ensemble's core attractions is its dynamic rhythm and melodic development techniques, which meld traditional musical structures and melodies with the possibilities for evolution and improvisational freedom. This richness and variability not only enhance the expressiveness of the music but also provide audiences with a diverse and enriched experience.

3.1. Rhythmic Forms and Changes

The HGDE showcases complex, layered rhythmic forms in its percussion performances. Key instruments like the king drum and wooden clappers anchor the rhythm, guiding its direction while harmonizing the diverse elements of indeterminacy through assorted rhythmic combinations. Cymbals intricately interlace to play a pivotal role, enhancing the rhythmic texture's richness and uniqueness. The gong establishes a robust foundation, underpinning the rhythm structure, while the small gong and yun gong add dynamism and complexity, filling rhythmic gaps and providing decorative flourishes that enrich the musical aesthetic. This intricate interplay of rhythmic layers constitutes the unique rhythmic style of Huachai Gong and Drum percussion, featuring the main rhythm form, accompaniment rhythm form, and combined rhythm form.

The primary tempo patterns in the ensemble involves gongs and drums that are prominently featured at junctures such as the introductory segments of compositions or following the conclusion of melodies. Predominantly structured around a two-quarter beat pattern, this tempo typically integrates regular eighth notes and a concluding segment of sixteenth notes. These elements are varied through the strategic selection of instruments and adjustments in duration. To enrich the musical texture, this stable rhythmic foundation is interspersed with elements of indeterminate free repetitions and variations in retakes, enhancing the dynamic complexity of the performance.

The accompaniment rhythm form in this musical arrangement is a freely structured component that plays in harmony with the main melody. Within this setup, the accompaniment exhibits a degree of flexibility, designated primarily to complement the main melody and also to provide transitional support at structural junctures. The accompanying patterns of Qupai typically involve the kind drum, which transitions from compact sixteenth notes to more expansive quarter-note rhythms, underscoring a sense of completeness. Concurrently, performers are afforded the liberty to adjust the density of the notes in response to the melodic delivery, thereby accentuating shifts in emotional expression. The interaction between the kind drum and cymbals creates a conversational rhythm pattern, typically

unfolding over approximately four measures. This collaborative approach not only facilitates musical development but also enriches rhythmic and timbral diversity. The fluid interchange of instruments between eighth and quarter notes leverages timbral changes to articulate distinctively lyrical qualities.

The combination rhythm form is primarily characterized by its variability when performing Changpai, which are compositions consisting of multiple Qupai. Owing to its comprehensive structure, sustained continuity, and intricate complexity, this form is utilized as a benchmark for assessing traditional performance skills. Emotional variations within the performance dictate specific rhythmic treatments. For instance, slow-paced, expansive whole notes are employed to facilitate narrative and imaginative expanses, while a stable medium tempo with loose half notes typically conveys melodious and calming emotions. In contrast, intense and vibrant emotions are captured through fast, densely repeated rhythmic patterns that drive towards a musical climax. Within the conventional rhythmic framework, performers are afforded the flexibility to manipulate connections and dynamics in rhythm, significantly enhancing the music's expressive and imagistic qualities.

3.2. Melodic Development Methods

Within the conventional framework of melody, performers engage in innovative expressions by manipulating the melody lines—extending, shortening, transforming, or repeating them. This approach to melodic manipulation transcends mere technical prowess, serving as a conduit for deeper emotional expression. This method not only showcases the performer's skill but also enriches the interpretative depth of the musical piece.

Variation and expansion are predominant in the melodic development of Huachai Gong and Drum music. The technique of variation often employs a method where segments start similarly but diverge in their conclusions, or maintain brief structural forms with varied endings. During these variations, a core tonal transformation is applied to evoke the sensation of 'altering the mode but not the essence,' reminiscent of the thematic changes in the traditional guqin piece 'Three Lanes of Plum Blossoms.' (Figure 2) The overtone subject of the three phrases in 'Three Lanes of Plum Blossoms' demonstrates a similar progressive characteristic. The pure fifth interval in the first two measures of the first phrase serves as the foundation for variation, while the repetition and interlocking technique at the start of the second phrase consolidate the thematic changes. The third phase builds on the first by altering the beginning and end, thus enhancing the melodic dynamism. These progressions yield a compact musical structure and streamlined materials, facilitating easier adaptation and memorization for performers. Moreover, these transformations exemplify the melodic features of variation and harmony that are emblematic of traditional Chinese philosophical thought. This approach not only simplifies the learning process for musicians but also deeply embeds the principles of harmony within the performance, reflecting core tenets of Chinese aesthetics.



Figure 2: Guqin music 'Three Plum Blossom Lanes' subject Fragment

Expanded forms the crux of traditional music, exemplifying the dynamic and adaptable melodic progressions observed in the performances. This approach mirrors the intricate compositional techniques found in traditional music. Development primarily stems from the core segments of melodies, where phrase alterations bring about harmonious unity. For instance, the distinctive sound patterns in Qupai 'Guaziren' recur frequently within the composition, akin to the structured and extension renditions seen in the traditional Jiangnan silk and bamboo piece 'Zhonghua Liuban.' Based on the foundational musical scores, performers introduce varied extensions to their interpretations. For example, performer Z employs a sequence of dotted notes to create a unique expressive quality, whereas performer G opts for rapid, compact note sequences to expand the melody dynamically [5]. This variability not only enriches the musical texture but also showcases the diverse interpretative possibilities inherent in traditional Chinese music. (Figure 3)

The image displays three systems of musical notation for the piece 'Zhonghua Liuban'. Each system consists of two staves: the upper staff is labeled 'Z' and the lower staff is labeled 'G'. The music is written in a key signature of one sharp (F#) and a 4/4 time signature. The notation includes various rhythmic values such as eighth and sixteenth notes, as well as rests and dynamic markings like 'f' (forte). The first system shows a melodic line in the 'Z' staff and a more rhythmic accompaniment in the 'G' staff. The second system continues this pattern with more intricate rhythmic figures. The third system concludes the excerpt with sustained notes in the 'Z' staff and rhythmic accompaniment in the 'G' staff.

Figure 3: 'Zhonghua Liuban' (Performance: Zhou Hao, Gu Liuxing, performance clips of Zhou Hao and Gu Liuxing)

The indeterminacy in melody development methods not only preserves the regional traits of traditional music but also offers expansive opportunities for variation, exhibiting immense flexibility for transformative interpretations. The implementation of these methodologies significantly enhances the performance dynamics of Huachai gong and drum music and contributes valuable practical examples to the study of Chinese regional music traditions. This adaptability ensures that each performance is both a reflection of enduring musical heritage and a novel exploration of artistic possibilities, enriching the broader discourse on the adaptability and evolution of traditional Chinese music.

4. Indeterminacy Improvisational Timbre

4.1. Dynamic Changes in Timbre

In the HGDE, melodies are predominantly rendered by high-pitched and low-pitched suona playing in unison. Timbre processing in these ensembles is not predetermined but improvised, tailored to the specifics of the performance context. Common techniques include the addition of intervals—such as fifths or octaves—or embellishments like portamento, which serve to enhance the variety and contrast of timbral characteristics. Depending on the emotional nuance and expressive demands of the piece, performers may engage in dialogic and call-and-response forms to expand the polyphonic texture and enrich the musical interest. Choices in tone—ranging from melodious to more assertive—are influenced not only by the intrinsic sound qualities of the instruments but also by the performers' manipulation of their techniques, such as varying the blowing intensity or adjusting the angle of air entry. Additionally, performers may occasionally modify their instruments or alter their physical stances to enhance timbral variation, thereby adding a performative dimension to this traditional music genre.

Percussion instruments of various colours present multi-form characteristics through control changes during performance. In addition to changes in intensity and percussion techniques, the performance of the king drum also dialogues with other percussion instruments promptly to increase the freedom of timbre. Similarly, the highly distinctive Wooden clappers and Yun gong incorporate subtle nuances through precise control over dynamics and timing by the performers. The performance of two-size cymbals demonstrates a dynamic range of timbres, which are artfully interwoven through controlled variations in intensity and articulation pauses. Furthermore, the gong's timbre is varied by altering striking frequencies and the force applied to its surface, allowing for a rich tapestry of sound through free repetition and tempo adjustments. These manipulations not only showcase the versatility of the instruments but also enrich the ensemble's overall sonic texture.

The interplay between the suona and percussion instruments in the ensemble showcases a dynamic range of timbral interactions. Lower-pitched suona paired with large cymbals set a broad, slow

rhythmic foundation that conveys a solemn emotional atmosphere, while higher-pitched suona coupled with small cymbals inject a lively and enthusiastic ambiance into the music. Furthermore, the performance involves intricate interactions between the instruments, such as echoing, call-and-response, and the juxtaposition of simplicity with complexity, as well as tightness with looseness. These interactions are meticulously crafted through precise manipulation of the instruments and deliberate body movements, ensuring that each performance is distinct in its timbral transitions and visual appeal.

4.2. The Combination of Technology and Expression

In the Fengcheng area of Jiangxi Province, there are over 300 gong and drum troupes that adhere to traditional, standardized formats and follow an orderly inheritance process. The skills of most performers in these troupes are orally transmitted by senior artists, making the performers' improvisational adaptations during the learning process a notable feature of this art form. This capacity for interpretation not only demands a mastery of technical skills but also a deep understanding of the emotional dimensions of musical culture. Through a seamless blend of technique and expressive capability, performers can explore the vast potential of gong and drum music.

Subtle control of technique underpins timbral improvisation in the flower drum ensemble. Performers must master various percussion techniques, including control of intensity, variations in speed, and rhythm management. For instance, a performer might need to swiftly alter dynamics to meet the emotional demands of a piece or produce diverse timbral effects by varying percussion techniques while adhering to a specific rhythm. Proficiency in these techniques necessitates prolonged practice and the accumulation of experience, as well as a profound understanding of the instrument by the player. The nuanced cultural expression of local characteristics forms the essence of improvisational timbre processing in Huachai gong and drum music.

Performers engage in exploring various timbre combinations and techniques to express their unique musical understanding and innovative ideas. For instance, during the transitional segments and background accompaniments in solo gong and drum performances, performers demonstrate subtle timbral shifts through the strategic addition or removal of instruments such as the colourful Yun gongs. In the improvisational setting characterized by indeterminacy, performers are required to respond rapidly to technical demands and instantaneously translate their emotional responses into the language of music. Developing this capability involves a long-term, systematic learning process that necessitates continuous exploration and experimentation in practice.

4.3. Conveying Cultural Confidence

The improvisation of timbre within the HGDE represents not merely a technical display but also embodies a novel approach to the preservation and evolution of traditional culture. The selection and application of variable timbre processing in the ensemble capture the musical characteristics and historical context specific to the agrarian central Jiangxi region, distinguishing it from other forms of gong and drum music linked to ceremonial folk activities. The utilization of these uncertain timbres not only recreates traditional cultural life scenes but also provides a foundation for contemporary musical creation and performance, thus reinforcing cultural confidence in the significance of embracing indeterminacy within traditional music practices.

5. Indeterminacy Promotes the Inheritance and Innovation of Traditional Music

Uncovering the indeterminacy of timbre and rhythm in the HDGE can stimulate innovation and artistic expression in the inheritance and performance practice of traditional music, and help develop creative thinking and skills. Indeterminacy allows musicians to introduce personal interpretation and improvisation within the fixed framework of traditional tunes. This approach encourages artists to explore new sounds and techniques related to traditional tunes through the collaboration of suona and percussion.

By varying playing techniques, artists can innovate to connect the changing aesthetics and increase the diversity and inclusiveness of HDGE. Indeterminacy provides a path that encourages students to explore and practice as they learn HDGE. Through the indeterminacy in traditional music, we discover the cultural temperament that is consistent with the traditional Taoist philosophy of harmony, helping students increase their cultural self-esteem and develop creative thinking and technical flexibility.

Indeterminacy promotes the application of technological innovation in ethnic instrumental music teaching. With the development of diversified digital media music technology, just as gong and drum players transform traditional instruments, national instruments and music forms are rediscovered and performed in new ways to make them more in line with the aesthetics of contemporary audiences.

6. Conclusion

This study delves deeply into how indeterminacy features within the HGDE and its role in fostering artistic expression and heritage innovation. The changeable characteristics of rhythm in HDGE are divided into main rhythm forms, accompaniment rhythm forms, and combined rhythm forms. Variation and expansion are the main techniques in melody development. These are increase the richness and variability of traditional music. Indeterminacy improvisational timbre processing enlarges the timbre cooperation space between suona and percussion, as well as personalized expression. The exploration of indeterminacy within traditional music provides a novel perspective for the inheritance and pedagogy of HGDE, fostering the creativity of freedom and harmony while deepening comprehension of traditional music culture and philosophy.

References

- [1] Jones, S. (1995). *Folk music of China: living instrumental traditions*. Clarendon Press.
- [2] Li, C. (2008). *The ideal of harmony in ancient Chinese and Greek philosophy*. *Dao* (7), 81-98.
- [3] Editorial Committee of 'Collection of Chinese Ethnic Folk Instrumental Music-Jiangxi Volume'. (2006). *Collection of Chinese National Folk Instrumental Music-Jiangxi Volume*. China ISBN Center.
- [4] Feng Guangyu. (2004). *Qupai: the carrier of traditional Chinese music and unique music creation thinking*. *Journal of Xinghai Conservatory of Music* (01), 1-15.
- [5] Li Ya. (2019). *Research on 'improvisational' performance of Jiangnan Sizhu*. *Chinese Musicology* (02), 76-83.