

## Power Structure and Interactive Mechanism in Chinese Traditional Opera Musical Improvisation : A Case Study of a Folk Professional Wuju Opera Troupe

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Received: March 31<sup>st</sup>, 2025; Revised: May 10<sup>th</sup>, 2025; Accepted: May 14<sup>th</sup>, 2025

### Abstract

This research focuses on instrumental music improvisation in Chinese traditional opera, studying a folk professional Wuju Opera troupe in Jinhua, Zhejiang, to explore its power structure and interactive mechanisms in instrumental improvisation. The study addresses the critical issue of preserving traditional opera art forms in modern society, where mechanisms for “living inheritance” remain insufficiently understood. Based on performance theory and oral-formulaic theory perspectives, through a 12-month ethnographic study involving participatory observation of 54 performances and 32 rehearsals, and interviews with 10 core musicians, the research finds that Wuju Opera instrumental improvisation is built upon a hierarchical power structure of “Five Principal Positions,” forming a dual interactive system of vertical command and horizontal coordination. Its operation follows a “cue-response-feedback” cyclical mechanism, transmitting information through three types of cues, achieving collaboration through hierarchical responses, and ensuring artistic effect through dynamic feedback. Wuju Opera instrumental improvisation embodies dialectical characteristics of “formula-dominated flexible adaptation,” with power regulations and creative freedom balanced through layered authorization, tacit boundaries, and feedback adjustments. The research enriches the interactive analysis framework of performance theory, expands the application scope of oral-formulaic theory, proposes a multi-dimensional identity construction model of “sound-practice-emotion,” and provides new perspectives for the protection and inheritance of traditional opera.

**Keywords:** Cultural Inheritance, Instrumental Improvisation, Interactive Mechanism, Power Structure, Wuju Opera

### Introduction

Wuju Opera, as an important local opera genre in Zhejiang Province, was listed as a national intangible cultural heritage in 2008. This recognition highlights its significant cultural value and the need for systematic preservation efforts. In recent years, academic attention has focused on the mechanisms for inheriting and protecting intangible cultural heritage; however, research on the micro-mechanisms of how traditional opera art achieves “living inheritance” in modern society remains insufficient. This research gap is particularly concerning as traditional art forms face increasing challenges from modernization, digital entertainment, and changing audience preferences.

Wuju Opera performance troupes currently exhibit a distinct binary differentiation pattern. First, state-owned professional troupes affiliated with cultural departments; second, folk professional troupes that are self-organized and survive through the market. Compared to standardized state-owned troupes, folk professional troupes are more flexible and variable, representing an important force for the inheritance and innovation of Wuju Opera art (Ni, 2021).

Folk professional troupes generally maintain the performance tradition of “formula-based performance,” which contains rich elements of improvisation. As an indispensable component of Wuju Opera performance, instrumental music not only assumes the basic functions of gong and drum beat-keeping and atmosphere creation but also contains profound elements of improvisation. This improvisation based on traditional formulas is both a manifestation of the collective wisdom of folk artists and an important source of vitality for traditional instrumental music (Chen & Shi, 2021). However, as a complex cultural practice, the internal operational mechanisms of Wuju Opera instrumental improvisation have not been systematically revealed, and relevant research remains lacking.

The significance of this research lies in its potential contributions to both theory and practice. From a theoretical perspective, this research will expand the interactive analysis framework of performance theory by constructing a “cue-response-feedback” analytical model, deepening the understanding of the mutual influence between power relations and artistic innovation in the performance process; enrich the application fields of oral-formulaic theory, confirming its effectiveness in explaining traditional music improvisation; and deepen the understanding of “invented tradition” in cultural inheritance theory, explaining how traditional art achieves living inheritance through creative transformation in modern contexts.

From a practical perspective, this research will provide targeted recommendations for the protection and revitalization of Wuju Opera by revealing the key roles of “power structure” and “interactive mechanism” in artistic inheritance, providing empirical evidence for constructing a diverse inheritance system; and provide practical guidelines for musician training by examining the learning processes and interactive patterns of artists from different generations, summarizing effective paths for traditional Wuju Opera instrumental inheritance.

### **Research Objectives**

1. To reveal the internal operational logic of Wuju Opera instrumental improvisation, this research conducts a systematic ethnographic investigation.
2. To explore its unique value in cultural inheritance, this study examines its role and significance in the transmission of tradition.
3. To provide new interpretative paths for understanding the innovative mechanisms of Chinese traditional opera music, this research analyzes its creative processes and structural characteristics.

### **Research Significance**

From a theoretical perspective, this research will expand the interactive analysis framework of performance theory by constructing a “cue-response-feedback” analytical model, deepening the understanding of the mutual influence between power relations and artistic innovation in the

performance process; enrich the application fields of oral-formulaic theory, confirming its effectiveness in explaining traditional music improvisation; and deepen the understanding of “invented tradition” in cultural inheritance theory, explaining how traditional art achieves living inheritance through creative transformation in modern contexts.

From a practical perspective, this research will provide targeted recommendations for the protection and revitalization of Wuju Opera by revealing the key roles of “power structure” and “interactive mechanism” in artistic inheritance, providing empirical evidence for constructing a diverse inheritance system; and provide practical guidelines for musician training by examining the learning processes and interactive patterns of artists from different generations, summarizing effective paths for traditional Wuju Opera instrumental inheritance.

### Literature Review

Wuju Opera research mainly focuses on four aspects, including historical origins, vocal music, performance art, and genre characteristics. In historical origins research, scholars have examined the origins and development of Wuju Opera-related vocal styles (Guo, 2014), with particular attention to the formation of the vocal system (Fu, 2004). In vocal music research, scholars have analyzed the melodic and rhythmic characteristics of Wuju Opera singing (Zhou, 2016) and its aesthetic connotations (Guan, 2017). In performance art research, they have outlined the formulaic content of opera performance (Wang, 2021). In genre characteristic research, they have analyzed the unique features of Wuju Opera in terms of thematic content and stage art (Nie & Fang, 2021).

However, these studies have obvious limitations. First, they neglect Wuju Opera instrumental improvisation; second, they pay insufficient attention to folk professional troupes; and third, they mostly employ documentary research rather than fieldwork.

In opera instrumental research, scholars have mainly focused on four aspects including performance techniques, orchestration rules, musical structure, and cultural connotations. At the technical level, research has examined the characteristics of Beijing Opera music formula performance (Chen, 2022a) and Kunqu Opera flute (Hu, 2022), and other instrumental performance features. Regarding orchestration rules, scholars have outlined the ensemble characteristics of Bangzi-style lead music (Han, 2024) and other opera genres. At the musical structure level, they have analyzed the relationship between “beat pattern” and “vocal pattern” in bangqiang-style music (Chen, 2022b). Regarding cultural connotations, they have interpreted the dramatic nature (Kong, 2024) and local characteristics of opera percussion music (Li & Li, 2024).

Although these studies address multiple aspects of opera instrumental music, inadequacies remain. First, there is a lack of systematic analysis of the operational mechanisms of improvisation; second, there is less focus on power structures and interactive relationships in instrumental performance; and third, they fail to fully reveal the intrinsic connection between instrumental improvisation and cultural inheritance.

### Theoretical Framework

#### 1. Performance Theory Perspective

Schechner (2006), pointed out that performance is both concrete behavior and complex interaction among participants. For opera instrumental music, musicians must not only master playing

skills but also establish resonance with the accompaniment objects. This research draws on performance theory, with particular attention to two core concepts including first, “interaction ritual chains” (Collins, 2004), referring to the emotional energy transmission network formed during the performance process; and second, “performance framework” (Goffman, 1974), referring to the implicit rule system that regulates performance behavior. Through these concepts, the research will deeply analyze the power structure and interactive mechanisms in Wuju Opera instrumental improvisation.

## **2. Oral-formulaic Theory Perspective**

Oral-formulaic theory, proposed by Parry and Lord, aims to explain the patterns of oral poetry creation. Lord (1960), pointed out that oral poetry is not created on the spot but forms a set of “formulaic” creative patterns through oral transmission. After mastering these “formulas,” performers can improvise on the spot without losing traditional characteristics. This research applies oral-formulaic theory to the analysis of Wuju Opera instrumental improvisation, focusing on two aspects. First, the internalization mechanism of traditional “formulas,” i.e., how musicians master musical vocabulary and performance rules through oral teaching; and second, the realization path of improvisational innovation, i.e., how musicians adjust musical expression within the formula framework according to specific situations.

## **Research Methodology**

### **1. Research Subjects**

Based on the purposive sampling principle of qualitative research (Palinkas et al, 2015), this research selected the Yongkang Wuju Opera Troupe No. 1 in Jinhua, Zhejiang, as the key research subject. Selection criteria included (1) long history with rich traditional repertoire, (2) complete talent echelon, with orchestra members of different age groups, (3) frequent performances, maintaining high-density market performances, and (4) high recognition and influence in the region.

Established in 1999, the Yongkang Wuju Opera Troupe No. 1 currently has over 60 performers and staff, including 12 orchestra members, with more than 40 performance repertoires and over 600 performances annually. The research focuses on 10 core musicians in the troupe’s orchestra, including 3 senior musicians (over 50 years old), 5 middle-aged musicians (30 - 50 years old), and 2 young musicians (under 30 years old).

### **2. Research Methods**

This research adopted a multi-method combination strategy, focusing on participatory observation, in-depth interviews, and audio-visual material collection. From June 2023 to June 2024, the researcher entered the field as an apprentice, participating in and observing 54 performances and 32 rehearsals, which were selected based on their representativeness of different repertoires and performance contexts. These observations allowed for detailed recording of the orchestra’s organizational operation, improvisation process, and musician interaction patterns.

Systematic semi-structured interviews were conducted with 10 core musicians, lasting about 60 minutes each. Interview content mainly included personal growth experiences, understanding of traditional formulas, thinking patterns in improvisation, and views on cultural inheritance, collecting about 100,000 words of original interview data. These interviews provided valuable insights into how musicians conceptualize and experience their roles within the tradition.

Audio-visual material collection involved recording rehearsals and performances, resulting in 80 hours of rehearsal videos, 35 performance videos, and over 1,000 photographs. Additionally, literature materials such as old photographs and handwritten scores privately preserved by musicians were collected to provide historical context for contemporary practices.

### 3. Data Analysis

The research employed thematic analysis to organize and refine field materials from both observations and interviews (Braun & Clarke, 2006), with a specific analysis process including six steps. (1) Familiarizing with data through repeated review of field notes, interview transcripts, and audio-visual recordings. (2) Generating initial codes by identifying meaningful segments of data relevant to the research questions. (3) Searching for themes by grouping related codes into potential thematic categories. (4) Reviewing themes to ensure coherence within themes and distinction between themes. (5) Defining themes by refining and naming each theme. (6) Writing reports that present the analysis in a coherent narrative. To ensure research rigor, three strategies were adopted, including methodological triangulation (comparing data from different collection methods), researcher triangulation (involving multiple researchers in the analysis process), and participant validation (verifying interpretations with research participants), thus improving the credibility and reliability of the research.

## Results

### 1. Power Structure of Wuju Opera Instrumental Improvisation

#### 1.1 Hierarchical Division System of “Five Principal Positions”

Traditional Wuju Opera orchestras are typically small, efficient, and distinctive, generally composed of five people (also called the “Five Principal Positions”), with an ensemble consisting of Drum Master, Lead Huqin, Secondary Wind Instruments, Large Gong (also called Sanxian), and Small Gong. Due to the needs of vocal styles and repertoire performance, each person is proficient in performing multiple instruments. After the reform and opening up, Wuju Opera orchestras have followed innovation and reform, absorbing some new instruments such as cello, double bass, and electronic keyboard to enhance harmonic effects, increasing the orchestra from the traditional 5 people to more than 10. However, field investigation found that the organizational structure of orchestras in today’s folk professional Wuju Opera troupes still presents a tight ensemble centered on the “Five Principal Positions,” mainly a three-level division of labor system.

The first level is the core leadership layer, held by the Drum Master. The Drum Master is not only responsible for playing percussion instruments but also assumes the overall leadership function. As the troupe’s Drum Master said, “The Drum Master is the conductor in the orchestra, controlling the rhythm and directing the overall situation throughout the performance” (personal communication, July 15, 2023). The Drum Master achieves leadership functions through three mechanisms. First, technical leadership, establishing the overall musical framework through control of rhythmic patterns; second, information control, achieving dispatch of the entire team through cues such as eye contact, gestures, and gong and drum beats; and third, effect control, coordinating the overall musical effect.

The second level is the main execution layer, composed of the Lead Huqin and Secondary Wind Instruments. The Lead Huqin is mainly responsible for playing string instruments such as banhu and erhu, while the Secondary Wind Instruments are mainly responsible for playing wind instruments such as flute and suona. They jointly assume the functions of melody leading and musical transition. As the Lead Huqin musician said, “We must both follow the Drum Master’s cues and facilitate the connection of the actors’ singing on stage, playing the role of ‘supporting the tone and maintaining the key’ in opera performance” (personal communication, August 10, 2023).

The third level is the supporting layer, held by the Large Gong and Small Gong. They are responsible for playing percussion instruments such as large gong, large cymbals, small gong, and moon gong, mainly providing rhythmic support and atmosphere enhancement. This level is usually held by young musicians or apprentices and is the position with a relatively lower technical threshold among the “Five Principal Positions.” It is worth noting that this hierarchical division of labor is not static but can be adjusted according to repertoire needs and personnel conditions, showing the fluidity and complementarity of roles.

### 1.2 Historical Formation and Cultural Roots of the Power Structure

In-depth analysis reveals that the power structure of Wuju Opera orchestras is deeply rooted in specific historical contexts and cultural soil.

From a historical origin perspective, the ensemble of “Five Principal Positions” can be traced back to the organization of folk opera troupes in the Ming and Qing dynasties. Early Wuju Opera troupes had limited orchestra personnel, often with only five people, thus forming a performance tradition of “one person with multiple roles, combining specialization with versatility.” With the changing times, although the scale of orchestras in modern Wuju Opera troupes has expanded, the core position and hierarchical relationship of the “Five Principal Positions” have been preserved.

From a cultural roots perspective, this power structure reflects the hierarchical concepts and group ethics of traditional Chinese society. The hierarchical relationships in the orchestra are not only technical divisions of labor but also manifestations of cultural identity. The Drum Master is often held by a middle-aged or older musician with rich experience; both the Lead Huqin and Secondary Wind Instruments are musicians with high instrumental playing quality, with the Lead Huqin having more experience than the Secondary Wind Instruments; the Large Gong and Small Gong are mostly held by interns or young musicians who have not been in the profession long, responsible for auxiliary work. This instrumental ensemble structure makes the orchestra not only a performance group but also a cultural community with ethical bonds.

More importantly, this power structure is sustained through intergenerational transmission. Field investigation found that the training of folk Wuju Opera musicians is mainly conducted through “apprenticeship teaching” and “learning with the troupe.” Young musicians usually start by learning basic percussion instruments and, after years of practice, have the opportunity to serve as Drum Master. This gradual learning process not only imparts skills but also conveys the applicability and necessity of the power structure.

## 2. Interactive Mechanisms of Wuju Opera Instrumental Improvisation

### 2.1 “Cue-Response-Feedback” Cyclical System

Field investigation found that the interaction process of Wuju Opera instrumental improvisation follows a “cue-response-feedback” cyclical mechanism. This mechanism is not only a channel for information transmission but also a platform for artistic creation, ensuring that improvisation is both rule-based and variable.

The cue stage is the starting point of interaction, mainly achieving information transmission through three forms as follows.

The first is action cues, mainly transmitted by the Drum Master to other musicians through non-verbal means such as eye contact, nodding, and gestures. Field observation found that although these actions seem simple, they contain rich information, and this non-verbal communication requires long-term tacit understanding among musicians for accurate interpretation. For example, a glance indicates preparation, a slight nod indicates the performance is about to begin, and a light tap with fingers suggests reducing volume.

The second is musical cues, mainly conveying specific performance requirements through particular gong and drum patterns. These gong and drum patterns are like “code” within the orchestra, with each combination corresponding to specific performance requirements. The Drum Master, by hitting specific gong and drum rhythm combinations, indicates to orchestra members the upcoming musical direction, constituting the “grammatical system” of Wuju Opera instrumental improvisation.

The third is singing cues, mainly transmitted by actors on stage to the orchestra through subtle changes in singing. Actors might suggest slowing down by extending the final sound of a word or indicate a key change by raising the pitch. The Drum Master explained, “Due to long-term collaborative performances, we have established an unspoken understanding with the actors. When actors adjust their singing on stage unexpectedly, the orchestra can immediately grasp their intentions without prior explanation and adjust the music accordingly, achieving seamless connection and smooth transition” (personal communication, July 15, 2023).

The response stage is the response process after receiving cues, showing characteristics of hierarchy and synergy as follows.

The first is the priority response of core instruments. Field observation shows that after the actor’s cue is given, the Drum Master usually uses a fixed gong and drum rhythm as connection and transition. After receiving the Drum Master’s cue, the Lead Huqin and Secondary Wind Instruments, as the main melodic instruments, need to respond immediately to set the tone for the musical direction.

The second is the cascading response of supporting musicians. After the core instruments establish the tone, supporting musicians such as the Large Gong and Small Gong successively join the performance sequence. This cascading entry is not a simple time difference but a conscious construction of sound layers. As the Large Gong musician stated, “We need to listen carefully to the gong and drum direction played by the Drum Master and gradually integrate into the performance” (personal communication, February 5, 2024).

The third is the coordinated adjustment of the overall sound. All musicians need to continuously adjust their volume and rhythm during the response process to ensure the

harmony and unity of the overall sound effect. This coordinated adjustment depends not only on the central coordination of the Drum Master but also on mutual listening and self-adjustment among musicians, forming a “decentralized” collaboration mechanism.

The feedback stage is the dynamic assessment and adjustment of performance effects, mainly including three dimensions as follows.

The first is the immediate response to the actor’s state. The orchestra adjusts according to the actor’s performance state, such as enhancing atmosphere when emotions are in place or “boosting” with music when the performance is weak. This adjustment is not only about technical changes but also reflects the emotional resonance between music and performance.

The second is the flexible adaptation to audience reactions. The orchestra adjusts performance strategies based on audience reactions such as applause and cheers. When audience reactions are enthusiastic, the orchestra enhances intensity and enriches variations; when reactions are flat, it stimulates interest by changing rhythm and speed.

The third is the comprehensive control of the overall effect. Comprehensive feedback ensures the artistic quality of improvisation. As the core of the orchestra, the Drum Master needs to balance various factors at this stage, both accommodating the actors well and considering audience feelings, while maintaining the balance of the orchestra’s sound, thereby optimizing the overall musical effect.

It should be emphasized that “cue-response-feedback” is not a linear process but a continuously cycling system. This performance mechanism, obtained through collective practice from “cue-response-feedback,” not only guarantees the artistic effect of improvisation but also embodies the artistic characteristic of “having rules but no fixed format” in Wuju Opera performance.

## 2.2 Structural Characteristics of Multiple Interactive Networks

In-depth analysis shows that the interactive network of Wuju Opera instrumental improvisation presents dual characteristics of “hierarchy” and “networking,” forming a dynamic performance ecological system that is “centered on the Drum Master, based on formulas, and characterized by improvisation.”

First, internal interactions within the orchestra show obvious hierarchical characteristics. This hierarchical interaction is mainly manifested in two aspects including first, vertical instruction transmission, from the Drum Master to the Lead Huqin and Secondary Wind Instruments, then to the Large Gong and Small Gong, forming a clear power chain; second, horizontal collaborative cooperation, with musicians at the same level forming close cooperation to jointly complete specific musical functions.

Second, close artistic interaction is formed between musicians and actors. This interaction is mainly manifested in three modes including first, emotional resonance, with musicians forming echoes with the actors’ emotional performance through musical expression; second, rhythmic response, achieving synchronization of musical rhythm and performance rhythm through the “cue-response” mechanism; and third, plot enhancement, dynamically adjusting musical texture and expression techniques according to plot development.

Third, a dynamic feedback loop is established between the orchestra and the audience. The audience’s reactions are conducted to the entire orchestra through the Drum



Master's conducting, forming a complete interactive closed loop. This interaction has two characteristics, including first, immediate feedback, with audience applause and cheers directly affecting performance intensity; and second, atmosphere creation, with the orchestra guiding audience emotions by adjusting performance strategies. The instrumental performance of folk professional troupes particularly values audience reactions, and this market-oriented approach makes them more interactive and entertaining than state-owned troupes, forming a unique artistic style.

This multiple interactive network is not the result of deliberate design by musicians but a cultural adaptation mechanism naturally formed in long-term artistic practice. On one hand, it meets the artistic needs of opera performance, ensuring the high unity of music and performance; on the other hand, it also adapts to the survival environment of folk troupes, enhancing market competitiveness through flexible interaction.

### 3. Internal Mechanisms of Improvisation

#### 3.1 Dialectical Unity of Formula Internalization and Innovative Expression

Wuju Opera instrumental improvisation presents binary dialectical characteristics of “formula-dominated flexible adaptation,” and this dialectical relationship constitutes the internal logic of improvisation.

On one hand, the internalization of traditional “old tunes” is the foundation of improvisation. Field investigation found that Wuju Opera instrumental musicians need to master a large number of traditional tune patterns and gong and drum patterns. These “old tunes” are internalized into the musician's musical memory through three pathways including first, master-apprentice inheritance through oral teaching, with old artists transmitting musical vocabulary through methods such as “oral imitation” and “physical demonstration”; second, repeated practice in practice, with musicians forming muscle memory through long-term performances; and third, the subtle influence of cultural immersion, with musicians naturally absorbing musical language and aesthetic standards in the opera cultural environment.

On the other hand, flexible adaptation is the source of vitality for improvisation. Improvisation is not a simple replication of traditional formulas but a creative transformation based on formulas according to specific situations. This flexible adaptation is mainly manifested in three levels including first, response to the actor's state; second, adaptation to audience reactions; and third, consideration of performance conditions.

#### 3.2 Dynamic Balance between Power Regulations and Creative Freedom

Another dialectical relationship in Wuju Opera instrumental improvisation is the dynamic balance between power regulations and creative freedom. This balance not only embodies the collective wisdom of Chinese traditional art but also reflects folk artists' profound understanding of the essence of art.

From the perspective of power regulations, Wuju Opera instrumental performance is based on a tight organizational structure and clear power allocation. This regulation is mainly realized through two aspects. First, role positioning, with the division of labor of the “Five Principal Positions” clarifying the responsibility scope and behavioral boundaries of each musician; and second, the command system, with the Drum Master achieving control and command of the entire team through various cues.

From the perspective of creative freedom, Wuju Opera instrumental performance also reserves considerable innovation space for musicians. This innovative freedom is mainly manifested in three levels. First, the technical level, where musicians can freely use playing techniques while maintaining the basic framework; second, the expression level, where musicians can give different emotional colors to music according to personal style and understanding; and third, the interactive level, where musicians can independently adjust performance strategies according to interactions with actors and audiences.

#### **4. Identity Construction in Cultural Inheritance**

##### **4.1 Activation of Cultural Memory in Musical Practice**

Wuju Opera instrumental improvisation is not only a musical activity but also a process of activating cultural memory, playing a unique role in local cultural inheritance.

First, Wuju Opera instrumental music retains rich local musical elements, becoming a sonic carrier of local cultural memory. Field investigation found that Wuju Opera music is deeply influenced by local dialects and folk tunes, forming a unique musical style.

Second, instrumental improvisation strengthens the inheritance of collective memory through participation in ritual activities. In the Jinhua area, Wuju Opera is not only an art form but also an important component of folk activities. From weddings and funerals to festivals and temple fairs, Wuju Opera instrumental music plays a ritualistic function. Especially in rural communities, the proverb “When gongs and drums sound, feet itch to dance,” which circulates in Jinhua’s folklore, vividly reflects the close connection between Wuju Opera instrumental music and local people’s lives.

Finally, the interactive nature of improvisation provides a path for the living inheritance of cultural memory. Compared to fixed music performances, improvisation has stronger openness and participation, allowing audiences to generate deeper emotional resonance and cultural identity in the appreciation process. Field observation shows that when watching Wuju Opera performances, audiences are not only passively receiving but also actively participating, forming interaction with performers through cheering, applause, and other means.

##### **4.2 Multi-dimensional Construction of Local Cultural Identity**

Wuju Opera instrumental improvisation participates in the construction process of local cultural identity through multiple dimensions, forming a multi-dimensional system of “sound-practice-emotion.”

First, the regional characteristics of the vocal system are the sonic foundation of cultural identity. Wuju Opera instrumental music is closely combined with local dialects, forming a musical language with distinct regional characteristics. This combination is mainly manifested in three aspects. First, the correspondence between pitch and tone, with the melodic direction of Wuju Opera music highly consistent with the tonal characteristics of local dialects; second, the resonance between rhythm and intonation, with musical rhythm reflecting the intonation characteristics and tempo changes of dialects; and third, the isomorphism between emotion and expression, with musical emotions resonating with the emotional expression methods in dialects.

Second, social interactive networks are the practical foundation of cultural identity. Wuju Opera performance has formed an extensive social interactive network in the Jinhua area, mainly constituted by three parts. First, performance groups, including musicians, actors, and related

staff; second, audience groups, including fixed supporters and occasional participants; and third, support systems, including local government, corporate sponsorship, and folk funding. This interactive network not only supports the inheritance of Wuju Opera art but also forms a cultural community centered on Wuju Opera.

Finally, emotional resonance systems are the psychological foundation of cultural identity. Wuju Opera instrumental music evokes emotional resonance in audiences through specific musical vocabulary and expression techniques, and this resonance further strengthens cultural identity. As an old audience member said, “Hearing Wuju Opera gong and drum music is like returning to childhood, when the whole family went to watch opera together, a sense of familiarity that no other music can provide” (personal communication, October 20, 2023). This emotional connection stems from both personal memory and collective memory (such as the association between traditional festivals and Wuju Opera), constituting the emotional foundation of cultural identity.

## Conclusion and Discussion

### 1. Research Conclusions

Through a 12-month ethnographic field investigation, this research has reached the following four core conclusions.

First, Wuju Opera instrumental improvisation is built upon a hierarchical power structure centered on the “Five Principal Positions,” forming a dual interactive system of vertical instruction transmission and horizontal collaborative cooperation. This power structure is not only a need for technical division of labor but also a manifestation of historical tradition and cultural concepts, sustained and consolidated through intergenerational transmission.

Second, the operation of Wuju Opera instrumental improvisation follows a “cue-response-feedback” cyclical mechanism, achieving information transmission through action cues, musical cues, and singing cues; hierarchical response through core instrument priority response, supporting instrument cascading response, and overall sound coordinated adjustment; and dynamic adjustment through comprehensive control of actor state, audience reaction, and overall effect.

Third, Wuju Opera instrumental improvisation presents dialectical characteristics of “formula-dominated flexible adaptation,” manifested as the internalization of traditional musical vocabulary and flexible adaptation to on-site situations. Meanwhile, a dynamic balance between power regulations and creative freedom is formed through layered authorization, tacit boundaries, and feedback adjustments, providing institutional guarantees for artistic innovation.

Fourth, Wuju Opera instrumental improvisation constitutes an important path for the living inheritance of contemporary Wuju Opera art and is a core carrier for the construction of local cultural identity. It activates local cultural memory by retaining local musical elements, participating in ritual activities, and interactive performance; and constructs multi-dimensional local cultural identity through the regional characteristics of the vocal system, the broad participation of social interactive networks, and the psychological connection of emotional resonance systems.

## 2. Theoretical Contributions

This research makes three theoretical contributions as follows.

First, it enriches the interactive analysis framework of performance theory. By constructing a “cue-response-feedback” analytical model, the research deepens the understanding of the mutual influence between power relations and artistic innovation in the performance process. This model breaks through the simplified framework of the binary opposition between performers and audiences in traditional performance theory, revealing the complex interactive relationships among multiple subjects in performance.

Second, it expands the application fields of oral-formulaic theory. The research applies oral-formulaic theory to the analysis of traditional music improvisation, confirming that this theory is applicable not only to oral poetry creation but also to explaining the patterns of traditional music improvisation. In particular, the research reveals the manifestation of formulaic characteristics at multiple levels such as musical ontology, organizational structure, and interactive patterns, enriching the understanding of the concept of “formula.”

Third, it deepens the empirical foundation of cultural identity theory. By analyzing the role of Wuju Opera instrumental improvisation in cultural memory activation and identity construction, the research proposes a multi-dimensional identity construction model of “sound-practice-emotion.” This model goes beyond the excessive focus on symbols and discourse in traditional cultural identity theory, emphasizing the core roles of bodily practice, emotional experience, and interactive participation in identity construction.

## 3. Practical Implications

This research has three practical implications for the protection and revitalization of Wuju Opera.

First, constructing a diverse protection system. Heritage protection policies should respect the endogenous mechanisms of folk professional troupes, avoiding simply applying the management model of state-owned troupes. It is recommended to improve the protection system from three aspects including policy support, market expansion, and inheritance support, especially encouraging traditional training methods such as “apprenticeship teaching” to preserve the cultural context of artistic inheritance.

Second, optimizing inheritance mechanisms. In response to the current shortage of young musicians, it is recommended to establish a “master-apprentice pairing” system, conduct “learning with the troupe” training, and promote the combination of school education and folk inheritance, ensuring both the standardization of basic education and the vitality of folk inheritance.

Third, innovating dissemination methods. To expand the influence of Wuju Opera, it is recommended to use new media platforms to showcase the charm of Wuju Opera instrumental music through short videos, live streaming, and other forms; and promote cross-border cooperation, such as innovative fusion with modern art, forming new performances and expanding young audience groups.

## Research Limitations and Prospects

This research has three main limitations including first, limited sample representativeness, examining only one typical troupe in depth; second, limited research period, with a 12-month field

investigation unable to fully grasp the long-term process of artistic inheritance; and third, insufficient comparative perspective, lacking systematic comparison with other opera genres and failing to fully examine the differences between state-owned troupes and folk troupes.

Future research can expand in three directions such as first, broadening the research scope to conduct comparative studies of folk professional Wuju Opera troupes in different regions; second, conducting longitudinal research to reconstruct the historical changes of Wuju Opera instrumental improvisation through historical material analysis and oral history collection; and third, expanding the comparative perspective to compare Wuju Opera with other opera genres while comparing the similarities and differences between folk troupes and state-owned troupes, understanding the innovative mechanisms of Chinese traditional opera music from a broader perspective.

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