

# Ethnomusicological Preservation and Educational Application of Jaw Harp Music of the Yi Region in Liangshan, China

### Maolan Zhang

College of Music, Mahasarakham University, Thailand

**Arsenio Nicolas** (Corresponding author)
College of Music, Mahasarakham University, Thailand E-mail: sennicolas@gmail.com

#### **Awirut Thotham**

College of Music, Mahasarakham University, Thailand

#### **ABSTRACT**

This study examines the preservation and educational applications of the Yi jaw harp in the Liangshan Yi Autonomous Prefecture of China, drawing on ethnomusicological fieldwork, instrument classification, and pedagogical analysis. Rooted in oral traditions, spiritual symbolism, and linguistic resonance, the Yi jaw harp functions as both a musical instrument and a cultural artifact, deeply intertwined with the identity and emotional life of the Yi people. Field data collected from local masters reveals the instrument's historical trajectory through phases of decline, revival, and cultural protection, shaped by shifting sociopolitical contexts and revitalized through artistic innovation. The jaw harp has 18 distinct types, each with unique structural and tonal characteristics tied to regional use and symbolic meaning. Detailed educational strategies are proposed, including classification by technique, structural analysis, and resonance theory. The study also explores dialect-based melodic variations and the connection between Yi speech tones and musical intervals. By integrating traditional playing methods, instrument craftsmanship, and contemporary teaching practices, this work offers a comprehensive model for sustaining jaw harp music as an evolving form of intangible cultural heritage. The findings confirm that incorporating the Yi jaw harp into formal and community-based education ensures its continued vitality, while empowering younger generations to carry forward a rich legacy of sound, language, and identity.

Keywords: Yi jaw harp, Liangshan, ethnomusicology, cultural preservation, music education

# INTRODUCTION

The jaw harp is among the oldest and most prevalent musical instruments globally, existing in many forms across several ethnic communities. It holds particular cultural and artistic significance for the Yi people of the Liangshan Yi Autonomous Prefecture in Sichuan Province, China. The jaw harp, referred to as honghuo in Yi, serves not only as a musical instrument but also as a vital medium for expressing identity, emotion, and communication (Shen & Xianyi, 2022). The Yi regard the jaw harp as a personal and expressive instrument that communicates emotion through a melodic and rhythmic language (Fiveash et al., 2021). The instrument is often meticulously constructed from bamboo or copper, with its structure differing, with reed plates that range from one to five. These diverse designs offer a broad spectrum of sounds that capture the geographical, linguistic, and cultural nuances of the Yi people (Nikolsky, 2020).

The Liangshan region, known for its mountainous terrain and ethnic diversity, poses unique challenges for preserving traditional knowledge systems. Among these is the Yi jaw harp tradition, which has historically played an essential role in daily life, courtship, rituals, and artistic expression (Wong, 2020). However, increasing urbanization, migration, and the weakening of oral transmission have led to a significant decline in the performance and meaning of jaw harp music (Liu et al., 2025). Despite its cultural richness, academic research on this tradition remains limited, and comprehensive historical documentation is largely absent. Without immediate preservation and scholarly efforts, much of this intangible heritage risks being lost with the passing of elder musicians and cultural bearers (Cao & Xu, 2023).

In recent years, the importance of preserving intangible cultural assets has grown. Traditional Yi jaw harp production techniques, which have been passed down through generations, are dying owing to a shortage of trained successors. Each stage of jaw harp production—from material selection and reed plate fabrication to final tuning—requires specific expertise and cultural sensitivity. This research aims to describe these processes as part of a broader ethnomusicological approach, focusing on technical proficiency and the instrument's symbolic meaning in Yi society (Li & Zhang, 2024; Zi, 2020).



In addition to preservation, this project investigates the instructional potential of jaw harp music. The melodies performed on the jaw harp frequently resemble speech patterns, tone fluctuations, and emotional signals, making the instrument a linguistic and musical combination (Long et al., 2024). Jaw harp music may be used in curriculum creation, digital learning tools, and interactive performance workshops. This study uses current educational tools such as audio-visual recordings, virtual demonstrations, and annotated digital archives to develop accessible materials that assist the learning and transmission of jaw harp traditions in local and global contexts (Chang et al., 2024; Liu & Chuangprakhon, 2024).

The objective of this study is to blend ethnomusicological fieldwork with pedagogical applications. The study aims to conserve the Yi jaw harp's musical history through in-depth documentation, categorization, and analysis and investigate novel teaching and transmission techniques. Doing so helps revive an endangered cultural heritage and promotes the continuous development of culturally appropriate music education. Finally, this research aims to preserve the history and encourage future generations to participate in and nurture the living heritage of Yi jaw harp music in the Liangshan region and elsewhere.

# LITERATURE REVIEW

# The Global Knowledge of Jaw Harps

Jaw harps are ancient musical instruments in many civilizations worldwide, most notably in China, Russia, Vietnam, and other Southeast Asian countries. Archaeological evidence indicates that the first bone jaw harps date back around 4,000 years. Depending on local availability, these instruments have historically been made of bone, bamboo, iron, or copper. In most cultures, the jaw harp has remained a basic, single-reed instrument, with melodic expression centered on rhythmic variety (Qiuxiao, 2022). However, more complex versions with multiple reed plates have emerged in Southeast Asia and Southwest China, which can produce harmonic textures. These regional modifications reflect the instrument's diverse musical aesthetics and cultural significance. Despite their long history and widespread use, jaw harps have often been overlooked in conventional academic music studies, and documentation in many regions is scarce (Chen & Sensai, 2024).

The Yi people of Liangshan, Sichuan, regard the honghuo (jaw harp) as a deeply expressive cultural instrument. Due to the region's isolation and linguistic diversity, Yi jaw harp traditions have remained largely undocumented (Santaella, 2022). The instrument mirrors the tonal patterns of Yi speech and serves as a powerful medium for emotional and cultural expression. Scholars have noted the jaw harp's unique ability to mimic human speech and its role as a cultural symbol among indigenous communities. Despite its simple design, it demands intricate playing techniques and holds significant ethnomusicological value (Lin & Gui, 2024).

# The Knowledge of the Jaw Harps in China

Jaw harps are found across many regions of China, with each ethnic group developing its own methods of construction, classification systems, and musical traditions. Among them, the Li people of Hainan Island regard the jaw harp as a culturally important instrument, even though their musical heritage is relatively less documented. In contrast, ethnic minorities in Southwest China, such as the Yi, Naxi, Lisu, Pumi, and Atayal, have cultivated rich and dynamic jaw harp traditions. In particular, the Liangshan Yi Autonomous Prefecture in Sichuan Province stands out as a major center for the production of traditional Yi jaw harps. These instruments are typically made from bamboo or copper and are distinguished by their multi-reed structures, each designed to reflect the linguistic tones and expressive aesthetics of Yi musical culture (Nikolsky, 2020). Subtle tone fluctuations distinguish these instruments and are frequently employed in courting rituals. Other ethnic groups, including the Pumi, Lisu, Wa, Jingpo, and Qiang, also have distinct jaw harp traditions, with some, such as the Qiang, using finely carved bamboo jaw harps as ornamental emblems of their identity. In Yunnan's Ninglang Yi Autonomous County, the instrument known as "Xiangmie" is vital to romantic expressiveness. Similarly, in Guizhou, the Miao and Buyi peoples utilize the jaw harp in social and ceremonial settings, employing distinct playing styles and assigning different meanings to it (Chen & Seekhunlio, 2024).

Jaw harps are culturally significant among the Hui and Salar populations in Gansu, Qinghai, and Ningxia. For example, the Salar people of Qinghai view the jaw harp as their primary musical instrument, crafting miniature replicas from red copper or aluminum. Bamboo and metal jaw harps are employed in Gansu's hilly Longdong region to convey love and other elements of daily life. The instrument is popular among Ningxia Hui women and comes in two varieties: bamboo and iron, with extensive histories and distinct artistic appeal (Meng, 2022). In Taiwan, ethnic groups refer to the jaw harp as "galopos," with the Atayal people developing a unique multi-reed variant of bamboo and brass played with synchronized hand movement. Iron single-leaf jaw harps are popular in Inner Mongolia and the Altay area of Xinjiang, where they are frequently associated with shamanic ceremonies and folk performances. These look like the jaw harps in Russia's Yakutia and Tuva regions. Despite the instrument's widespread popularity and cultural significance, the number of experienced jaw harp producers is



fast decreasing, notably in Mongolia, where most instruments are now imported. Bamboo, copper, and iron are the principal materials used to make jaw harps in China, with bamboo being the most popular across all ethnic groups. Copper jaw harps are peculiar to the Yi and Miao cultures (Gong et al., 2024).

## The Knowledge of the Jaw Harps in Liangshan

The Liangshan Yi Autonomous Prefecture in Sichuan Province is a culturally rich area where the Yi people, Sichuan's biggest ethnic minority group, have maintained a thriving musical culture. Yi music, influenced by the region's distinct natural and cultural environments, is integral to their cultural identity. According to cultural anthropology, Liangshan Yi music is a different storytelling style representing Yi society's spiritual outlook and social structure. This music is used for ritual, communication, and emotional expression in addition to its artistic goals. Among the many aspects of Yi musical culture, oral musical writing is notable for its historical richness and cultural significance. Traditional Yi instruments such as the Yueqin, while not unique to the Yi people, are profoundly ingrained in the region's folk traditions. However, due to industrialization and environmental changes, the transfer of instrument-making skills has slowed. Scholars have underlined the necessity of regional collaboration in Yi musical instrument research throughout Sichuan and Yunnan provinces to guarantee a more comprehensive knowledge and a successful preservation plan (Zhang et al., 2022; Yu & Choatchamrat, 2024).

Among the various folk instruments used by the Yi people, the jaw harp—locally known in Yi as Hehuo—is particularly prominent. The jaw harp, also known as kouxian in Chinese, is a plucked instrument that produces sound using a vibrating reed and the mouth cavity. Yi jaw harps in Liangshan are primarily constructed of bamboo or copper, with each material providing different tonal qualities: bamboo harps give a mellow and distant sound, whilst copper harps produce a brighter, more agile tone (Li & Woramitmaitree, 2023). Despite its wide global presence, the Liangshan Yi jaw harp is especially notable for its intricate structural design, layered musical expressiveness, and enduring legacy within the Yi community. These qualities underscore the instrument's significance not merely as a tool for performance but as a living cultural artifact that carries historical memory and social meaning. Given this depth, there is an urgent need for greater scholarly attention, systematic documentation, and educational integration to ensure its preservation and transmission for future generations (Akpabio, 2023).

#### **Research Theory**

This study employs ethnomusicological theory to examine the Yi people's jaw harp music, a vital component of their cultural identity. The study investigates the jaw harp's role as an instrument for emotional expression, social communication, and cultural continuity. Fieldwork approaches, including interviews with local musicians and observations of traditional settings, help uncover the instrument's profound ties to Yi oral traditions, language, and symbolic meanings (Wang, 2022). Additionally, the study incorporates applied ethnomusicology concepts by translating field data into practical teaching tools. These resources are designed to preserve and revitalize the jaw harp heritage while making it accessible in community and academic settings (Mu, 2003; Cottrell, 2010).

## **METTHODOLOGY**

This study uses a qualitative ethnomusicological approach to investigate the preservation, performance practices, categorization, and pedagogical applications of jaw harp music among the Yi Region of Liangshan Yi Autonomous Prefecture, China. The technique combines fieldwork, interviews, participant observation, audiovisual documentation, and instrument analysis to capture both the tangible and intangible aspects of Yi jaw harp culture.

### Fieldwork and Site Selection

The primary field research was conducted in numerous Yi communities throughout Liangshan Prefecture, including Butuo, Xichang, Zhaojue, Meigu, and Ganluo counties. These regions were chosen based on their linguistic diversity (Adu, Shiza, Suodi, and Yinuo dialect areas), the presence of active jaw harp practitioners, and their status as cultural centers for traditional Yi music. Fieldwork was conducted over several periods between 2024 and 2025, including large festivals, community meetings, and informal musical sessions.

## **Data Collection Methods**

1) Participant Observations

The researcher immersed themselves in the local Yi community, engaging with jaw harp performers, craftsmen, and elders. Through direct involvement in musical instruction, rituals, and informal performances, the study captured embodied practices and cultural contexts. Informal learning sessions were recorded and analyzed to understand performance techniques and transmission modes.

2) In-depth interviews

Semi-structured and open-ended interviews were performed with key informants, including jaw harp performers,



instrument craftsmen, cultural experts, and music educators. Topics covered included the history of jaw harps, dialectal effect on melodies, instrument building, educational transfer, and modern improvements.

#### 3) Limitations

Limitations include potential bias due to the researcher's outsider status, limited geographic coverage, and subjectivity in oral histories. Despite this, triangulation of data sources ensured reliability, and findings contribute to both cultural preservation and music education research.

## 4) Audiovisual Documentation

High-quality video and audio recordings were created to capture playing skills, rhythmic patterns, dialect-based tunes, and instructive demonstrations. These resources facilitate both analysis and future pedagogical usage by providing a realistic graphic depiction of complex actions.

## 5) Instrument Measurement and Classification

Eighteen different varieties of jaw harps (9 bamboo, 9 copper) were physically examined, measured (length, breadth), and tested for tonal qualities. To create a database for educational categorization, researchers captured basic pitches and resonance properties with digital tuners and spectrographic software.

#### 6) Language and Music Analysis

Given the intimate association between Yi dialects and musical phrasing, a linguistic-musicological method was utilized to examine the melodic contours and intonation systems of the Adu, Shiza, Suodi, and Yinuo dialects. Songs and spoken sentences were transcribed and matched to the matching musical intervals to determine how tone language influences musical expression. These data were then applied to the music categorization technique employed by Yi players.

### 7) Education Strategy Design

Using field observations and interviews with educators, this project created a basic framework for adding jaw harp teaching into local music curricula. The techniques were divided into six teaching categories: breath, rhythm, dialect articulation, fingering, speed, and dynamics. The educational application approach is based on community-based pedagogy, which includes conventional imitation, customized instruction, and the use of audiovisual aids.

### **RESULTS**

# **Development and Education Preservation of the Jaw Harps**

Through ethnomusicological fieldwork and in-depth interviews with prominent Yi jaw harp practitioners and cultural bearers this study identified six key periods in the historical development of the Yi jaw harp: its origins, two periods of decline (1946–1949 and 1950s–1960s), a recovery phase (1970s–1980s), a prosperity period in the 1990s, and a phase of cultural protection from the 2000s onward. These results show how the jaw harp has remained a musical instrument and a cultural icon, closely connected to Yi oral history, folklore, and emotional expression. Even though it was banned in the past because of spiritual taboos and political unrest, the instrument lived on in secret among slaves and shamans. Radio shows, government cultural policy, and folk artists helped bring the jaw harp back into public life in the 1970s. This cultural revival sparked a desire in new generations to reconnect with their musical traditions, leading to innovative approaches in playing, instrument design, and teaching.

The Yi jaw harp has evolved from a little-known folk instrument to a protected and appreciated form of intangible cultural heritage over the last several decades. Key informants who have helped the instrument reach a wider audience by creating new multi-reed versions, writing instructional materials, and participating in cultural events and academic talks. People today learn how to play the jaw harp by imitating others, getting one-on-one help, and even using local notation systems. Its one-of-a-kind tonal features and speech-like resonance have not only drawn the attention of scholars worldwide, but they have also led to partnerships with contemporary music styles, such as electronic music. The Yi jaw harp is a prime example of ethnomusicological preservation in action, where tradition is not only kept alive but also revitalized through education, innovative ideas, and a sense of pride in one's culture. This story demonstrates how incorporating traditional music into school settings preserves its historical and cultural integrity while ensuring it can be passed on to future generations.

# Types of Jaw Harps in Liangshan Yi Region, China

Through detailed ethnomusicological fieldwork and classification, this study identifies and documents 18 distinct types of jaw harps used by the Yi people in Liangshan, China, comprising 9 bamboo types and 9 copper types. These instruments vary in structure, tonal quality, tuning, and function, reflecting the deep craftsmanship and cultural expression embedded in Yi musical traditions. Bamboo jaw harps, typically larger than those made of copper, are known for their warm, earthy timbre and are often associated with poetic expression, love narratives, and ritual use. Copper jaw harps, more compact and durable, exhibit brighter, more resonant tones and are often utilized in rhythmically dynamic and expressive performances. Each type—such as the Sanxian, Maga, Sixian, and Yangchang—has unique musical roles, aesthetic qualities, and symbolic associations, some of which represent elements of nature, family structures, or spiritual beliefs. Informants confirmed that different Yi



subgroups prefer other types of jaw harps, and their musical use is shaped by both oral tradition and regional identity. As shown in Figure 1, the bamboo jaw harps display a longer and broader structure, reflecting their resonant, earthy sound and connection to ceremonial and lyrical use. In contrast, Figure 2 illustrates the compact and precisely crafted copper jaw harps, emphasizing their durability and suitability for intricate, fast-paced performances. These visual representations support the classification and cultural roles discussed in the text.



Figure 1. Bamboo jaw harps



Figure 2. Copper jaw harps

The preservation of this complex classification system is not only a matter of safeguarding physical instruments but also of protecting the intangible musical knowledge tied to each type. By documenting precise measurements, tunings, and cultural meanings of the jaw harps, this study contributes to a body of ethnomusicological data that supports both academic understanding and the practical preservation of these instruments. Furthermore, the classification framework provides a foundation for developing educational tools, such as comparative learning charts, audiovisual demonstrations, and community-based teaching methods. These instruments offer valuable opportunities for interdisciplinary learning, blending craftsmanship, acoustics, language, and performance. In this way, the jaw harp types of the Liangshan Yi Region are not just artifacts of heritage but living resources for cultural transmission and innovation in contemporary educational and musical contexts. As shown in Table 1, the jaw harps are categorized by material—bamboo and copper—and are further differentiated by size, tonal range, and structural complexity. Each instrument type reflects specific functions and cultural meanings within the Yi community, making this classification a valuable reference for ethnomusicological research and curriculum development.

Table 1. Types of Jaw Harps in Liangshan Yi Region, China

Table 1. Types of Jaw Harps in Llangshan 11 Region, China						
Туре	Material	Length (cm)	Width (cm)	Fundamental Tone		
Sheng Zhen Shi Bamboo	Bamboo	15.0	1.2	2F		
Single Piece Bamboo	Bamboo	19.0	1.6	2#F		
Two-piece Bamboo	Bamboo	16.5	1.4	2G-2A		
Sanxian Bamboo	Bamboo	15.0	1.1	3bB-3G-3C		
Maga Bamboo	Bamboo	13.5	1.0	3E-3#C-3#F		
Yangchang Bamboo	Bamboo	13.8	1.0	3F-3bE-3bA		
Sixian Bamboo	Bamboo	13.5	1.1	3F-3D-3G-3C		
Cicada Bamboo	Bamboo	13.0	1.2	3G-3E-3A-2A		
Five-piece Bamboo	Bamboo	14.5	1.0	3bE-3C-3G-3F-2bB		
Sheng Zhen Shi Copper	Copper	7.7	1.3	2G		
Single Piece Copper	Copper	7.4	1.6	2bB		
Two-piece Copper	Copper	7.6	1.5	2G, 2A		
Sanxian Copper	Copper	7.0	1.3	4C, 3A, 3D		
Maga Copper	Copper	6.5	1.2	3G, 3E, 3A		
Yangchang Copper	Copper	7.0	1.3	3#G, 3#F, 3B		
Sixian Copper	Copper	8.2	1.6	3bA, 3F, 3bB, 3bE		



Туре	Material	Length (cm)	Width (cm)	Fundamental Tone
Cicada Copper	Copper	8.0	1.6	3bA, 3F, 3bB, 2bB
Five-piece Copper	Copper	7.5	1.3	3bE, 3C, 3G, 3F, 2bB

## **Educational Introduction to the Yi Jaw Harp Instrument**

In the context of educational application, a foundational understanding of the Yi jaw harp begins with its physical structure and basic playing setup. The opening of the jaw harp follows a distinctive method: the instrument is opened in a fan shape from top to bottom, with the top reed being designated as the first and the subsequent reeds arranged in order. This orientation serves not only acoustic but also pedagogical purposes, helping learners easily identify the order and role of each reed during performance.

When teaching beginners, the proper holding position is crucial for accurate sound production and control. The first and second fingers of the left hand are used to hold the "source" part of the jaw harp, forming a stable grip with the palm shaped like a loose fist. Meanwhile, the right hand is responsible for plucking the "touch" part of the reed, which generates the initial vibration. This coordination between both hands enables students to develop the motor skills and muscle memory essential for optimal performance. Visual aids and demonstrations—such as using the Maga copper jaw harp as a model—greatly enhance comprehension and technique acquisition in classroom settings. Visual aids play a critical role in reinforcing these practical skills. The three-piece Maga jaw harp—available in both copper and bamboo forms—serves as an effective model for teaching. Figure 3 displays the copper jaw harp in its closed, resting position, where all three reed plates are aligned and dipped together, emphasizing compact storage and careful handling. In contrast, Figure 4 illustrates the same copper instrument in its open position, fanned out to reveal each reed's placement and angle, which is essential for airflow and resonance understanding. Similarly, Figure 5 shows the bamboo version of the jaw harp in its closed form, highlighting its larger, earthy aesthetic and handcrafted quality. Figure 6 demonstrates the open layout of the bamboo jaw harp, offering a visual guide to proper spacing and balance.



Figure 3. Three-piece Maga copper jaw harps are dipped together



Figure 4. The open position of the three-piece Maga copper jaw harps



Figure 5. Three-piece Maga bamboo jaw harps are dipped together





Figure 6. The open position of the three-piece Maga copper jaw harps

### **Educational Strategies for Yi Jaw Harp Performance**

For educational purposes, Yi jaw harp performance can be divided into six main technique categories, each of which serves as a course of study in an organized music curriculum. 1) Breathing Techniques, 2) Rhythm Techniques, 3) Dialect Techniques, 4) Fingering Techniques, 5) Speed Techniques, 6) Dynamics Techniques.

- 1) Breath techniques for students are introduced to two breathing techniques, exhalation and inhalation. These approaches help manage airflow, which in turn influences sound resonance and continuity. By adding breath control exercises, students may eventually grasp longer, more expressive articulation.
- 2) Rhythm techniques for teaching rhythm in Yi jaw harp music entail practicing four basic rhythmic patterns: quarter notes, eighth notes, sixteenth notes, and dotted rhythms. Exercises using these patterns help students develop their timing, coordination, and musical interpretation, allowing them to play in a variety of venues. As shown in Figure 7, the rhythm patterns for 2/4 and 4/4 time signatures illustrate essential beat groupings and accent placements, which guide learners in maintaining a consistent tempo and understanding phrasing.

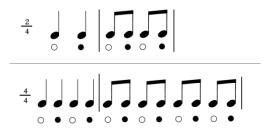


Figure 7. Rhythm for 2/4 and 4/4

- 3) Dialect techniques for Yi jaw harp music are inextricably linked to language; many dialect approaches are critical to its expressive potential. Students in an educational context can learn four dialect-based articulations: Shiza, Adu, Suodi, and Yinuo. Each dialect has its tonal hue, allowing students to integrate ethnic variety within the Yi musical environment.
- 4) Fingering techniques for students begin by practicing with the index finger, then proceed to more difficult methods that require coordinated movement of the index and middle fingers. The finger-wheel method, popularized by master musician Ma Guoguo, is presented at the intermediate level to help pupils improve their speed and fluidity.
- 5) Speed techniques for students are taught to perform compositions at various speeds, including slow, medium, and rapid. Lessons include tempo exercises to help students understand pace and its emotional impact on the listener.
- 6) Dynamics techniques for dynamic teaching focus on loudness and expression control. While the Yi jaw harp naturally has slight accentuation, students are trained to control these dynamic shifts gently so that they blend into the melodic flow without seeming abrupt.

### **Educational Understanding of the Sound Principle**

To expand their theoretical understanding, students investigate the sound generation process of the jaw harp, which consists of two major components: reed vibration and sonorous cavity resonance. An external force, typically finger plucking, activates the reed and causes it to vibrate. The physical properties of the reed (length, breadth, thickness, and substance) have a direct impact on pitch. For example, a longer reed generates a lower tone, and a shorter reed produces a higher pitch. This information is essential for instrument manufacturing lessons and pitch training sessions. Understanding how the human body contributes to sound amplification is also essential for classroom learning. The five sonorous cavities (cephalic, nasal, oral, pharyngeal, and thoracic) serve as resonators. The mouth cavity, in particular, functions as a megaphone, amplifying the vibration caused by the reed. Learn how to adjust mouth shape, tongue position, and breathing to improve tone quality and projection.



Each develops a distinctive timbre through activities that investigate personal resonance chambers, which contribute to both personal expressiveness and ensemble variation in group performances. This thorough approach, which includes physical skill, musical expression, and acoustic theory, guarantees that Yi jaw harp music is preserved and taught in a systematic and culturally significant manner.

#### The Skills of the Jaw Harps of the Yi Region

Yi jaw harp music is inextricably linked to the player's oral articulation, where adjustments in mouth shape, breath, and tongue position result in shimmering harmonics layered atop fundamental tones. These polyphonic effects create a diatonic and triphonic framework based on the Yi language. Yi artists tailor the harp to fit regional speech intonation, allowing performers to create improvised melodies that express their inner feelings. The expressive power of the jaw harp is heightened by the performer's physical control and language rhythm, making each performance distinct. The jaw harp is played in several ways, including finger pulling or plucking (typically with fingers 1 or 2) and breath modulation. Players rely on several anatomical resonating chambers, such as the oral, nasal, and chest cavities. Design variations, ranging from single to five-piece jaw harps, need greater coordination and breath control. Dialect and regional identity influence playing methods and harmonic textures, resulting in an oral-intonation-based musical system that reflects Yi cultural values. This close relationship between language and music highlights the importance of incorporating jaw harp teaching into ethnomusicological education to preserve its cultural heritage.

#### Melody Classification in Yi Jaw Harp Music

Yi jaw harp tunes are influenced by the Yi language's tones and rhythms, which vary depending on dialect. Traditionally used to express love and emotion, the harp has varied meanings across dialect groups. Regardless of geography or language, the instrument acts as a cultural unifier. The music is classified into four dialect-based categories: Adu, Shiza, Suodi, and Yinuo, each having its own phonetic, rhythmic, and lexical qualities. The Yi tonal system, which includes high, sub-high, medium, and low descending tones, has a direct impact on melodic intervals and expressiveness. These tones, which are deeply ingrained in regional speech, shape how melodies are created and interpreted. Because each dialect adds a unique musical vocabulary, preserving and educating these variants is vital to maintaining the cultural diversity of Yi jaw harp music. By incorporating dialect-specific musical genres into educational practice, the Yi jaw harp serves as both an instrument for artistic expression and language preservation. As shown in Figure 8, the classification principles help illustrate how each dialect contributes a distinct layer to the overall tapestry of Yi musical heritage, reinforcing the jaw harp's dual role as a tool for artistic performance and a vehicle for language preservation.

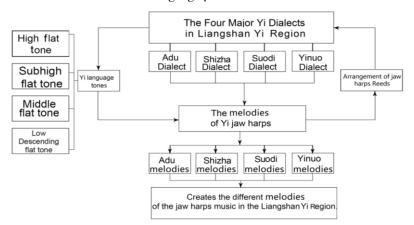


Figure 8. Principles of melody classification in Yi jaw harps

## DISCUSSION AND CONCLUSION

The preservation and educational application of Yi jaw harp music in the Liangshan region is a multidisciplinary endeavor encompassing ethnomusicology, linguistics, cultural studies, and pedagogy. Ethnomusicological fieldwork and interviews with tradition bearers reveal that the jaw harp—locally called honghuo—is more than a musical instrument; it is a deeply embedded symbol of Yi cultural identity, emotional expression, and spiritual connection. Its functions extend beyond music to include oral storytelling, romantic communication, ritualistic healing, and ancestral remembrance. Despite historical periods of repression—particularly during political campaigns in the mid-20th century—the jaw harp remained resilient through underground transmission by shamans, slaves, and elder performers (Chang, 2007; Wang, 2014). This cultural resilience underscores the instrument's dual role as both a vessel of expression and a means of cultural protection, sustaining Yi identity across generations (Yao et al., 2024).



The instrument's resurgence from the 1970s onward—and especially during the cultural renaissance of the 1990s and 2000s—has transformed it into a platform for innovation and education. Pioneering artists and researchers have introduced modern adaptations, including multi-reed designs, notation systems, and dialect-based instruction methods. These innovations have facilitated the integration of Yi jaw harp music into wider musical landscapes, such as contemporary world music and electronic genres (Liu et al., 2018). Simultaneously, the dialectal diversity of Yi speech—reflected in Adu, Shiza, Suodi, and Yinuo dialects—directly influences the tonal, rhythmic, and expressive structure of jaw harp compositions. This linguistic-musical interface has produced region-specific performance styles and articulation patterns, making dialectal sensitivity essential in both musical training and linguistic preservation (Pu et al., 2023; Bozkaya et al., 2012).

From a pedagogical perspective, the Yi jaw harp is uniquely positioned for educational enrichment across formal and informal learning settings. Its compact structure, bodily engagement, and improvisational nature make it ideal for integrative education that bridges music, language, cultural studies, and even cognitive development (An et al., 2025). Instruction in the jaw harp includes dialect-specific melodies, rhythm systems, breath control, oral resonance techniques, and traditional storytelling—all contributing to a culturally responsive curriculum. Methods such as oral transmission, imitation, and gesture-based guidance have been successfully integrated into structured learning environments, preserving both cultural authenticity and academic rigor (Lau, 2007; Horlor, 2019; Göğüş et al., 2012). The Yi jaw harp thus serves not only as an artifact of heritage but also as a living pedagogical tool that fosters cultural continuity, emotional expression, and artistic innovation.

In conclusion, the Yi jaw harp is more than a musical instrument—it is a vessel of cultural memory, linguistic expression, and communal identity. This study illustrates that its preservation requires not only documentation but a deep engagement with the lived experience of the Yi people. Through a unique combination of dialectal analysis, instrument classification, and pedagogical integration, this research contributes a multidimensional model for heritage conservation that centers both tradition and innovation. By linking the tonal structures of the Yi language to melodic construction, the study demonstrates how the jaw harp functions as a speech-like musical system. The classification of jaw harp types—across bamboo and copper materials—not only reveals technical diversity but also shows how different Yi subgroups express identity through instrumental design and performance. Most significantly, the development of rhythm-based, dialect-specific educational strategies offers a framework for transmission that aligns with both local oral traditions and modern curriculum design. If embedded into community education, village-level instruction, and institutional ethnomusicology programs, this integrated approach ensures that the Yi jaw harp will not merely survive but evolve—serving as a living emblem of cultural resilience in the 21st century.

### REFERENCES

- Akpabio, E. (2023). Instrumental Communication. In *Indigenous Communication: A Global Perspective* (pp. 31-55). Cham: Springer International Publishing.
- An, N., Chuangprakhon, S., Seekhunlio, W., & Liu, Q. (2025). Guqin Transmission in the Digital Age: A Posthumanist Perspective on Music Education. *Journal of Posthumanism*, 5(2), 771-783. https://doi.org/10.63332/joph.v5i2.453
- Bozkaya, M., Aydin, I. E., & Kumtepe, E. G. (2012). Research Trends and Issues in Educational Technology: A Content Analysis of TOJET (2008-2011). *Turkish Online Journal of Educational Technology-TOJET*, 11(2), 264-277.
- CAO, H., & XU, J. (2023). Constructed Love: On the Narrowed Expressive Function of Kouxian of People of Minority Ethnic Groups of Southwest China;-Taking the Tibetan, the Qiang and the Yi Peoples as Examples. *Journal of Chuxiong Normal University*, 38(2), 80.
- Chang, J., Seekhunlio, W., Chuangprakhon, S., Chen, Q., Santaveesuk, P., & Maphet, T. (2024). Reviewing the current status of the preservation of Gannan Tea Picking opera. *Multidisciplinary Reviews*, 7(9), 2024184. https://doi.org/10.31893/multirev.2024184
- Chang, P. (2007). Bright Sheng's music: An expression of cross-cultural experience—illustrated through the motivic, contrapuntal and tonal treatment of the Chinese folk song *The Stream Flows. Contemporary Music Review*, 26(5–6), 619–633. https://doi.org/10.1080/07494460701653044
- Chen, H., & Sensai, P. (2024). Education and Literacy in the Development and Transmission of Chinese Yao Nationality Folk Songs. *International Journal of Education and Literacy Studies*, 12(1), 213-220. https://doi.org/10.7575/aiac.ijels.v.12n.1p.213
- Chen, Q., & Seekhunlio, W. (2024). PHILOSOPHICAL AND RELIGIOUS DIMENSIONS OF LUSHENG MUSICAL INSTRUMENTS IN THE QIANDONGNAN MIAO AND DONG AUTONOMOUS PREFECTURE. *European Journal for Philosophy of Religion*, *16*(3), 426-444. https://doi.org/10.24204/ejpr.2024.4497



- Cottrell, S. (2010). Ethnomusicology and the Music Industries: An Overview. *Ethnomusicology Forum*, 19(1), 3–25. https://doi.org/10.1080/17411912.2010.489279
- Fiveash, A., Bedoin, N., Gordon, R. L., & Tillmann, B. (2021). Processing rhythm in speech and music: Shared mechanisms and implications for developmental speech and language disorders. *Neuropsychology*, *35*(8), 771.
- Gogus, A., Nistor, N., Riley, R. W., & Lerche, T. (2012). Educational technology acceptance across cultures: A validation of the Unified Theory of Acceptance And Use of Technology in the context of Turkish national culture. *Turkish Online Journal of Educational Technology-TOJET*, 11(4), 394-408.
- Gong, X., Chonpairot, J., & Seekhunlio, W. (2024). Preservation of Shiping Folk Songs in Weiyuan County, China. *International Journal of Education and Literacy Studies*, 12(1), 238-244. https://doi.org/10.7575/aiac.ijels.v.12n.1p.238
- Horlor, S. (2019). Popular Song Afterlives: Oral Transmission and Mundane Creativity in Street Performances of Chinese Pop Classics. Journal of World Popular Music, 6(1), 10-31. https://doi.org/10.1558/jwpm.34195
- Lam, J. (2008). Chinese music and its globalized past and present. Macalester International, 21(1), 9.
- Lau, W. T. (2007). Teaching Chinese folk songs with an authentic approach. *Music Educators Journal*, 94(2), 22-27. https://doi.org/10.1177/002743210709400206
- Li, J., & Woramitmaitree, N. (2023). Shanxi Daoqing opera music analysis as a resource for teaching Chinese opera music history. *International Online Journal of Education & Teaching*, 10(3). 2057
- Li, J., & Zhang, L. (2024). Exploring the application of artificial intelligence in Qiang culture heritage and museum design. *Journal of Humanities, Arts and Social Science, 8*(7), 1733-1737. https://doi.org/10.26855/jhass.2024.07.034
- Lin, L., & Gui, Y. (2024). Traditional culture of settlements associated with the natural environment: the case of Yi minority Southwest China. *Journal of Asian Architecture and Building Engineering*, 24(4), 2411–2429. https://doi.org/10.1080/13467581.2024.2373822
- Liu, Q., Li, G., Kong, D., Huang, B., & Wang, Y. (2018). Climate, disasters, wars and the collapse of the Ming Dynasty. *Environmental Earth Sciences*, 77, 1-15.
- Liu, R., Chuangprakhon, S., & Chen, X. (2025). Literacy Preservation of Baxian Chinese Folk Traditional Music. *International Journal of Education and Literacy Studies*, 13(1), 25-31.
- Liu, S., & Chuangprakhon, S. (2024). Reviewing the current situation of Huadengxi Chinese folk songs in Yunnan Province. *Multidisciplinary Reviews*, 7(5), 2024109. https://doi.org/10.31893/multirev.2024109
- Long, S., Ang, M. F., & Mohd, N. N. (2024). Narrative review on the development and challenges of pipa education in China. *Multidisciplinary Reviews*, 8(1), 2025001. https://doi.org/10.31893/multirev.2025001
- Meng, X. (2022). Analysis of artistic characteristics and inheritance protection of Dongbei Dagu [Master's thesis], Liaoning Normal University.
- Mu, Y. (2003). Ethnomusicology With Chinese Characteristics?—A Critical Commentary. *Yearbook for Traditional Music*, *35*, 1–38. doi:10.2307/4149320
- Nikolsky, A. (2020). "Talking Jew's Harp" and its relation to vowel harmony as a paradigm of formative influence of music on language. In N. Masataka (Ed.), *The origins of language revisited* (pp. 89-104). Springer. https://doi.org/10.1007/978-981-15-4250-3\_8
- Pu, M., Musib, A. F., & Ching, C. C. S. (2023). The modern heritage of Chinese traditional culture in the perspective of intangible cultural heritage preservation: A case study of Henan Zhuizi. *International Journal of Academic Research in Progressive Education and Development*, 12(2), 1082-1096.
- Qiuxiao, L. (2022). Presentation of Noise Elements of Chinese Plucked String Instruments in Electronic Music. *Organised Sound*, 27(3), 316–324. doi:10.1017/S1355771822000528
- Santaella, M. A. (2022). Kulintang Kultura: Danongan Kalanduyan and Gong Music of the Philippine Diaspora. *Ethnomusicology*, 66(3), 542-545.
- Shen, L., & Xianyi, S. (2022). The Creation of New Tunes for Ci-Poetry in the Qing Dynasty and Their Dual Forms of Music and Text. *Theoretical Studies in Literature and Art*, 42(3), 197-208.
- Tisch, M., Ranz, F., Abele, E., Metternich, J., & Hummel, V. (2015). Learning factory morphology–study of form and structure of an innovative learning approach in the manufacturing domain. *Turkish online journal of educational technology*, 14(Special Issue 2), 356-363.
- Wang, D. (2014). Study on family rules in the Ming and Qing dynasties. *Open Journal of Social Sciences*, 2(11), 132.
- Wang, H. (2018). Exploration and Innovation, the Chinese Model of the Musicacoustica-Beijing Festival. *Contemporary Music Review*, *37*(1–2), 147–160. https://doi.org/10.1080/07494467.2018.1453348
- Wang, Q. (2022). Ethnomusicology and Music Anthropology in the Field. Masterpieces, 6(26), 158-160.



- Whitridge, P. (2015). The sound of contact: Historic Inuit music-making in northern Labrador. *N. Atlantic Archaeol*, 4, 17-42.
- Wong, J. Y. (2020). Chinese musical culture in the global context-modernization and internationalization of traditional Chinese music in twenty-first century. Chinese culture in the 21st century and its global dimensions: Comparative and interdisciplinary perspectives, 105-122. https://doi.org/10.1007/978-981-15-2743-2
- Yao, Z., Li, R., & Hartanto, Y. (2024). Chinese Folk Songs Can Facilitate Chinese Language Learning—A Pilot Study. *Journal of Psycholinguistic Research*, *53*(6), 72. https://doi.org/10.1007/s10936-024-10109-1
- Yu, L., & Choatchamrat, S. (2024). Historical Development of Education and Learning in the Transmission of Miao Nationality Music in Yunnan Province, China. *Journal of Education and Learning*, 13(3).
- Zhang, J., Nicolas, A., & Karin, K. (2022). Examining Cultural Production and the Development of Zhuang Cultural Performances in Guangxi Province, China. *The International Journal of Critical Cultural Studies*, 20(1), 13. https://doi.org/10.18848/2327-0055/CGP/v20i01/13-25
- Zi, W. (2020, March). Practice of Knowledge: Overview of the First Advanced Workshop on the Archaeology of Chinese Music. In 4th International Conference on Culture, Education and Economic Development of Modern Society (ICCESE 2020) (pp. 349-353). Atlantis Press. https://doi.org/10.2991/assehr.k.200316.078