

## The Memory and Reconstruction of Sound: The Recording Practice of Audio Archives of Tujia Sheba Festival Ritual Music and the Attempt of "Technology and Art" Dual Track System Archives

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**Citation:** Xueyang, Z. and Tajuddin, T. I. B. (2025). The Memory and Reconstruction of Sound: The Recording Practice of Audio Archives of Tujia Sheba Festival Ritual Music and the Attempt of "Technology and Art" Dual Track System Archives, *Journal of Cultural Analysis and Social Change*, 10(2), 2588-2604. <https://doi.org/10.1064753/jcasc.v10i2.1981>

**Published:** November 17, 2025

### ABSTRACT

This paper presents the creation and analysis of a high-fidelity audio archive documenting the complete ritual music of the Tujia Sheba Festival, recorded in March 2024 in Guzhang County, China. Facing the critical challenge of cultural erosion and the advanced age of key inheritors, this project constitutes an urgent act of salvage ethnomusicology. The study's primary subject is 90-year-old national inheritor Xiang Hanguang, the sole individual capable of performing the full suite of chants in the Tujia language. The recording was conducted in a professional studio using 24-bit/192kHz resolution, adhering to international archival standards (IASA-TC03). A key methodological approach was the production of two distinct versions from the same source: a pristine, unprocessed archival master for research, and a second version with 1.5 seconds of added reverberation to simulate the acoustic environment of the actual ritual ground, intended for practical use during community celebrations. The paper argues that this dual-output strategy successfully navigates the core tension in audio archiving between objective preservation and contextualized application. It demonstrates how the studio environment can yield a "reference-grade" document while technically managed enhancements can serve living cultural practices. This project provides an invaluable, authoritative resource for the study of Tujia language and ritual music, establishing a "techno-artistic" model for safeguarding the intangible cultural heritage of non-literate communities.

**Keywords:** Tujia Ethnic Music, Audio Archives, Intangible Cultural Heritage Inheritance, Recording Technology, Sheba Festival

### INTRODUCTION

#### Research Background

##### *Definition of Audio Archive and its Development Status in China*

Audio is the preservation of sound through recording technology, which provides an objective carrier for ethnomusicology research and compensates for the limitations of traditional notation and textual descriptions. Audio archives are regarded as interdisciplinary research objects in ethnomusicology, archival science, and cultural heritage conservation. The core value of audio archives is to preserve endangered traditional music and provide primary materials for academic research, such as the "rescue recording" function emphasised by scholars like Tao Yuan and Xiao Mei. According to Xiao Mei's "Ontology of Audio Archives", which published in *HUANGZHONG* (Journal of Wuhan Conservatory of Music) in 2022, the author found that audio archives are

not only static "historical relics", but also dynamic "objects in waiting" - their value is activated through interpretation, reproduction, and reuse by future generations. For example, Laufer's Collection (1901-1902): researchers revealed the superb skill of folk music in the late Qing Dynasty through replay, music analysis and instrument restoration. They showed the value of "Historically Informed Performance" (HIP) of archives. Additionally, the audio recording of blind A Bing (瞎子阿炳)'s "Er Quan Ying Yue" (*Moon Reflected on Second Spring*-二泉映月) and Yang Yinliu's rescue recording have become classics after dissemination, highlighting the dynamic role of archives in cultural inheritance. Psychologist Carl Stumpf overcame the difficulties of notating non-Western music through recording technology and realised the profound influence of culture on hearing.

### **Multiple Values of Audio Archives**

**Academic Research:** Through audio archives, we can analyse the musical forms and cultural changes present in various music recordings.

**Cultural Revival:** Communities can reclaim their traditions through recordings (such as the "return" project of Hawaiian ballads).

**Educational Dissemination:** providing resources for teaching and creation (e.g., publication of *A Bing's Music Collection*).

### **Research Status of the Tujia Sheba Festival Ceremony in China**

According to Xiong Wei (2014), the Tujia people are an ancient ethnic group with a history spanning over 2,000 years. Currently, their population in China stands at 9.58 million, with the majority residing in the border regions of Hunan, Hubei, Chongqing, and Guizhou provinces. This area, characterised by interlacing mountains and rivers, a humid climate, and abundant rainfall, has nurtured the Tujia people for millennia, shaping their unique and vibrant culture. Among their cultural traditions, the Sheba Festival (舍巴节) holds significant importance.

As noted by Wang Qing (2019), the Sheba Festival is also referred to as the Hand-Waving Festival (摆手节). The term "Sheba" (舍巴) originates from the Tujia language, meaning "hand-waving", while "ri" (日) functions as a verb, denoting "to perform" or "to hold". The Sheba Festival is a ritual ceremony passed down through generations by the Tujia people, and it stands as one of their grandest traditional festivals. It carries the weight of ethnic history, mythological legends, and collective memory, transmitting Tujia intangible cultural heritage—such as language, attire, music, and dance—through performances, worship, and other forms.

In traditional Tujia belief, ancestor worship is a core tenet. The Sheba Festival venerates deities including: The Eight Great Kings (八部大王, Bā Bù Dàwáng), ancestral gods or local guardian spirits; Duke Peng the Lord (彭公爵主, Péng Gōng Juézhǔ), a revered historical figure deified in Tujia religion. The festival blends elements of Tujia indigenous beliefs (e.g., nature worship, ancestor veneration) with Taoist and Buddhist influences, serving as a communal prayer for favourable weather and agricultural abundance. Typically, organised by villages or clans, the event brings together all generations, strengthening intergenerational bonds and reinforcing traditional social structures. It fosters community identity and kinship solidarity, epitomising the Tujia "collective presence" ideal.

**Timing of the Festival:** Held annually in Tianjiadong, Guzhang County, the Sheba Festival takes place on the fifth Wù day (戊日) after the Spring Equinox (立春). This date aligns with the Tujia lunar calendar, ensuring ancestral blessings for prosperity and population growth in the coming year.

### **Current Status of Audio Archives about Tujia Sheba Festival**

Regarding the audio archives and research of Tujia music, Chinese academic institutions, cultural departments, and civil organisations have undertaken some initiatives. However, there still exist issues of scattered data and unsystematic research overall. The following provides a detailed overview:

#### **Official Collections**

**Music Research Institute of Chinese National Academy of Arts:** This institution houses vintage records and tapes of Tujia folk songs and instrumental music, such as "Dongdongkui" (咚咚喹) and "Daliuzi" (打溜子), recorded in the 1950s-60s. It also includes some audio materials from *the Anthology of Tujia Folk Songs*. However, digitisation is limited, and public access remains restricted.

**Local Cultural Centres/ICH Preservation Centres:** Institutions in Enshi (Hubei) and Xiangxi (Hunan) possess field recordings of recent Sheba Festivals and funeral rituals (e.g., "Sayirhe" -撒叶儿嘞), though most are archived as internal documents and not fully publicly accessible.

#### **Collections by Academic Teams**

**College of Music, Central University for Nationalities:** Since 2010, has conducted high-definition recordings and spectrographic analyses of Tujia "Hand-Waving Songs" (摆手歌) from western Hunan, with findings published in works like *Studies on Polyphonic Folk Songs of China's Ethnic Minorities*.

**Wuhan Conservatory of Music:** Established the *Yangtze River Traditional Music Culture Database*, which includes audio samples of Tujia "Weeping Wedding Songs" (哭嫁歌) from western Hubei, partially accessible online (e.g., via the conservatory's resource library).

### **Civil and Commercial Records**

**Independent Musician Projects:** Composer Tan Dun incorporated elements of Tujia "Daliuzi" into his album *The Map* after fieldwork in western Hunan, though the original recordings remain unpublished.

### **Commercial Recordings in Tourist Areas**

Tujia music CDs sold in Zhangjiajie and Enshi scenic spots are largely rearranged versions with limited ethnomusical value.

### **Typical Cases**

**Field Recordings of Tujia Daliuzi** (Hunan Audio and Video Publishing House, 2005) features traditional repertoires from Longshan County, western Hunan. It represents one of the most complete publicly available audio resources, though it lacks scholarly annotations.

**Tujia Language Folk Song Database** (Hubei Minzu University): This database contains over 300 folk songs with audio and transcribed texts. It is primarily focused on linguistic preservation rather than musical analysis.

### **Research Questions**

#### **The Problems with Audio Archives of Tujia Music**

The Tujia people have a spoken language but no writing system. Audio archives can effectively preserve the sounds of Tujia music and language through recording technology, compensating for the limitations of notation systems and textual descriptions. These archives provide objective materials for ethnomusicological research, safeguard endangered traditions, and offer primary data for academic study. However, through the compilation of data and literature, the author identifies several existing issues in the study of Tujia audio archives:

**Limited Accessibility:** Most original recordings remain inaccessible to the public or researchers, and their copyright ownership is unclear.

**Fragmented Research:** Acoustic analysis is often disconnected from anthropological and linguistic approaches and lacks interdisciplinary integration.

**Technical lag:** Less use of advanced international audio archives management standards (such as IASA Technical guidelines).

**Intergenerational Discrepancies:** The original recording quality of the old artists is poor, the style of the new generation singers is variable, and the comparative study is difficult.

**Incomplete Documentation:** A complete set of high-quality audio archive recordings of Tujia Sheba Festival ceremony music is not yet available.

**Imbalanced Focus:** The existing studies of Tujia music mainly focus on describing dance or ceremony and lack discussion of the balance between technical standards of audio archives and cultural authenticity.

#### **The Inheritance of Tujia Music is Facing Numerous Challenges at Present**

##### **Disconnection in Succession and Ageing Practitioners**

**Youth Migration:** With the acceleration of urbanisation, a significant number of Tujia youth migrate for work or education, leading to a shrinking group of local cultural inheritors and posing a dilemma of "no one to pass on" traditional musical skills.

**Ageing Masters:** Elderly practitioners proficient in ancient ballads and instruments (e.g., *Daliuzi* [打溜子], *Dongdongkui* [咚咚喹]) lack systematic documentation, risking "extinction with the artist".

##### **Modern Cultural Impacts and Shifting Aesthetics**

**Diversified Entertainment:** Younger generations prefer pop music and short videos, showing limited interest in traditional forms.

**Eroding Ritual Functions:** Originally tied to agrarian, sacrificial, and life-cycle contexts (e.g., *Sayirbe* (撒叶儿嘑) funeral dances), Tujia music's social role diminishes in modern settings.

### ***Inadequate Systematic Preservation and Innovation***

**Spotty Documentation:** Many orally transmitted tracks and vocal styles lack music notation or digital preservation, putting some skills on the brink of being lost.

**Innovation Dilemmas:** Experiments with modern fusion (e.g., electronic music, theatre) remain exploratory, and some attempts may compromise authenticity.

### ***Economic Support and Dissemination Limitations***

**Commercialisation Poses Significant Challenges:** The Tujia music market is too limited in scope, making it difficult to achieve economic sustainability through performances or products, and ensuring the livelihood of inheritors is challenging.

**Limited Dissemination Channels:** Reliance on local festivals (e.g., Sheba Festival) or tourist displays limits exposure, and it lacks robust digital dissemination (e.g., streaming platforms, short videos).

### ***Gaps in Education Systems***

**Marginalised School Curricula:** Schools in ethnic areas primarily focus on mainstream cultural courses, and Tujia music is not included in regular music education.

**Declining Community Transmission:** Due to population mobility, the traditional "master-apprentice" model within clans/villages is becoming unsustainable.

### ***Summary***

Therefore, given the current challenges of ageing practitioners and the risk of "extinction with the artist" (ren wang yi jue) in Tujia musical traditions, compounded by inadequate documentation that has left many orally transmitted repertoires unrecorded and on the verge of disappearance. The future of Tujia audio archives demands breakthroughs in three areas: urgent data rescue, academic collaboration, and technological advancement. It is critical to prevent this precious sound heritage from falling into the dilemma of "not having good sound archives" in the digital age.

Moving forward, it is imperative to:

Systematically organise and produce high-fidelity audio archives to preserve Tujia musical arts;

Strike a balance between living transmission and innovative adaptations.

### ***Research Process***

#### ***Preparation before Recording***

On March 25, 2024, the author was honoured to receive an invitation to participate in the ceremony of the Tujia Sheba Festival in Tianjiadong, Guzhang County, Hunan Province, and participated in the whole music playing. Before the Sheba Festival, the author participated in the audio archives recording of the entire Sheba Festival ceremony on March 22. One day before the audio recording on March 22, he author got to know Ms. Shu Yintchun, director of the intangible Cultural Heritage of Guzhang County, the chief planner of the event. Mr. Xiang Hanguang, the national representative inheritor of Tujia folk songs (second from the right in Figure 1). Mr. Tian Zhixin, the representative inheritor of the Tujia hand waving dance in Hunan Province (first from the left in Figure 1). The recording location was chosen to be in the recording studio of Chen Jian, a music teacher at Guzhang No.1 Middle School and Secretary General of Guzhang County Musicians Association (first from the right in Figure 1).



**Figure 1.** The Author Met with Tujia Inheritors and Artists in Guzhang County

The author learned that Mr. Xiang Hanguang is now 90 years old and is one of the most senior representative inheritors in Guzhang County, who is proficient in performing Tujia folk songs in the **Tujia language**, including "Watuluogu" (挖土锣鼓歌, *earth-digging percussion songs*), "Hand-Waving Songs" (摆手歌), and "Tima Sacred Chants" (梯玛神歌). From childhood, Teacher Xiang was immersed in the rich traditional arts of the Tujia people. He learned by osmosis—studying with folk singers, *Tima* (梯玛, Tujia ritual specialists), and elders to master Tujia-language mountain songs. After 1968, he joined the workforce and was engaged in the protection, excavation and sorting of ethnic folk cultural heritage. For decades, he visited a lot of villages in Guzhang County. Since Mr. Xiang can speak Tujia language, he has accumulated rich knowledge of ethnic folk culture over the decades of cultural work, and has rich experience in cultural work. He has become one of the most senior representative inheritors in Guzhang County.

Mr. Xiang Hanguang and Mr. Tian Zhixin told the author the genesis and historical background of Tujia's Sheba Festival ceremony. The author learned that different regions of the Sheba Festival ritual activities in the worship of ancestors and gods have different; there are sacrifices to the Eight Great Kings, there are sacrifices to Duke Peng the Lord, *Elder Xiang* (向老官人), or *Tian the Hero* (田好汉), and so on. However, the most characteristic of the Sheba ceremony in Tianjiadong is the sacrifice to the *Seven Great Generals* (七大将军). Through Wang Qing (2019), the author learned that in the Sheba Festival activity of Tianjiadong, the Seven Great Generals of sacrifice refer to *Iron-Clad Han* (铁打汉), *Thousand-Mile Eye* (千里眼), *Wind-Catching Ear* (顺风耳), *Water-Diving Dragon* (水里钻), *Mountain-Leaping Tiger* (飞山虎), *The Unkillable* (打不死), *The Fireproof* (烧不烂). They were called generals because foreign enemies invaded heavily in the late Tang Dynasty, causing unbearable suffering to the people. At the critical moment of national survival, these seven heroes and brave men led their troops to the front line. They bravely fought against the enemy, making indelible contributions to protecting their families and defending their country. Their achievements and virtues are deeply loved by the people, so people raised funds to build the "Hall of Merit" (功德堂) to commemorate them. However, due to being falsely accused of rebellion, Iron-Clad Han was wrongfully killed, while the other six were waiting to be executed. From then on, the Tujia ethnic group held the Sheba Festival yearly to commemorate these seven Tujia generals who served the country. On the day of the Sheba Festival ceremony, everyone in the village pays tribute to the *She Bodhisattva* (舍菩萨) and holds a grand sacrificial event. Villagers dress up in their own costumes to have the Sheba Festival, also called "*Shebaba*" (舍巴巴) in the local area. The scene of the event is vivacious.

Mr. Xiang also emphasised that Tujia folk songs possess a profound national cultural and artistic significance, representing an invaluable heritage of the nation's folk culture and art. Yet today, Tujia-language folk songs teeter on the brink of extinction. In order to salvage and safeguard this precious music, the county's Intangible Cultural Heritage (ICH) Centre has planned to record a complete set of Sheba Festival audio archives. So these precious intangible cultural heritages will be passed down. It is also convenient for future generations to inherit and learn Tujia folk songs and culture.

### **Audio Recording on March 22-23**

The recording session was held in Mr. Chen Jian's private recording studio, who is a music teacher at Guzhang No. 1 Middle School. The approximately 10-square-meter studio with a 3-meter ceiling was treated with strong acoustic-absorbing porous materials, yielding a reverberation time of around 0.6 seconds. The equipment the author used:

Sound card: **YAMAHA UR816C**

Sampling rate: **24-bit/192kHz**

DAW: Licensed **STEINBERG CUBASE 10**

The author operated the recording equipment during the two-day session (March 22-23, 2024).

The author learned that Mr. Xiang Hanguang is now 90 years old and is one of the most senior representative inheritors in Guzhang County. Mr. Xiang performed the ritual songs solely through chanting and recitation. All pieces are chanting in Tujia language. The ceremony comprises three phases:

- Inviting the Deities (请神)
- Worshipping the Deities (敬神)
- Sending Off the Deities (送神)
- The ten ritual pieces recorded include:
- Invocation of Deities(召唤神灵)
- Ancestral Worship at the Pine Gate (祭祖下松门)
- Entering the Sheba Hall (进社堂)
- Purification (净身)
- Tima Chants (梯玛歌)
- Broom Dance (扫把舞)
- Three Pig-Sacrifice Tune(杀猪调)
- Deities-Sending Tune (送神调)

Mr. Xiang performed while shaking ritual bells, their rhythms serving as "divine communication signals" (analogous to the frequency-guiding function of shamanic drums). All the ritual pieces have no melody, but are chanted in the Tujia language with a sense of rhythm (similar to rap). During the chanting, most segments of the songs adhere to a 2/4 beat rhythm, with distinct strong-weak beats. Some songs even incorporate gong and drum beats to complement the chanting and singing (for this particular time, we only recorded the solo performance by Teacher Xiang without the accompanying drum beats). Additionally, certain paragraphs and phrases feature a free rhythm. Mr. Xiang must sing and shake a bell in his hand, singing and ringing simultaneously. Therefore, the author believes that a single microphone cannot capture the spatial sense of the bell adequately, and ultimately uses three condenser microphones for three-point array recording. They are:

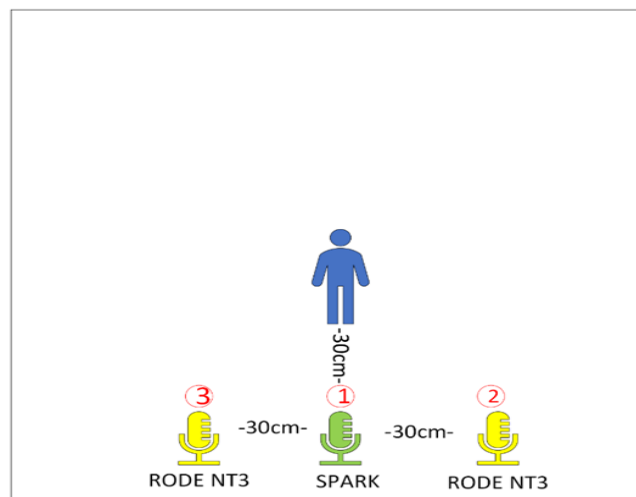
Two RODE NT3 cardioid condenser mics

One SPARK cardioid condenser mic

All positioned 1 meter above ground, with the central mic 30 cm from Mr. Xiang. The whole recording session lasted approximately two hours. The location is shown in the Figure. The entire recording of ten ritual songs lasted approximately two hours.



**Figure 2.** The Author and Xiang Hanguang are Reviewing the Recorded Audio



**Figure 3.** The Picking-Up Location for Xiang Hanguang's Recording

"Invocation of Deities" is the opening piece of the Sheba Festival's three-phase ritual sequence (Inviting-Worshipping-Sending Off the Deities). It summons ancestral spirits or local guardian deities (such as Tianjiadong's Seven Great Generals) to the altar, carrying profound religious sanctity. The commencement of this chant marks the official start of the core ceremony-Zheng She (正舍).

The sacrificial procession, led by the village chief and Tima, will proceed to the Pine Gate (松门) to pay homage to the ancestors. Tima will perform the song "Ancestral Worship at the Pine Gate" during this ceremony. The Pine Gate symbolises the boundary of the ancestors' dwelling place, and the lyrics often touch upon the family lineage and migration history. This song follows a regular rhythm of 2/4 beats, accompanied by drum beats (such as "XX XX"), representing the marching steps. The lead singer (Tima) and the villagers alternate in singing, embodying the "coexistence of humans and gods". After paying respects to the ancestors at the Pine Gate, the sacrificial team, guided by Tima, moves on to the Shechangping ceremonial ground. (During the Sheba Festival on March 25, 2024, the on-site team played the drums in synchronisation with Mr. Xiang Hanguang's recorded songs.)



**Figure 4.** The Sheba Festival Procession Walks towards the Pine Gate (Song Men) t



**Figure 5.** Wizards in the Sheba Festival Parade



**Figure 6.** The Tima Ancestral Worship at the Pine Gate

"Entering the Sheba Hall" and "Purification" are part of the "Inviting the Deities" ceremony. The function of the song "Entering the Sheba Hall" is to guide the deities into Sheba Hall (the core area of the altar). The Tima of ceremonies recites invocations, presents offerings to the She Bodhisattva, sets off firecrackers, burns incense paper, and offers wine, proclaiming: "Hail! Your descendants have come to worship. May you bless us with peace and safety." After further invocations, the Tima begins "casting the divination blocks" (打筊, dǎ jiào). The ritual is only successful when a "favourable omen" (顺筊, shùn jiào) is achieved, signifying the deities' presence. The Sheba Hall is a sacred space, and the music embodies the transition from the secular to the holy. The atmosphere is solemn.

The function of "Purification" is to purify the participants and the altar during the ceremony. Musical Features: Short, repetitive phrases looped throughout, synchronised with water-sprinkling and sweeping gestures. Music and body movements construct a "*purification soundscape*" (similar to the Taoist altar-cleansing rites).



**Figure 8.** The Tima LED the Crowd into the Sheba Hall.



**Figure 9.** "Purification" Ceremony

After the "Inviting the Deities" ceremony, there is a ceremony of "Worshipping the Deities". After Tima obtained a favourable divination result (顺筮, shùn jiào), the congregation, led by the chief officiant, began prostrating and offering incense. Tima then sings the "Tima Chants" while leading the *Eight-Treasure Bell Dance* (八宝铜铃舞). According to Wang Qing (2015), "Tima Chants" serves as the core chant for Tima to commune with the gods, incorporating mythological narratives. The lyrics cover creation myths (such as "the Great Flood") and national heroic epics (such as "the Seven Great Generals"). Its musical characteristics are narrative melodies, featuring long lyrics in the Tujia language with tones fluctuating according to the content, such as a sudden pitch rise during war passages. It has a free rhythm structure of "loose-slow-moderate-fast-loose". Accompanied by *eight-treasure bells* (八宝铜铃) and a *ceremonial knife* (sidao 司刀). *Eight-Treasure Bell Dance* is a dance performed by Tima during ancestor worship or the worship of the Eight Great Kings. This dance movement carries a strong religious flavour, including kneeling, bowing, and worshipping the gods. Tima spins and dances, with colourful eight-panel loincloths spread out, resembling a peacock spreading its tail.



**Figure 10.** Worshipping the Deities Ceremony

According to Wang Qing (2019), the function of the music "Broom Dance" is to drive away evil and welcome auspiciousness. It is a unique ritual in Tianjiadong, Guzhang County, and is not found in other Tujia ethnic areas. On March 25th, during the Sheba Festival, Mr. Xiang Hanguang's recorded chants and recitation of scriptures were accompanied by a live performance of large gongs and drums beating in sync with the chanting rhythm. The drum beat rhythm of "Dong-Ca | Dong-Ca" (typical 2/4 beat structure) was used, with distinct rhythms and clear alternating beats, which highly matched the dance movements of the "sweeping, stepping, squatting, jumping" steps in the "Broom Dance". The strong beat corresponded to the sound of the broom touching the ground. The "Broom Dance" is a unique sacrificial dance of the Tujia ethnic group, with profound cultural significance. The broom in the "Broom Dance" is a ritual implement, and the movements metaphorically represent "sweeping away grievances" (echoing the legend of the Seven Great Generals). The movements are simple: holding the broom with both hands, stepping out with the left foot, sweeping to the right side of the body; vice versa, while sweeping, singing: "*Kang Ze Ke Se, He Wei*", which means: sweeping away dirt, our heroes will return, our village will be safe. The entire dance repeats this phrase, which is said to call back the souls of the Seven Great Generals and summon their heroes. The broom in the dance symbolises sweeping away unclean things and bringing peace and auspiciousness, expressing the Tujia people's prayers for disaster relief and evil exorcism. Both the movements and lyrics of the "Broom Dance" carry strong religious overtones, reflecting the Tujia people's reverence for ancestors and their yearning for a better life.



**Figure 11:** Broom Dance Performance

"Pig-Sacrifice Tune": This marks the sacrificial phase. According to Wang Qing (2015), two strong men tied up a pig and carried it to the Shechangping ground. The chief priest excitedly shouted, "Punish the treacherous minister!" In Tianjiadong, the pig is metaphorically seen as a traitor who framed the Seven Generals. Participants rushed forward and kicked it. At this time, the song "Pig-Sacrifice Tune" would be played, featuring intense emotions: high-pitched tones with syncopated rhythms. The participants would drag the half-dead pig to the statue of the Iron-Clad Han to offer apologies. The violent nature of the music reflects the collective memory of "avenging ancestors".

At the last is the song "Deities-Sending Tune" (《送神调》). Its function is to mark the end of the ceremony and ceremoniously return deities to their realm. The musical characteristics emerge: descending melodic lines, with the scale gradually lowering symbolising the deities' departure. The ritual instruments

gradually weaken: the rhythm of the bell slows down, eventually ending in sync with the drumbeat. The lyrics express gratitude and wishes (such as "bless the descendants with abundant harvests"). Following this, the Tima leads the "Broom Dance" team while chanting: "*Gangze! Gangze! Wowe! Sweep out evil spirits, sweep in peace and health!*" At this moment, firecrackers sound, gongs and drums resound, and the ox horn and earth horn are blown. The ceremony culminates with firecrackers, thunderous percussion, and blasts from buffalo-horn trumpets.

The sacrificial ceremony is divided into three stages: Inviting the Deities, Worshipping the Deities, and Sending Off the Deities. These three stages constitute the main content of the Sheba Festival Ritual, reflecting the Tujia people's reverence for ancestors and their yearning for a better life. The ancestral worship activities on the Sheba Festival show reverence and gratitude towards ancestors and are a vital way to inherit Tujia culture. Through these rituals and dances, the Tujia people not only express their respect for their ancestors but also inherit the historical culture and life wisdom of the Tujia people.

### Audio Mixing Production

As we all know, as a sound engineer, it is essential to ensure that the technical aspects of the work are up to standard, such as clear sound quality, high signal-to-noise ratio, absence of significant distortion, and complete content.

In the music recording mixing, the work should adhere to principles of balance and contrast, where all music parts coexist within a unified soundstage while maintaining distinctiveness. Moreover, audio engineers must have a considerable understanding of different styles of musical works, genres, and cultural and historical backgrounds to produce sound recordings that reflect the musical works' historical style and cultural characteristics and conform to the standards of recording technology. Therefore, when remixing a music recording, the sound engineer must "create in an orderly manner", for instance, by following various information of the musical work to add remixing effects.

But audio archives and music recordings are fundamentally different. Audio archives place greater emphasis on archival value, authenticity, and sometimes may not be "perfect". According to Ruan Chengjia's "Chinese Traditional Music Sound Archives" (2022), from the description and detailed catalogue of the documents listed in the application of the "Memory of the World" international project for the Chinese Traditional Music Audio Archives, it can be seen that each piece of information in this audio archive includes the title, genre, ethnicity, place of popularity, performance form, author, performer, source of the program, collection number, etc. By looking through the catalogue, one can basically understand the version and recording date of the music. In musicology, a recording not only needs to have sound but also text; it not only needs the voice of the interviewee but also the interviewee's name, age, gender, ethnicity, location, time, occasion, the instruments used and their combinations, and other related information. Only in this way can it be considered a recording in the academic sense. Because only by cross-referencing the sound and the text, and matching the front stage with the backstage, can researchers perceive the scene, and the recording in musicology will present a different picture. By providing the background, the text and the sound complement each other, as if allowing people to be present at the scene, making historical interpretation possible. The audio archives pursue objectivity, authenticity and completeness. They record the sound in its original context.

And music recording places more emphasis on artistry, sometimes even in order to achieve the most perfect repeated recording. But audio archives place more emphasis on originality and authenticity.

### Key Distinctions from Commercial Music Products

| Criteria                  | This Audio Archive                                                                                                                                                                                        | Commercial Music                                                                                                                                          |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Purpose                   | Preservation, research, and as evidence of cultural heritage                                                                                                                                              | Aesthetic appreciation, commercial distribution, artistic expression                                                                                      |
| Content                   | Complete ritual procedure with cultural context                                                                                                                                                           | Artistic adaptation, decontextualised                                                                                                                     |
| Recording standards       | Conform to IASA-TC03 (lossless format)                                                                                                                                                                    | Possible compression, sound quality loss                                                                                                                  |
| Rights Management         | Community-shared, restricted access                                                                                                                                                                       | Copyright held by producers                                                                                                                               |
| pursue                    | Objectivity, authenticity, and completeness. Record the sound as it is in its original context.                                                                                                           | Subjective aesthetic appeal, artistic impact, and emotional resonance. Create an idealized sound.                                                         |
| Technology and Processing | Minimize intervention. Use transparent, high-fidelity technology, aiming to accurately capture. Post-processing is limited to noise reduction and equalization to restore the original sound, rather than | Creative intervention. Extensive use of reverb, compression, equalization, multi-track editing, auto-tuning, etc., is aimed at beautifying and enhancing. |

|               |                                                                                                                                                                                   |                                                                                                                    |
|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
|               | altering it.                                                                                                                                                                      |                                                                                                                    |
| Core values   | Creative metadata. Detailed information about "who, what, when, where, why, and how" is more important than the sound itself. A recording without metadata is just homeless data. | Performers and works. Star soloists, composers and producers are at the core.                                      |
| Final product | A detailed information package is stored in an archive or database for scholars to study.                                                                                         | A record, a single, or a master tape enters the market for circulation and is available for the audience to enjoy. |

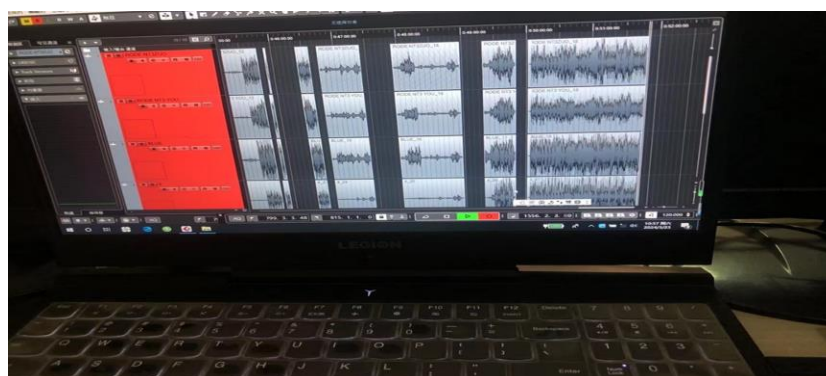
When Teacher Xiang sang, his voice was straightforward and his tone was strong and clear. The author slightly adjusted the vocal volume level in response to this natural chanting. Ultimately, two versions were produced. The first version was a pristine recording of the original vocals without any effects.

According to IASA-TC03 (2017), for digitisation of original analogue audio recordings, IASA recommends a minimum digital resolution of 48 kHz sampling rate at 24-bit word length, using linear pulse code modulation (LPCM) encoding. In heritage/memory institutions, a resolution of 96 kHz / 24-bit has become widely adopted. Better transfers of the unintended parts of a sound document now (see section 8) will make the future removal of these artefacts by digital signal processing easier when making access copies. Because of the transient character of consonants, speech recordings must be treated like music recordings. Because this set of audio archives was recorded using a 24-bit/192kHz sampling rate, the final output is a 48kHz, 24-bit audio WAV format, which is burned onto a CD and belongs to a lossless audio format. It meets the technical standards of IASA-TC03 for sound archives.

The second version added a slight 1.5-second reverberation to the vocals, making it easier to use in rituals or performances (the sound engineer would not need to add additional reverberation effects during playback). Apart from reverberation, no other effects were added. Since these audio archives will be played during the Sheba Festival ritual in the future, and the venue for the Tianjiadong Sheba Festival is always the open Shechangping ground. Shechangping ground covers an area half the size of a football field and is surrounded by stands. The second version with reverberation reflects the special sound field and perform effect in Shechangping ground. During ceremonies, sound reinforcement is often provided for the Tima and the sound engineer will add a certain amount of reverb to make the Tima's voice sound as if they were "conversing with the gods". Therefore, although the second version has added artificial reverb and incorporated the "mixing artistry" of the sound engineer, it accurately highlights the characteristics of the performance on the communal ground, allowing people to immediately associate it with the communal ground venue of the Sheba Festival performance. In fact, the second version should be defined as somewhere between an audio archive and a music recording.



**Figure 12.** Sending Off the Deities Ceremony.



**Figure 13.** CUBASE Mixing Project File.

In summary, this set of audio archives of the Tujia Sheba Festival ritual encompasses three stages: "Inviting the Deities," "Worshipping the Deities," and "Sending Off the Deities," recording a total of 10 pieces of ritual music.

The author has produced two versions of audio archives. One version is an "original sound music", recorded purely in the studio. It better reflects the preservation value of audio archives and retains the authentic voice recording of Teacher Xiang, a national-level intangible cultural heritage inheritor of the Tujia ethnic group. It is more convenient for data collection, preservation, and academic research. Through acoustic reconstruction, the other version restores the original environment of the sacrificial music and adds reverberation, making it more suitable for live performance playback and teaching purposes. It is more convenient for the application of audio archives. As sound engineers, when recording and mixing these works, we must not only grasp the fundamental technical indicators but also understand the music form, music characteristics, performance venue, historical background, cultural characteristics, and sound art characteristics of these music pieces. We also need to know the elements of remixing the original ecological ethnic music audio archives and the differences between it and the remixing of music recordings.

**Application of Audio Archives - For official performance and Live Playback during the Sheba Festival on March 25th.**



**Figure 14.** Scenery of Tianjiadong area in Guzhang County



**Figure 15.** The Author in Tianjiadong's Shechangping Ground

On March 25, 2024, the Sheba Festival was officially held in Tianjiadong, Guzhang County. Considering that Mr. Xiang Hanguang, who is 90 years old, may be too physically burdened to serve as the Tima of ceremonies for the Sheba Festival again, and that apart from Mr. Xiang Hanguang, there is no other person in

the county who is fully proficient in serving as the Tima of ceremonies and hosting all the tracks of the Sheba Festival ceremony, the county decided to use other masters of ceremonies to host the Sheba Festival this time, but to play Mr.Xiang Hanguang's audio on site (the audio archives recorded from March 22-24) and then have the other masters of ceremonies lip-sync to it. This also reflects the urgency and necessity of recording this set of audio archives. Apart from Mr.Xiang Hanguang, no one in the county is proficient in hosting and serving as the Tima of ceremonies for the Sheba Festival. Recording this set of audio archives will allow the audio to be played during the event and contribute to the inheritance and teaching of Tujia music. The author served as the music player and audio engineer for the entire Sheba Festival in Tianjiadong. This is also the first time the author has played music for a folk event.



**Figure 16.** Rainy Conditions During the Event



**Figure 17.** The Author Operating the Audio Playback System



**Figure 18.** " Hand-Waving Dance" Live Performance

Generally, performance music is played in a pre-arranged order. However, the sequence must be strictly adhered to for this Sheba Festival folk event, necessitating prior familiarity with the ritual procedures and audio tracks. The author was already acquainted with the order of the ten tracks, playback segments, and functional

characteristics during the recording. However, the playback timing had to be adaptable in real time. As a sound engineer, one must constantly monitor and understand where Tima is in the process, whether it's "Invocation of Deities" or "Ancestral Worship at the Pine Gate", and immediately play the audio for that segment. Trigger each audio segment with split-second timing—neither premature nor delayed. After several days of recording and consulting with experts on Tujia culture, the entire process was smoothly carried out, and the event was a complete success. The sound system received positive feedback from everyone, and we can consider it a satisfactory outcome. This set of audio archives achieved an essential application for the first time!

Despite heavy rain during the Sheba Festival, the Tujia people's enthusiasm for the festival could not be dampened. They celebrated through song, dance, and their sentiments towards the motherland and their hometown! Perhaps moved by the villagers' enthusiasm, the clouds finally parted, and the warm sun shone on the earth while the final music was being performed. Hundreds of people sang and danced, creating a surging and touching scene that fully demonstrated the Tujia people's deeply sentiments towards life and cultural resilience.



**Figure 19.** The Author Adjusting Audio Equipment

## RESEARCH ANALYSIS

### Can Audio Archives Be Recorded in Studios?

Through literature review, the author found that whether audio archives must be field-recorded or can be studio-produced depends on a comprehensive assessment of the files' purpose, academic standards, and cultural authenticity requirements. The following provides a detailed analysis:

#### *Core Value of Field Recordings*

**Cultural Authenticity:** Field recordings (e.g., improvisational performances by folk singers) preserve the music's native context—ambient sounds, audience interactions, and natural acoustics—capturing the integrity of the soundscape. This is foundational to ethnomusicological research. For instance, as Xiao Mei's studies highlight, early wax-cylinder recordings at the Berlin Sound Archive retained environmental details of performances, later serving as key evidence for reconstructing historical sound fields.

**Non-Intervention Recording:** Avoiding manual adjustments in the studio (e.g., noise reduction, multi-track editing) ensures the music's authenticity, which is particularly crucial for archives related to intangible cultural heritage preservation and academic research.

**Case Example:** The "Memory of the World" project by the Chinese National Academy of Arts includes Yang Yinliu's steel wire recording of A Bing's "Er Quan Ying Yue" (Moon Reflected on Second Spring) from the 1950s. The street-performance background noise in these recordings has become invaluable for analysing the stylistic nuances of folk musicians.

#### *Applicable Scenarios for Studio Recording*

**Artistic Preservation and Dissemination:** For archives intended for pedagogical, publishing, or public dissemination purposes (e.g., supplementary CDs for Anthology of Chinese Folk Songs), studio recording can enhance audio quality by removing ambient noise, thereby improving the listening experience. For instance, the China Conservatory of Music re-recorded Peking opera excerpts from vintage records in studios for classroom instruction.

**Salvaging Endangered Music:** When field conditions are impractical (e.g., elderly inheritors unable to travel), studio recordings efficiently preserve core musical content. An example is Wang Yusang's recording

restoration project of Shandong drum storytelling (Shandong dagu), where missing segments were re-recorded by inheritors in studios to complete fragmented archives.

**Technical Standardisation:** The controlled acoustic environment of studios (e.g., frequency-response calibration) is ideal for creating "reference-grade" archives, ensuring consistency for comparative research.

### ***Complementarity and Controversy Between the Two Approaches***

The choice between exclusive reliance on field recordings versus studio documentation remains a subject of scholarly debate in audio archiving circles.

**Opposition to Studio Recording:** Scholars like Xiao Mei argue that decontextualised recordings strip away the significance of "music as cultural behaviour" (e.g., the sacredness of ritual music). Field recordings, as "*cultural specimens*", prioritise ecological authenticity.

**Advocacy for Studio Recording:** Technically oriented researchers contend that field recordings with ambient noise may obscure essential musical features (e.g., the rotational speed error in the steel wire recording of "*Borrowing an Arrow from a Straw Boat*" requires correction using studio equipment). Studio recording, on the other hand, produces a "purified sample," emphasising technical preservation.

The Asia-Europe Music Research Centre at the Shanghai Conservatory mandates that studio recordings include field notes documenting lost contextual elements.

The Sheba Festival rituals in Tianjiadong, Guzhang are predominantly held in the open-air Shechangping (社场坪) ceremonial ground. During the ceremonies, the presiding officiant continuously moves and changes positions according to the ritual sequence. Given the vast size of the venue, amplification microphones are typically used for the officiant's voice, which naturally carries approximately 1.5 seconds of reverberation in this space. Additionally, various "noise interferences" from the large audience are invariably present.

After careful consideration, both the county's ICH (Intangible Cultural Heritage) authorities and master inheritors (including the author) concluded that field recording at Shechangping ground would be inadequate for comprehensively documenting the complete ritual music repertoire of elder Xiang Hanguang. Furthermore, this set of audio archives is intended not only for academic preservation at the county ICH department as a scholarly reference of Tujia ritual music, but also for public applications - including playback during actual ceremonies, radio broadcasts, and ICH education programs. Therefore, we unanimously agreed to prioritise studio recording to produce a "purified sample," creating a "reference-grade" archive that meets both preservation and dissemination needs.



FIG. 2 Shechangping ceremonial ground

### **Why does it belong to the Audio Archive?**

#### ***Compliance with International Archival Standards (IASA-TC03)***

**Cultural Authenticity:** Despite being recorded in a studio, the core ritual music of the Sheba Festival, including the entire process (*Inviting-Worshipping-Sending Off the Deities*), was fully documented, and was performed by the sole National ICH Inheritor who can preside over the ritual, Xiang Hanguang, ensuring the authority and cultural fidelity of the content.

**Comparing Field Recordings:** Although there is no on-site ambient sound, the inheritor's identity and the ritual procedure's integrity compensate for this absence (IASA allows "*salvage recording under controlled conditions*").

#### ***Dual Information Preservation:***

**The two audio versions** (with reverberation/original sound) correspond to different purposes. The research version, unmixed, is archived at the Intangible Cultural Heritage Centre of the County Cultural Museum. The public version, featuring reverberation, is suitable for ceremonial broadcasts or educational purposes. And the public versions are labelled as "*archive-based adaptation*". Additionally, both versions include the following information:

1. Recording time, location, and participants (with Xiang Hanguang and Tian Zhixin's credentials);
2. Cultural background of the track;
3. Technical parameters (equipment, 24-bit/192kHz, etc.);
4. Ethical Protocols, which have been marked in the archive description:
  - Urgency: inheritor's advanced age
  - Usage restrictions: such as prohibition of commercial misuse, and the requirement for community consent for Tujia language research.

This information elevates the recording from "*musical products*" to "*archival assets*".

### ***Aligns with China's ICH Safeguarding Practices***

The Chinese National Academy of Arts' precedent (e.g., guqin recordings) demonstrates that studio-documented endangered ICH can qualify for UNESCO's *Memory of the World* registers when rigorously annotated. This set of audio recordings directly contributes to the preservation and transmission of intangible cultural heritage, including ritual broadcasts, teaching, and research, which fundamentally differs from the entertainment purposes of ordinary commercial music products.

## **CONCLUSION**

According to **Su Yinchun**, Director of the County Intangible Cultural Heritage (ICH) Centre: "This is the first set of audio archives of the Sheba Festival ceremony recorded in a professional recording studio in the county." Fewer and fewer young people can speak the Tujia language and sing the songs. Many traditional cultural rituals of Tujia language are face the danger of extinction. This set of audios can effectively preserve Tujia folk songs and Tujia music, providing more references and learning opportunities for future generations. It fully meets the core definition of audio archives and holds significant cultural archival value.

Audio archives are both technological products and carriers of cultural practices, and their vitality relies on sustained scholarly engagement and social application. According to Xiao Mei (2022), "Take the well-known 'Er Quan Ying Yue' (Moon Reflected on Second Spring) as an example. If Mr. Yang Yinliu and others had not promptly notated and published the *A Bing Anthology* after the rescue-style recording, and if they had not promptly submitted this recording to the China National Radio for broadcast nationwide, it would be inconceivable for this piece to be regarded as a classic of the 20th century." This set of Tujia Sheba Festival audio is a rescue achievement of intangible cultural heritage with archival attributes. Performed by Xiang Hanguang, the only national-level inheritor who can preside over the ceremony, it belongs to the studio version of the endangered intangible cultural heritage. This set of audios has achieved breakthroughs in three aspects: data rescue, academic collaboration, and technological upgrading (24-bit/192kHz studio protocols). This audio preserves an authoritative record of the Sheba Festival and provides irreplaceable original materials for subsequent research (such as Tujia language studies and cross-cultural ritual comparisons). It avoids the dilemma of this precious auditory heritage falling into the trap of "having recordings but lacking depth" in the digital era.

This audio collection has been produced in two versions (with reverberation/original no effect) to cater to different scenes and purposes. The version with reverberation accentuates the spatial acoustics (such as in open Shechangping ground, where the Tima recites scriptures to the crowd and the sky) and the sound art of live performances at the Sheba Festival, further integrating artistic and cultural context and highlighting the significance of "music as cultural behaviour". It is more convenient for the application of audio archives too. The original version without reverberation preserves the raw authenticity of the inheritor's recordings, effectively preserving core musical content. It establishes reference-grade archival quality. As the Tujia ethnic group currently only has a spoken language but no writing system, much ritualistic music is at risk of being lost. Therefore, this research and audio archives provide a 'technical-artistic' dual-track archiving paradigm for preserving the endangered music of the Tujia ethnic group without a written script, offering valuable reference for similar ICH projects globally.

The audio archives and research of Tujia ethnic music have already established a certain foundation, but a comprehensive system has yet to be formed. We still need to intensify our efforts to preserve and promote the living transmission of Tujia ethnic music. In the future, it is necessary to strengthen policy support, digital

archiving, and incentives for youth participation, and explore the balance between living transmission and innovative expression. The audio archives need to shift from "static preservation" to "dynamic application" to leverage their multiple values as "sound libraries," "knowledge repositories," and "cultural resource repositories." Furthermore, deeper interdisciplinary research is required, integrating acoustic and anthropological methods, such as using "soundscape theory" to demonstrate the spatiality of ceremonial music. Upholding the principle: "From the community, for the community" is essential to serve academic research and the public better.

As an audio engineer, in the process of audio archives, we should not only have excellent recording skills, but also have a wide range of different music knowledge, and have a considerable understanding and accumulation of the historical background, cultural heritage, music development and form, performance venue of various music, we also need to grasp the differences between remixing audio archives and music recordings. Culture is the root, soul, and spiritual backbone of a nation. Only by deeply rooted in one's own homeland, and widely incorporating the excellent culture and advanced art of various ethnic groups into the world's equal cultural pattern, can we truly promote cultural globalization and diversity. Protecting ethnic culture is a huge systematic project. We young literary and artistic workers should love and identify with our various ethnic cultures from our hearts, work harder to learn and improve ourselves, and showcase the unique charm of culture to the world.

## REFERENCES

### Journal Papers

- Lu, Q. (2009). "Zhaba Ri"— the Oldest Reproductive Tujia Dance. *Journal of South-Central University for Nationalities*, 29(6), 43–45.
- Wang, Q. (2019). Field Folklore Records of the Sheba Festival Ceremony of Tujia: A Case Study of Tianjiadong, Guzhang County. *Journal of Original Ecological National Culture*, 11(6), 120–126.
- Xiao, M. (2022). Ontology of Sound Archives. *HUANGZHONG (Journal of Wuhan Conservatory of Music)*, 2, 4–18.
- Zhang, M. (2015). Research on the Audio Archives Preservation. *Archives Science Study*, 3, 96–100.
- Zhang, X. (2021). On the Elements of Sound Beauty Embodied in Music Recording. *Entertainment Technology*, 178(Z1), 24–27.
- Jin, J. (2022). The Research on the Innovative Application of Audio Music Archives from the Perspective of New Media: Exemplifying the Library of China Conservatory of Music. *People's Music*, 11, 74–77.
- Tian, J., & Chen, T. (2020). A Preliminary Study on the Composition of Festival Cultural Space of Tujia Nationality. *Journal of Yunnan Arts University*, 7(4), 34–39.

### Dissertation

- Wang Q. (2015). Research on the cultural connotation of the Tujia nationality Sheba Festival ritual dance. Jishou University. *China Master's Theses Full-Text Database*.  
<http://cnki.kmlib.yn.cn/kns55/brief/result.aspx?dbPrefix=CMFD>
- Xiong, W. (2014). On the Ritual Functions of Tujia Sheba Festival —A Case Study at Village Tianjiadong, Guzhang, Hunan. Jishou University. *China Master's Theses Full-Text Database*.  
<http://cnki.kmlib.yn.cn/kns55/brief/result.aspx?dbPrefix=CMFD>

### International Literature and Standards

- Prentice, W., Gaustad, L., & Prentice, W. (2017). *The Safeguarding of the Audiovisual Heritage: Ethics, Principles and Preservation Strategy (LASA-TC 03)* (4th ed.). The International Association of Sound and Audiovisual Archives.

### Monographs on Books

- Ruan, C. J. (2022). Zhongguo chuantong yinyue luyin dang'an [中国传统音乐录音档案]. In M. Z. Du (Ed.), *Zhongguo shijie jiyi yichan quan jilu* (pp. 1–19). Qilu Press.