

Navigating the Challenges of Developing Niujiang Qin for Contemporary Cultural Transmission in Aba Prefecture, China

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Abstract

The development of the Niujiang Qin for contemporary cultural transmission in Aba Prefecture, China, is a multifaceted task that includes cultural heritage protection, adaptation, and rejuvenation. Significant changes in the structure, tuning system, and musical performance of the Niujiang Qin occurred between AD 618 and 1980, reflecting the region's rich cultural context. These transformations contributed to cultural contacts, artistic manifestations, and larger socio-cultural tendencies. Since 1980, significant progress has been made in Tibetan music culture, academic trends, and instrument reform, demonstrating efforts to revitalize traditional heritage while incorporating new ideas. The Niujiang Qin's evolution demonstrates the complex interplay of tradition, innovation, and globalization in Aba Prefecture's cultural scene. The challenges include preserving the instrument's cultural core, combining tradition with modern demands, and rekindling enthusiasm among younger generations. By embracing tradition and innovation, encouraging collaboration, and engaging in education and outreach, stakeholders can effectively manage these hurdles and ensure Niujiang Qin's continued life and relevance in the cultural environment of Aba Prefecture.

Keywords: Niujiang Qin; Contemporary Cultural; Transmission; Aba Prefecture.

The Niujiang Qin symbolizes great cultural importance in Tibetan society, representing the fundamental nature of the Tibetan Plateau and its abundant heritage. This stringed instrument, derived from the horns of wild yaks, which are emblematic creatures of the area, symbolizes the complex interplay between tradition and invention. It is a testament to the continuing essence of Tibetan musical expression (Antunes & Inacio, 2004; Childs, 2003; Lhagyal, 2021; Ning, 2023). The Niujiang Qin exerts significant influence over many provinces in China's

Tibetan territories, including Sichuan, Qinghai, Yunnan, Gansu, and Xizang, amidst the diverse landscapes present in these regions (Inácio et al., 2006; Serafin & Young, 2004).

The Ngawa Tibetan and Qiang Autonomous Prefecture in Sichuan Province, specifically in the Aba People's Community, is where the Niujiang Qin flourishes. The Aba Prefecture's combination of natural beauty and cultural heritage has created a unique type of Niujiang Qin, showcasing the region's significant role in Tibetan musical heritage (Moule, 1907; Serafin

& Young, 2004). In 1999, the Aba Prefecture Ethnic Song and Dance Troupe initiated a transformative journey, acknowledging the crucial role of the Niujiang Qin in safeguarding Tibetan musical traditions. Located in the stunning scenery of the Ngawa Tibetan and Qiang Autonomous Prefecture, the company is committed to uncovering and perfecting the core of the Niujiang Qin, to present this cultural gem to modern audiences (Wu, 2020). A refined version of the Niujiang Qin was created through meticulous endeavors and meticulously crafted to deeply connect with the Aba community. The widespread distribution of this rejuvenated instrument ignited a renewed admiration for the Tibetan musical legacy in Aba Prefecture, enhancing its thriving cultural milieu (Song & Zhao, 2018).

Although the Niujiang Qin is highly important, it is inherently limited as a minority instrument, which puts it at risk of being endangered. Within the framework of current cultural transmission in Aba Prefecture, the challenge of renewing and sustaining the Niujiang Qin is both tough and essential, requiring the implementation of effective inheritance mechanisms (Sun X, 2023). The Niujiang Qin is a significant cultural artifact closely connected to the Tibetan people's heritage, set against Aba Prefecture's diverse cultural fabric. Nevertheless, its exclusion challenges its ongoing growth and transmission to future generations (Chen & Lin, 2022). Hence, safeguarding this cultural gem necessitates a deliberate endeavor to negotiate present-day cultural dynamics while paying tribute to its traditional origins. This study involved the development of the Niujiang Qin for contemporary cultural transmission in Aba Prefecture, China. It highlights the importance of implementing appropriate inheritance techniques to protect its heritage for future generations.

Literature Review

2.1 General Knowledge of Chinese String Instruments

The Guqin is a string instrument of great reverence in China, with a rich history spanning over 3,000 years. The Guqin, known for its tranquil and reflective tone, occupies a significant position within Chinese culture and is frequently linked to the philosophical traditions of Confucianism, Taoism, and the intellectual elite (Shen et al., 2022). The instrument possesses seven strings, which can be played using a plectrum or fingers. Its timbre evokes the sound of a gentle breeze passing through trees, rendering it a fundamental component in musical compositions that seek to cultivate a sense of calmness and self-reflection (Liu, 2022; Penttinen et al., 2006, 2007).

When classifying Chinese national plucked string instruments, the pipa, ruan, liuqin, and zheng are particularly noteworthy for studying their development and improvement. Enhancing these entities is guided by several principles, prioritizing the preservation of national identity, adherence to cultural aesthetics, and seamlessly integrating art and technology (Lee & Zhang, 2021; Liang et al., 1999). Moreover, the Erhu, sometimes called the 'Chinese violin,' is a bowed instrument with two strings widely recognized and revered globally as an emblem of Chinese music. The notable development, particularly in the solo repertoire, throughout the past century, mirrors the shifting terrain of Chinese musical traditions. The advent of China's liberalization during the latter part of the 1970s facilitated the infiltration of Western cultural elements, resulting in a notable surge of Westernization throughout Chinese instrumental music. In the 1980s, the Erhu, characterized by its timbre like the violin's, experienced significant transformations in playing techniques and repertoire. Notably, the Erhu incorporated prepared violin works into its repertoire (Wang & Klyuchko, 2020; Zhang, 2015; Zhang, 2009).

The Erhu, a traditional stringed instrument of national significance in China, occupies a prominent position within the Hu Qin family. Throughout millennia of evolution, it has flourished into a multifaceted art form that

includes performance, instruction, and artistic production. The Tibetan Xianhu, Niujiang Qin, and biwang are stringed musical instruments meticulously fashioned by the Tibetan populace using indigenous resources (Lhalungpa, 1969). It is highly esteemed as a valuable creative artifact of the frigid plateau. The Tibetan rap art "being," folk songs, and dances like "Xianzi" and "rebate" heavily rely on this instrument as their main accompaniment. It possesses a gruff, deep, thick, and distinctively resonant voice that intimately connects with the Tibetan people (Tan, 2020).

Tibetan Niujiang Qin has gradually intertwined due to the growth of civilization, cultural background shifts, and cultural psychology changes (Sun & Ryder, 2016). These factors have made Erhu and Tibetan Niujiang Qin significant representatives of Huqin art in both Han and Tibetan cultures. The concept of intertextuality is evident in multiple facets, including the form of musical instruments, the function of art, techniques of teaching heredity, music creation, performances, and forms of artistic expression. These features have generated significant attention and prompted much deliberation (Chongde & Tsingan, 2003; Kharchenkova, 2023).

2.2 The Transmission of Chinese Music

Chinese music has been transmitted for thousands of years, showcasing a diverse range of cultural history and artistic creativity. Chinese music, with its strong foundation in tradition, has been disseminated through diverse mediums such as oral tradition, written notation, formal education, and contemporary technology (Horner & Ayers, 1998; Jia, 2021; Lee & Wong, 2017). The transmission of Chinese music is significantly influenced by oral tradition, wherein great musicians impart their knowledge and talents to apprentices through direct instruction and mentorship. This approach guarantees the conservation of stylistic subtleties, spontaneous methods, and cultural background inherent in the music (Jiang, 2022).

Written notation is paramount, particularly in preserving compositions and facilitating wider

distribution. The development of ancient Chinese musical notation systems spanned several centuries and aimed to accurately represent the melodic, rhythmic, and ornamental elements found in traditional music. Modern notation systems, such as staff notation and tablature, enhance the examination and execution of Chinese music in many geographical areas and musical genres (Chen et al., 2022; Yang, 2014). Conservatories and academies are formal educational institutions that offer systematic instruction in Chinese music theory, performance, and composition. These educational establishments provide specific curricula for a range of traditional musical instruments, vocal techniques, and regional musical repertoires, thereby promoting the preservation of musical traditions while fostering artistic creativity and exploration (Yue & Seekhunlio, 2024).

Over the past few decades, the use of contemporary technology has assumed a progressively prominent position in the dissemination of Chinese music. Digital platforms, online tutorials, and multimedia resources have facilitated broader accessibility to teaching materials, recordings, and collaboration opportunities (Shen & Sun, 2022). Virtual classrooms and live streaming platforms facilitate connections between students and professors regardless of location, promoting a worldwide community of professionals and followers. In addition to conventional avenues, the dissemination of Chinese music is intricately connected to cultural customs, ceremonies, and communal assemblies. Festivals, ceremonies, and community events allow artists to showcase their artistic abilities, interact with various audiences, and strengthen cultural consciousness through music (Gong et al., 2024; Jia & Koku, 2020).

2.3 Traditional Chinese Music Culture

China's music culture is abundant and varied, mirroring its extensive history and many ethnic

groups. The music domain in question covers traditional Chinese music originating from ancient Chinese civilization and contemporary genres that amalgamate elements from Eastern and Western traditions (Raadschelders, 2020; Song & Cao, 2022; Warkentin et al., 2015). Traditional Chinese music falls into various categories, including:

(1) Classical Music: This is frequently connected with music from the Chinese imperial court, which includes a variety of forms such as Peking opera. Classical music instruments include the guqin (a plucked seven-string instrument), pipa (a four-string lute), erhu (a two-string bowed instrument), and a variety of flutes and percussion instruments (Chin & Berger, 2010; Wang et al., 2021).

(2) Folk music: Each ethnic group in China has its distinct folk music heritage, utilizing a diverse range of instruments and genres. Folk music is generally passed down orally and reflects people's daily lives, histories, and beliefs.

(3) Religious and ceremonial music: Music is an important part of religious rites and festivals in China, including Buddhist, Taoist, and Confucian celebrations. It imparts spiritual teachings and facilitates meditation (Lam, 1995).

2.3 Aba Culture and Society

Aba Prefecture's culture is a rich fabric comprising various ethnic customs, geographical influences, and historical legacies. From production methods to ethnic communities, transportation networks, and religious customs, Aba Prefecture's diverse cultural landscape exhibits a balanced blend of history and modernity.

2.3.1 Production Methods & Ethnic Settlements:

- Aba Prefecture's geographical diversity has resulted in diverse agricultural and nomadic civilizations, with residents engaged in fishing, farming, hunting, and herding. Traditional farming practices continue, albeit with technical restrictions that impede economic growth.

- The ethnic communities of Aba Prefecture, which are largely populated by Tibetan, Qiang, Hui, and Han peoples, form a rich tapestry of coexistence and cultural interchange. Nomadic Tibetan forefathers settled on mountainous plateaus, while the Qiang people positioned themselves defensively. Ethnic diversity is a feature of Aba Prefecture, where different communities share living spaces and cultural customs (Yang et al., 2022).

2.3.2 Transportation Networks:

- Transportation connects Aba Prefecture to the outside world, promoting economic development and cultural interaction. To meet the region's demands, transportation infrastructure has evolved from historic canals to modern roadways.

- Improved mobility improves community contact, encouraging cultural interchange and shaping local identities. However, locations with little transit stay isolated, resulting in unique local cultural environments.

2.3.3 Cultural Characteristics:

- Aba Prefecture's distinctive geographical setting fosters a strong sense of regional identity. The cultural landscape is characterized by multicultural integration and happy coexistence, resulting in a diverse "cultural gene pool" with Tibetan and Qiang roots.

- Cultural variety takes many forms, from historical and religious foundations to artistic representations. The Aba's folk music culture represents the communal assimilation of ethnic minorities.

2.3.4 Religious Culture and Music:

- Religious institutions preserve traditional knowledge and promote cultural values. Monasteries are religious and cultural transmission centers that influence people's consciousness and habits.

- Tibetan music, with regional variances and dialect distinctions, illustrates the cultural richness of Aba Prefecture. Tibetan folk music encompasses various cultural forms, including

folk songs, dance music, traditional opera, and ethnic instruments (Wong et al., 2001; Zhu, 2023).

2.4 Research Theory

In navigating the challenges of developing Niujiao Qin for contemporary cultural transmission in Aba Prefecture, China, ethnomusicology theory offers a comprehensive framework. This method places significant emphasis on comprehending the cultural context of the instrument, actively involving local communities, safeguarding its historical origins, striking a balance between tradition and innovation, addressing social dynamics, and effectively navigating the challenges posed by globalization (Fan, 2016; Zhang, 1985). To ensure the genuine rehabilitation and sustainable transmission of Niujiao Qin in Aba Prefecture, stakeholders should focus on cultural heritage, community participation, and attention to social and historical elements (Berger & Stone, 2019; Zhao, 2023).

Methodology

3.1 Selection of the Research Site

Aba Prefecture, located northwest of Sichuan Province, has a suitable geographical location, bordering the Chengdu Plain to the southeast and Qinghai and Gansu to the north. It has boundaries with other cities and states, making it conveniently accessible from the provincial capital. Founded in 1953 as the Sichuan Tibetan Autonomous Region, it was later renamed Aba Tibetan Autonomous Prefecture in 1955. Recognizing its ethnic diversity, it was renamed Aba Tibetan and Qiang Autonomous Prefecture in 1987. Presently, Ngawa Tibetan and Qiang Autonomous Prefecture (Y. Liu et al., 2018). This evolution emphasizes its significance as a cultural and administrative center in Sichuan Province (Figure 1).

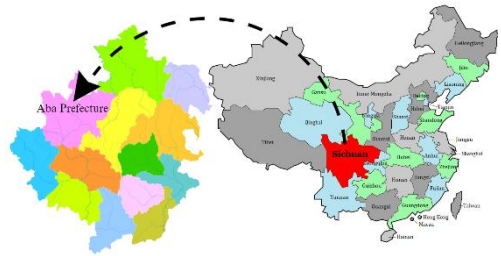


Figure 1. Aba Prefecture in Sichuan Province, China. Source: Chinafolio and Wikipedia.

3.2 Data collection

(1) Literature Review: Review the extant literature on Niujiao Qin, Tibetan musical traditions, and cultural behaviors in Aba Prefecture. This will provide an overview of the instrument's history, cultural importance, and past research findings.

(2) Fieldwork: Conduct fieldwork and ethnographic studies to collect primary data. This entails immersing oneself in the local culture, interviewing musicians, cultural practitioners, and community members, and attending musical events and rituals, including Niujiao Qin: record observations, interviews, and performances to understand the instrument's social and cultural background.

3.3 Data analysis

(1) Performance Analysis: Examine Niujiao Qin's performances in various venues, including traditional rituals, modern concerts, and instructional settings. To measure the success of cultural transmission mechanisms, consider variables such as repertoire selection, playing skills, audience participation, and cultural representation.

(2) Data Analysis and Interpretation: Analyze the acquired data using qualitative methods. Identify the patterns, themes, and insights from the research results. Interpret the findings in light of Aba Prefecture's broader socio-cultural setting and draw inferences about the evolution of Niujiao Qin for current cultural transmission.

Results

4.1 Evolution and Cultural Significance of the Niujiao Qin in Aba Prefecture, China (AD 618-1980)

The Niujiao Qin saw substantial changes in its structure, tuning system, and musical performance between AD 618 and 1980, mirroring the vibrant cultural environment of Aba Prefecture, China. The following are the primary results of the evolutionary trajectory of the Niujiao Qin throughout the specified time frame:

4.1.1 The form of the Tibetan Niujiao Qin underwent variations over time, driven by cultural interactions and creative manifestations. Historical documentation and artistic representations portray diverse manifestations of the Biwang, characterized by semi-pear-shaped musical instruments. The instrument's construction emphasizes the organic nature by utilizing buffalo horns and wood, resulting in distinctive features like a curved tube and varied diameters.

4.1.2 The tuning method of the Niujiao Qin is designed to serve as an accompaniment instrument in traditional Tibetan music genres like Batang Xianzi and Baiwang Quzhong. Its straightforward manufacturing procedure facilitated adjustment adaptability, with strings commonly crafted from bovine tendons or tails intertwined. This assisted the instrument's ability to adapt to various performance circumstances and regional preferences.

4.1.3 The Niujiao Qin served as a crucial accompaniment instrument for traditional Tibetan songs and dances, enhancing the cultural significance of festivals and daily entertainment. Batang Xianzi and Baiwang Quzhong's performances demonstrate the instrument's versatility and adaptability, where artists integrate puppetry and narrative into their acts.

4.1.4 The broader socio-cultural trends influence the creative expression of the Niujiao Qin in Aba Prefecture. The perpetuation of Baiwang Quzhong performances, especially in

rural regions, highlights the instrument's lasting appeal and cultural importance throughout successive generations.

4.1.5 The preservation and promotion of the Niujiao Qin in current cultural transmission pose significant obstacles that necessitate a comprehensive comprehension of its historical origins and the dynamic nature of its artistic activities. The documentation and revitalization of traditional performance techniques, with the adoption of innovative approaches and outreach initiatives, are imperative to maintaining the instrument's ongoing significance and liveliness within the contemporary cultural milieu.

4.2 Evolution and Contemporary Cultural Preservation of the Niujiao Qin in Aba Prefecture Since 1980

Since 1980, the Niujiao Qin has undergone notable progress in Tibetan music culture, academic trends, and instrument reform. This reflects a deliberate endeavor to save and rejuvenate traditional legacy while incorporating modern influences. The following are the primary results of the evolutionary trajectory of the Niujiao Qin throughout the specified time frame:

4.2.1 The development of Tibetan music culture has progressed through several stages since the formation of the Tibet Autonomous Region. It began with early performances by innovative musicians and has since gained widespread recognition and integration into mainstream Chinese music. The 1980s witnessed a phase of transformation, wherein music served as a mirror of societal shifts and ambitions for a fresh epoch. In the 21st century, Tibetan music has emerged as a prominent cultural export, drawing in tourists and generating worldwide attention. The ongoing spread of Tibetan music was facilitated by the active participation of young people and the use of digital media platforms.

4.2.2 The academic examination of Hu Qin, encompassing the Niujiao Qin, underwent a swift expansion after the formation of the People's Republic of China. The scope and

diversity of research in musicology have been broadened via professionalization and cross-cultural interchange. The widespread dissemination of academic accomplishments across several platforms, including monographs, journals, and the internet, demonstrates a strong academic environment committed to enhancing the comprehension of traditional music genres.

4.2.3 The rebirth of the Niujiang Qin in Aba Prefecture is a notable illustration of endeavors to preserve and advance indigenous musical instruments. In 1999, the Aba Prefecture Ethnic Song and Dance Troupe began a process of resurgence and improvement after a period of decline. This approach culminated in the creation of new Niujiang Qin instruments in 2004. These reforms aimed to improve the instrument's resonance, range, and durability while preserving its cultural authenticity. This was achieved through modifications in materials, design, and performance capabilities (Figure 2).



Figure 2. Niujiang Qin in Aba Prefecture in Sichuan Province, China. Source: Xiaao Sun

4.2.4 The effective management of cultural transmission in Aba Prefecture necessitates adopting a comprehensive strategy that recognizes the intricate interplay between

tradition, innovation, and globalization. Niujiang Qin's development exemplifies the broader cultural context, where heritage conservation interacts with the requirements of modernization and intercultural interaction. To preserve the ongoing vitality and relevance of Aba Prefecture's unique musical history in changing cultural dynamics, stakeholders should embrace reform while respecting tradition.

4.3 Contemporary Adaptation and Cultural Resonance of the Niujiang Qin in Aba Prefecture's Music Scene

The development of the Niujiang Qin for contemporary cultural transmission in Aba Prefecture entails modifying its structure and tone to satisfy modern demands while retaining cultural authenticity. Efforts include employing yak horns, developing new bows and strings, and improving timbral features to ensure the instrument's continued relevance and appeal in today's cultural landscape.

The advancement of its tuning system is notable. Before the reform, the instrument's tuning was arbitrary, emphasizing temporary modifications based on string tension. This traditional tuning procedure, distinguished by identical tones created by double strings, reflects traditions. However, following the reform, the Niujiang Qin used a standardized tuning system similar to the erhu, with metal strings and a defined tuning range. This transition to a more structured tuning system, combined with the instrument's three-octave range, increases its versatility and usefulness in contemporary musical contexts (Figure 3).

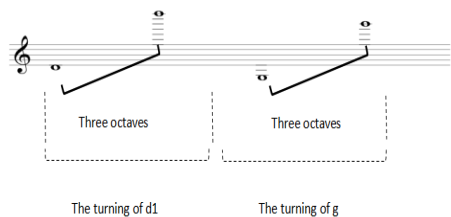


Figure 3. The tuning range after the reform. Source: Xiaao Sun

The Niujiang Qin performed in a variety of roles, including leading, accompanying, and self-entertainment. With the expansion of performance techniques, the instrument has expanded from its traditional role in folk song and dance to include solo and ensemble performances, with and without puppets. The addition of Biwang performances broadened its repertory by highlighting narratives of local customs and folklore. Furthermore, after the reform, Niujiang Qin's engagement in concerto and chamber music performances has reenergized its creative expression, encouraging collaboration with other instruments and strengthening the region's musical history. This diversification of performance formats maintains Niujiang Qin's continuous relevance and contributes to the overall growth of national music culture.

4.4 The Vital Role of Niujiang Qin Performance Techniques in Cultural Transmission and Preservation in Aba Prefecture

The utilization of performance techniques by Niujiang Qin holds significant importance in the cultural dissemination of traditional Tibetan music within Aba Prefecture. By mastering and transmitting these techniques from generation to generation, performers guarantee the conservation and uninterrupted transmission of the region's abundant musical legacy. The rigorous training and repetition necessary to achieve proficiency in fretting, tapping, bowing, and changing handles exemplify the commitment to cultural preservation as aspiring players fully engage in Niujiang Qin's performance complexities.

The transmission of knowledge on the technical aspects of playing the Niujiang Qin, as well as the cultural value and historical background associated with each skill, is facilitated by experienced players through training and learning. The process of knowledge transmission facilitates the development of a profound understanding and recognition of the instrument's significance within Tibetan culture, hence cultivating a sense of pride and identity

among the younger cohorts residing in Aba Prefecture.

Furthermore, the progression of performance postures and methods exemplifies Niujiang Qin's ability to adjust to modern circumstances while maintaining its traditional integrity. Performers assure the continued relevance and accessibility of the instrument to contemporary audiences by skillfully integrating contemporary aspects while upholding traditional approaches. The reciprocal relationship between tradition and innovation enables the continuous dissemination of cultural values and artistic expression via music.

As musicians in Aba Prefecture persist in honing their abilities and delving into novel realms of artistic expression through the Niujiang Qin, they make a valuable contribution to the dynamic cultural milieu of the area. It actively participates in cross-cultural interaction and debate by engaging with audiences, both locally and globally, through performances, workshops, and community activities. The dissemination of Niujiang Qin performance practices serves as both a mechanism for safeguarding cultural heritage and a driving force for cultural rejuvenation and intercultural comprehension.

Discussion

Developing the Niujiang Qin for contemporary cultural transmission in Aba Prefecture, China, is a complex problem that involves preserving, adapting, and revitalizing diverse parts of culture. The preservation of the true cultural character of the Niujiang Qin is a prominent challenge that must be addressed among the forces of industrialization and globalization (Wasserstrom, 2014). With the region experiencing swift socio-cultural transformations, there is a potential danger of diminishing the traditional importance and distinctiveness of the instrument.

Another notable problem is reconciling traditional values with contemporary requirements (Edward Grumbine & Xu, 2011). While it is crucial to introduce new ideas and

modify the instrument's design, tuning, and performance methods to align with current preferences, it is also important to ensure that its cultural authenticity is not compromised. The achievement of this intricate equilibrium necessitates careful contemplation regarding the incorporation of contemporary components while avoiding the overshadowing or erosion of the abundant cultural legacy inherent in the Niujiang Qin (Li, 2008; Ting & Lina, 2023).

The main challenge lies in rekindling the enthusiasm of new generations for classic instruments such as the Niujiang Qin. In an era characterized by the prevalence of contemporary modes of entertainment and technology, the task of captivating and motivating individuals towards cultural heritage can present considerable difficulties (Hong et al., 2021). In order to engage the imagination of young individuals and foster a sense of cultural pride and respect, it is imperative to employ innovative strategies, including educational initiatives, interactive workshops, and multimedia displays (Yang, 2021; Yantian et al., 2021).

It is imperative to guarantee the intergenerational transfer of information and expertise related to playing the Niujiang Qin to ensure its ongoing preservation. If traditional craftsmanship and performance techniques are not actively preserved and passed down, there is a risk of their loss due to changing lifestyles and priorities (Gao & Thoard, 2022; Zhang et al., 2023). It is crucial to make efforts to record, store, and share this information through educational initiatives and apprenticeship programs in order to protect the instrument's heritage (Hu, 2023; Wang, 2021).

Conclusion

In conclusion, Niujiang Qin's development for contemporary cultural transmission in Aba Prefecture presents both significant challenges and valuable opportunities. Balancing the preservation of traditional practices with the demands of modernity requires a multifaceted approach. To address this, it is crucial to integrate historical techniques with innovative methodologies, ensuring that the Niujiang Qin remains authentic while adapting to contemporary educational and technological advances. Promoting collaboration among musicians, educators, and cultural institutions will be key to creating a supportive ecosystem that fosters the growth and evolution of Niujiang Qin education. Additionally, investing in educational resources, training programs, and community outreach can enhance accessibility and engage new generations, nurturing a deeper appreciation for the instrument.

Sustainable development practices will be essential to ensuring the long-term preservation and relevance of the Niujiang Qin. This entails not only safeguarding the instrument itself but also supporting the cultural and artistic practices associated with it. By addressing infrastructure challenges, embracing digital tools, and integrating Niujiang Qin education into formal curricula, stakeholders can create a resilient framework for the tradition's continued impact. Through these efforts, the Niujiang Qin has the potential to serve as a symbol of cultural pride and identity, enriching communities and contributing to a broader understanding of its musical heritage.

WORKS CITED

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- Antunes, J., & Inacio, O. (2004). Physical modeling of Tibetan bowls. *The Journal of the Acoustical Society of America*, 115(5_Supplement). <https://doi.org/10.1121/1.4784029>
- Berger, H. M., & Stone, R. M. (2019). Theory for ethnomusicology. In *Theory for Ethnomusicology: Histories, Conversations, Insights*. <https://doi.org/10.4324/9781315408583>

- Chen, J., Yuan, P., Li, H., Chen, C., Jiang, Y., & Lee, K. (2022). Music-reading expertise associates with face but not Chinese character processing ability. *Quarterly Journal of Experimental Psychology*, 75(5). <https://doi.org/10.1177/17470218211053144>
- Chen, Y., & Lin, H. (2022). Overview of the development of offshore wind power generation in China. In *Sustainable Energy Technologies and Assessments* (Vol. 53). <https://doi.org/10.1016/j.seta.2022.102766>
- Childs, G. (2003). Polyandry and population growth in a historical Tibetan society. *History of the Family*, 8(3). [https://doi.org/10.1016/S1081-602X\(03\)00045-9](https://doi.org/10.1016/S1081-602X(03)00045-9)
- Chin, S. H. L., & Berger, J. (2010). Analysis of pitch perception of inharmonicity in pipa strings using response surface methodology. *Journal of New Music Research*, 39(1). <https://doi.org/10.1080/09298210903477260>
- Chongde, L., & Tsingan, L. (2003). Multiple Intelligence and the Structure of Thinking. *Theory & Psychology*, 13(6). <https://doi.org/10.1177/0959354303136004>
- Edward Grumbine, R., & Xu, J. (2011). Creating a “Conservation with Chinese Characteristics.” In *Biological Conservation* (Vol. 144, Issue 5). <https://doi.org/10.1016/j.biocon.2011.03.006>
- Fan, L. (2016). Chinese ethnomusicology to explore fieldwork methods. *SHS Web of Conferences*, 24. <https://doi.org/10.1051/shsconf/20162402014>
- Gao, J., & Thoard, M. (2022). Comparison Between Banhu and Erhu Art. *Res Militaris*, 12(2).
- Gong, X., Chonpairat, 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>
- Hong, Y., Su, Y., & Jiang, X. (2021). Assimilation and Reassembling in Entertainment and Media Industry. *BCP Business & Management*, 13. <https://doi.org/10.54691/bcpbm.v13i.118>
- Horner, A. B., & Ayers, L. (1998). Modeling Chinese musical instruments. *The Journal of the Acoustical Society of America*, 103(5, Supplement). <https://doi.org/10.1121/1.422612>
- Hu, Y. (2023). Developing and Disseminating Traditional Chinese Music from the Perspective of Non-foreign Heritage. *Highlights in Art and Design*, 3(1). <https://doi.org/10.54097/hiaad.v3i1.9048>
- Inácio, O., Henrique, L. L., & Antunes, J. (2006). The dynamics of Tibetan singing bowls. *Acta Acustica United with Acustica*, 92(4).
- Jia, F., & Koku, E. (2020). Music listening and cultural adaptation: How different languages of songs affect Chinese international students’ uses of music and cultural adaptation in the United States. *Journal of International and Intercultural Communication*, 13(4). <https://doi.org/10.1080/17513057.2019.1618893>
- Jiang, M. (2022). An Analytic Research on Transmission of Traditional Chinese Culture Reflected in National Music Curriculum Standards and Textbooks for Middle Schools in China. *International Journal of Secondary Education*, 10(1). <https://doi.org/10.11648/j.ijsedu.20221001.16>
- Jia, Q. (2021). Application of Chinese Traditional Musical Instruments. *Scientific and Social Research*, 3(1). <https://doi.org/10.36922/ssr.v3i1.1063>
- Kharchenkova, S. (2023). High art on a mug: Art merchandise in China’s contemporary art market. *European Journal of Cultural Studies*. <https://doi.org/10.1177/13675494231184016>
- Lam, J. S. C. (1995). The yin and yang of Chinese Music Historiography: The Case of Confucian Ceremonial Music. *Yearbook for Traditional Music*, 27. <https://doi.org/10.2307/768102>
- Lee, H. N., & Zhang, Y. (2021). Chinese Improved National Instruments – Plucked Stringed Musical Instruments. <https://doi.org/10.2991/assehr.k.210106.019>
- Lee, K. H., & Wong, D. T. K. (2017). Chinese popular music as a musical heritage and cultural marker of the Malaysian Chinese. *International Journal of Heritage Studies*, 23(10). <https://doi.org/10.1080/13527258.2017.1362577>
- Lhagyal, D. (2021). ‘Linguistic authority’ in state-society interaction: cultural politics of Tibetan education in China. *Discourse*, 42(3). <https://doi.org/10.1080/01596306.2019.1648239>
- Lhalungpa, L. P. (1969). Tibetan Music: Secular and Sacred. *Asian Music*, 1(2). <https://doi.org/10.2307/833907>
- Liang, S. F., Su, A. W. Y., & Lin, C. T. (1999). New recurrent-network-based music synthesis method for Chinese plucked-string instruments - Pipa and Qin. *Proceedings of the International Joint Conference on Neural Networks*, 4. <https://doi.org/10.1109/ijcnn.1999.833478>

- Li, F. M. S. (2008). Culture as a major determinant in tourism development of China. *Current Issues in Tourism*, 11(6). <https://doi.org/10.1080/13683500802475786>
- Liu, Y., Huang, C., Wang, Q., Luan, J., & Ding, M. (2018). Assessment of sustainable livelihood and geographic detection of settlement sites in ethnically contiguous poverty-stricken areas in the Aba Prefecture, China. *ISPRS International Journal of Geo-Information*, 7(1). <https://doi.org/10.3390/ijgi7010016>
- Liu, Z. (2022). The Artistic Characteristics of Chinese Guqin Songs. *Art and Society*, 1(2). <https://doi.org/10.56397/as.2022.10.06>
- Moule, A. C. (1907). Chinese Music. *The Musical Times*, 48(769). <https://doi.org/10.2307/905029>
- Ning, H. (2023). Analysis of the value of folk music intangible cultural heritage on the regulation of mental health. *Frontiers in Psychiatry*, 14. <https://doi.org/10.3389/fpsy.2023.1067753>
- Penttinen, H., Pakarinen, J., & Valimäki, V. (2006). Physical modeling of the GuQin, a chinese string instrument. 1st Nordic Music Technology Conference (NoMute 2006), Trondheim, Norway, October 12.-14., 2006.
- Penttinen, H., Pakarinen, J., Välimäki, V., Laurson, M., Kuuskankare, M., Li, H., & Leman, M. (2007). Aspects on physical modeling of a Chinese string instrument - the GUQIN. *Proceedings of the ICA*, September.
- Raadschelders, J. C. N. (2020). Impartial, skilled, respect for law: The ancient ideals of civil servants at the root of eastern and western traditions. *Korean Journal of Policy Studies*, 35(1). <https://doi.org/10.52372/kjps35101>
- Serafin, S., & Young, D. (2004). Toward a generalized friction controller: From the bowed string to unusual musical instruments. *Proceedings of the International Conference on New Interfaces for Musical Expression*. https://doi.org/10.1007/978-3-319-47214-0_12
- Shen, D., Guo, H., Yu, L., Ying, J., Shen, J., Ying, S., Bao, D., & Wang, Y. (2022). Sound Design of Guqin Culture: Interactive Art Promotes the Sustainable Development of Traditional Culture. *Sustainability (Switzerland)*, 14(4). <https://doi.org/10.3390/su14042356>
- Shen, Y., & Sun, S. (2022). Design of International Chinese Education Promotion Platform Based on Artificial Intelligence and Facial Recognition Technology. *Computational Intelligence and Neuroscience*, 2022. <https://doi.org/10.1155/2022/6424984>
- Song, C., & Zhao, B. (2018). Study on the Qiang's Costume Culture—A Case Study of the Qiang's Costumes in Li County. *Open Journal of Social Sciences*, 06(06). <https://doi.org/10.4236/jss.2018.66020>
- Song, W., & Cao, H. (2022). The Reality and Application of Yin and Yang. *Chinese Medicine*, 13(02). <https://doi.org/10.4236/cm.2022.132003>
- Sun, J., & Ryder, A. G. (2016). The Chinese experience of rapid modernization: Sociocultural changes, psychological consequences? In *Frontiers in Psychology* (Vol. 7, Issue APR). <https://doi.org/10.3389/fpsyg.2016.00477>
- Sun, X. (2023). Research on the application of the Tibetan intangible cultural instrument Nijiaoqin in art education in colleges and universities. *Chinese Literary Artists*, 6, 102-104.
- Tan, Q. (2020). The Study on the Intertextuality of Erhu Art and Tibetan Xianhu Art since the 20th Century.
- Ting, Z., & Lina, J. (2023). Motivation and Guidance of Teaching Strategies on Folk Music Education of Music Majors in Colleges and Universities. *Educational Administration: Theory and Practice*, 29(2).
- Wang, J. (2021). Preservation and promotion of China's musical cultural heritage on the internet. *Heritage Science*, 9(1). <https://doi.org/10.1186/s40494-021-00612-2>
- Wang, W., & Klyuchko, S. I. (2020). The Role of the Violin Repertoire in the Development of Modern Concert Playing the Chinese Bowed Stringed Instrument Erhu. *Университетский Научный Журнал*, 57. <https://doi.org/10.25807/pbh.22225064.2020.57.73.84>
- Wang, X., Wei, Y., Heng, L., & McAdams, S. (2021). A Cross-Cultural Analysis of the Influence of Timbre on Affect Perception in Western Classical Music and Chinese Music Traditions. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.732865>
- Warkentin, M., Charles-Pauvers, B., & Chau, P. Y. K. (2015). Cross-cultural IS research: Perspectives from Eastern and Western traditions. In *European Journal of Information Systems* (Vol. 24, Issue 3). <https://doi.org/10.1057/ejis.2015.7>
- Wasserstrom, J. (2014). China & Globalization. *Daedalus*, 143(2). https://doi.org/10.1162/DAED_a_00280

- Wong, H. L. C., Lopez-Nahas, V., & Molassiotis, A. (2001). Effects of music therapy on anxiety in ventilator-dependent patients. *Heart and Lung: Journal of Acute and Critical Care*, 30(5). <https://doi.org/10.1067/mhl.2001.118302>
- Wu, Z. (2020). Remembering the Past through Music: The Transmission of Chinese Qin Songs in Seventeenth to Nineteenth-Century Japan. *Journal of the American Oriental Society*, 140(2). <https://doi.org/10.7817/jameroriesoci.140.2.0345>
- Yang, G. (2021). The Political Development of Contemporary China from the Perspective of Historical Political Science. *Chinese Political Science Review*, 6(4). <https://doi.org/10.1007/s41111-021-00190-5>
- Yang, J. (2014). Ancient Chinese Musical Notation Discovered in the Old Library of St John's College, Cambridge. *East Asian Publishing and Society*, 4(2). <https://doi.org/10.1163/22106286-12341261>
- Yang, X., Dai, X., Li, W., Lu, H., Liu, C., Li, N., Yang, Z., He, Y., Li, W., Fu, X., Ma, L., Shan, Y., & Wang, Y. (2022). Socio-Ecological Vulnerability in Aba Prefecture, Western Sichuan Plateau: Evaluation, Driving Forces and Scenario Simulation. *ISPRS International Journal of Geo-Information*, 11(10). <https://doi.org/10.3390/ijgi11100524>
- Yantian, H., Seekhunlio, W., & Karin, K. (2021). The Shanxi Badatao in Shanxi Province, China. Review of International Geographical Education Online, 11(5). <https://doi.org/10.48047/rigeo.11.05.196>
- Yue, D., & Seekhunlio, W. (2024). The study of knowledge and preservation of songming lantern opera in Kunming, Yunnan province, China. *Multidisciplinary Science Journal*, 6(4). <https://doi.org/10.31893/multiscience.2024050>
- Zhang, J. (2015). Study on Artistic Characteristics of Erhu Concertos before Reform and Opening-up. *Proceedings of the 2015 International Conference on Education, Management and Computing Technology*, 30. <https://doi.org/10.2991/icemct-15.2015.140>
- Zhang, S. (2009). Erhu As Violin: Development of China's Representative Musical Instrument. In *Journal of Human Development* (Vol. 6, Issue 1).
- Zhang, W. (1985). Recent Developments of Ethnomusicology in China. *Ethnomusicology*, 29(2). <https://doi.org/10.2307/852141>
- Zhang, Y., Zhou, Z., Li, X., Yu, F., & Sun, M. (2023). CCOM-HuQin: An annotated multimodal chinese fiddle performance dataset. *Transactions of the International Society for Music Information Retrieval*, 6(1). <https://doi.org/10.5334/tismir.146>
- Zhao, W. (2023). Regional Cultural Characteristics and Heritage in Chinese Ethnic Music Composition. *Arts, Culture and Language*, 1(1). <https://doi.org/10.61173/21g64279>
- Zhu, X. (2023). Book Review: Culture, music education, and the Chinese dream in mainland China. *Global Media and China*, 8(2). <https://doi.org/10.1177/20594364231152315>