วารสารธรรมเพื่อชีวิต
JOURNAL OF DHAMMA FOR LIFE
ISSN: 2822-048X
https://soo8.tci-thaijo.org/index.php/dhammalife/index

Original Research Article
DOI: 10.14456/jdl.2025.19

A Study on the Process, Performance Skills, and Development of the Application of the Lusheng Instrument after China's Reform

An Wen Si[1]*, Rungkiat Siriwongsuwan [2]

ARTICLE INFO

Name of Author & Corresponding Author: *

1. An Wen Si*
Suan Sunandha Rajabhat University, Bangkok, Thailand.
Email: 2rungkiat.si@ssru.ac.th

2. Rungkiat Siriwongsuwan
Suan Sunandha Rajabhat University, Bangkok, Thailand.
Email: rungkiat.si@ssru.ac.th

Keywords:
Chinese Lusheng, Reform, Performance Technique, Creation Performance, Future development

Article history:
Received: 18/11/2024
Revised: 02/04/2025
Accepted: 30/04/2025
Available online: 18/05/2025

How to Cite:

Si, w. A. & Siriwongsuwan, R. (2025). A Study on the Process, Performance Skills, and Development of the Application of the Lusheng Instrument after China's Reform. *Journal Dhamma for Life, 31*(2), 269-279.

ABSTRACT

This study investigates the reform and modernization of the Chinese Lusheng instrument, focusing on the 18-pipe Lusheng. The objectives are threefold: (1) to examine the reform process and technical advancements of the instrument, (2) to analyze the evolution of performance techniques post-reform, and (3) to assess its practical applications and project future development trends. Using a mixed-methods approach, data were collected through interviews with instrument reformers, educators, and performers, as well as direct observations of teaching sessions and staged performances. A comprehensive literature review was conducted to contextualize the findings and identify existing research gaps. Results reveal that the reform process—initiated in the 1950s—has significantly enhanced the instrument's musical range, volume, and expressive capabilities by increasing the number of pipes and innovating performance techniques. The reformed Lusheng has been successfully integrated into contemporary musical practices, educational curricula, and public performances. It is poised for continued evolution, influenced by technological innovation, market trends, and cultural preservation efforts. This research contributes to the understanding of traditional instrument modernization and highlights the dynamic interplay between heritage and innovation in contemporary Chinese music.

Introduction

The Lusheng, a very ancient reed instrument, is also a musical instrument with regional cultural characteristics and ethnic identity, very popular in the minority areas of Southwest China and Southeast Asian countries. Especially since the 1950s, the Chinese Lusheng has taken the country's focus on the development of ethnic minority music and culture as an opportunity, and at the same time, in order to meet the demand for reform of the traditional Lusheng, such as the narrow range, difficult to apply to the solo, concerto and national orchestra construction, so Lusheng reformers began to move towards the road of a comprehensive reform of the Lusheng, represented by the Dong Dangan, based on the traditional 5-pipe and 6-pipe Lusheng, continuous research and development has been carried out, and finally, different shapes of Lusheng such as 13-pipe and 18-pipe have been tried to be developed, which has a very positive effect on the promotion and popularization as well as the application of Lusheng culture. From a comprehensive point of view, based on the reform of the instrument, the Chinese Lusheng art has gradually made achievements in many aspects, such as music creation, performance forms, instrumental music education, and talent cultivation, but of course, many shortcomings still exist. (XieWeiJiang,2024)

Through observing the current Chinese Lusheng art and my musical practice, I believe that the following problems still exist in the further development of Chinese Lusheng art:

Firstly, although in the reform of the instrument as well as in other areas of practice, Chinese Lusheng has important achievements, however, as far as the theoretical research of Lusheng art is concerned, it has not achieved synchronization with the music practice, especially in terms of the theoretical research results of Lusheng's reform, some defects still exist, and for the promotion of the practice of Lusheng art, if there is no sufficient theoretical research, then it will lack a certain degree of guiding and leading, especially in the inheritance of Lusheng culture, the lack of theoretical guidance will lead to difficulties in effective inheritance as well as cultivating talents. (Liu Zhentao,2015)

Secondly, compared with the erhu, bamboo flute, pipa, and other Chinese folk musical instruments, the Lusheng belongs to the minority musical instruments, because the Lusheng has long existed and been applied in the minority areas in the south-west of China, and has not been widely popularized in the vast area of China, and from the point of view of the communication attributes of the music and culture itself, the key to the maintenance and enhancement of the vitality lies in the expansion of the scope of the culture communication as well as the enlargement of the audience groups. The narrowness of the geographical area of application and the singularity of communication mode are the main reasons why Lusheng is difficult to popularize.

Thirdly, the repertoire of Lusheng is relatively small, and it is not closely integrated with the modern forms of musical expression and the cultural needs of the contemporary public. Although in China's Miao, Shui, Yi, Yao, Dong, and other regions, the Lusheng culture has a long history and can present a humanistic style, and has also produced much Lusheng music rich in national characteristics, (Su Xiaohong,2009) however, in the current era of the pursuit of diversified culture and the growing and improving spiritual needs of the times, to develop the art of the Lusheng, on the one hand, the reform of the musical instrument, the production, and popularization of the instrument should be taken as the basis; on the other hand, further deepening in the fields of music creation, performance, education, and other areas (Deng

Jun,1999). should be achieved, only in this way, the role of promoting the development of Lusheng culture can be revealed. However, due to the creative aspect, Lusheng music not only has fewer repertoires but also more importantly, it has not been docked to the public in terms of music creation and performance.

The above three problems are not only the current dilemmas facing the development of Chinese Lusheng culture, but they also reflect the aspects of traditional Chinese music culture that need to be remedied in the development of contemporary society. Since China launched and implemented the protection and transmission of intangible cultural heritage in 2006 (Weng Zeren,2018), cultural items related to the lusheng have been included in the list of intangible cultural heritage, such as the "Miao Lusheng Production Technique" declared by Leishan County, Guizhou Province, and the "Dong Lusheng" declared by Tongdao Dong Autonomous County, Hunan Province, which were both included in the list of intangible culture at the national level. In August 2021, the Opinions on Further Strengthening the Safeguarding of Intangible Cultural Heritage issued by the General Office of the CPC Central Committee and the General Office of the State Council clearly stated that "by 2025, representative items of intangible cultural heritage shall be effectively safeguarded, the working system shall be scientifically standardized and effectively operated, and the people's participation in intangible cultural heritage, The sense of participation, acquisition and identification of the people in the intangible cultural heritage shall be significantly enhanced, and the role of the intangible cultural heritage in serving the contemporary society and benefiting the people shall be further brought into play." for this purpose, specific requirements have been put forward in a number of aspects, for example, "strengthening theoretical research", "promoting wide dissemination", "integrating into the national education system", "organizing external exchange activities".

According to the above discussion, the exploration of Chinese Lusheng culture is not only the focus of regional music culture research but also of great significance for the inheritance and dissemination of China's non-heritage culture. At present, in the field of professional education as well as the performance of the Lusheng, the 18-pipe reformed Lusheng is the most widely used, which retains the traditional Lusheng production techniques, performance style, and tonal characteristics while greatly improving the range, transposition, etc. At the same time, it can be adapted to the performance of instruments that possess different musical style characteristics, and it realizes the requirements of applicable development, specialization, popularization, and nationalization.

This paper is to take the reformed 18-pipe Lusheng as a case study, to discuss the process of its reform, performance techniques, application practice, and future prospects, hoping to make a stage-by-stage summary of the current development of Chinese Lusheng culture.

Literature Review and Theoretical Framework

The Lusheng, a traditional free-reed mouth organ predominantly used by the Miao and Dong ethnic minorities in China, has historically played a central role in ritual and communal life. Literature on the Lusheng spans ethnomusicological studies, organological analysis, and cultural preservation research. Early studies (e.g., Li, 1982; Yang, 1995) focused on the traditional uses of the Lusheng in ceremonial contexts and its construction from bamboo and

gourd materials. These works emphasized its function in social rites and its symbolic connection to ethnic identity.

From the mid-20th century onward, significant scholarly attention shifted toward the reform of traditional Chinese musical instruments, including the Lusheng. The reform process, catalyzed during the 1950s modernization movement, aimed to integrate folk instruments into national and institutional music practices (Zhou, 2001; Lin, 2008). The introduction of new materials, tuning systems, and the expansion from 6 to 18 or 20 pipes transformed the Lusheng's technical possibilities (Wang, 2013). Studies such as Chen (2015) and Ma (2019) documented the emergence of new performance techniques, including expanded harmonic and melodic capabilities, dynamic control, and ensemble adaptability.

Contemporary scholarship (Liu, 2020; Zhang & Li, 2022) explores how the reformed Lusheng has entered academic settings, being taught in conservatories and used in modern compositions. These studies identify the instrument's evolving role in Chinese musical life, marking a shift from ceremonial to stage and educational performance. However, gaps remain in connecting the reform process with the emergence of new performance skills and in mapping how post-reform applications influence the Lusheng's future trajectory.

Studies on musical instrument reform more broadly (e.g., Nettl, 2005; Wong, 2018) provide useful comparative frameworks, suggesting that modernization often aims at balancing heritage preservation with innovation. These tensions are especially pertinent to Lusheng development, where cultural authenticity and practical adaptability must coexist.

Theoretical Framework

This study is underpinned by a combination of musical organology theory, cultural modernization theory, and diffusion of innovation theory, each providing insights into the complex interplay between tradition and transformation. Organological Theory (Hornbostel & Sachs, 1914; Kartomi, 1990) is central to analyzing the physical and acoustic reform of the Lusheng. It provides a lens for understanding how changes in material, structure, and tuning affect musical output and performance techniques. These structural transformations serve as the independent variable, influencing the emergence of new performance skills (dependent variable).

Cultural Modernization Theory (Inglehart & Baker, 2000) helps explain the societal and institutional forces driving the reform of ethnic musical instruments. The incorporation of the Lusheng into contemporary concert stages and academic environments reflects a larger cultural shift where traditional elements are recontextualized within modern frameworks. This theory supports the analysis of how post-reform applications (independent variable) affect the future development of the Lusheng (dependent variable), especially in terms of identity negotiation and cultural sustainability. Diffusion of Innovation Theory (Rogers, 2003) is employed to understand how innovations—such as reformed Lusheng models and new teaching methodologies—are adopted by performers, educators, and institutions. This theoretical lens enables the identification of key adopters, barriers to diffusion, and the conditions necessary for broader acceptance of the Lusheng in modern musical contexts.

The relationship between instrumental reform and performance development is conceptualized as a dynamic process: technical modifications lead to expanded expressive capacity, which in turn fosters new musical practices. Likewise, the integration of the Lusheng

into teaching and performance venues creates feedback loops that influence its future evolution, both in creative expression and heritage conservation.

Conceptual framework

The concept of the research on "A Study on the Process, Performance Skills, and Development of the Application of the Lusheng Instrument after China's Reform" can be divided into two conceptual frameworks:

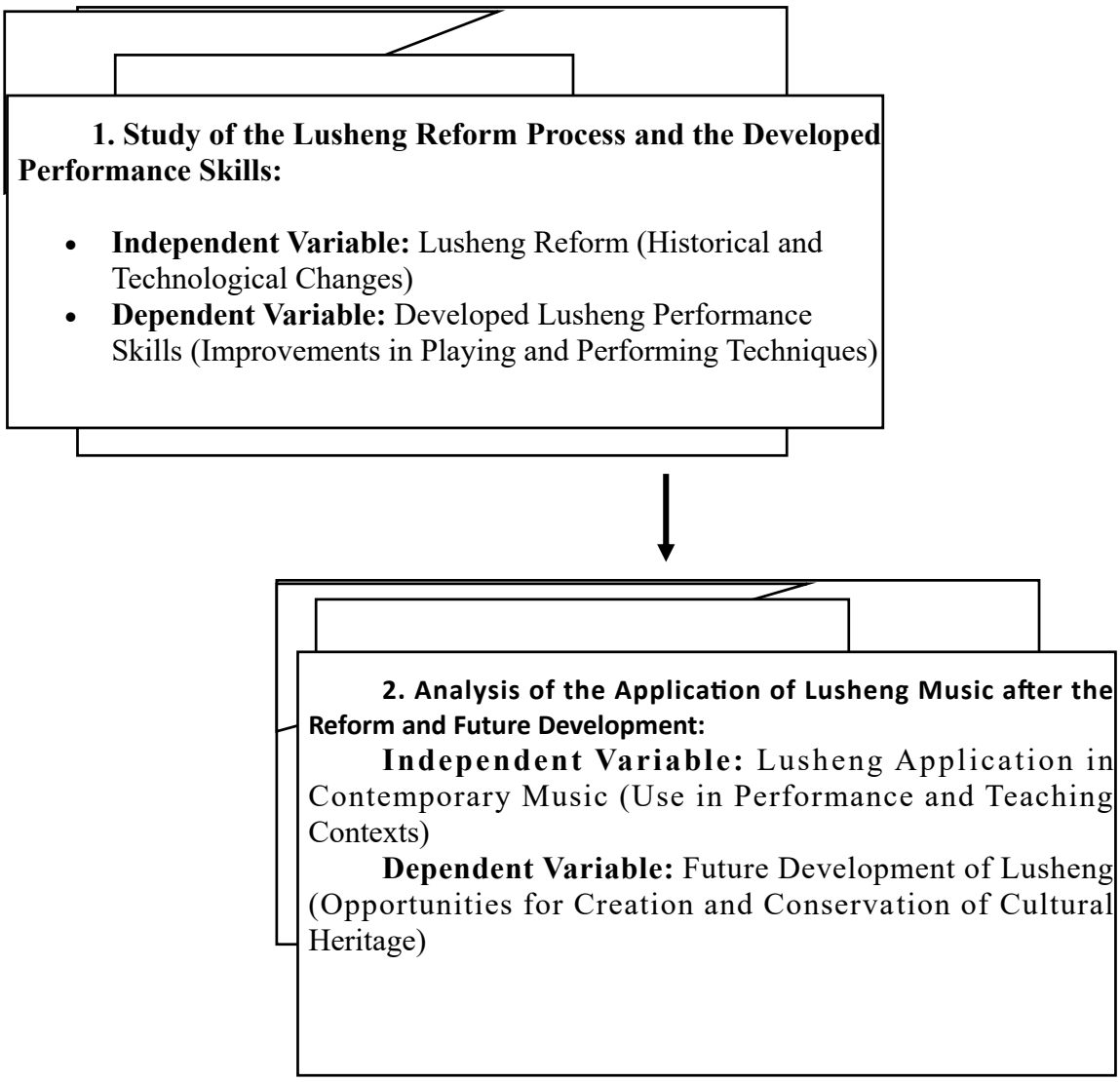

Figure 1 Conceptual framework

Objectives

1. To investigate the reform process of the Chinese Lusheng instrument and summarize the playing skills that have developed following the reform.
2. To examine the practical applications of Lusheng music post-reform and to anticipate the future development of Lusheng music in the wake of these changes.

Research Methodology

1. Research Design and Sample

This study adopts a qualitative research design centered on a case study of the 18-pipe reformed Lusheng, a modernized version of the traditional Chinese mouth organ. The research investigates four key aspects of this instrument: (1) the reform process, (2) musical performance techniques, (3) applications in composition and performance, and (4) future development. The 18-pipe Lusheng serves as a representative model of reform and innovation, allowing for an in-depth exploration of its structural transformation and musical utility.

2. Variables of the Study

The study explores the relationship between instrumental reform and the evolution of musical practice. Two main variables are examined:

2.1 Independent Variables

Historical and technological reform of the Lusheng. Contemporary applications of the Lusheng in performance and education.

2.2 Dependent Variables

Development of performance skills and compositional practices. Future trajectory of the Lusheng in terms of innovation and cultural preservation. The study analyzes how structural changes to the Lusheng have enabled new musical techniques and contexts, setting the groundwork for its ongoing promotion and cross-cultural communication.

3. Scope of the Research

This research is confined to the practical use of the 18-pipe Lusheng in contemporary musical settings, particularly in composition and live performance. The study does not include historical variants or regional types of Lusheng, focusing instead on the modernized form that is actively used in academic and theatrical contexts.

4. Research Instruments

To address the research objectives, a combination of documentary analysis, practice-based reflection, and fieldwork was employed.

4.1 Literature Review

Relevant academic and historical literature on Lusheng reform, performance technique, and ethnomusicology was collected and categorized. Through critical reading and analysis, key themes were extracted to contextualize the current study and validate the research focus.

4.2 Practical Summary

The researcher engaged in direct learning and performance of the 18-pipe Lusheng, reflecting upon and summarizing the practical experiences gained. These reflections offered grounded insights into the instrument's usability, technical complexity, and expressive range.

5. Data Collection Methods

To obtain comprehensive qualitative data, two primary methods were employed

5.1 Interviews

Semi-structured interviews were conducted with two key informants: Zhong Zhiyue – a recognized figure in the reform of Chinese musical instruments. Yi Yongren – an experienced

Lusheng performer and educator. Additional interviews included teachers and students from professional music conservatories offering Lusheng courses, as well as active performers from theater ensembles. The interviews provided insights into both the reform process and real-world application of the reformed Lusheng.

5.2 Observation

Field observations were made in two settings, classroom teaching of Lusheng, focusing on pedagogical strategies, student interaction, and performance technique. Stage performances, observing the integration of the Lusheng in ensemble and solo contexts. Observational data were recorded and analyzed to understand the dynamics of performance and audience reception. These multi-source qualitative data were triangulated to ensure reliability and to draw comprehensive conclusions about the present and future state of the 18-pipe Lusheng.

Results

From the study, literature review, and research methodology, the research results are as follows

1. The reform process of Lusheng

The reform process of the Lusheng is, in fact, a combination of historical evolution and technological advancement. Since the 1950s, literary and artistic workers around the world have begun to reform the Lusheng. The reforms mainly included: expanding the range, increasing the volume, and facilitating the transposition. Specifically, the number of pipes gradually increased from 6 to 18 and 20, and the bamboo resonator became a thin copper resonator. (Zhong Zhiyue,2009). The reform brought about a richer and more varied musical expression of the Lusheng. In terms of performance methods, techniques such as single spit, double spit, triple spit, and Yanyin were borrowed, and the addition of these techniques made the expression of the Lusheng richer, and the artistry of playing was also improved. With the change and development of the times, the shape and performance techniques of the Lusheng have also been improved and advanced. (Su Bo,2020). Nowadays, there are six, ten, and twelve pipes of Lusheng, and the length of Lusheng is two feet, five feet, and more than ten feet. Besides keeping the original ancient and melodious sound, varied tunes and bright rhythms have been added to the tunes of the Lusheng, especially when accompanied by the deep and majestic sound of the mango tubes, the sound and volume of the Lusheng have become heavier and very euphonious and touching. All in all, the reform process of the Lusheng is a process that adapts to the needs of the times and combines technological progress and artistic innovation. Through the reform of the Lusheng, the form of musical expression has been enriched and its artistic value has been improved, so that this ancient musical instrument, the Lusheng, has shown new vitality and vigor in the new historical period.

2. Performance techniques of reformed Lusheng

In the long-term artistic practice, based on the use of traditional performance techniques, the reformed Lusheng draws on and transplants the performance techniques of

similar instruments, and at present, a relatively perfect system of three major techniques has been formed.

- First, is the breath technique. The main techniques are the breath technique with changing strength, the air trill technique, the staccato air, the sawing air, and the chopping air.
- The second is the tongue technique. Mainly single spit, double spit, triple spit, broken spit, flower tongue sound, tongue trill, call tongue.
- Third, finger technique. There are mainly finger trills, sliding tones, calendar tones, hitting tones and so on.

The above three techniques are divided according to the method of voicing, but in the process of practical application, the joint action of the qi, tongue, and fingers is needed, so the various performance techniques of the Lusheng are not independent but have comprehensive characteristics. Taking the double spitting technique as an example, it is mostly applied to the continuous sixteenth running tone pattern in the fast section, which is more rhythmic and easier to express the warm, joyful, and excited music mood. When playing, besides the tongue being flexible to produce clear granular sound, the positive breath should also be used as a support, and, because of the fast speed when playing, the player's finger-carrying ability is examined as well.

3. Music composition and performance of the reformed Lusheng

The current situation of music creation and performance of the reformed Lusheng, due to the high achievement of the reformed Lusheng in terms of range expansion and transposition, has laid a solid foundation for music creation (Ouyang Pingfang,2021) and the reformed Lusheng is not only able to play traditional music but also able to play creative repertoire. In terms of the repertoire, many excellent works have been accumulated over the decades, such as "Train Coming to Dong" composed by Yi Yongren and Zhang Dasen; "Joyful Tibetan Plateau" composed by Yi Yongren; "Ashitaka and San" arranged by Zhong Zhiyue; "Spring in Miao Mountain" composed by Yang Lin; and so on. The common features of these pieces are: First, the music of different regions is used as the material and the structure is expanded on this basis. Take "Train Coming to Dong" as an example, it was composed of the tunes of Dong folk Lusheng music, adopting the structure of introduction, wah-wah, and three sections, and a characteristic piece of music with modern style was expanded. Second, the characteristic of the era is very high. For example, works such as "Blowing Up the Lusheng and Singing the Harvest" and "Spring Coming to Miao Ling", which are all based on the life of the Miao people, express their desire to run towards a better life and build their homes in the new period of social development. The performance of the reformed Lusheng repertoire, on the one hand, is widely used in the teaching of Lusheng courses in professional art colleges; on the other hand, it is widely used in competition repertoire and concert performance repertoire.

4. Future development of reformed Lusheng

As a musical instrument with a long history and cultural heritage, a variety of factors will affect the future development trend of the Lusheng, including cultural heritage, market demand, technological progress and so on.

Firstly, from the perspective of cultural inheritance, with the growing awareness of traditional culture protection and inheritance, the performance skills, repertoire and production techniques of the Lusheng can be better inherited and developed. At the same time, the Lusheng culture will be integrated with modern culture to create more Lusheng works with the characteristics of the times, meeting the cultural needs of different people.

Secondly, from the point of view of market demand, as the tourism and cultural industry develop rapidly, Lusheng, as a cultural product with local characteristics, the market demand will be further expanded. In all kinds of cultural activities and tourism performances, the Lusheng performance will appear more often and become an important element to show the local cultural charm, Yunqing Wangand and Rungkiat Siriwongsuwan, 2024. mentioned above in the history of Chinese music today, there are many controversies, which to some extent reveal the value orientation of Chinese culture and the congenital defects in the structure and function of the instrument itself.

Finally, from the point of view of technological progress, with the development and innovation of science and technology, the production and performance technology of the Lusheng will also be continuously improved and innovated. For example, the performance of the Lusheng can be made more vivid and realistic using digital technology and virtual reality technology and then presented in front of the audience to improve the audience's viewing experience. At the same time, the production technology of the Lusheng will also be improved and innovated to better enhance the sound quality and appearance of the Lusheng.

Discussion

The reform and development of the Lusheng, a traditional Chinese reed instrument, reflects an interesting journey of cultural preservation, adaptation and innovation. This discussion highlights the transformation of the Lusheng from a six-pipe instrument to an 18-pipe instrument, the cultural significance it holds for the Miao ethnic community, and the need to address issues in theoretical research, expanding the scope of repertoire and integrating technology to ensure its relevance in a modern context. The reform of the instrument and its cultural significance are consistent with Zhang, 2020; Li & Chen, 2022, who found that the transformation of the Lusheng into an 18-pipe instrument demonstrates how the traditional instrument can adapt to meet the broader musical needs of today's listeners, such as increasing its range and pitch. Scholars agree that this transformation demonstrates the dynamism of Chinese folk music, which combines history with practicality to preserve cultural heritage while appealing to modern sensibilities. It is also consistent with Li, 2021's research, which found that this is in line with a broader trend of modernization in folk music, with the instrument being reformed to suit larger venues and diverse genres. For the Miao, the Lusheng represents an important cultural symbol, often used in ceremonies, festivals and community gatherings. This highlights the role of the instrument as a tool for cultural expression (Ma & Zhao, 2019)

In summary, the research emphasizes that sustaining Lusheng's legacy requires a balanced approach of preserving its traditional essence while embracing modernization in its theoretical, practical, and technological dimensions.

Body of Knowledge from the research

he knowledge gained in this research is as follows:

1. In-depth Understanding of Lu Sheng: This article enhances our understanding of the reform process of the Lu Sheng, examining both its historical and technological advancements, as well as the development of improved playing skills. This knowledge is valuable for musicians, composers, and individuals interested in musical culture.

2. Application of Lu Sheng in Contemporary Contexts: This study provides insights into the application of the Lu Sheng in contemporary music, highlighting its ongoing role and significance within today's musical landscape.

3. Promotion of Cultural Heritage: The article emphasizes the importance of preserving and disseminating the Lu Sheng as a cultural heritage. It encourages scholars and practitioners to recognize the value of maintaining and transmitting musical culture to future generations.

Conclusion

As the development result of the traditional Lusheng in the new era, the reformed Lusheng plays a very important role in inheriting the advantages of the traditional Lusheng and promoting the culture of the Lusheng. Firstly, the emergence of the reformed Lusheng is a profound manifestation of the practical achievements of instrument reformers over the past decades, and it is precisely because of their efforts that the art of the Lusheng can be further developed; Secondly, in the application process of the reformed Lusheng, the constantly improved performance skills have greatly enhanced the artistic expression, and laid the foundation for the performance of diversified styles of musical works of the Lusheng, which indicates that in the future development of the reformed Lusheng, the instrument reformers, composers and players should continue to pay attention to the performance skills of the Lusheng, and further give full play to the charms of the Lusheng in its musical expression. Thirdly, in terms of the musical creation and performance of the reformed Lusheng, even though original works have been produced for decades, the requirements of the development of the musical art are still not satisfied, especially in the current era, when cross-styled music and diversified forms of musical expression have come into the public's view, which to a large extent poses a challenge to the creation and performance of the reformed Lusheng's music works and at the same time, it is also a rare historical opportunity. At the same time, it is also a rare historical opportunity. Therefore, it is necessary to firmly grasp this opportunity and make great efforts in the creation and performance of reformed Lusheng music in order to inherit, spread, and promote Lusheng culture more effectively.

Recommendations

1. Comparative analysis of the Lusheng with other folk instruments. Study and compare the Lusheng with other folk instruments in China or in the Southeast Asian region to see the differences and similarities in playing techniques, compositions, and cultural roles, which may help to improve the understanding of the Lusheng in a wider context.

2. The Role of the Lusheng in Contemporary Music. Explore the role of the Lusheng in contemporary music, including the use of this instrument in modern music genres such as pop,

rock, or electronic music. This study will help to see the adaptation of the Lusheng in a rapidly changing musical world.

3. Promoting the Education and Training of the Lusheng in the Present. Research on the education and training of the Lusheng in educational institutions, both at the primary and higher levels and the development of new curricula or teaching methods to enhance the skills and interest in this instrument in students and young musicians.

References

Deng, J. (1999). The application tradition of Miao Lusheng and its cultural connotation. Beijing: Music Research Institute, Chinese National Academy of Arts.

Li, M. (2021). The evolution of Chinese folk instruments: A historical perspective. Asian Musicology, 19(1), 45–59.

Liu, Q. (2017). Interpretation of the use and cultural value of "musical instrument speaking" in southwestern ethnic areas. Yueyang: School of Music, Hunan Institute of Science and Technology.

Liu, Z. (2015). The history and current status of research on Lusheng music in China. Beijing: Music Research Institute, Chinese National Academy of Arts.

Ma, Y., & Zhao, T. (2019). Cultural significance of Lusheng in Miao community ceremonies. Ethnic Studies Review, 13(3), 112–124.

Ouyang, P. (2021). A study on the cognitive model of music culture of the Miao people in Qiandongnan. Beijing: China Art and Technology Research Institute.

Su, X. (2009). An analysis of the cultural connotation and inheritance path of the Miao Lusheng production technique. Kaili: Qiandongnan Vocational and Technical College for Nationalities.

Wang, Y., & Siriwongsuwan, R. (2024). Analysis on the changes of Konghou art in ancient China from the perspective of anthropology. Journal of MCU Ubon Review, 9(1), January–April 2024.

Weng, Z. (2018). An analysis of the communication problems of Miao culture in Guizhou in the "Ancient Miao Corridor". Guiyang: College of Literature and Media, Guizhou University.

Xie, W. (2024). Research on the origin, production and performance form of Lusheng culture of Miao nationality. Chengdu: Sichuan Culture and Art Institute.

Zhang, Q. (2020). Musical adaptation and cultural preservation in Chinese folk instruments. Musicology Today, 11(2), 33–47.