

An Analysis of Tuba Playing Techniques in the Chinese Folk Song “Ga Da Mei Lin”

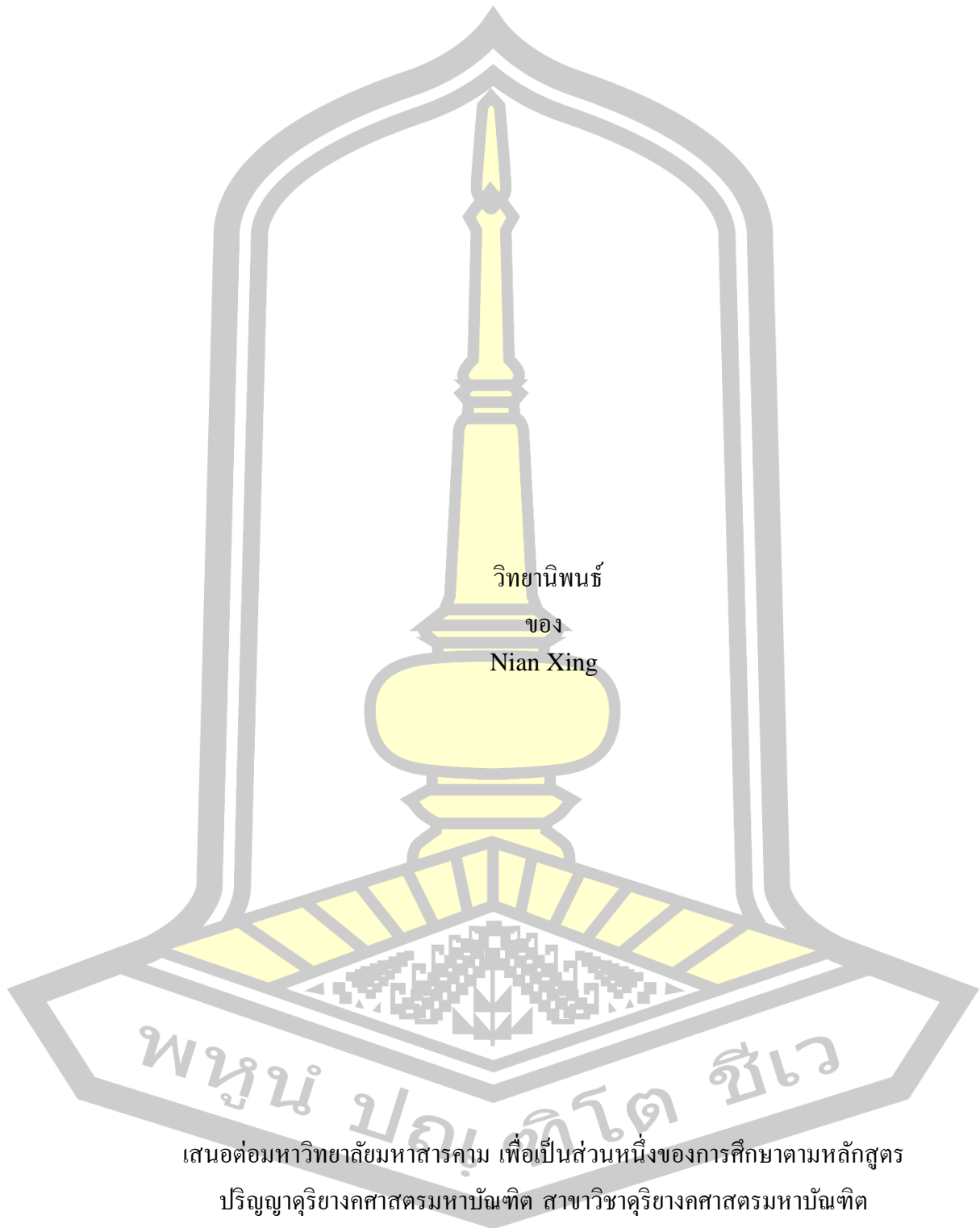
Nian Xing

A Thesis Submitted in Partial Fulfillment of Requirements for
degree of Master of Music in Music

February 2025

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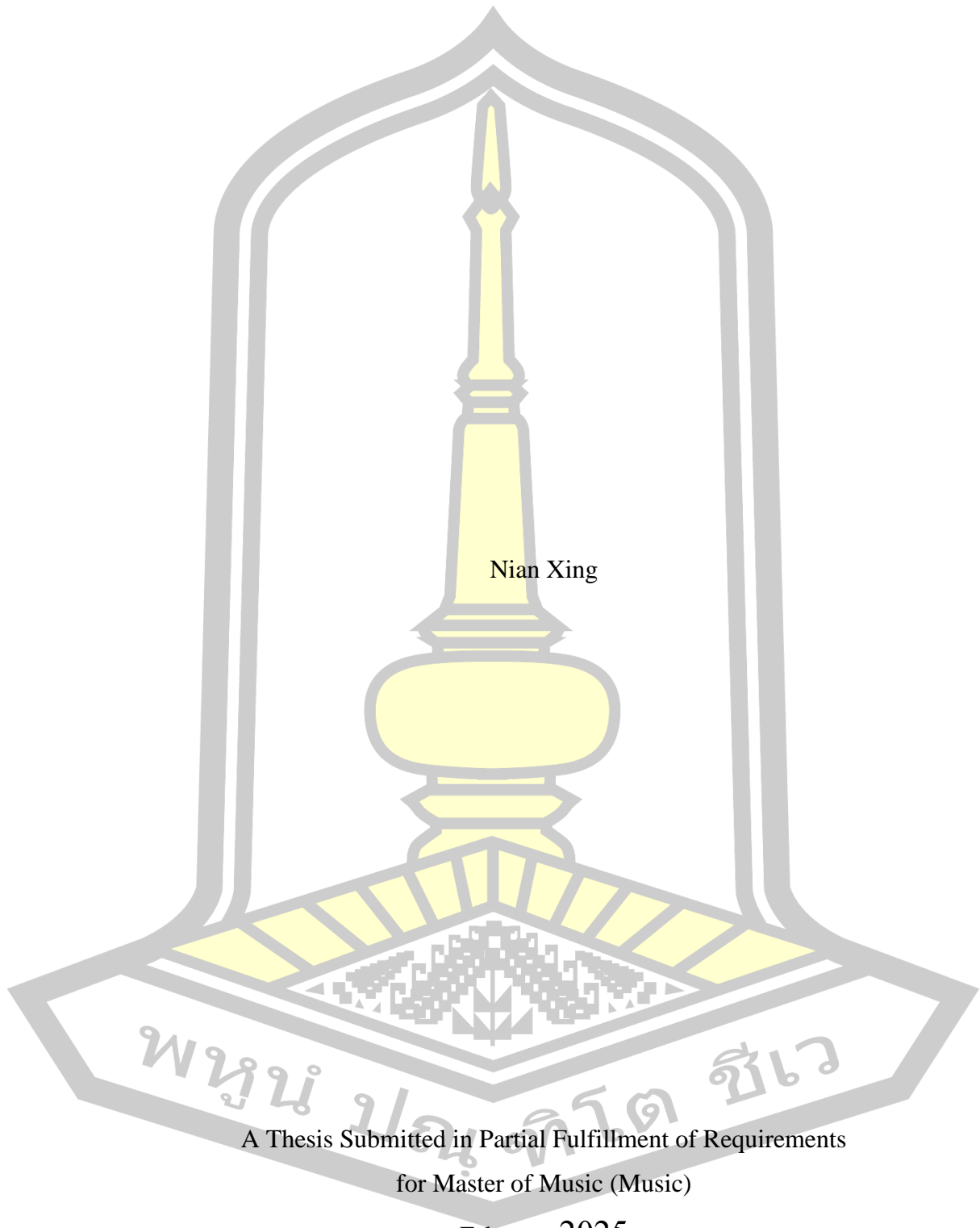
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for Master of Music (Music)

February 2025

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The examining committee has unanimously approved this Thesis, submitted by Mr. Nian Xing , as a partial fulfillment of the requirements for the Master of Music Music at Mahasarakham University

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ABSTRACT

This research study has two objectives: 1) the historical development and 2) the Tuba playing techniques in performing the Chinese folk song “Ga Da Mei Lin”. The researcher conducted qualitative research and data collection through field investigations involving two key informants. The research tools included observation and interview questionnaires. The research findings are as follows:

1. Originating as a Mongolian long narrative folk song, “Ga Da Mei Lin” narrates the heroic resistance of “Ga Da Mei Lin”, a Mongolian leader who fought against feudal oppression to protect his people's grasslands. Various musical forms, including a symphonic poem and a Tuba solo arrangement, have adapted this folk song. These adaptations exemplify a fusion of Mongolian traditional music with Western instrumental methodologies, preserving the cultural essence while showcasing the versatility of Western instruments. The historical evolution of this iconic folk song emphasizes its transformation into a Tuba solo.

2. Analyze the technical of performing this solo on the Tuba, including breath control, tone shaping, glissandos, rhythmic techniques, and the use of vibrato to evoke the ethnic and emotional essence of Mongolian music. This study shows how important “Ga Da Mei Lin” is to Mongolian culture as a symbol of heritage. It can bring people from different cultures together by comparing how famous performers have interpreted it.

It also gives us helpful information about teaching and creating art by mixing traditional Chinese folk elements with Western instrumental styles, which helps us learn more about how music from different cultures can blend.

Keyword : Tuba solo, Ga Da Mei Lin, Folk Song, Mongolia Folk Song

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Throughout the interview process, I had the privilege of engaging with scholars, artists, and administrators who generously shared their knowledge and expertise on the inheritance and performance techniques of the solo instrument. Their contributions enriched my research and added depth to my findings.

My heartfelt thanks to the teachers and friends who have provided unwavering support and assistance throughout my master's journey.

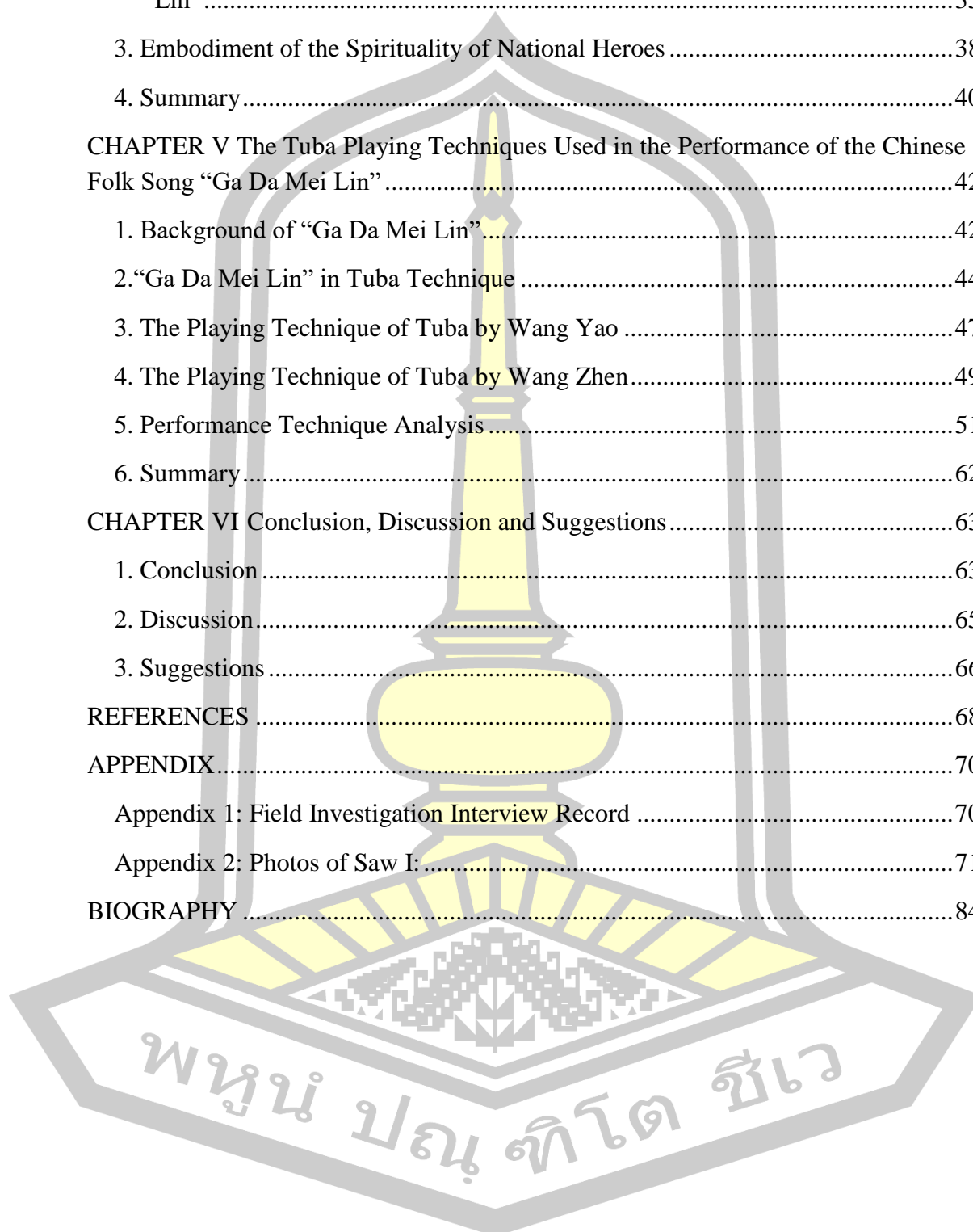
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Nian Xing

TABLE OF CONTENTS

	Page
ABSTRACT.....	D
ACKNOWLEDGEMENTS.....	E
TABLE OF CONTENTS.....	F
LIST OF FIGURES	H
CHAPTER I Introduction	1
1. Research Background	1
2. Research Objectives.....	2
3. Research Questions.....	2
4. Research Benefit.....	3
5. Definition of terms.....	3
6. Conceptual Framework.....	4
CHAPTER II Literature Review.....	5
1. General Knowledge about Tuba.....	5
2. General Knowledge of “Ga Da Mei Lin”.....	9
3. The General knowledge about the Development of Chinese Tuba	10
4. The General Knowledge about the Playing Techniques of Tuba	12
5. The General Knowledge of Folk Songs in China.....	18
6. Theory Used in This Research.....	20
7. Related Documents and Research.....	22
CHAPTER III Research Methodology.....	25
1. Research Scope.....	25
2. Research Process	26
CHAPTER IV The Historical Development of the Tuba in the Performance of the Chinese Folk Song “Ga Da Mei Lin”	33
1. The Composition Process of Mongolian Long Narrative Folk Song “Ga Da Mei Lin”	33

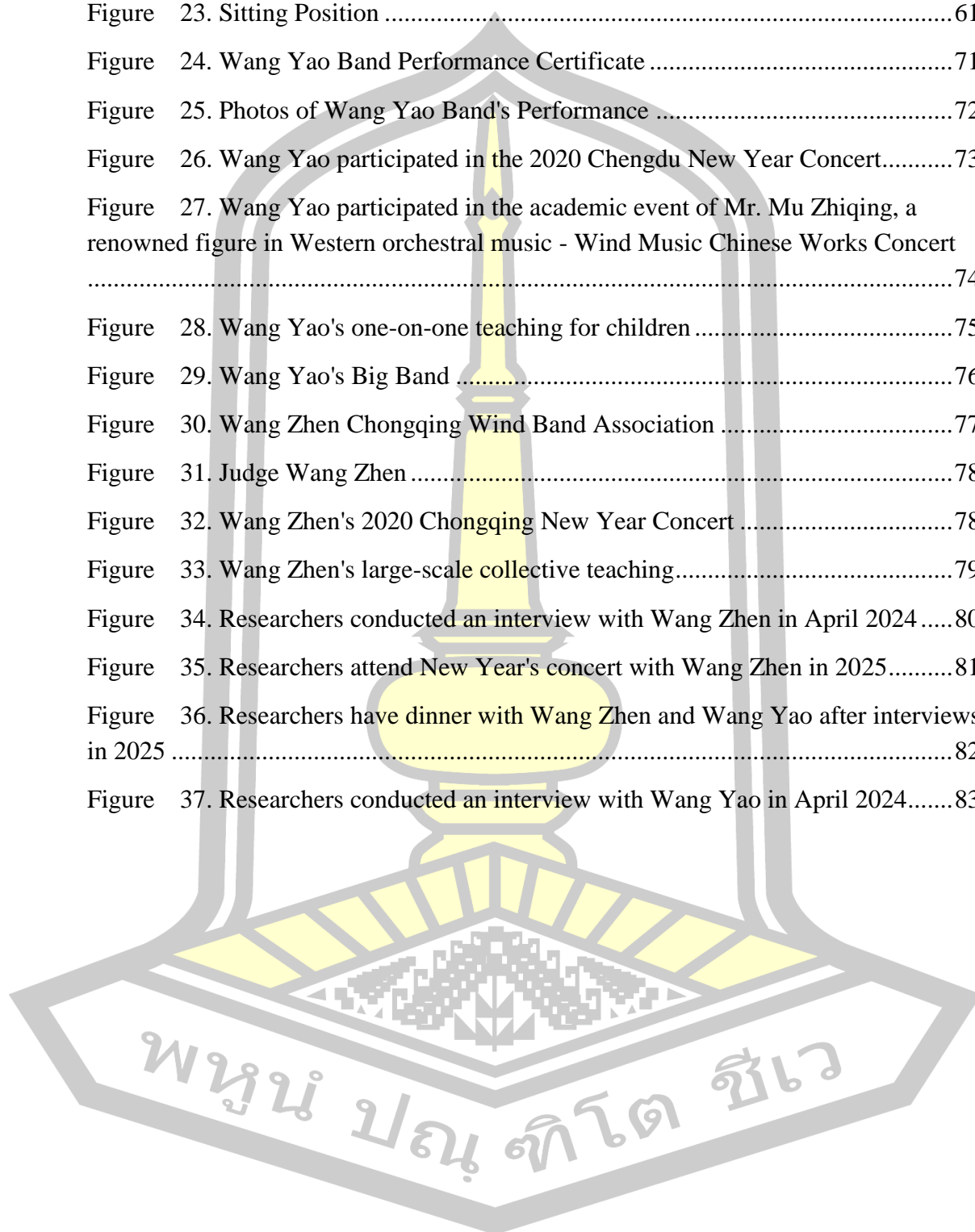
2. The Process of Development of Musical Compositions Related to “Ga Da Mei Lin”	35
3. Embodiment of the Spirituality of National Heroes	38
4. Summary	40
CHAPTER V The Tuba Playing Techniques Used in the Performance of the Chinese Folk Song “Ga Da Mei Lin”	42
1. Background of “Ga Da Mei Lin”	42
2. “Ga Da Mei Lin” in Tuba Technique	44
3. The Playing Technique of Tuba by Wang Yao	47
4. The Playing Technique of Tuba by Wang Zhen	49
5. Performance Technique Analysis	51
6. Summary	62
CHAPTER VI Conclusion, Discussion and Suggestions	63
1. Conclusion	63
2. Discussion	65
3. Suggestions	66
REFERENCES	68
APPENDIX	70
Appendix 1: Field Investigation Interview Record	70
Appendix 2: Photos of Saw I:	71
BIOGRAPHY	84



LIST OF FIGURES

	Page
Figure 1. Ophicleide.....	6
Figure 2. Tuba fingering	14
Figure 3. Sichuan Province, China	26
Figure 4. Mr. Wang Yao	28
Figure 5. Mr. Wang Yao	28
Figure 6. Mr. Wang Zhen	29
Figure 7. Ga Da Mei Lin portrait	35
Figure 8. Wang Yao plays “Ga Da Mei Lin”	49
Figure 9. Wang Zhen plays “Ga Da Mei Lin”.	50
Figure 10. “Ga Da Mei Lin”playing technique (1-18)	51
Figure 11. “Ga Da Mei Lin”playing technique (1-18)	51
Figure 12. “Ga Da Mei Lin” playing technique (24-58)	53
Figure 13 “Ga Da Mei Lin” playing technique (38-58)	53
Figure 14. “Ga Da Mei Lin”playing technique (65-91)	54
Figure 15. “Ga Da Mei Lin”playing technique (100-105)	55
Figure 16. “Ga Da Mei Lin” playing technique (111-133)	56
Figure 17. “Ga Da Mei Lin”playing technique (139-193)	57
Figure 18. “Ga Da Mei Lin”playing technique (265-285)	57
Figure 19. “Ga Da Mei Lin”playing technique (265-285)	58
Figure 20. “Ga Da Mei Lin”playing technique (289-302)	59
Figure 21. “Ga Da Mei Lin”playing technique (38-46)	59

Figure 22. Standing Position.....	60
Figure 23. Sitting Position	61
Figure 24. Wang Yao Band Performance Certificate	71
Figure 25. Photos of Wang Yao Band's Performance	72
Figure 26. Wang Yao participated in the 2020 Chengdu New Year Concert.....	73
Figure 27. Wang Yao participated in the academic event of Mr. Mu Zhiqing, a renowned figure in Western orchestral music - Wind Music Chinese Works Concert	74
Figure 28. Wang Yao's one-on-one teaching for children	75
Figure 29. Wang Yao's Big Band	76
Figure 30. Wang Zhen Chongqing Wind Band Association	77
Figure 31. Judge Wang Zhen	78
Figure 32. Wang Zhen's 2020 Chongqing New Year Concert	78
Figure 33. Wang Zhen's large-scale collective teaching.....	79
Figure 34. Researchers conducted an interview with Wang Zhen in April 2024.....	80
Figure 35. Researchers attend New Year's concert with Wang Zhen in 2025.....	81
Figure 36. Researchers have dinner with Wang Zhen and Wang Yao after interviews in 2025	82
Figure 37. Researchers conducted an interview with Wang Yao in April 2024.....	83



CHAPTER I

Introduction

1. Research Background

The Tuba was invented in 1835 by German trombonists Wilhelm Friedrich Wieprecht and Johann Gottfried Moritz. The original Wieprecht and Moritz instruments used five valves of the Berlin pump type, a precursor to the modern piston valve. Over time, the Tuba continued to improve. At the beginning of its invention, the Tuba was still relatively young, and its playing range was mainly limited to orchestra ensembles, but gradually, composers began to write solo solos for it, and its playing techniques and expressions were enriched (Zhen Guo,2019).

Appearance: The Tuba is the largest instrument in the brass family. Commonly, there are embouchure type, circle type and mouth solo type (commonly known as “sousaphone”), etc. The latter two are often used in marching bands or wind bands. Structure: by the horn mouth solo, tube body, and three mechanical parts. The mechanical part is mostly of the piston type, with four to six pistons (rotary type is more common), and the role of the piston is to change the length of the air column of the tube body through the key, thus changing the pitch. Tone characteristics: The Tuba has a serious and heavy tone with a wide range. Its low register is thick and low, providing a solid bass foundation for the orchestra; the treble register is relatively soft, and modern composers occasionally use the Tuba's treble register to play melodies (Jian Huiluo, 2015).

The Tuba is a brass instrument, so it is usually played on the stage in the brass section, next to the third Tuba or bass Tuba, next to the double bass, and behind the viola. This kind of stage placement allows the Tuba to enhance the brass section in the orchestra, the bass in the bass woodwind and the bass-cello parts, and the orchestra to better coordinate (Di Shi,2011).

Now, the popular brass instrument group standard system is generally 4 horns, 3 trumpets, 3 Tubas, 1 Tuba. Such composition and configuration can meet the needs of the vast majority of music works. It is important to note that only one Tuba is used, not because it is dispensable, but because it is loud and expressive, so in the orchestra, one Tuba is usually enough. Although there is no obvious advantage in numbers,

there must be a small number, which reflects the Tuba's unique and indispensable status in the symphony orchestra. This is the only Tuba that plays a unique role that no other instrument can play. When an orchestra performs a solo concert, it plays a solo for the Tuba. This shows how valuable and important a Tuba player is in an orchestra (Haili Zhong, 2020) .

The “Ga Da Mei Lin” was composed in the autumn of 1959 by Ma Youdao, a Chinese composer, based on the symphonic poem Gada Meiren by Xin Luguang; it is the first Tuba work to be composed using Chinese music materials. It is based on folk songs from Mongols and uses traditional composition techniques. Many of the best Western musical instruments are based on Chinese folk music. In order to explore the application of Chinese music materials in Tuba works, this paper takes “Ga Da Mei Lin” as an example (Huang Yu,2012).

This research focuses on applying Chinese musical elements in Tuba music, using “Ga Da Mei Lin” as a case study. By summarizing the history of Tuba development in China, the study aims to explore the country's overall progress. This research highlights how Chinese musical characteristics are expressed through an analysis of the creative background, the musical composition of “Ga Da Mei Lin”, and Tuba playing techniques. The study also emphasizes the importance of collaborating with other instruments, paying attention to emotional expression and artistic impact in order to present captivating musical performances for audiences. Ultimately, it seeks to summarize the key features of the application of Chinese music elements in Tuba music.

2. Research Objectives

2.1 To investigate the historical development of the tuba in the performance of the Chinese folk song “Ga Da Mei Lin.”

2.2 To analyze the tuba playing techniques used in the performance of the Chinese folk song “Ga Da Mei Lin.”

3. Research Questions

3.1 How did the Tuba evolve historically in the performance of the Chinese folk song "Ga Da Mei Lin?"

3.2 How were the Tuba playing techniques used in the performance of the Chinese folk song “Ga Da Mei Lin?”

4. Research Benefit

4.1 To understand the historical development of the Tuba in the performance of the Chinese folk song “Ga Da Mei Lin.”

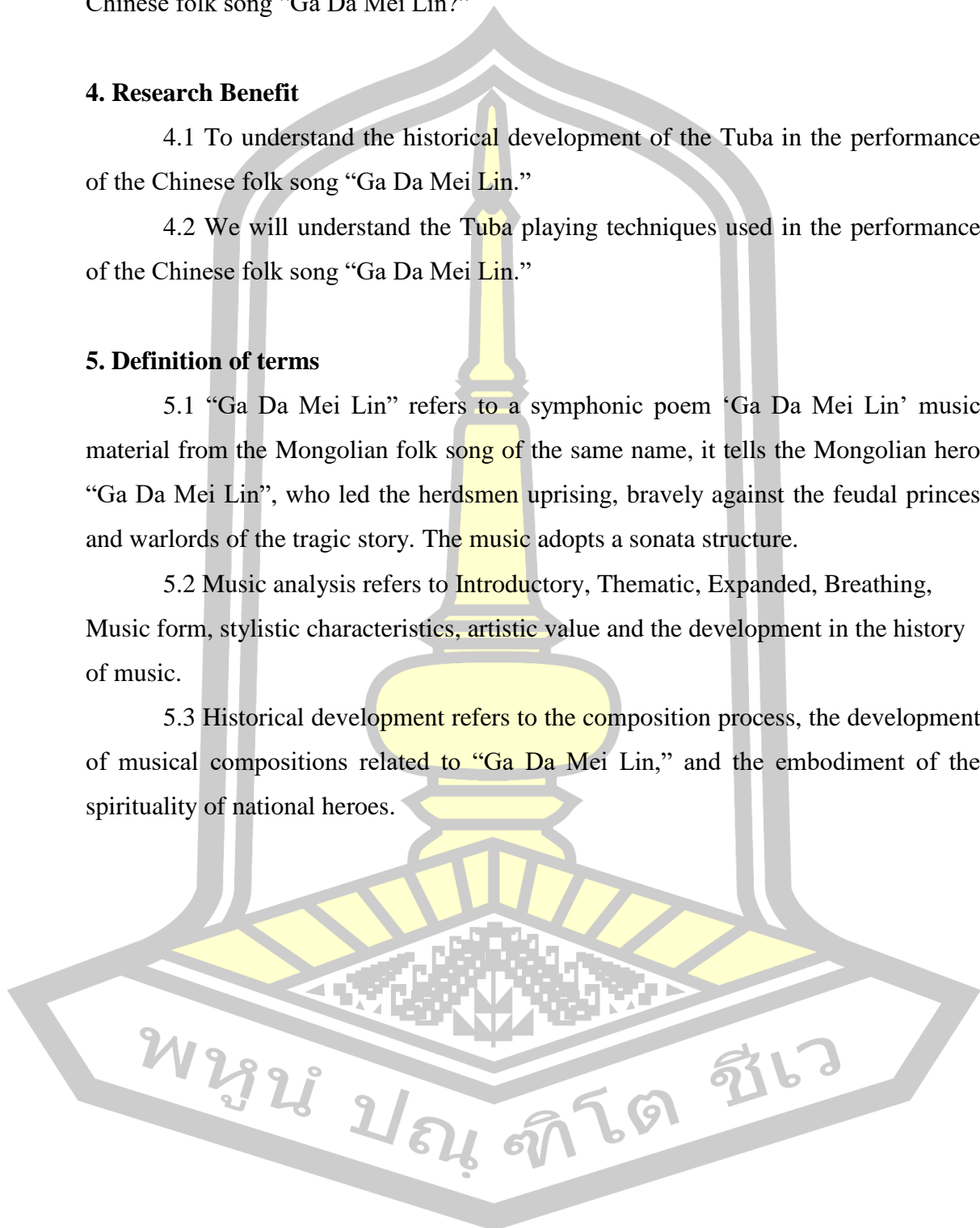
4.2 We will understand the Tuba playing techniques used in the performance of the Chinese folk song “Ga Da Mei Lin.”

5. Definition of terms

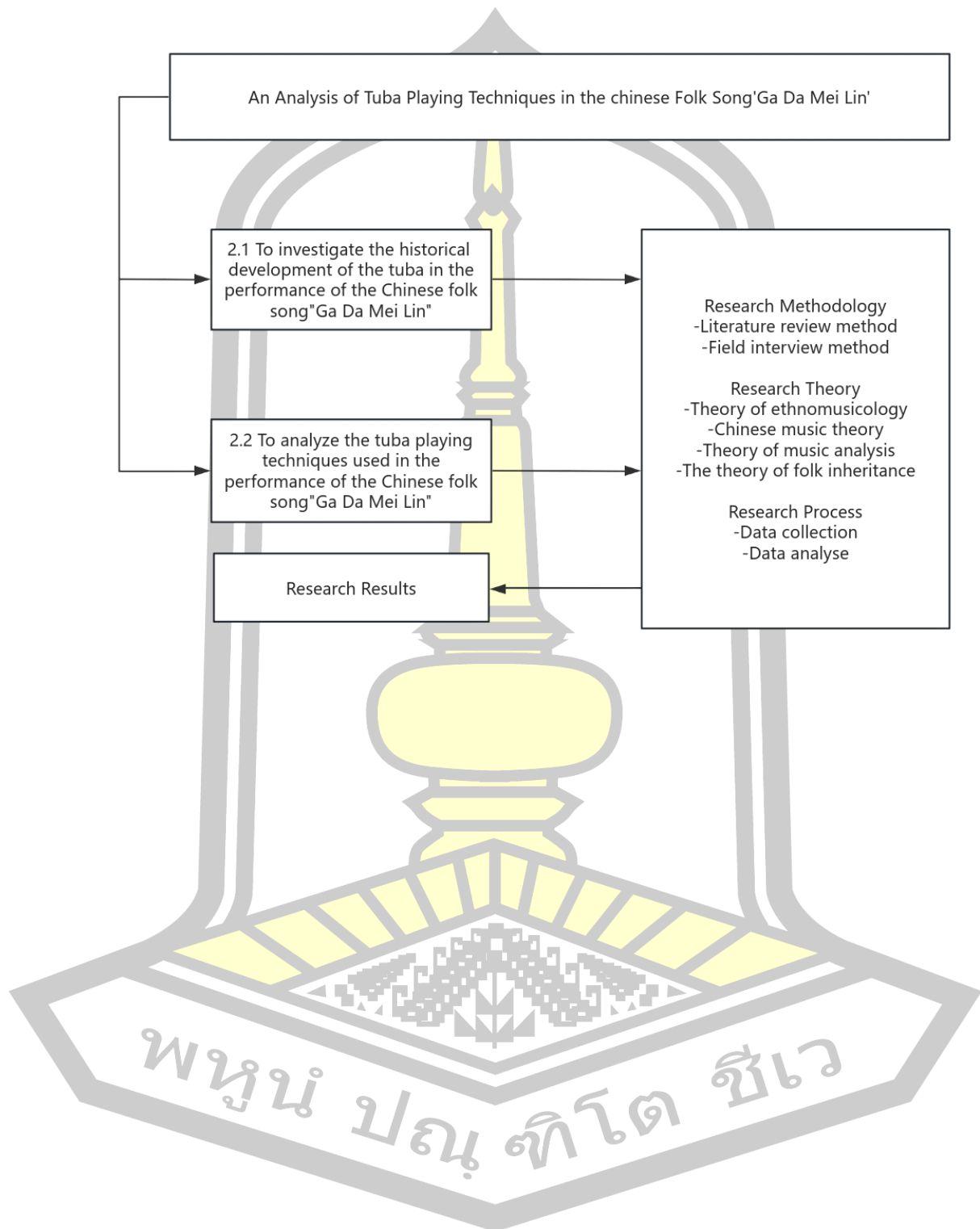
5.1 “Ga Da Mei Lin” refers to a symphonic poem ‘Ga Da Mei Lin’ music material from the Mongolian folk song of the same name, it tells the Mongolian hero “Ga Da Mei Lin”, who led the herdsmen uprising, bravely against the feudal princes and warlords of the tragic story. The music adopts a sonata structure.

5.2 Music analysis refers to Introductory, Thematic, Expanded, Breathing, Music form, stylistic characteristics, artistic value and the development in the history of music.

5.3 Historical development refers to the composition process, the development of musical compositions related to “Ga Da Mei Lin,” and the embodiment of the spirituality of national heroes.



6. Conceptual Framework



CHAPTER II

Literature Review

This chapter reviews the literature on the analysis of the performance of the Chinese Tuba. The technique "Ga Da Mei Lin" was used to achieve the most comprehensive information available in this study. The review of various literature is divided into the following categories:

1. General Knowledge about Tuba
2. General Knowledge of "Ga Da Mei Lin"
3. The General Knowledge about the Development of the Chinese Tuba
4. General Knowledge of the Playing Techniques of Tuba
5. The General Knowledge of Folk Songs in China
6. Theory Used in This Research
7. Related Documents and Research

1. General Knowledge about Tuba.

1.1 The History of Tuba

The origin of the Tuba can be traced back to the late 16th century, with its predecessor being the serpent-shaped Tuba created in Italy. In the development process, the predecessor of the Tuba was the Ophicleide, which had a sound principle similar to that of woodwind instruments. It shortened or extended the length of the air column by opening and closing the sound holes on the side of the pipe to change the pitch. Its sound was powerful but relatively rough, which was inconsistent with the sound of general brass instruments. To seek bass instruments that are more harmonious with brass instruments, many musicians and instrument makers in the 19th century explored and invented them. In 1835, German instrument maker Moritz J. G1777-1840 completed the F-key bass Tuba based on a design sketch by Wieprecht W. F (1802-1872), the music supervisor of a Prussian military band at the time. This Tuba was originally used in military bands, with a wide range, flexible playing techniques, and good sound effects. It was approved by many composers and quickly incorporated into orchestras. Sax Adolphe (1814-1894) also made significant

contributions to the improvement of the Tuba. He successfully determined the size ratio between brass instruments, forming the Saxhorn series with seven basic sizes, and applied for a patent in 1845. Therefore, some people also refer to the Tuba as the Saxhorn. With the advancement of technology and the development of music, Tuba instruments have been continuously improved and perfected. The Tuba used in modern bands is mostly a bass Tuba. In addition, the Sousaphone is also a type of Tuba, named after the famous American military conductor and composer John Philip Sousa (1854-1932). He transformed the oval shaped Tuba he held for performance into a circular one, which could be worn on his body and played on his back. This not only facilitated the use of the military band, but also enhanced the band's momentum (Jian Jiao 2022).



Figure 1. Ophicleide

Source: Xing Nian (2024)

1.2 The fusion of timbres

The Tuba is the focal point of harmony in orchestral performance, which means that the Tuba can shape beautiful harmonies and enhance the expressive power of musical works. In most large-scale band performances, the Tuba is played in harmony with other instruments to create a perfect tone and improve the quality of the performance. Of course, the characteristics of Tuba are not only low-pitched sound

but also combine some features of Tuba and Tuba. For example, Tuba can replace Tuba to shape the bass four-part harmony and enrich the bass part of the Tuba. No matter which instrument it replaces, it can perform perfectly. The tone of the Tuba itself is deep and rich, not outstanding enough, so this feature can better integrate the Tuba into the overall tone, thereby improving the performance quality of the orchestra (Jian Huiluo 2015).

1.3 The expression of music

Large instruments can also help enhance the expressiveness of music in orchestral performances. Every musical work is the creator's emotional expression, and the performance process seems to be telling a vivid story. The important role of the large size is to create a musical atmosphere, shape the mood, and make the audience's thoughts wander. From ancient Romanticism and Impressionism to Modernism, composers of each genre use music to express their emotions and tell people vivid stories. The deep tone of the Tuba is often overlooked by composers, and it is precisely because of this unique timbre that the orchestra's performance is more atmospheric. So, overall, without the help of large instruments, the artistic conception of the entire band's performance cannot reach the expected level, and the reasonable development of musical emotions is also difficult to achieve (Jian Huiluo 2015).

1.4 The arrangement of the brass instrument Tuba in symphony orchestras

The symphony orchestra has a large organization and scale, consisting of four parts: string, woodwind, brass, and percussion. A symphony orchestra generally consists of 5 sets of instruments. In addition to the optional special instrument set, there are 4 sets of essential instruments, namely string instrument set, woodwind instrument set, brass instrument set, and percussion instrument set. The arrangement of the Tuba in a symphony orchestra includes three aspects: instrument group arrangement, performance position arrangement, and quantity arrangement (Ye Yuan 2021).

The Tuba relies on the pressure changes of the performer's Embouchure and the method of connecting the instrument itself to the "additional tube" to change the pitch. This is different from the pronunciation method of woodwind instruments, which involves changing the pitch by shortening the air column inside the tube. The large volume is grand and wide, with a majestic, brilliant, and passionate tone. The

tube body is in the shape of a long cone and is equipped with cylindrical nozzles of similar shape. These are common features of brass instrument groups. According to statistics, the proportion of each instrument group in the symphony orchestra is as follows: the string instrument group accounts for 60%, the woodwind instrument group accounts for 15%, the brass instrument group accounts for 15%, and the percussion instrument group accounts for 10%. The brass instrument group accounts for a significant proportion in the entire symphony orchestra, second only to the string instrument group, and holds a pivotal position in the entire orchestra. Of course, the contribution of a musical instrument to a symphony orchestra is only a part of its quantity, and musical expression is also a very important factor. Brass instruments have become an indispensable presence in symphony orchestras due to their highly recognizable timbre and powerful musical expression, surpassing any other group of instruments in terms of power. The power of brass instruments is jointly shaped by the Tuba, trumpet, Tuba, Tuba, etc (Ye Yuan, 2021).

The Tuba belongs to brass instruments, so its stage performance position is usually in the brass instrument group area, next to the third Tuba, the bass Tuba, adjacent to the cello and following behind the viola. This stage position distribution facilitates the strengthening of the musical expression of the brass instrument group in the ensemble of the orchestra, enhances the bass effect of the woodwind and double bass parts, and thus better coordinates the entire orchestra (Ye Yuan, 2021).

The number and configuration of Tuba in symphony orchestras have also undergone a long process of evolution. At first, the number of large sizes was relatively random. The majority of symphonic works are performed in a large format. Using two large symphonic works, such as Berlioz's "Symphony of Fantasy," Stravinsky's "The Rite of Spring," Richard Strauss's "Alpine Symphony" and "Zarathustra Speaks," Holst's "Planetary Suite," etc. Using five Tuba, such as Wagner's epic musical mastersolo "The Ring of the Nibelung" and Bruckner's "Symphony No. 7". Using six Tuba instruments such as Richard Strauss's "Alpine Symphony" and so on. In the late 19th century, the number and organization of Tuba in symphony orchestras gradually became unified, meaning that both medium and large orchestras only used one Tuba. Whether it is a symphony orchestra with a single or double pipe formation, a symphony orchestra with a three to four pipe formation,

or a large formation, it will be equipped with a Tuba. The standard arrangement for brass instrument groups currently popular is generally 4 Tubas, 3 trumpets, 3 Tubas, and 1 Tuba. This composition and configuration can meet the needs of the vast majority of music works. It is worth noting that only one Tuba is used, not because it is optional, but because the volume of the Tuba is high and the musical expression is extremely strong. Therefore, in symphony orchestra composition, only one Tuba is generally needed. Although there is no obvious advantage in terms of quantity ratio, having a small quantity is essential, which precisely reflects the unique and indispensable position of the Tuba in symphony orchestras. It is this only large instrument that plays a unique role that no other instrument can achieve. Whenever a band is going to hold a solo concert, they always give solo music to the Tuba player, which shows how precious the Tuba player in a band is important (Ye Yuan 2021).

2. General Knowledge of “Ga Da Mei Lin”

2.1 Introduction

Gada Meilin is a landmark figure in the modern history of the Mongolian ethnic group. The anti-reclamation struggle he led not only caused a stir at that time but also became a symbol of the heroic resistance spirit of the Mongolian people in later generations. His deeds have transcended time and space, continuously exerting their charm in the fields of history, culture, and art. Many scholars have been attracted to conduct in-depth research, providing a crucial perspective for understanding the modern history, national culture, and social changes of the Mongolian ethnic group (Huang Yu, 2012).

2.2 Research on Life and the Course of the Uprising

Scholars generally agree on the details of Gada Meilin's life. He was born into a peasant family in Darhan Banner in 1892. He received a private school education, mastered both Mongolian and Chinese languages, and rose from a member of the banner guard to the military affairs of Meilin through his abilities. In the research on the course of the uprising, it is clear that in 1928, a large amount of land in Darhan Banner was reclaimed, threatening the survival of the herdsmen. He opposed the land - selling and was dismissed from his post. In 1929, he resolutely launched an uprising. The key battles, marching routes, and force comparisons during the uprising have

been carefully sorted out, demonstrating the difficulty and determination of his resistance.

2.3 Analysis of the Causes of the Uprising

At the economic level, the reclamation severely damaged the traditional nomadic economy of the Mongolian ethnic group. The herdsmen lost their grasslands, which were the basis of their livelihood, and their lives became unsustainable. Politically, the Darhan princes colluded with the government of the Republic of China to sell the interests of the banner people. Gada Meilin's uprising was a rebellion against this corrupt rule. From a cultural perspective, the reclamation undermined the cultural foundation of the Mongolian people on the grassland, and the uprising was a defense of the inheritance of national culture. These multi-dimensional aspects reveal the deep-seated roots of the uprising.

2.4 Research on the Character Image and Spiritual Connotation

In the shaping of the character image, literary, musical, and film-television works have continuously enriched its connotation. From the heroic leader in the folk song "Gada Meilin" to the flesh-and-blood national hero in film and television dramas, he has become the embodiment of wisdom, courage, and justice. His spiritual connotation includes love for the national homeland, the pursuit of fairness and justice, and the adherence to national culture, inspiring future generations.

2.5 Conclusion and Prospect

The existing research has achieved fruitful results, covering many aspects such as life, uprising, and spirit. However, there is still room for expansion. Future research can delve deeper into the evolution of the social and economic structure behind the uprising, compare the anti-reclamation movements in different regions, and strengthen interdisciplinary research. By integrating multidisciplinary methods such as history, culture, and sociology, we can further enrich our understanding of Gada Meilin and related historical events.

3. The General knowledge about the Development of Chinese Tuba

Since ancient times, the Tuba has played an important role in Chinese court music, temple fair bands, and folk music performances. With the changes of the times and the development of music, its status continues to be elevated. China's large size

has undergone certain evolution and development. Modern plus size has gradually taken shape through reform and innovation since the 20th century. It has a unique tone and expressive power, with a full and rich tone that can express deep emotions and magnificent momentum (Yi Yang, 2020).

In terms of music applications, Tuba is widely used in traditional Chinese music, especially in occasions such as celebrations, banquets, and ceremonies. It can express people's emotions towards joy and congratulations through high-pitched tones and strong volume, making music more vivid and lively. In modern music, the Tuba can not only be played as a solo instrument but also often ensemble with other instruments, playing important melodic and accompaniment roles in symphonies and orchestras, adding strength and rendering effects to the music (Lu Yao, 2024).

In terms of playing techniques and cultivation of Tuba, performers need to use comprehensive skills such as breath control and finger techniques to achieve the required timbre and performance of musical works. In order to play beautiful Tuba music, performers need to constantly practice and improve their skills (Shuo Xu, 2018).

In the field of education and cultural exchange, Tuba not only plays an important role in music performance but also promotes education and cultural exchange. Many music schools and art groups have invested a lot of manpower and material resources in cultivating Tuba performers, and the production techniques and performance skills of Tuba are constantly improving, injecting new vitality and inspiration into Tuba performance and timbre (Zhen Guo, 2019).

In addition, the reputation of the Chinese ethnic musical instrument Tuba is also increasing internationally. Chinese Tuba performers have demonstrated outstanding skills and charm on the international stage, promoting the development and improvement of Chinese Tuba art. Chinese Tuba artists also actively participate in international music exchange activities, bringing the charm of Chinese music to audiences around the world (Lv Jiang, 2019).

At the same time, some regions in China also have distinctive forms of large size, such as Guangling large size. It is a unique musical instrument in Guangling County, originally made based on the court's official name and used in folk funerals and funerals. Its horn is like an inverted urn, usually made of copper, weighing about

8 pounds, with a length of about 60 centimeters and a mouth diameter of 25 centimeters. During the performance, the artist creates resonance through chest airflow, blowing out rich and majestic music. Large numbers belong to monophthongs and can only produce two sounds similar to "ha" and "hu", creating a distant and spacious artistic effect. Nowadays, the Guangling Tuba plays an important role in drum music and has also reached the stage of elegance. But this ancient music also faces problems such as the marginalization of traditional music and a decrease in the number of performers and urgently needs protection and inheritance from relevant parties (Jiacheng Lv, 2019).

In short, as an important component of traditional Chinese music, Tuba has a wide range of applications and important positions in both traditional and modern music creation. With the continuous development of technology and music innovation, the influence of Tuba in the music industry is expected to continue to increase, and its international dissemination and exchange will further enrich and broaden the artistic expression of Tuba.

4. The General Knowledge about the Playing Techniques of Tuba

4.1. The playing method of the Tuba

4.1.1 The Importance of Breath

Playing the Tuba requires the use of strong breath. In daily practice, it is necessary to practice breathing in a targeted manner to ensure that the performer can use different methods of controlling breathing skillfully to complete different intensity pronunciation needs. If the breath is insufficient, it may cause the performance to be interrupted, or the sound intensity and flatness emitted may not be sufficient to match the sound of other instruments, affecting the overall performance effect. Many beginners often encounter some problems when practicing breathing, especially due to incorrect practice methods, resulting in poor practice results. When practicing, it is important to keep your shoulders still and avoid shrugging. Otherwise, it may appear that you can blow out gas harder on the surface, but in reality, this method can easily cause insufficient inhalation, physical fatigue, and even overeating before the music ends, resulting in the opposite effect and affecting the audience's visual and auditory enjoyment. There is also the phenomenon of lower abdominal arch, which many

people believe is beneficial for the lungs to inhale more air, but in fact, this is unscientific. Because the lower abdomen does not require inhaling air at all but mainly gathers some internal organs of the human body, and gases enter the lungs directly through the nasal cavity through breathing. So arching the lower abdomen is just adding unnecessary details, which cannot achieve the expected effect and may even cause discomfort to the performer. The phenomenon of false breathing also needs to be avoided, which is one of the important reasons that cause tension in performers. At present, there is a relatively comprehensive guidance on breathing exercises for Tuba players. Players need to strengthen their basic skills in order to achieve better performance (Min Guanshi 2017).

4.1.2 Strengthen timbre practice

Vocal practice is a necessary and fundamental skill for learning to play an instrument, but it does not necessarily mean the task is easy. It also requires a lot of practice and correction to meet the requirements. The timbre is divided into the bass, midrange, and treble regions. Each vocal range has different characteristics, and when practicing, it is necessary to combine the characteristics of each vocal range for targeted exercises. The main feature of the Tuba is to highlight the bass characteristics, and the pronunciation characteristics of the bass zone are mainly thick, which requires emphasis on strengthening practice. However, appropriate practice is also needed for the midrange and treble regions. The midrange region generally focuses on full-bodied sound, while the treble region presents bright features. Many beginners are prone to confusion during the practice process. The best way to address this situation is to practice using slower music to deepen the practitioner's impression. Oral exercises need to be conducted simultaneously with vocal exercises, and the process of vocal exercises should be integrated with each corresponding oral form in order to lay a solid foundation and facilitate later learning. In short, the basic skill practice of performers is very important and needs to be taken seriously (Min Guanshi 2017).



Figure 2. Tuba fingering

Source: Xing Nian (2024)

4.2. Analysis of the performance of brass instrument Tuba in symphony orchestras

In ensemble, using the Tuba requires mastering certain techniques, the most important of which is to ensure the most reasonable Embouchure vibration and correct breath processing methods. Only by combining the two can the most perfect timbre of the Tuba be reflected. Firstly, there is the vibration of the Embouchure, which requires the performer to train the correct mouth shape. Generally speaking, the Embouchures appear slightly smiling in their natural state, with the tip of the Embouchure slightly open until a jujube-shaped air hole is left. The Embouchure tip muscles remain in a naturally relaxed state, and the jaw is slightly forward, creating a vertical line between the upper and lower teeth. At this time, the Embouchure vibration effect is the best. Due to the large diameter of the mouthsolo of the Tuba, it is easy to create a certain vibration area during performance, which reduces the vibration frequency. Never play the Tuba by playing the trumpet. In addition to the different models, there are also significant differences in the caliber of the trumpet mouth between the two instruments. Therefore, using the trumpet to play the Tuba is a common learning mistake for many beginners. On this basis, respiratory processing is also crucial, especially the method of blowing air. When practicing blowing, Tuba players must face the mirror and try to grasp the key movements as much as possible.

In the early stage of formal performance, it is necessary to first inhale sufficient breath and then steadily blow out the breath while ensuring that the position of the Embouchure does not change in order to ensure smooth exhalation. The Tuba instrument is a great test of breath, especially the player's ability to store breath otherwise it may cause mistakes during playing. Therefore, during the breathing process, one can try chest and abdominal breathing, inhaling as quickly as possible to achieve the fullest storage of breath in the player's chest (Xiong Jiang, 2020).

In general, to fully utilize the characteristics of the Tuba instrument, it is crucial to undergo breath training, possess correct inhalation and exhalation techniques, and then improve through persistent training and practical performance in order to help the performer better play the role of the Tuba instrument.

4.3. The arrangement of brass instrument Tuba in symphony orchestras

In a symphony orchestra, the Tuba can play both bass and treble, as well as sustain notes. It can be performed in an ensemble with other instruments or as a Tuba solo. It can provide harmonic accompaniment, strengthen bass parts, coordinate the entire band, create an artistic atmosphere, play independent musical weaves, and more.

Playing bass chords and serving as a backing vocalist in the band, mainly responsible for the bass harmony. The Tuba is an accompaniment instrument in a band ensemble. In symphonic works, performance often follows the bass line, mainly playing bass chords and playing the role of harmony. In the ensemble play, the four-part harmonic structure is the most common, usually consisting of one Tuba and three Tubas, which have sufficient power to enhance the harmony. As the brass instrument with the lowest vocal range, the Tuba is the solid foundation of the entire band's sound system and is responsible for the harmony center of the entire band. German Romantic composer Wagner had a particular preference for the Tuba. He not only composed for the Tuba but also developed his own French-style Tuba (including the tenor, bass, and Tuba), known as the Wagner Tuba. There are numerous examples of using the Tuba in his symphonies. The "Flying of Valkyries" segment in "The Ring of the Nibelung" features five Tuba harmonies playing bass chords, creating a majestic and surging sound that maximizes the powerful tone of the Tuba. It showcases the heroic demeanor of Valkyries riding their flying horses across the sky, creating a

grand and profound artistic conception that can be considered an epic musical mastersolo. The famous singers of Nuremberg perfectly embody the musical charm of the Tuba. All of these further confirm that the combination performance of Wagner's Tuba will make the harmony more unified and harmonious, making the band's performance more layered (Cheng Jialv, 2020).

Strengthening the bass voice and enhancing the bass effect, the Tuba was once known as the "king of bass." As a brass instrument, it forms the low voice part of the brass group. The Tuba, along with the double bass, cello, Tuba, horn, Tuba, etc., plays an important role in bass performance in symphony orchestras, strengthening the brass bass and woodwind bass and enhancing the double bass section. The bass line of a Tuba band can be divided into two situations: in a large-scale band, playing the low part together with other instruments; In a small-scale band, the Tuba plays independently in the lower part. There are countless examples of using the Tuba to play bass in symphonies. For example, the symphonic poem "Fountain of Rome" is one of the "Roman Trilogy" composed by Italian composer Ottorino Respighi. In the third movement, he used the unique tone of the C-key Tuba to play the widest and deepest bass, expanding the bass harmony, emphasizing rhythmic patterns, and laying the foundation for the bass music of the entire symphony. For example, the artistic image of the muscular, deep, and heavy bear in Stravinsky's ballet "The Firebird" is derived from the large, deep, and rich timbre. From this, it can be seen that the Tuba can not only play bass melodies but also establish a good bass foundation for the orchestra, creating a magnificent atmosphere for symphonies (Cheng Jialv, 2020).

Coordinate the rhythm of the band and integrate the timbres of the instruments. Firstly, the Tuba combines the characteristics of a Tuba, which can be well integrated into a distinctive brass instrument group. Ensemble with Tuba, the music becomes more flexible and versatile; Playing with the horn makes the music more pleasant and harmonious. Secondly, the rich tone and wide vocal range of the Tuba can coordinate the performance of both brass and woodwind instrument groups. Therefore, the large size will make the sound effect of the entire symphony orchestra more harmonious. During the Romantic period, the orchestration master Berlioz praised the noble timbre of the Tuba and in 1843, he changed the Ophicleide in his Fantasia Symphony (premiered in 1830) to the Tuba (Cheng Jialv, 2020).

Rendering the musical atmosphere, enhancing the emotional mood with a deep and majestic tone, establishing the emotional tone of the band and shaping a solemn and dignified musical atmosphere. Famous composers such as Berlioz, Brahms, Wagner, Tchaikovsky, Bruckner, and Mahler consider the Tuba as the best promoter of musical atmosphere and apply it to symphonies to enhance the emotional mood of music. Taking Berlioz as an example, most of his works use bass to render the tranquility and depth of music, creating a vast and distant atmosphere. As mentioned earlier, Wagner's epic musical mastersolo, "The Ring of the Nibelung," creates a solemn and powerful musical atmosphere with the thick and low sound effects of the Tuba, which is highly expressive. For example, in the third movement of Mahler's Symphony No. 1, the F-key is played as the fourth entry in the Canon technique, with a clear head and coherent curves. In the end, a ten-bar long note is used in a loop, making the music more mysterious and creating a strange scene that appears sad but actually harbors ghosts (Cheng Jialv, 2020).

Of course, the use of Tuba by symphony orchestras is a continuous process of exploration. Sometimes, in order to support the horn and woodwind parts in strong plays, the Tuba will also play weak or double weak sustain notes separately. The Tuba excels in bass and plays high notes with a bright and beautiful tone. In "The Famous Singers of Nuremberg," Wagner used the F-key Tuba to play the climax of the overture, with a tone eight degrees higher than that of the double bass, bright, beautiful, magnificent and can be called a classic. The piano suite "Exhibition of Pictures" composed by Mussorgsky and the orchestral version arranged by French composer Ravel are also considered classics. The fourth painting is 'Bull Cart '. Interpret the scene of two bulls carrying heavy loads moving forward with the conversion of high and low frequencies in a large format. The Tuba's voice changes from weak to strong, then to strongest, then to weak, and finally to weakest, symbolizing the change in the strength of the ox pulling the cart. It shows the gradual process from far to near and from near to far, vividly depicting the stumbling, stumbling, difficulty, and fatigue of the ox cart walking on rural roads in Poland, with a strong sense of painting. In addition, symphonic works with sensitive and bright Tuba pronunciation include the ballet "Gepelia", where rapid vocalizations in the high range and frequent jumps can more clearly express the theme of the musical work.

5. The General Knowledge of Folk Songs in China

5.1 Chinese folk song

Chinese folk songs are oral poems created collectively by working people, a form of folk literature, capable of being sung or chanted, mostly in rhyme. Here are some general knowledge about Chinese folk songs.

Origin: It is generally believed that folk songs arose from people's social life and labor, and the ancients created music in their productive labor and sang the earliest folk songs - labor horns. In addition, the creation of folk songs is also related to religion and emotional language, such as ancient mankind's ancestor worship, totem worship, witchcraft, and other activities accompanied by the production of folk songs (Qing Quanxiang, 2014)

Development history: Chinese folk songs have been developed since the Zhou Dynasty. Folk songs and dances developed greatly during the Zhou Dynasty. The emperor appointed specialized officials to select folk poems and songs, and Confucius compiled China's first general collection of poems, the Book of Songs, of which the State Winds was the earliest anthology of folk songs in ancient China. During the Spring and Autumn Period, the folk songs of the state of Chu flourished, and Qu Yuan and others collected and organized the folk songs of the state of Chu to create the Chu Rhetoric. During the Western Han Dynasty, Emperor Wu of the Han Dynasty set up the Lefu and formally began to collect and organize folk songs, which depicted the hardships of the people and exposed the contradictions of feudal society. During the Northern and Southern Dynasties, the folk songs inherited the spirit of realism, and the Northern Dynasties folk songs mostly reflected the social life of the northern peoples and wars. During the Sui and Tang dynasties, the state had a pear orchard, and the creation of folk songs flourished in the Tang dynasty. During the Middle Tang period, tunes were prevalent in the countryside, and there were works such as Yangguan Sanjian during this period. The music of the Song Dynasty included miscellaneous opera music and southern opera music, and more satirical ballads were produced by the folk in the Southern Song Dynasty. During the Yuan and Ming dynasties, people created ballads to reflect class and national oppression. During the Ming and Qing dynasties, a large number of folk songs of democratic and progressive nature were produced. In modern times, a large number of folk songs reflecting the

characteristics of the times emerged in different periods such as the Anti-Japanese War period, after the birth of new China, and after the reform and opening up (Qing Quanxiang,2014).

5.2 The influence of "Ga Da Mei Lin" on Tuba playing techniques.

5.2.1 Application of breath:

There may be requirements for long notes, coherent melodic lines, and strong and weak variations in the music, which prompts the performer to master more stable and flexible breath control techniques to achieve fullness, coherence, and expressiveness of the large tone color.

5.2.2 Embouchure technique:

The Tuba may need to use glissando to express specific emotions or musical images in the music, in order to imitate the stylistic characteristics of Mongolian music. The use of glissando can enhance the charm and emotional expression of music.

5.2.3 Rhythm control:

The work may contain various rhythm types, such as fast paragraphs or complex rhythm combinations, which require the performer to have a good sense of rhythm and accurate playing ability to clearly present the changes in rhythm and the rhythm of the music.

5.2.4 Intensity control:

To express different plots and emotions in the music, the performer needs to precisely control the intensity, with delicate changes from strong to weak and from light to loud, to enhance the expressive and infectious power of the music.

5.2.5 Emotional expression:

By understanding the story and emotions contained in "Ga Da Mei Lin," performers need to integrate these emotions into the Tuba performance, making the music more expressive and artistically infectious.

Taking "Ga Da Mei Lin" as an example, the song was created by Mr. Ma Youdao based on Xin Huguang's symphonic poem "Ga Da Mei Lin" for the Tuba, and later adapted into a grand solo solo. The music unfolds with a long and rich ethnic theme, depicting not only the vast desert grasslands but also the fierce battles of thousands of troops and horses, as well as the mournful songs and praises of heroes.

Each plot and story requires the use of different playing techniques of the Tuba to create a musical image while also fully showcasing the various playing techniques of the Tuba, such as its wide range and unique wide-tone color. When playing this solo, the performer needs to flexibly apply various techniques according to different parts of the music to express the emotions and connotations of the music.

Different performers may adjust and utilize the playing techniques of the Tuba according to their personal understanding and style when interpreting “Ga Da Mei Lin”, thus giving each performance a unique artistic charm. Such works provide rich materials and space for the development and innovation of Tuba-playing techniques.

6. Theory Used in This Research

6.1 Traditional Chinese Music Theory

The terms “China” and “traditional music” in Chinese traditional musicology are considered to be of great historical significance, and in “traditional musicology,” it is viewed as a distinctive art form aiming to explore the essence of Chinese culture and integrate it into contemporary artistic creations. “traditional musicology” is viewed as a unique art form that seeks to explore the essence of Chinese culture and incorporate it into contemporary artistic creations. In our view, the core idea of traditional musicology is to delve into the history and evolution of music through the use of musicological methods. It takes into account the uniqueness of music as well as focuses on the tradition and cultural background to which it belongs, so as to better understand the developmental history of music. Therefore, this paper focuses on the content of traditional Chinese musicology (Xue Feiwang,2024).

Domestic fine traditional musicology is a general definition and a general curriculum, within which there may be sub-courses for in-depth study in accordance with the categorization of very different fields, such as formology, music genre and even opera musicology and so on. There may also be ethnomusicology, modern language instrumentation, music acoustics and other marginal specialties to carry out professional in-depth study of various fine traditional Chinese musicology, such as the characteristics of Chinese national dialects and musical instruments, the use of sound

measurement technology to measure the musical instruments of various fine traditional culture of the country's musical instruments such as rhythmic heights and scales, which are the specific content of traditional Chinese musicology. Of course, when specializing in Chinese traditional musicology, it should not and cannot be closed. We should not be closed-minded when we specialize in Chinese traditional musicology. We should only explore “China” without considering “international”, we should only explore “Chinese traditions” without bothering about “non-traditional”, and we should only focus on our own discipline. We should focus only on our own disciplines and not pay attention to the corresponding disciplinary studies. without paying attention to the study of the corresponding disciplines and other conservative and closed-minded writing styles. It is undoubtedly undesirable.

6.2 Musicological theory

Musicological theory is a systematic study of music, music has a variety of functions in social life, such as on social occasions, dance music can create a relaxed and happy atmosphere and promote communication between people; in religious ceremonies, religious music can enhance the solemnity of the ceremony and a sense of sacredness; in the field of movies and advertisements, music can set the atmosphere, shape the role of the character image, and play a key role in the work's emotional In movies and advertisements, music can set the atmosphere, shape the characters, and play a key role in creating the emotion and atmosphere of the works (Ying Zhang,2024).

Based on the theories of music performance and music creation in musicology, this study collected videos and audio of Tuba performances, by analyzing the musical characteristics, singing styles and musical forms of northern “Ga Da Mei Lin” folk songs. At the same time, based on the analysis of the characteristics of musical materials and playing techniques of Tuba in music theory.

6.3 Ethnomusicology Theory

Ethnomusicology, sometimes called musical anthropology, is a branch of musicology and anthropology. It combines the research methods of anthropological fieldwork, and in contrast to musicology, which studies the evolution of Western music, ethnomusicology incorporates world music into its scope of study, examining

all musical genres outside the scope of Western music. Ethnomusicology also analyzes music, but often takes “the role of music in culture” as its primary musical research topic (Seeger, Anthony, 1983).

The researcher will continue to analyze the musical ontology of ethnomusicology on the basis of Western music analysis, analyze theories, delve into deeper structures, and apply traditional Chinese music theory.

6.4 Western Music Theory

Western musicological theory is the study of Western music, including music history, music analysis, music aesthetics, and many other aspects of Western musicology, mainly including the ancient and medieval period, the medieval period, the Renaissance period, the Baroque period, the Classical period, the Romantic period, the Modernist and Postmodernist period and other periods (DONALD. JAY. Grout, 1826).

The researcher will continue to analyze the musical ontology of ethnomusicology, analyze theories, delve into structures, and apply Western musicological theories based on Western music analysis.

7. Related Documents and Research.

Adler-McKean J (2024) study of The History and Future of the Tuba Family: Material-, Resonance-, and Performance-Based Perspectives: This paper proposes an examination of the intersections of materiality, acoustics, and musical performance practice through the prism of instruments of the Tuba family. Investigation into the symbiotic relationship between instrumental evolution and performance practice is a crucial facet of any study of timbre and orchestration. The development of musical objects to produce the sound colors demanded by aesthetic trends and compositional desires (or vice versa) has an inevitable impact on both performance and pedagogical traditions. Gone unchecked, such transformations can easily solidify as common practices and are soon followed unquestioningly by new generations of performers. This can result in a rarefication of the palette of timbres available to musicians, be they interested in evaluating the music of the past or exploring the music of the future.

Philip Farkas's (2024) *The Art of Brass Playing* is a book that provides an in-depth and detailed analysis of all aspects of brass playing. In terms of technique, it not only clearly explains the basic blowing methods, such as breath control, Embouchure position and tension, etc., but also goes into those subtle but crucial differences in playing techniques.

Jian Jiao (2022). *Arrangement and Performance Analysis of the Brass Tuba in the Symphony Orchestra* focuses on the arrangement of Tuba's position in the symphony orchestra, its playing techniques, timbral characteristics, and collaboration with other instruments, as well as an in-depth study and analysis of its performance.

Jian Huiluo(2015).It probably focuses on the specific ways of practicing trombone and Tuba breathing techniques, the scenarios in which they are used, and the related precautions that may be involved. The practice and application of trombone and Tuba breathing techniques in music performance requires attention to the rhythm of breathing in harmony with the music, maintaining the smoothness and depth of breathing, and avoiding over-exchanges of breath that lead to unstable breath, and so on.

Ye Yuan (2021) mainly discusses the specific ways of using symphonic works in brass instrument performance, innovative ideas and methods, and relevant case studies that may be involved. The innovative use of symphonic works is of great significance in movie soundtracks, stage performances, and cultural exchanges. It can bring unique artistic charm and emotional expression to these fields.

Yi Yang (2020). It mainly discusses the research results, practical experience, specific training methods, and possible problems and solutions of breathing techniques in large-scale performance scenes.

Xiong Jiang (2020) mainly describes Tuba's role in orchestral works during the Romantic period, its expressive characteristics, playing techniques, and its influence on the work as a whole. Analyzing orchestral works usually requires knowledge of music theory, such as harmony, melody, rhythm, etc.; a certain understanding of the characteristics of various instruments and playing techniques; familiarity with the characteristics of different musical styles and periods; and good hearing and musical perception.

Cheng Jialv(2020).It mainly describes the analysis of the performance of large and difficult fragments in some classic symphonic literature, which may cover the technical difficulties of these fragments, the way of presenting the musical expression, the relationship with the overall work, and the challenges for the performers. The musical expression of large and difficult solos in classical symphonic literature is usually characterized by strong emotional impact, complex harmonic and melodic interweaving, and high technical requirements to present grand musical scenes. To improve the ability to play large and difficult symphonic fragments, targeted practice is needed, including gradually overcoming technical difficulties by paragraphs and bars; listening to more versions by outstanding performers and learning their ways of dealing with them; and strengthening the understanding of the music and grasping the emotional connotations and overall structure of the works.

Guo Zhen(2019). It is mainly elaborated that the basic exercises for the bass horn usually include long tone exercises, scale exercises, spitting exercises, etc., to enhance breath control, intonation, and playing skills. In terms of performance analysis, it is important to consider the fullness of the tone, the use of the range, and the coordination with the orchestra. Choosing the right bassoon for you requires consideration of many factors. First of all, consider your physical condition, such as height, arm length, etc., to ensure that you can hold and operate the horn comfortably. Secondly, consider your budget, as the price of different makes and models of bass horns can vary greatly. Furthermore, try out different bass horns to get a feel for the tone, intonation, and ease of playing, and choose the one that best matches your playing style.

Shi Di (2011).It mainly describes the origin, development history, structural evolution of the trombone and Tuba, as well as the key factors of how to form a mature tone in different periods and styles, such as playing techniques and improvements in production technology. The trombone's tone is characterized by flooding and brilliance in strong playing and softness and fullness in weak playing. The Tuba's tone is characterized by low, thick and full, with strong resonance and penetrating power.

CHAPTER III

Research Methodology

The study of the “Ga Da Mei Lin” tuba and delving into its performance techniques represents a qualitative exploration within the realm of tuba ethnomusicology. This research encompasses preliminary investigations and gathering a wide range of relevant materials, including academic literature, textbooks, reports, fundamental concepts, theoretical frameworks, and articles from diverse academic journals.

Furthermore, the researchers conducted in-depth analyses of key informants and general respondents. They base these analyses on the field survey data from crucial information providers. The research themes are categorized into the following sections:

1. Research Scope
 - 1.1 Scope of Content
 - 1.2 Scope of Time
2. Research Process
 - 2.1 Selection of Research Site
 - 2.2 Selection of the Key Informants
 - 2.3 Selection of Songs
 - 2.4 Research Tools
 - 2.5 Data Collection
 - 2.6 Data Management
 - 2.7 Data Analysis
 - 2.8 Data Presenting

1. Research Scope

- 1.1 Scope of Content

Methods of studying Tuba playing techniques include analyzing playing techniques including posture, breath, and emotional communication. In addition, the transmission of these techniques is understood through the study of master-disciple relationships, teaching methods, and pedagogical approaches. Understanding the

transmission of these techniques provides insight into how the rich heritage of the Tuba in the performance of “Ga Da Mei Lin” has been passed on. Maintenance and development. This comprehensive analysis allows us to understand the nuances of playing and teaching the Tuba. Ensuring its continued relevance and vitality in the field of music.

1.2 Scope of Time

January 2024- January 2025

2. Research Process

2.1 Selection of Research Site

This study includes an area in Sichuan, China. Sichuan is located in southwestern China, at the upper reaches of the Yangtze River, between longitude $92^{\circ}21' \sim 108^{\circ}12'E$ and latitude $26^{\circ}03' \sim 34^{\circ}19'N$, with an east-west length of more than 1,075 kilometers and a north-south width of more than 900 kilometers. It is connected to Chongqing in the east, Yunnan and Guizhou in the south, Tibet in the west, and Qinghai, Gansu and Shanbei provinces in the north, with a total area of 486,000 square kilometers, ranking fifth in China. As of the end of 2022, the resident population of Sichuan Province was 83.74 million. It is shown in Figure 1.



Figure 3. Sichuan Province, China

Source: <https://chinafolio.com/>

2.2 Selection of the Key Informants

2.2.1 The criteria for selecting key information were

- 1) Academic specialists who have published several books and papers on the dulcimer, as well as books and papers on Tuba production and recording.
- 2) Understand the heritage and preservation of the Tuba. Can play Tuba compositions, sing or have played the Tuba
- 3) Tuba age of 20 years or more.
- 4) Based on the above selection criteria, the researcher chose the key informant Wang Yao, Wang Zhen. Because they are two representative and excellent key informants.

Wang Yao

Birthplace and Early Education

Born on April 18, 1982, in Chengdu, Wang Yao displayed exceptional musical talent from a young age. In 1997, he was admitted to the Affiliated Middle School of the Sichuan Conservatory of Music, marking the beginning of his formal musical education.

Academic and Professional Training

In 2000, Wang Yao was admitted to the Music Department of the People's Liberation Army (PLA) Academy of Fine Arts. He graduated with honors in 2003 from the Military Music (Tuba) Department of the PLA Academy of Fine Arts.

Professional Career

2003–2004: Wang served as the Tuba player for the Third Unit of the PLA Military Orchestra. During this time, he led the unit on a tour to Germany to participate in the Bremen International Wind Festival.

2004–2014: Wang joined the Shanghai Philharmonic Orchestra as the principal Tuba and deputy principal brass. He performed in prestigious events, including:

2009: Represented China at the Brisbane Shanghai Week in Australia.

2010: Participated in European tours across Switzerland, Slovakia, and Hungary and performed at the Shanghai Expo.

2014: Invited to perform at the Chiayi Wind Music Festival in Taiwan.

Throughout this decade, he was also a frequent performer at the Shanghai Spring Music Festival and participated in thousands of performances.

Simultaneously, Wang served as a senior instructor for the Landing Craft Squadron Band of the East China Sea Fleet from 2003 to 2014.

Current Role

In 2015, Wang Yao was appointed as the Tuba Leader of the Chengdu Symphony Orchestra, further solidifying his reputation as a leading figure in brass performance (As shown in Figure 4-5).



Figure 4. Mr. Wang Yao
Source: Nian xing(2024)



Figure 5. Mr. Wang Yao
Source: Nian xing(2024)

Wang Zhen: Chongqing Municipal Opera House, Chongqing Symphony Orchestra Principal Tuba, National Second Grade Performer, Member of China Musicians Association, Member of Chongqing Musicians Association, National Amateur Examination Judge of China Music Association, Vice President of Chongqing Bass Brass Professional Committee, Artist of China Orchestral Network, Chongqing University, Chongqing Science and Technology College, Southwest University of Political Science and Law, Chongqing Ba Shu Middle School, Chongqing Nankai Middle School Chongqing Shuren Primary School, Chongqing Shapingba Primary School, Chongqing People's Primary School, special Tuba-alto horn teacher (As shown in Figure 6).



Figure 6. Mr. Wang Zhen
Source: Nian xing(2024)

2.3 Selection of Songs

Criteria for selecting songs include the song “Ga Da Mei Lin” for Tuba, the skills needed to play it on Tuba, and how to express emotions. “Ga Da Mei Lin” Symphony is the graduation work of female composer Xin Hua guang in 1956 when

she was studying at the Central Conservatory of Music, and it is also her famous work, which is of very high artistic standard. The symphonic poem is based on the Mongolian folk song of the same name, which is a popular folk narrative poem about the Mongolian hero “Ga Da Mei Lin” and is composed in sonata form. The music describes and glorifies the herdsmen's uprising led by the Mongolian hero “Ga Da Mei Lin” and his heroic battle against the feudal princes and warlords.

2.4 Research Tools

Fieldwork was the key research method used in this study. The main research tools used in this study are the interview form and observation form. Data collection and interviews were conducted with experts and their families. In order to better record useful data and information materials, I prepared a video recorder, audio recorder, computer, pen and notebook.

Process of creating interviews:

- 1) Designing questions according to the research objectives
- 2) Design appropriate questionnaires and interviews.
- 3) Submit them to the client for checking.
- 4) Make revisions based on comments from consulting editors.
- 5) Revise based on expert advice prior to fieldwork.

2.5 Data Collection

In order to collect information between January 2024 and August 2024, researchers Wang Yao and Wang Zhen. They conducted multiple interviews via phone, WeChat, and other networks. Analyzed literature, libraries, literature, and reading materials.

2.5.1 Data Collection of Mr. Wang Yao.

- (1) In January 2024, the researcher conducted an interview with Mr. Wang Yao.
- (2) In March 2024, the researcher conducted interviews with the study participants by means of offline video interviews.
- (3) In June 2024, the researcher discussed Tuba playing techniques with the study participants by means of offline video interviews in order to obtain favorable information.

(4) In July 2024, the researcher conducted an extensive review of Tuba history and sheet music.

2.5.2 Data Collection of Mr. Wang Zhen.

(1) In January 2024, the researcher interviewed Mr. Wang Zhen.

(2) In March 2024, the researcher interviewed the study participants through offline video interviews.

(3) In June 2024, the researcher discussed the Tuba playing technique with the subject by means of an offline video interview to obtain favorable information.

(4) In July 2024, the researcher conducted an extensive review of the history and sheet music of the Tuba.

2.6 Data Management

All collected data were categorized and organized.

(1) Transcripts and recordings of the webcam interviews were converted into notes,

All raw data and transcripts were kept separately.

(2) Sheet music and video

For research, the collected sheet music was categorized and recorded as sheet music and recorded as pentatonic scores.

and recorded as pentatonic scores. Acquired data is categorized and managed.

(3) Literature, music, audio, and academic papers on the Tuba performance of Ga Da Mei Lin were analyzed according to the data type.

2.7 Data Analysis

The researcher will use concepts and theories to analyze all research information at the core. Theories are analyzed. Based on the topic of this paper, select data that is directly related to this study. Data directly related to this study. Effective dates are categorized according to the purpose of the study. For the purpose of the study, the data can be categorized into two groups: the development of the folk song “Ga Da Mei Lin” played by the Tuba and the research data on the performance of “Ga Da Mei Lin” on the Tuba. Research materials on Tuba playing techniques, musical characteristics, and their analysis. These materials are categorized into instrumental music, performance, and sheet music.

2.8 Data Presenting

There are six chapters in my dissertation.

Chapter I: Introduction

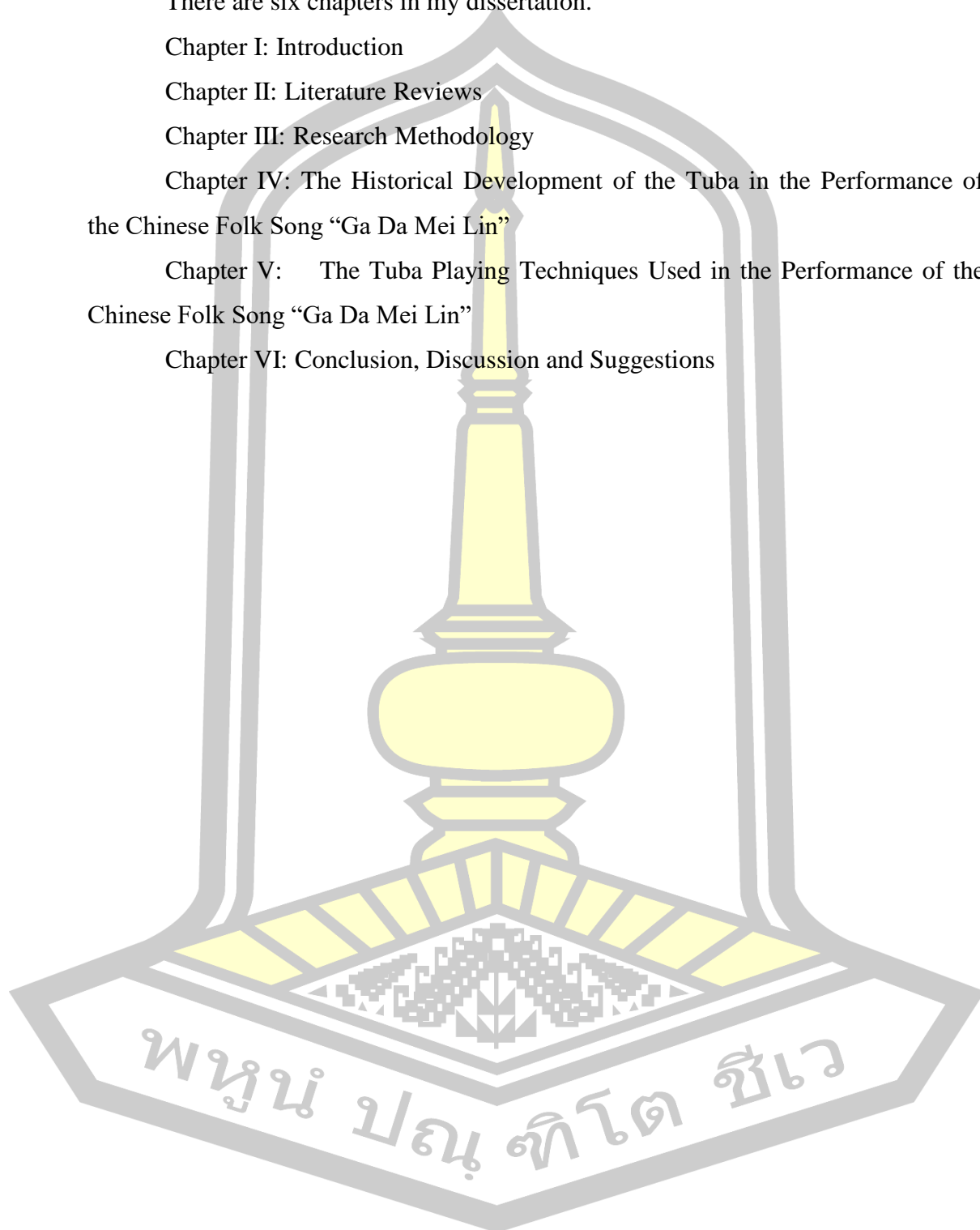
Chapter II: Literature Reviews

Chapter III: Research Methodology

Chapter IV: The Historical Development of the Tuba in the Performance of the Chinese Folk Song “Ga Da Mei Lin”

Chapter V: The Tuba Playing Techniques Used in the Performance of the Chinese Folk Song “Ga Da Mei Lin”

Chapter VI: Conclusion, Discussion and Suggestions



CHAPTER IV

The Historical Development of the Tuba in the Performance of the Chinese Folk Song “Ga Da Mei Lin”

Through the study of the Tuba concerto “Ga Da Mei Lin,” this research summarizes the unique artistic characteristics of this Western instrumental solo adapted from a Chinese folk song. The work makes use of more Mongolian musical elements, is a successful work of fusion of Chinese and Western music, and is one of the many excellent works of instrumentalization of folk songs. By analyzing the specific performance techniques of the solo instrument Tuba, the work introduces how the Tuba, a Western instrument, uses its own performance characteristics to blend with the music when playing Chinese folk instrumental music in terms of form and content.

1. The Composition Process of Mongolian Long Narrative Folk Song “Ga Da Mei Lin”
2. The process of development of musical compositions related to “Ga Da Mei Lin”
3. Embodiment of the spirituality of national heroes
4. Summary

1. The Composition Process of Mongolian Long Narrative Folk Song “Ga Da Mei Lin”

Narrative folk song “Ga Da Mei Lin” is a widely circulated Mongolian long narrative folk song, the song recounts a real historical event that took place in Horqin grassland in the first half of the 20th century. At that time, our country was in a chaotic situation of warlordism, and the Mongolian feudal aristocrats colluded with the Feng system warlords for their own self-interest, disregarding the interests of the majority of the herdsmen, and implemented the policy of “reclaiming the land and realizing the border” on the grassland, the “reclaiming the land policy” has promoted the local economic development to a certain extent. The implementation of the “reclamation policy,” to a certain extent promoted the development of the local

economy, but it completely destroyed the fundamental interests of the majority of herders. The herdsmen lost their pastures and lived a life of displacement. “Ga Da Mei Lin”, at that time, served as the king of Dalhan Meilin (the highest military chief of the royal family), he is upright kind, could not bear to see the majority of herdsmen because of the displacement of the pasture, so to the king of Dalhan admonition request to stop the pasture, the pasture returned to the majority of herdsmen. But he was repeatedly rejected by the feudal princes, and even persecuted. Finally, “Ga Da Mei Lin” realized that the only way to fight for the herdsmen's rightful interests and defend their property was an armed revolt, so he unveiled a revolt.

Ga Da Mei Lin's uprising soon spread all over the Horqin grassland; the king's rich nobles began to fidget, but the majority of herdsmen saw hope and began to support the uprising of “Ga Da Mei Lin.” Uprising team growing, the feudal princes also began to organize armed forces to suppress, after several failures, the princes decided to seek the help of Feng system warlords. In this way, the feudal bureaucrats colluded with the Fenghuang warlords to launch a full-scale suppression of the “Ga Da Mei Lin” uprising, the uprising forces were finally outnumbered, declared a failure, and the “Ga Da Mei Lin” also heroically killed. Although the uprising failed, it delayed the release of the land, and ultimately saved the livelihood of the herders. The grassland on which the herdsmen depended for their survival was saved.

In honor of this hero, the deeds of “Ga Da Mei Lin” were widely celebrated in the form of a long narrative poem. Most of the character names in the poem use real names from reality, but in some episodes the will and wishes of the people themselves are also incorporated, so that this is not exactly the same as the real historical events.

The long narrative poem “Ga Da Mei Lin” was published in People's Literature in 1950, and was co-translated by Chen Qingba, Pengfei, Meng and Bat, Damulin, Junli, Meijige, Songlai Zamusu, and Sesiyaratu. This long narrative poem describes in detail the process of Ga Da Mei Lin's uprising at the head of his herdsmen. The Mongolian people sang the poem widely in honor and praise of Ga Da Mei Lin and then formed the relatively mature folk song “Ga Da Mei Lin.” Due to the large size of the long narrative poem, we will only present you the first page of the long poem, in which the content of the folk song “Ga Da Mei Lin,” which we are more familiar with now, is already included, but due to the cultural background of the

creators and the different forms of the works, they are not exactly the same in terms of the way of expression and the modification of the words.



Figure 7. Ga Da Mei Lin portrait

Source: Nian xing (2025)

2. The Process of Development of Musical Compositions Related to “Ga Da Mei Lin”

“Ga Da Mei Lin” is an excellent Mongolian work. In recent years, composers have been constantly collecting, accumulating, and combining the characteristics of the times with their inner inspirations. In recent years, composers have been constantly collecting and accumulating information and creating works with the characteristics of the times and their inner inspirations. Various versions of “Ga Da Mei Lin” music works of different genres have been dedicated to the people. Among them, the following are representative works :

Table 1. Performance Style

Song title	Composer	Performance Style
“Ga Da Mei Lin”	Sangtong with accompaniment	Solo songs
“Ga Da Mei Lin”	Zhu Jian Er	Mixed chorus
“Ga Da Mei Lin”	Xin Hu Guang	Orchestral music
“Ga Da Mei Lin”	Wang Qiang	Cello concerto

1.2.1 Arrangement of a solo of music for an instrumental genre Symphonic Poem of “Ga Da Mei Lin” - Xin Huguang

The symphonic poem “Ga Da Mei Lin”, composed by China's female composer Xin Huguang, is one of the more prominent works in the process of China's 20th-century symphonic music creation; this solo was the author's graduation work in 1956 and premiered in 1957. The work is based on the melody of the Mongolian folk song of the same name, “Ga Da Mei Lin” and the melody of the work is deep and beautiful. This work and the work to be analyzed in this article, Cello Concerto “Ga Da Mei Lin”, are both based on Mongolian folk songs, but the two are different in content and form, Professor Tan Bingruo once commented: “Wang Qiang's cello concerto uses the first person, while Xin Huguang's symphonic poem uses the third person.”

The cello concerto “Ga Da Mei Lin” was composer Wang Qiang's graduation work at the Shanghai Conservatory of Music. The work was premiered at the opening ceremony of the Shanghai Spring in 1960 with great success. This work combines the characteristics of Chinese and Western musical cultures. The combination of Western compositional techniques with Chinese national tones, rhythms, individuality of the weave, and instrumental methods is very appropriate, and the two cultures are organically combined in this work. In addition, the sound of the cello is very similar to that of the Mongolian horse-head fiddle, which makes the cello particularly expressive in Mongolian-style music, and the cello, a Western instrument, is fully utilized in this work. “Ga Da Mei Lin” has also been adapted into solo solos for trumpet, trombone, pipa and other instruments, which utilize the different characteristics of their respective instruments to enrich the image of “Ga Da Mei Lin” and make the hero's voice even more melodious.

1.2.2 Vocal Genre Adaptations

Solo song “Ga Da Mei Lin”--Sang Tong with accompaniment

The accompaniment of this song was arranged by Mr. Sang Tong, a famous music educator, composer, and music theorist in China. once published, it has been recorded and circulated as audio-visual material many times, and there are still many famous singers singing this song in concerts. The song is based on the Mongolian long narrative poem “Ga Da Mei Lin”, the original lyrics are long, after

finishing, the more representative verses, edited and created into a solo song form: the song adopts the more typical Mongolian pentatonic of five tones, with the three tones of the Feather, Gung, and Horn as the backbone of the tone through the pattern of gradations and jumps with the use of excessive tones and auxiliary tones, with the large range of intervals jumping in and out, making it the best of all time, with a great range of intervals jumping in and out. With the large range of intervals, the whole melody is more stretched and smooth, solemn and heroic. The rhythm is calm, steady, and powerful, reflecting the momentum of the passion and sadness of the song.

Mr. Sang-Tung's piano accompaniment makes great use of columnar and broken chords: the use of columnar chords expresses a heavy and sad atmosphere; the use of broken chords expresses the nostalgia for "Ga Da Mei Lin" in the work. The varied rhythmic forms enrich the artistic effect of the song, fully integrating the accompaniment with the melody and aptly reflecting the valor of "Ga Da Mei Lin" and the tragedy of the resistance against the reclamation uprisings. Male soloist and mixed chorus "Ga Da Mei Lin"- adapted and composed by Zhu Traminer.

Zhu Zhen'er, originally from Jing County, Anhui Province, China's famous composer, born in the 1920s before the founding of the People's Republic of China was engaged in music composition and conductor after the founding of the People's Republic of China was engaged in music production for a long time, and went to the Moscow Conservatory of Music to continue his study of composition. 1960 graduated from the Conservatory of Music and returned to China, specializing in composing, with a broad field of creativity, a wide range of subjects, and diverse genres of works, of which the main works include: orchestral music His major works include Orchestral Overture, <Festival Overture>, <Naxi Yiqi>, <Qianling Fu>, folk music ensemble <Turnaround Day>, as well as a number of large-scale symphonies and a large number of song works. His creative concept is based on traditional culture and borrows and applies Western creative techniques so that Eastern and Western cultures can be organically, dialectically, uniformly, and developmentally linked and fused together. In the rich and diversified modern art environment, he creatively integrates and constitutes new music concepts and languages so that they can adapt to the needs of the times and cultural development, express the characteristics of the culture of the new era, and give new connotations and flavor to the national culture.

In the chorus of “Ga Da Mei Lin” adapted and composed by Zhu Zhen'er, Zhu Zhen'er's compositional characteristics are also fully reflected. The work utilizes the material of the famous Chinese Mongolian folk song “Ga Da Mei Lin” for its creation. The original folk song adopts the form of a stanza song to narrate the historical process of “Ga Da Mei Lin” leading the Mongolian herdsmen to fight for the land with the feudal lords and the reactionary warlords. The majority of the songs “Ga Da Mei Lin” that are sung now still continue the artistic form of the stanza song. Most of the songs sung nowadays “Ga Da Mei Lin” still continue the art form of sectional song, the structure of the work is symmetrical and neat, and the tune is stretching and melodious. However, in the choral solo “Ga Da Mei Lin” adapted and created by Zhu Traminer, the commonly used sectional song form is changed, and the piano accompaniment echoes with the soloist and the chorus in the whole work, making a detailed padding and excess for the expression of the music's emotion. Music in the unified pattern highlights the different voices in the chorus of the timbre of the artistic effects, the chorus and the melody to do a reasonable distribution so that the work expresses the image of a more distinctive, more passionate melody and mood. The composition of the work is relatively free, with ups and downs in the melody, strong contrasts in the music, and a more specific and delicate depiction of the musical image. This asymmetrical artistic effect precisely demonstrates Mr. Zhu's concept of dialectical unity and developmental connection, and it is an excellent example of the organic combination of the Chinese national style and Western compositional techniques.

3. Embodiment of the Spirituality of National Heroes

The national heroism of the Tuba concerto “Ga Da Mei Lin” is manifested through musical features as well as aesthetic group characteristics. First of all, “Ga Da Mei Lin” represents the interests of the herdsmen, which is embodied in the music by the use of Mongolian folk tones, in which the heroic theme is always centered on the solo Tuba, which represents the heroic character, and the other instrumental groups are just like the herdsmen's reliance on and support for the “Ga Da Mei Lin” which is always accompanied by the main theme. Secondly, the spreading process of the “Ga Da Mei Lin” incident also reflects the increase of aesthetic individuals to the extent of

prompting the expansion of the aesthetic group. After the sacrifice of “Ga Da Mei Lin”, herdsmen associated with the uprising were spreading the heroic deeds of “Ga Da Mei Lin”, and then the group of aesthetics was expanded to include more herdsmen, and gradually formed the Mongolian long narrative poem “Ga Da Mei Lin”. As mentioned before, in 1950, the long narrative poem “Ga Da Mei Lin” was published in People's Literature, and the heroic deeds of “Ga Da Mei Lin” moved more people and began to spread and propagate throughout the country. And in literature, music, dance, art, film, television and other fields appeared Ga Da Mei Lin's figure, the subject of standing beauty has changed, the specific object of aesthetics is also constantly changing. The object of aesthetics, the relationship between the aesthetic object and the subject is also changing, and the specific process is as follows.

Specific incidents → Rebel herdsmen → Formation of the long narrative poem Ga Da Mei Lin → More pastoralists → Published in 'People's Literature' → National dissemination → Multiple Art Forms of 'Ga Da Mei Lin' Emerge → Expanding types of aesthetic groups → The Content of the Heroic Deeds of Ga Da Mei Lin . Publishing Beauty in <People's Literature> and the Formal Beauty of its Propaganda Vehicle

From the figure, we can feel that after the occurrence of specific events, through people's propaganda, feelings, cognition, re-creation, to complete a series of standing beauty and aesthetic process, in the process of aesthetic object and aesthetic way no matter how to change, there is a major aesthetic content has not changed, that is, “Ga Da Mei Lin” heroism, this kind of fearlessness and national heroism, always be able to move us, so that people more brave and more cohesive.

Tuba Concerto “Ga Da Mei Lin” is just one of many aesthetic re-creation objects. The author, through his own cognition and perception, richly utilizes the elements of Mongolian musical culture, and the narrative-free compositional structure of the work graphically depicts the process of the “Ga Da Mei Lin” Uprising and highlights and expresses the spirit of the “Ga Da Mei Lin” nation. Regardless of the era, region and nationality, through the work, we can truly feel the feelings and thoughts of those characters belonging to that era, that place, and the performance

time of the work is not long, and the uprising of “Ga Da Mei Lin” has already become history, but the spirit of Ga Da Mei Lin's national heroes is still moving us, about the “Ga Da Mei Lin.” Ga Da Mei Lin's spirit of national heroism is still touching us, and the experience of the beauty of “Ga Da Mei Lin” is underway. I believe that more people will familiarize themselves with this work and enjoy it, and will sing the praises of this hero and remember him.

4. Summary

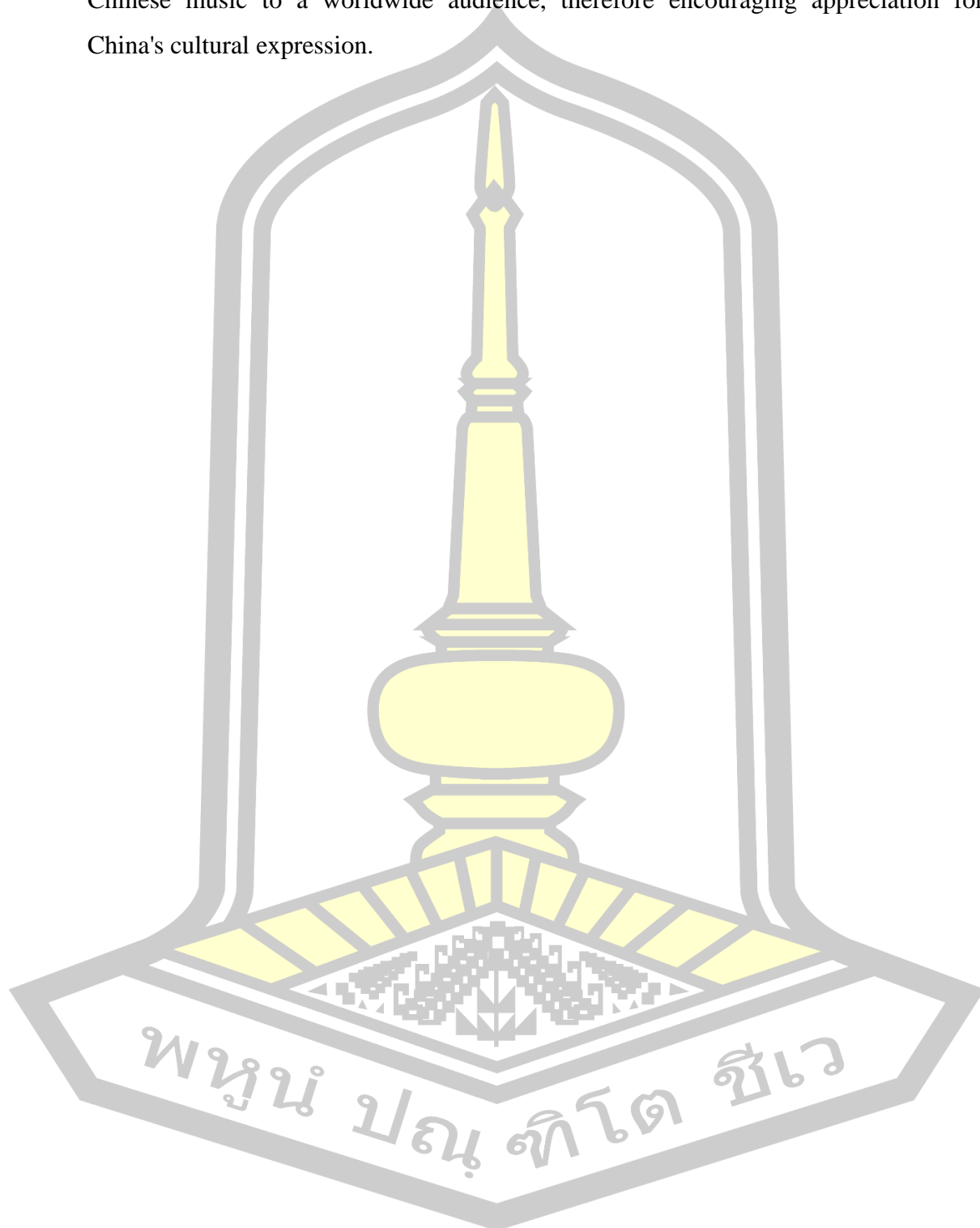
Western musical instruments are diversifying in modern China, and musical styles are becoming more diversified. Contemporary music composition frequently incorporates aspects from several civilizations, exemplifying a dynamic amalgamation. This study examines the Tuba Concerto “Ga Da Mei Lin”, evaluating its musical attributes and investigating the convergence of music and culture. The objective is to encapsulate the characteristics of this fusion while providing insights into the nationalization of Western musical instruments and the amalgamation of musical cultures.

This study, albeit early and limited to a tiny portion of national music, emphasizes a significant concept: the integration of national music components enhances musical forms and intensifies their cultural significance. Music, as a cultural expression, inherently integrates traditions and innovations, mirroring both individual spirituality and the collective cultural identity of a nation.

Safeguarding and transmitting traditional culture is a collective obligation. In light of globalization and the influx of foreign cultural influences, it is imperative to engage with these interactions with receptivity and inclusiveness. Cultural variety lacks absolute rightness or wrongness; perceptions of culture differ based on different viewpoints, which subsequently affect the course of cultural evolution. Embracing many perspectives on culture promotes variety and advancement, as illustrated by the adage, “Cultural diversity propels global development.”

According to the adage, “Unity of purpose ensures sustained existence.” The coexistence of many schools of thinking and cultural expressions—“a hundred schools of thought contend, and all flowers bloom”—represents cultural flourishing. The current open cultural landscape offers a distinctive chance to promote traditional

national music. By capitalizing on this opportunity, we may exhibit the richness of Chinese music to a worldwide audience, therefore encouraging appreciation for China's cultural expression.



CHAPTER V

The Tuba Playing Techniques Used in the Performance of the Chinese Folk Song “Ga Da Mei Lin”

“Ga Da Mei Lin” is a thematic fantasia for trombone by Mr. Ma Youdao, based on the symphonic poem “Ga Da Mei Lin” by Xin Huguang, and later adapted for solo Tuba. The compositional elements of the work are derived from the symphonic poem “Ga Da Mei Lin”, and the musical material of the solo is taken from a Mongolian folk song of the same name. He adapted it from the folk song “Ga Da Mei Lin,” which is a Mongolian hero who led the people's armed uprising against the feudal rulers' wanton destruction of the grasslands on which they depended for their survival, and which has been sung endlessly on the steppes of Inner Mongolia. The work unfolds with a long and rich nationalistic theme, which not only depicts the desert steppe but also the fierce battles of thousands of armies and horses, as well as the sad songs and praises of the heroes. Each episode and story uses different Tuba techniques to create musical images, and each musical image also demonstrates the many techniques of the Tuba.

1. Background of “Ga Da Mei Lin”
2. “Ga Da Mei Lin” in Tuba Technique
3. The Playing Technique of Tuba by Wang Yao
4. The Playing Technique of Tuba by Wang Zhen
5. Performance Technique Analysis
6. Summary

1. Background of “Ga Da Mei Lin”

1.1 History

Gada Meiling's real name is Moletu Nadamud, Chinese name Meng Qingshan, was born in 1892 in the Darhan flag of a farming family. Due to the youngest rank family, once served as the Darhan flag Merlin military affairs, called “Gada Merlin” early 20th century, the national unrest, the Darhan King Namuzile Seleng for their

own interests, will be a large area of the desert sold to the Manchu government, the Beiyang Warlords, resulting in a large number of herders lost the land of residence. early 1929, the King decided to start the 10th desertification, the establishment of the desertification bureau. In early 1929, the Dalhan king decided to start the tenth desertification, established the desertification bureau, sold the flag land to the north China warlords and forced to reclaim, this move caused strong dissatisfaction from all classes of Dalhan flags, especially the majority of herders. "Ga Da Mei Lin" and the national upper-class people's flag elected a representative to Shenyang permanent, Dalhan Wang Fu, petitioned to stop the reclamation, but Dalhan Wang refused to accept the flag people's request. Later, "Ga Da Mei Lin" was arrested and imprisoned for the crime of "preventing the liberation of the western and northern wilderness" On November 13, 1929, his wife Mudan and his friends and relatives rescued him from prison. After his release from prison, "Ga Da Mei Lin" launched an armed struggle against reclamation and feudal princes and led the rebel army to raise the banners "Down with the Surveyor's Office, no looting of people's property" and "Defend Darhan land". The rebel army went everywhere to fight against the "Desertification Bureau", "Survey Team" and "Reclamation Bureau", and with the support of the masses of the people, they destroyed the desert land sales plan. However, at the end of 1930, King Dalhan asked the warlord forces of the three eastern provinces to send more than 4,000 soldiers to root out the rebels. After several fierce battles, most members of the rebel forces were killed in battle. On April 9, 1931, "Ga Da Mei Lin" led his troops to the northern part of Shebtu in Panji Darhan, and when forced to cross the Xinkai River, he was shot and killed at the age of 39.

1.2 Cultural background

Ethnic and cultural foundation: Mongolians are an ethnic group with a long history and rich culture, whose culture emphasizes respect for nature, the pursuit of freedom, and love of nation and homeland. The story of "Ga Da Mei Lin" is deeply rooted in this national culture. Ga Da Mei Lin's fight to protect the grasslands and the

herders' interests reflects the traditional values and national spirit of the Mongolian people.

Socio-historical background: In the early 20th century, Chinese society was in a period of chaos and change, and feudal princes and warlord governments colluded with each other to deprive the Mongolian people of their rights and interests, such as land. In this social backdrop, the Mongolian people faced an existential crisis and national oppression. Ga Da Mei Lin's rebellion is the heroic struggle of the Mongolian people to defend their rights and fight against oppression, reflecting the contradictions of society and the demands of the people at the time.

Literary and artistic traditions: Mongolians have a rich oral literature and music tradition, and long narrative songs are one of their important literary forms. Ga Da Mei Lin” is passed down in the form of a long narrative song, which narrates the heroic actions of “Ga Da Mei Lin” through vivid lyrics and beautiful songs, and has not only literary value but also musical and artistic value, which is an important embodiment and heritage of Mongolian literary and artistic traditions.

2. “Ga Da Mei Lin” in Tuba Technique

“Ga Da Mei Lin,” a solo of music with a strong Mongolian style, can show its majestic side when played with a Tuba, and the following is a detailed introduction to several playing techniques:

2.1 Breath Application Techniques

Long breath support: When playing the opening section of “Ga Da Mei Lin,” depicting the vast grassland scene, it is necessary to use the extremely long and smooth breath to play long notes. For example, in the introductory part, which is usually a soothing melodic line, the Tuba player should inhale deeply, let the breath sink to the abdomen, and feel the breath like a continuous stream, blowing out slowly to make the tone mellow and full, and create a sense of the vastness of the steppe. A long tone may last for several seconds, during which time the breath must not be shaken or interrupted in the slightest; otherwise, the mood will be destroyed.

When the music into the lyrical passages, such as the expression of “Ga Da Mei Lin” on the hometown, on the loved ones of the feelings of longing, the same to use this calm and long breath, to bring out the melody of the melody, so that the emotions can be fully expressed, just like the singer in the singing of the deep slow song, the breath of the notes, so that the listener is immersed in it.

Flexible air handling: In the faster tempo, melodic ups and downs of the battle scene depicting the passage, such as the insurgent army and the enemy battle part, although the notes are dense, the air point should be accurately grasped. The performer should anticipate the phrases in advance, and utilize short rests or slower tempos to change air quickly and silently. This requires a great deal of practice to make the air changes an instinctive response, so as not to affect the rhythmic continuity, to ensure that the exciting atmosphere of the solo is not interrupted, and to make the listener feel as if he or she were in the midst of a tense and intense battle.

2.2 Embouchure

Tone Shaping: To play a warm, broad tone that matches the ethnic style of “Ga Da Mei Lin”, the Embouchure muscles should be relatively relaxed. When playing in the lower register, the Embouchure is in a rounder, looser state, allowing the airflow to slowly pass through the horn mouth solo, producing a deep, majestic sound, like a low horn on the steppe, demonstrating the heroic underpinnings of Mongolian music. For example, at the beginning of the solo, the bass sound blown with this loose Embouchure state can instantly outline the grand background of the steppe.

In the high register, the Embouchure needs to be tightened appropriately to increase the control of the airflow and make the tone bright and penetrating. But be careful not to over-tighten, so as not to sound sharp and harsh, losing the flavor of the music should be. In the performance of the heroic figure of Ga Da Mei Lin's heroic image, the bright tone of the soprano region can be timely, highlighting its glorious image.

Vibrato Technique: The subtle and rapid vibration of the Embouchure produces a vibrato effect, which is the key to adding emotional expressiveness to the solo. In the lyrical adagio, the regular trilling of the Embouchure at a moderate frequency can make the melody sound like a sob, as if it were a deep remembrance of

“Ga Da Mei Lin.” The amplitude of the vibrato should be adjusted according to the strength of the emotion; the amplitude of the deep emotion should be a little larger, gently swaying the listener's heartstrings; the amplitude of the calmer lyrical passages is a little smaller to maintain the delicate emotional transmission.

2.3 Glissando Technique

An embodiment of ethnic style: The use of glissandi is frequent in Mongolian music, and the skillful use of glissandi in the Tuba's performance of “Ga Da Mei Lin” can greatly enhance the ethnic flavor. In the connection of melodic lines, sliding from one tone to another, such as a smooth transition from a certain tone in the bass region to the neighboring tone in the treble region, just like the singer's melodious singing in Mongolian long tunes, makes the music full of grassland flavor. For example, in the passages that express the herdsmen's daily grazing and life scenes, the use of glissandos makes the music more dynamic and natural, as if you can see the picture of cows and sheep strolling on the grassland.

Emotional expression of assistance: when the music into the sad emotional passages, such as the sacrifice of “Ga Da Mei Lin” people's grief, glissando can be slowed down, increase the size of the tone in the process of sliding down full of sadness texture, as the people of the sadness of the whimpering, strengthened the emotional catharsis, so that the listener can be more empathetic to the pain and reluctance to experience.

2.4 Rhythmic Techniques

The use of free rhythm: In the beginning of the solo or in the parts that show the natural scenery of the grassland and the leisurely life of the herdsmen, free rhythm can be used appropriately, as in the Mongolian long tunes. According to the performer's understanding of the music, under the premise of maintaining the overall sense of rhythm, the length of the notes can be flexibly stretched or compressed so that the music is like the wind on the grassland, sometimes gentle and soothing, sometimes with a slight pause, giving people unlimited space for reverie, and sketching out a picture of the grassland that is at ease and cozy.

Stable Rhythm Advancement: The rhythm must be precise, stable and powerful when entering into the depiction of battle and resistance scenes. Based on a

clear beat, the player should be like a drummer beating out the rhythm of a stirring war drum, letting every note fall into place, driving the mood of the solo high and showing the bravery of the insurgents. At this point, the metronome is particularly important to ensure that the metronome is not deviated from the fast tempo so that the listener can follow the rhythm of the solo and feel the tension of the battle.

In short, playing “Ga Da Mei Lin” on Tuba requires an all-round mastery of these skills, and a perfect blend of breath, Embouchure, glissando, rhythm and other elements in order to interpret the unique charm of this classic solo of music, and to convey to the listener the heroic tale of “Ga Da Mei Lin” and the deep cultural heritage of the Mongolian people.

2.5 Music Notation Explained

1) Jian Qiang Refer to in music, the crescendo is an important musical term and expressive device in which a wind instrument player controls the breath by increasing the force of the blow and by changing the Embouchure, fingering, etc.

2) Jian ruo Refer to is when the volume of the music is gradually reduced, so that the sound is slowly lightened. It is symbolized on sheet music by a “>”, which is like a greater-than sign. When playing or singing, the performer gradually reduces the intensity, allowing the music to gradually decrease in intensity.

3) Refer to is the gradual slowing down of the music, usually indicated by “rit.” or “rall.” in the score. When played, the tempo is gradually lengthened, allowing the music to progress soothingly.

3. The Playing Technique of Tuba by Wang Yao

3.1 In terms of the use of breath (stability of breath): he showed extremely stable breath control during the performance, and in the long tones, the breath output was even and long-lasting. In the lyrical passages of the solo, he was able to support each long note with a smooth breath, making it full and melodious, making the listener feel as if they were in the middle of a vast grassland, and better creating the serene and far-reaching atmosphere of the solo. This breath control makes the long tones sound pure, without the slightest tremor or lack of breath, reflecting a high level of performance.

3.2 Breath intensity changes: The breath intensity is very accurate, according to the emotional needs of the solo and rhythmic changes, to adjust the breath intensity appropriately. In the climax of the solo, the breath output will be increased to make the notes more powerful and full and to enhance the impact and infectious force of the music, while in the softer passages, the breath will be gently controlled so that the music will be as delicate as the breeze on the face. This precise control of the breath strength makes the music more distinct and richer in emotional expression.

3.3 Fingerings: (Proficiency in basic fingerings) The basic fingerings are very skillful, and when playing fast melodic passages, the fingerings are switched quickly and accurately, with hardly any jams or mistakes. Whether it is the upward or downward movement of scales or complex intervallic jumps, he is able to cope with them with ease, so that the smoothness of the music is well guaranteed. For example, in the fast section of the solo, the fingering is as natural as flowing water, allowing the listener to fully feel the vigor and dynamism of the music.

3.4 Handling of rhythmic changes: When Wang Yao handles rhythmic changes, he emphasizes natural and smooth transitions. When the solo moves from slow to fast or from one rhythmic pattern to another, he is able to make the rhythmic changes gradual through delicate playing techniques and breath control so that the listener can easily keep up with the rhythmic changes of the music without feeling abrupt or unaccustomed to them.

3.5 Emotional expression (depth of emotion): Wang Yao is good at digging deep into the emotional connotation of the solo and integrates his own understanding and feelings about the story of “Ga Da Mei Lin” into his performance. When playing, his expression and body language are closely integrated with the music, which can let the audience deeply feel the heroic and tragic feelings of “Ga Da Mei Lin” and the Mongolian people's reverence and nostalgia for the hero. His performance is full of emotional tension, which can cause strong resonance with the audience.

Wang Yao favors a subtle and introverted way of expressing his emotions. His playing is like the flow of water, with emotions flowing slowly between the notes, requiring the listener to savor them carefully to feel the depth of meaning. This way of expression aligns more with oriental aesthetic concepts, giving people a delicate and deep feeling (Figure 8).



Figure 8. Wang Yao plays “Ga Da Mei Lin”.

Source: Nian Xing (2025)

4. The Playing Technique of Tuba by Wang Zhen

4.1 In terms of breath use (stability of breath) : Wang Zhen's breath is a little less stable, and in long tones, there may be slight fluctuations in breath. However, B may skillfully utilize this change in breath to add a unique emotional expression to the solo. For example, in some emotionally complex passages, the slightest change in breath can show the inner struggle or the ups and downs of emotion, making the performance more personalized and expressive.

4.2 Breath intensity changes: probably more inclined to the more exaggerated breath intensity changes. In his performance, Wang Zhen will suddenly increase the strength of his breath in certain passages, creating a strong contrasting effect and bringing a greater auditory impact to the listener. For example, at the turning point of a solo, he may use a strong breath explosion to highlight the drama of the music, so that the listener's emotions are instantly mobilized. However, if the degree of this approach is not well grasped, the overall coordination of the music may be affected to a certain extent.

4.3 Proficiency in basic fingering: The proficiency in basic fingering is also high, but in some difficult fingering passages, there may be a slight delay. However, Wang Zhen is good at utilizing this kind of fingering “imperfection” to create a kind of rustic and real style of playing. For example, in some ornamental or fast arpeggio passages with national characteristics, his fingering is not so precise, but it is more reflective of the spontaneity and naturalness of folk music.

4.4 Stability of rhythm: Wang Zhen is relatively free in his grasp of rhythm, and will make certain changes to the rhythm according to his own understanding and

feeling of the solo. For example, in some free passages, he may lengthen or shorten the duration of certain notes to make the music more flexible and expressive. This kind of free rhythmic treatment requires the performer to have a high level of musical literacy and in-depth understanding of the solo, otherwise it may easily lead to rhythmic confusion.

4.5 Handling of rhythmic changes: Wang Zhen emphasizes more on the drama and contrast of rhythmic changes. At the moment of rhythmic change, B may adopt sudden acceleration or deceleration to create a strong rhythmic contrast, bringing an unexpected auditory impact to the listener. This kind of treatment can make the rhythm of the solo more varied and energetic, but it also requires the player to have a strong sense of rhythm and the ability to control it.

4.6 Depth of emotion: Wang Zhen is more direct and passionate in his emotional expression. He will release his inner emotions unreservedly through his strong musical expression and passionate playing style. In his performance, the music is more infectious and can quickly ignite the audience's emotions, making the audience feel as if they were in the battle scene of "Ga Da Mei Lin", and feel that kind of heroic and fearless spirit.

In his playing, Wang Zhen favors an outward, open expression of emotion. His playing is like a blazing fire, with passionate and unrestrained emotions, which can directly impact the listener's heart. This kind of expression is more modern and personalized, and easily attracts the attention of young listeners.



Figure 9. Wang Zhen plays "Ga Da Mei Lin".

Source: Nian Xing (2025)

5. Performance Technique Analysis

5.1 Introductory section

The first part focuses on the angry and repressed emotions of the people of Inner Mongolia under the dark rule, and the musical image is expressed in the introductory part.

嘎达梅林

Tuba

Figure 10. "Ga Da Mei Lin" playing technique (1-18)

Source: Nian Xing (2025)

From figure 10 is the original composition of Mr. Ma Youdao's "Ga Da Mei Lin Theme and Fantasy" for trombone.

Figure 11. "Ga Da Mei Lin" playing technique (1-18)

Source: Nian Xing (2025)

From figure 11 is the altered Tuba score, both of them are different because of the characteristics of the instrument in the treatment of the notes, and the following are the author's thoughts and treatment techniques in playing the work.

The music of the introductory part consists of the appearance of a bass (a large character set of G), the use of infinite prolongation of the note number to set off this bass G, plus an f of the strength of the notation, the first note requires blowing low and firm, spit the sound of the sound of the calm and powerful, requiring the player in the breath and tongue have full preparation, the tip of the tongue can be against the upper gums part of the breath driven by the tongue to quickly retract the Embouchure slightly open the mouth of the gas, the breath in the form of a column of air into the instrument to form a strong and powerful vibration. The breath enters the instrument in the form of a column of air, forming a strong and powerful vibration. It expresses the strong, broad, thick and rugged national temperament unique to Inner Mongolia. The trombone is required to play in unison with the triplet pattern that appears later. The adapted Tuba requires spitting. The Tuba is a bass instrument, so it cannot express the notes clearly by playing legato, but it cannot be played by spitting in contrast to the eighth-note spitting in measure 15.

So, the author believes that the triplet can be played with a soft spot (Legato), and that the tip of the tongue should be lightly struck against the upper gums when playing the soft spit, and the soft spit should be pronounced as “lu the tip of the tongue is lightly struck against the upper gums, and the soft spit is pronounced as “lu” or “le”. The eighth note of the 14th measure should be played firmly and long, and the spit note of the fifth measure should be played without the soft spit note, and the tongue should be strengthened to spit with a clear and firm spit note and gradually speed up, forming a contrast between fullness and shortness. The 18th and 19th bars should have a wide effect; the breath can be freely extended, showing a kind of thinking and thought struggle and brewing a higher emotion. When dealing with the triplets and the scales behind them, I make the volume of each note progressively stronger, their role is to highlight the long notes behind them at the end, the introduction to the end of the section gradually weakened, and the eighth note of bar 25 is deliberately weakened, and even completed with a soft spatula, which is a better echo of the triplets of sixteenth notes. The range is gradually lowered and finally

returns to the bass (G), and with the piano breaking down the chords, the mood changes to a relatively soothing and peaceful section.

5.2 Thematic section

The theme uses delicate and gentle tunes to depict the vast grassland and the beautiful and magnificent scenery. The Tuba's alto tone cuts in, and the beautiful lyrical melody contains the musical elements of Mongolian long tunes (Figure 12).

24 rit. *p* *mf* *jian man* *jian ruo* **9**

38 A tempo *p* *mf* *jian qiang* **7**

49 *p* *mf* **7**

zhu ti

zhu ti

Figure 12. "Ga Da Mei Lin" playing technique (24-58)

Source: Nian Xing (2025)

38 A tempo *p* *mf* *jian qiang* **7**

49 *p* *mf* **7**

zhu ti

zhu ti

Figure 13 "Ga Da Mei Lin" playing technique (38-58)

Source: Nian Xing (2025)

The performance of the theme is based on the spitting sound, which is coherent and rounded, and the spitting sound is better to produce the "tu" sound, rather than the spitting sound that we usually understand should be pronounced as "tu", because the sound spits out with "tu" is presented in a flat form without any flatness. The sound spit out by "tu" is presented in a flat form and does not reflect the three-dimensionality of the notes, as a singing section seems to be hard. The sound

highlighted by “tou” is closer to the shape of a water drop, and the three-dimensionality of the tone and notes is stronger, so the author prefers to use the “tou” way of spitting. In terms of the air opening of the solo, the air opening in Example 4 is not appropriate for the Tuba player. There is a difference between the trombone and the Tuba in the amount of air used in the performance. The author believes that an air opening should be added after the quarter note appoggiaturas in bar 7 of example 4. The reason for choosing to make an air opening here is that the duration at the appoggiaturas is a little bit longer, so it is possible to inhale quickly at the sixteenth notes of the appoggiaturas and inhaling rapidly here can keep the consistency of the music, and the melody of the treble melody is completed after inhaling in one go. The 8th and 9th bars have three consecutive high notes, as well as 4 beats of long notes, for the Tuba player to speak if not in front of an additional airport, it is difficult to ensure the quality of sound and accuracy in blowing here, blowing the high notes need to be enough breath and air pressure to support the need to keep pressure on the abdomen in blowing the high notes, abdominal support with air, air pressure to accelerate the speed of the airflow, the mouth solo wind to reduce the addition of atmospheric pressure, the Embouchure of the air point close to the lower part of the mouth solo can be moved slightly upward, which is more conducive to the performance of the high notes. In measure 17, the air is also treated in the same way. When the long, high notes are being emphasized, it is necessary to maintain the full duration of the blow, not to shorten it or weaken it.

5.3 Expanded portion

65 A tempo 轻快地
p
ruo qi

75 accel.
p
ruo qi

86 rit. A tempo jian man zhongyin
6 4

Figure 14. “Ga Da Mei Lin” playing technique (65-91)

Source: Nian Xing (2025)

From figure 14 When the unfolding part of the solo is played on the spit, successive dotted notes are accompanied by a crescendo, which raises the mood of the music, and the music gradually speeds up and gets stronger. Using fourteen quarter notes, when dealing with the dotted notes, you can play the previous dotted note as an accent and the 16th note behind it in short bursts, with the tip of the tongue touching the tip of the upper teeth quickly, gently, but forcefully, in order to block the breath, and without the tip of the tongue being too slow to make the articulation cumbersome. This adds to the flow of the solo. Breath part, the author in order to music playing fluency, every four bars at the end of the long note can be added to an air mouth, rapid air change.

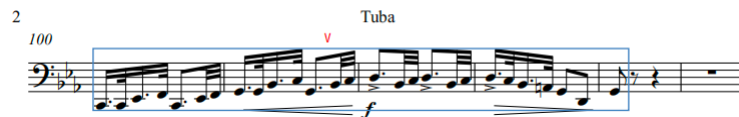


Figure 15. "Ga Da Mei Lin" playing technique (100-105)

Source: Nian Xing (2025)

Base speed varies from 66 beats per minute to 88 beats per minute. The rapid succession of dotted notes and thirty-second notes is played with the dotted sixteenth note treated as an accent and the thirty-second note treated as a staccato, requiring a light and elastic spit. Imitate the aural effect of a war horse galloping and jumping. When practicing fast spitting, you can choose to practice with a single note with a dotted note, follow the metronome, and gradually increase the speed. Later, you can add melodic patterns.

This music paints a picture of a battle scene in which the generals are bravely killing the enemy. The mood of the music heats up quickly at this point, bringing the solo to a climax. Due to the emergence of the Allegro, many players will arrange the air gaps randomly, thus destroying the smoothness of the music. The author believes that it is more appropriate to add an air opening at the eighth note of the second beat of the second measure, which requires as short a breath change as possible, or even a chest breath. In this case, the air change should be as short as possible, and even chest breathing can be used to achieve a fast air change.

111 *accel.* *v*

jianqian jiankuai

115 *A tempo*
sff
qi ang zou *san lian yin* *san lian yin*

122 *dim.*

129 *accel.* *f* *jian qi ang*

111 *accel.* *v*

jianqian jiankuai

115 *A tempo*
sff
qi ang zou *san lian yin* *san lian yin*

122 *dim.*

129 *accel.* *f* *jian qi ang*

Figure 16. "Ga Da Mei Lin" playing technique (111-133)

Source: Nian Xing (2025)

Breathing is a slow crescendo at bar 3 of Example 8, with an aperture at the end to prepare for the soprano *sff* in bar 4. The soprano is played firmly and powerfully, with abdominal breathing, the breath is inhaled into the abdomen, supporting the abdomen and diaphragm, and the air pressure is increased to blow out.

Example 8, measures 7, 9, and 11, at the triplets; example 7 trombone requires legato; example 8 Tuba requires spitting to play the triplets in contrast to the spitting of measures 4 and 5, and choose to complete these three measures with soft spitting. Special attention should be paid to the 17th bar of example 8, the last two bars of the long note, which need to maintain the timing and strength of the notes; some players tend to ignore the long note and play short or weak, resulting in melodic collapse and fault.

Figure 17. "Ga Da Mei Lin" playing technique (139-193)

Source: Nian Xing (2025)

Music forms the intense rhythm of the fast plate into a soothing slow part (score example 9), depicting the tranquility of the grassland after the battle, as well as the love and nostalgia of Ga Da Mei Lin's hometown and the people, the performance requirements of the loose and consistent, even if it is a weak play, the breath is also required to be full of strong, melodic performance of the grassland people's temporary songs and dances.

Figure 18. "Ga Da Mei Lin" playing technique (265-285)

Source: Nian Xing (2025)

After the slow lyrical section, the rhythm of the horses' hooves reappears and the tense battle music resumes, heralding a more brutal struggle, with "Ga Da Mei Lin" still leading the people of Inner Mongolia to rise up in revolt.

Example 10, measure 5, shows a long tone, which is played smoothly and powerfully, with increased speed and strength, thus increasing the tension of the music. In the author's opinion, long notes are essential in practicing, and the player can use a metronome to practice, keeping each note as long as possible. The breath is smooth and even, the air point is concentrated, so that the sound quality of the long tones is smooth and full, in addition, there is also a strong practice of long tones, the practice of each 4-beat long tones should be added to the accents (slightly aggravated spit head), and the volume of each long tone is different, the more the practice of long tones after the volume of long tones should be gradually aggravated and strengthened, the practice of the E-flat scale can be carried out in E-flat.

Example 10, measures 17 through 21, visualize the scene of “Ga Da Mei Lin” sacrifice. The quarter notes in measure 17 should be emphasized, and the rests can be slightly extended, depicting the scene of “Ga Da Mei Lin” sudden death, a moment frozen in time. 18 measures of the two d notes can be slightly exaggerated and emphasized, and deliberately played with the accent technique to show the tragic scene of the hero's fall, with the earth shaking, and the intensity of *ffff* is then weakened, and the intensity of measures 20 and 21 should be the same as that of measures 18 and 19, but with the same emphasis. The last long tones can be slightly prolonged, which the author understands to be echoes from afar, making people nostalgic and sentimental.

5.4 Analysis of the performance technique of the theme recapitulation part of the solo.

Figure 19. “Ga Da Mei Lin” playing technique (265-285)

Source: Nian Xing (2025)

The theme is presented again, and the performance no longer has the theme of the melodious and magnificent feeling; at this time, the national hero “Ga Da Mei Lin”

has been heroically sacrificed and should be played out of the feelings of grief and sadness. The spit is slow and full and powerful, even flat and straight, symbolizing the people's heavy steps, more determined to fight, in contrast to the theme's delicate and gentle. In terms of breath, an airport is added between the two quarter-note extensions in the penultimate measure and the coda in the penultimate measure to ensure that the breath supports the timing and accuracy of the high notes.

5.5 Coda section

289 A tempo 光辉灿烂地 V V
 296 V
 299 V
 ji an qiang

Figure 20. "Ga Da Mei Lin" playing technique (289-302)

Source: Nian Xing (2025)

38 A tempo p

Figure 21. "Ga Da Mei Lin" playing technique (38-46)

Source: Nian Xing (2025)

The Mongolian pentatonic scale, a unique mode in Mongolian music, is composed of five notes: gong (1), shang (2), jue (3), zhi (5), and yu (6), lacking 4 and 7 in Western music.

Each mode has distinct features. Gong mode is bright and stable; Shang mode is lively; Jue mode is gentle; Zhi mode is cheerful; Yu mode is soft and deep.

Melodically, it combines step - by - step progressions, small leaps, and diverse rhythms. This scale is widely used in long - tune, short - tune, and khoomei, bringing out the unique charm of Mongolian music.

Although this scale contains the notes fa and xi, transposing it upwards by a major second will transform it into a traditional Mongolian pentatonic scale.

The coda, with its bright and luminous tone, symbolizes a new dawn for the people after the darkness of the war and also expresses people's nostalgia and praise for the great national hero of Inner Mongolia, "Ga Da Mei Lin". At this point, the requirements of playing a loud voice, quarter note gradually strong and blow full time value, in the score example 12 of the 9th to 12th bars, is a continuous tone plus the last sixteenth note of the tone pattern, I think the sixteenth note should deliberately blow heavy blow strong, even in the weak beat, the requirements of the strength of the next beat of the same as the notes of the same strong. Afterward, in the penultimate measure, we can make a "rit," and the whole solo ends with the last C note getting stronger.

The whole track covers a lot of Tuba spitting and breath techniques, well embodied the characteristics of the Tuba instrument, the use of the Tuba's thick sound quality perfectly portrayed the heroic image of "Ga Da Mei Lin". The expressive power of each register was also well and appropriately realized, closely integrated with the storyline, for which I was deeply infected by its boldness and wide range of sound. It deeply shakes the hearts of all music lovers, and is a unique mastersolo for trombone and Tuba.

Standing Position

Stand straight with your feet shoulder-width apart and keep your body naturally relaxed without bending or hunching over. Place the body of the euphonium on the left side of your body, hold the supporting part of the body with your left hand and prepare to operate the piston with your right hand.



Figure 22. Standing Position

Source: Nian Xing (2025)

Sit in the front third of the chair with your back straight, not leaning on the back of the chair. Place the basset horn between your legs, slightly to the left, to keep the instrument stable and at the same time easy for the player to handle.



Figure 23. Sitting Position

Source: Nian Xing (2025)

Breathing Methods

The abdominal breathing method is used, which means that the inhalation and exhalation of the breath is controlled through the expansion and contraction of the abdomen. When inhaling, breathe deeply into the abdomen so that the abdomen bulges outward; when exhaling, exhale the breath evenly and steadily, controlling the flow and velocity of the breath.

Breath control

Playing the basset horn requires strong breath support, learn to control the strength and stability of the breath. When playing long notes, try to maintain an even output of breath for a consistent, smooth sound. Breath control can be improved by practicing long notes of different lengths and intensities.

Familiarize yourself with the fingering

The euphonium usually has three or four pistons, each with a different pitch variation. You need to familiarize yourself with the function of each piston and its corresponding pitch, and play various notes through different combinations of pistons.

Fingering exercises

Perform specialized fingering exercises, such as scale exercises, arpeggio exercises, etc., to improve finger dexterity and accuracy. When practicing, pay attention to the finger key action should be rapid, clean, do not appear to press the key in time or press the wrong key situation.

Mouth Formation

Form a flattened mouth shape by closing the Embouchure loosely and stretching the corners of the mouth slightly to the sides. The horn is then gently placed over the Embouchure, maintaining proper pressure, not too tight or too loose.

Tone Adjustment

Tone is controlled by adjusting the mouth solo, breath, and Embouchure tension. Generally speaking, the tighter the Embouchure, the higher the sound produced; the sharper the breath, the stronger the sound. It is important to flexibly adjust these factors according to the needs of the solo in order to obtain a mellow, full and pure tone.

6. Summary

Technique	Wang Yao	Wang Zhen
Flavor	Stabilise, Powerful, Full	Slightly weaker. Exaggerated.
finger method (in painting)	Conservative, accurate, stable	Innovative, bold, unique
Affective expression	Subtle, deep	Outgoing, flamboyant.

พหุ ประถมศึกษา

CHAPTER VI

Conclusion, Discussion and Suggestions

1. Conclusion

1.1 The historical development of the Tuba in the performance of the Chinese folk song “Ga Da Mei Lin.”

The Tuba Concerto “Ga Da Mei Lin” is an exceptional amalgamation of Mongolian traditional music with Western instrumental methodologies. The composition is derived from the Mongolian folk song of the same title, narrating the tale of “Ga Da Mei Lin,” a leader who battled to safeguard the herdsmen's territory during early 20th-century strife in the Horqin grasslands. As the leader of Dalhan Meilin, “Ga Da Mei Lin” orchestrated a rebellion against feudal lords and warlords whose land reclamation tactics ravaged the herders. Although the insurrection was finally quelled, it safeguarded the grasslands and bequeathed a lasting legacy of valor, subsequently commemorated in an extensive narrative poem and eventually adapted into a popular folk song.

This narrative of persistence has inspired several musical interpretations. Prominent instances encompass Xin Huguang’s Symphonic Poem “Ga Da Mei Lin,” Wang Qiang’s Cello Concerto “Ga Da Mei Lin,” and Sang Tong’s arrangement of a solo song. These compositions maintain the essence of the original folk song while using Western methodologies. Xin Huguang’s symphonic poem conjures the majesty of the Mongolian steppe, but Wang Qiang’s cello concerto encapsulates its emotional profundity through an instrument reminiscent of the Mongolian horse-head fiddle. Sang Tong’s composition emphasizes the valor of “Ga Da Mei Lin” with a pentatonic melody and a lush piano accompaniment that conveys both melancholy and resilience.

The Tuba Concerto “Ga Da Mei Lin” exemplifies the Tuba's flexibility, embodying the majesty of the steppe and the valor of its titular figure. The Tuba’s deep, resonant tones evoke the emotional profundity of the work, while the

accompanying represents the herdsmen's support for "Ga Da Mei Lin". This concerto illustrates the capacity of Western instruments to genuinely convey the cultural and historical histories of Chinese folk music, thus strengthening both traditions.

Ga Da Mei Lin's narrative crosses temporal and spatial boundaries. His heroics have transitioned from local tradition to national renown via literature, music, and art. The Tuba Concerto "Ga Da Mei Lin" is an adaption that honors and perpetuates his legacy, ensuring his spirit inspires future generations. This work reconciles cultural disparities and underscores music's capacity to intertwine history, culture, and emotion in significant and lasting manners.

1.2 The Tuba Playing Techniques Used in the Performance of the Chinese Folk Song "Ga Da Mei Lin"

"Ga Da Mei Lin", originally composed by Ma Youdao for trombone and later adapted for solo Tuba, is a significant fusion of Mongolian folk music and Western instrumental techniques. Based on Xin Huguang's symphonic poem and a Mongolian folk song, the solo tells the story of "Ga Da Mei Lin", a heroic leader who led a rebellion against feudal oppression to protect the grasslands and herders. Through its rich nationalistic themes, the music portrays the vastness of the steppe, the intensity of battle, and the reverence for this iconic hero.

The performance of this solo on Tuba requires mastery of several advanced techniques. Breath control is essential for producing long, smooth tones to evoke the steppe's expansiveness and for maintaining precision during faster, more dynamic passages depicting battle scenes. Embouchure control shapes the tone—relaxed Embouchure for broad, warm sounds in the lower register and tightened Embouchure for bright, penetrating high notes. Vibrato and glissandos add emotional expressiveness and enhance the ethnic character of the music, creating a sound reminiscent of Mongolian long tunes.

Rhythmic techniques further contribute to the narrative. Free rhythm reflects the serene and flowing nature of the steppe, while stable and precise rhythm intensifies the drama of the battle scenes. Each section requires seamless integration of breath, tone, and rhythm to convey the music's emotional depth.

Performers Wang Yao and Wang Zhen offer contrasting interpretations of the solo. Wang Yao's subtle, controlled style emphasizes introspection and smooth transitions, while Wang Zhen's dynamic and passionate approach highlights dramatic contrasts and bold emotional expression. Both interpretations capture different facets of the heroism and grandeur depicted in the solo.

2. Discussion

The "Ga Da Mei Lin", a Mongolian folk song, breathed into Western instrumental traditions in 1959. This adaptation not only preserved the cultural essence of the original folk song but also expanded its reach by integrating it into modern performance practices. The Tuba version adapted later, has become a cornerstone of Mongolian music's development, demonstrating how traditional melodies can find new expression through Western instruments. This transformation allowed the solo to bridge tradition and innovation, fostering its inheritance in music education and performance.

The evolution of "Ga Da Mei Lin" reflects the development of Tuba playing techniques over time. As performers continued to refine their craft, breath control, articulation, and tonal precision became increasingly sophisticated. Modern Tuba players demonstrate delicate control over phrasing, such as managing subtle changes in breath intensity to express emotions effectively. This is consistent with PhiEmbouchure Farkas's analysis in *The Art of Brass Playing* (2024), which highlights the importance of breath control and tone shaping in brass performance. Similarly, Jian Huiluo's (2015) insights into breathing techniques emphasize the importance of synchronizing breath with musical phrases, maintaining depth and stability.

The solo exemplifies stylistic fusion, combining Mongolian folk music with the tonal qualities of the Tuba to create a distinctive sound. The incorporation of Mongolian long-tune elements, such as glissandos and free rhythms, enhances the solo's ethnic character, while modern performance practices add richness and versatility. This fusion aligns with Adler-McKean's (2024) study, which examines

how instrumental evolution impacts performance practices and timbre, emphasizing the interplay between tradition and innovation in shaping musical expression.

Educationally, the Tuba version of "Ga Da Mei Lin" plays a vital role in cultivating students' understanding of ethnic music and advanced playing techniques. Its inclusion in concerts, competitions, and online platforms has broadened its audience and ensured the continued promotion of Mongolian music culture. Jian Jiao's (2022) research highlights how works like this enrich music education by bridging traditional and modern styles, helping students master technical and cultural aspects of brass performance.

Looking ahead, "Ga Da Mei Lin" is poised for further innovation. Advances in recording and music production technologies will allow for more creative interpretations and dissemination of the solo, reaching new audiences. The growing frequency of cross-cultural exchanges will encourage diverse interpretations, further enhancing the fusion of styles and broadening its appeal. As Xiong Jiang (2020) noted, Tuba's role in Romantic orchestral works demonstrates its expressive power, which continues to evolve in modern settings like "Ga Da Mei Lin."

3. Suggestions

3.1 General suggestions

1) Innovative Techniques: Encourage experimentation with breath control, spitting, and rhythmic variations to enhance expressiveness and precision. Strengthen handle flexibility training to better convey melodic lines and inject vitality into performances.

2) Stylistic Fusion: Integrate modern elements like pop, jazz, or rock and collaborate with other ethnic music styles to create a contemporary, multicultural appeal that resonates with younger audiences.

3) Education and Inheritance: Prioritize "Ga Da Mei Lin" in music education through lectures, masterclasses, and collaborations between folk artists and professional educators to deepen understanding and refine performance techniques.

4) Expanded Performance Forms: Combine the solo with other art forms like dance or drama, use multimedia for greater visual impact, and organize large-scale ensemble performances to explore dialogue between instruments.

5) Cultural Promotion: Highlight the cultural significance of "Ga Da Mei Lin" through media channels, foster public appreciation of Mongolian culture, and encourage the creation of derivative works, such as symphonies and chamber music, to broaden its influence.

3.2 Suggestions for future research

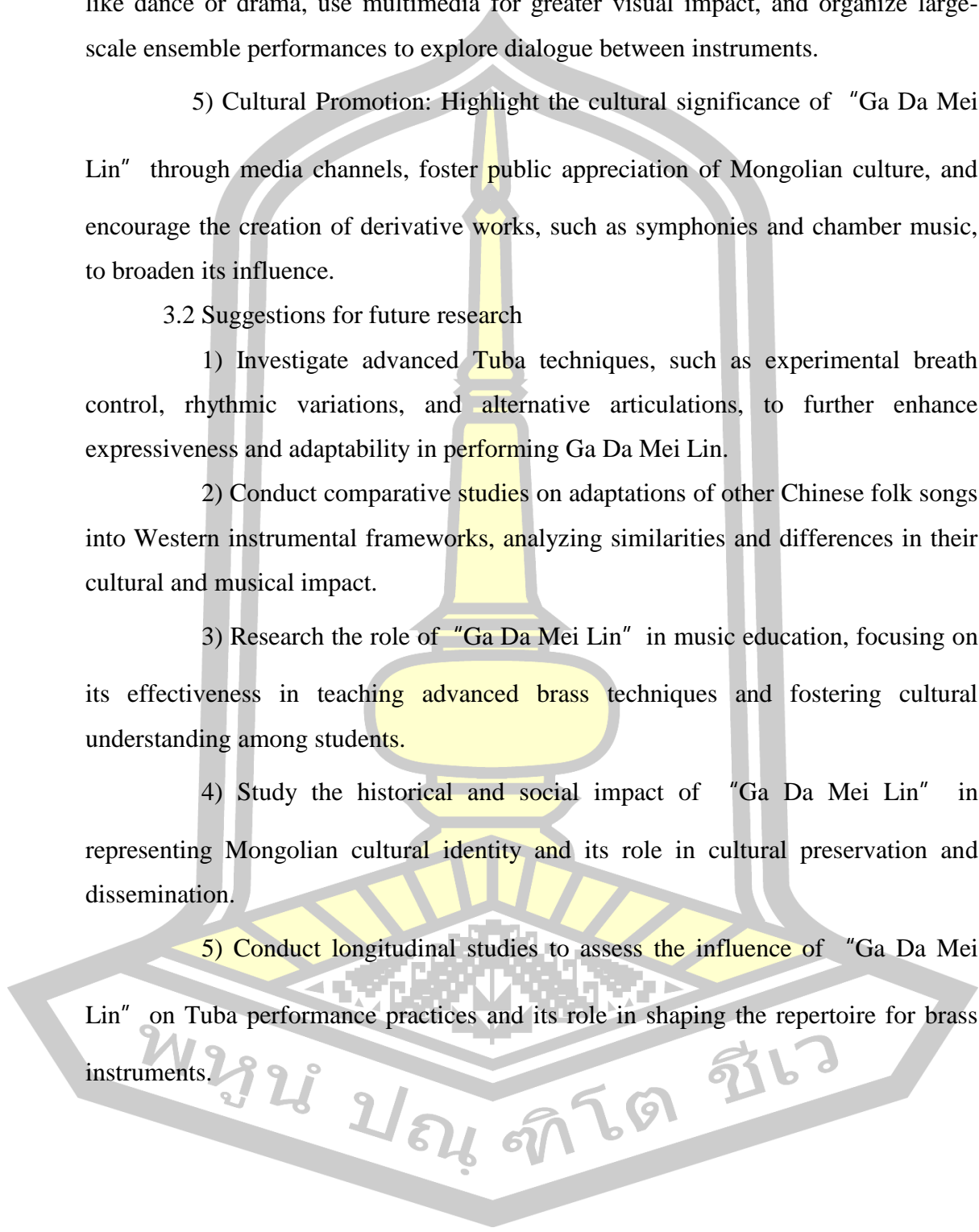
1) Investigate advanced Tuba techniques, such as experimental breath control, rhythmic variations, and alternative articulations, to further enhance expressiveness and adaptability in performing Ga Da Mei Lin.

2) Conduct comparative studies on adaptations of other Chinese folk songs into Western instrumental frameworks, analyzing similarities and differences in their cultural and musical impact.

3) Research the role of "Ga Da Mei Lin" in music education, focusing on its effectiveness in teaching advanced brass techniques and fostering cultural understanding among students.

4) Study the historical and social impact of "Ga Da Mei Lin" in representing Mongolian cultural identity and its role in cultural preservation and dissemination.

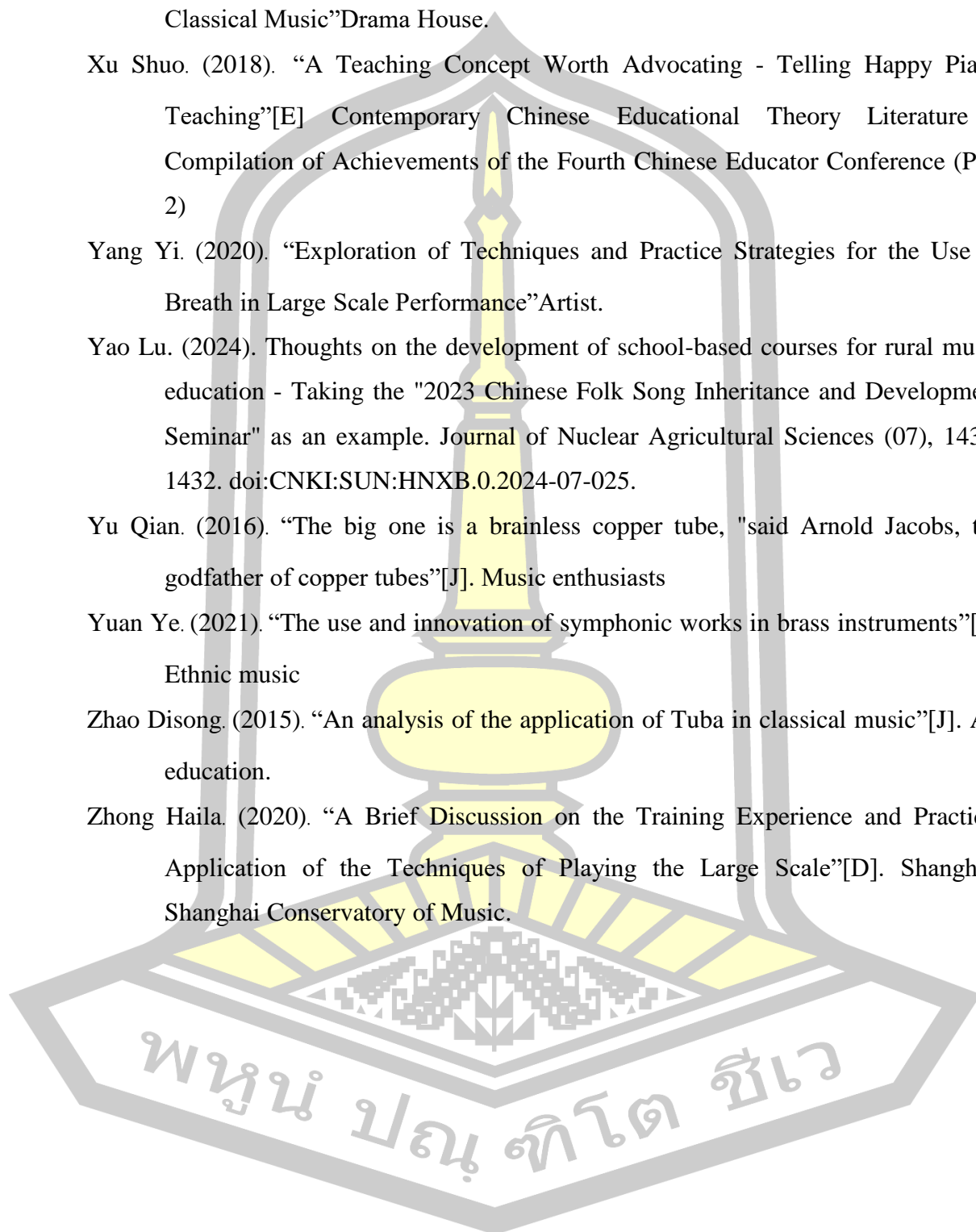
5) Conduct longitudinal studies to assess the influence of "Ga Da Mei Lin" on Tuba performance practices and its role in shaping the repertoire for brass instruments.



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APPENDIX

Appendix 1: Field Investigation Interview Record

1. Time:

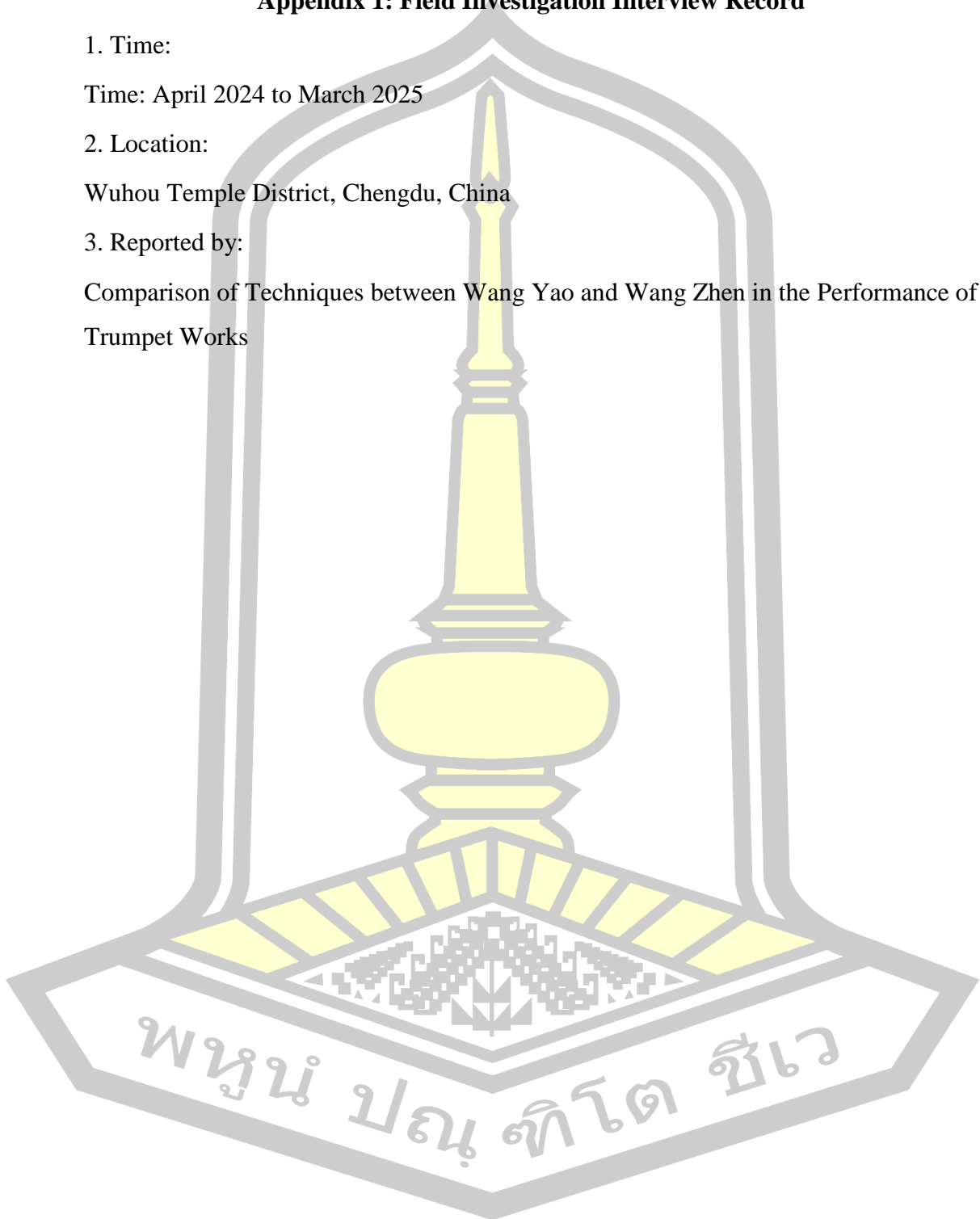
Time: April 2024 to March 2025

2. Location:

Wuhou Temple District, Chengdu, China

3. Reported by:

Comparison of Techniques between Wang Yao and Wang Zhen in the Performance of Trumpet Works



Appendix 2: Photos of Saw I:



Figure 24. Wang Yao Band Performance Certificate

Source: Nian Xing





Figure 25. Photos of Wang Yao Band's Performance

Source: Nian Xing





Figure 26. Wang Yao participated in the 2020 Chengdu New Year Concert

Source: Nian Xing





Figure 27. Wang Yao participated in the academic event of Mr. Mu Zhiqing, a renowned figure in Western orchestral music - Wind Music Chinese Works Concert

Source: Nian Xing

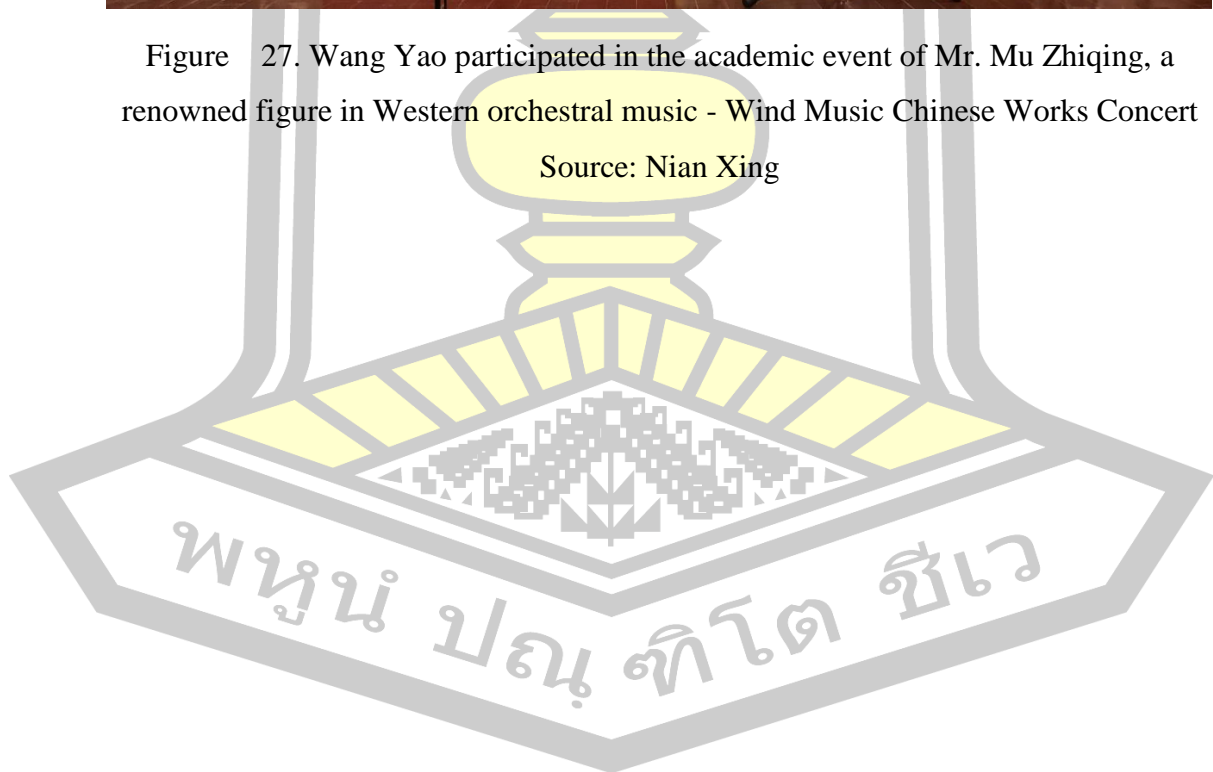




Figure 28. Wang Yao's one-on-one teaching for children

Source: Nian Xing

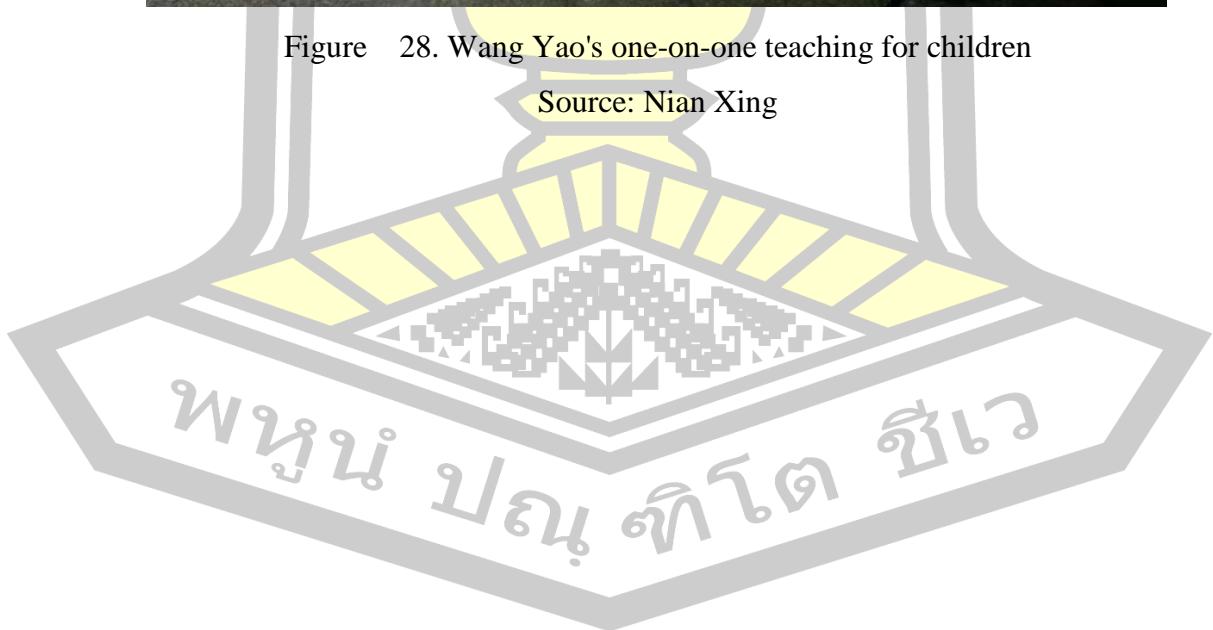




Figure 29. Wang Yao's Big Band

Source: Nian Xing





Figure 30. Wang Zhen Chongqing Wind Band Association

Source: Nian Xing





Figure 31. Judge Wang Zhen

Source: Nian Xing



Figure 32. Wang Zhen's 2020 Chongqing New Year Concert

Source: Nian Xing



Figure 33. Wang Zhen's large-scale collective teaching

Source: Nian Xing





Figure 34. Researchers conducted an interview with Wang Zhen in April 2024

Source: Nian Xing





Figure 35. Researchers attend New Year's concert with Wang Zhen in 2025

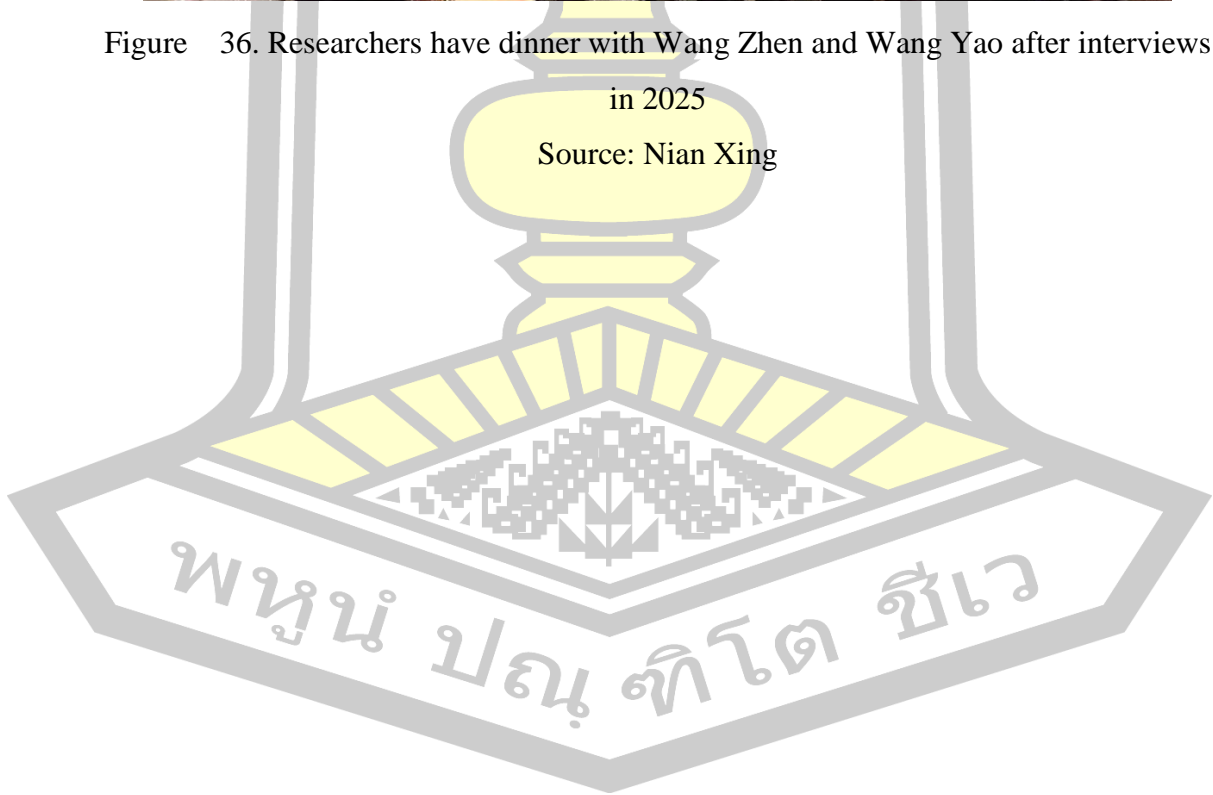
Source: Nian Xing





Figure 36. Researchers have dinner with Wang Zhen and Wang Yao after interviews in 2025

Source: Nian Xing



BIOGRAPHY

NAME	Nian Xing
DATE OF BIRTH	24/08/1983
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