# THE MUSICAL AND CULTURAL CONNOTATION OF "DUOZI" IN XIPING FOLK SONGS

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#### **ABSTRACT**

Xiping folk songs are a national level intangible cultural heritage in China, and DUOZI is a unique musical expression form in Xiping folk songs, with many related music works. However, the theoretical research on the cultural connotations of DUOZI music in Xiping folk songs is currently a blank, and neither music professionals nor folk artists can provide a clear and indepth interpretation of it. Faced with this research gap, I used methods such as literature review, case study, and observation to conduct in-depth research on 15 Xiping folk songs that used DUOZI. Explore the cultural connotations of DUOZI music from its melody, rhythm, lyrics, and other aspects, and interpret its similarities and differences with other art forms. Research has found that DUOZI is a rap form in Xiping folk songs, which is formed by constantly changing the melody of the upper and lower phrases. The vocal range of the DUOZI melody is mainly in the mid to low range, close to the human speaking range. The melody progresses with a large number of second and third intervals. It makes the melody of *DUOZI*sound like rap. However, this rap melody has a stronger traditional Chinese music style. In addition, the independent beat produces a sense of rhythm in the music, and the characteristic of more lyrics but less pitch variation makes DUOZI more like rap music. DUOZI often uses exaggerated and absurd lyrics to tell comedy stories, adapting to the needs of Spring Lantern Festival performances. The research results not only fill this theoretical research gap, but also provide people with a clearer understanding of the musical and cultural connotations of *DUOZI* in Xiping folk songs.

Key words: Xiping Folk Songs, DUOZI, Intangible Cultural Heritage, Chinese Folk Songs

#### Introduction

Xiping folk song refers to a folk song that is popular in Xiping Town and surrounding areas of Xixia County, Henan Province, China. In June 2008, "Xiping Folk Songs" were included in the second batch of national intangible cultural heritage list (Guo, 2023). Most Xiping folk songs have relatively short length, and medium to long Xiping folk songs are mostly completed by adding *DUOZI*, such as *Si Liu Ju* adding *DUOZI*, or *Shi Liu Shao Huo* adding *DUOZI* (Han, 2016). *Si Liu Ju* and *Shi Liu Shao Huo* are a theme melody in Xiping folk songs, so what does

DUOZI mean here? In the currently published monographs or papers on Xiping folk songs, it is also common to see works named Si Liu Ju adding DUOZI. In the actual process of wind harvesting, folk artists often use the term DUOZI. It can be seen that DUOZI and Si Liu Ju adding DUOZI are professional terms in Xiping folk songs. But when I further explore what DUOZI is with folk artists, most of them will tell me that DUOZI is adding content to the singing process, singing, speaking, and then singing. It is both like speaking and like singing. Then they will sing a piece of work such as "Shi Zi Ge" or "Shi Ge Gui Nv Zhao Po Jia" (X.-J. Wei, personal communication, May 1, 2023). In their vivid singing, I can indeed feel the feeling of "both like speaking and like singing" in what they say about DUOZI, but I still feel that it is different from our daily conversations because it has melody and rhythm. So why do these melodies called DUOZI produce such feelings? "Both like speaking and like singing"? Is it traditional Chinese rap? How does it express the plot of medium and long stories? When I searched for answers to these questions in the databases of China National Knowledge Infrastructure (CNKI) and Duxiu, I found that there were many interpretations of DUOZI by previous researchers, but most of the content was about the interpretation of DUOZI in Quyi, other local folk songs, and traditional Chinese opera. There are similarities and differences between these theoretical interpretations and those of folk artists in Xiping. So, what is the musical and cultural connotation of DUOZI in Xiping folk songs? What are the similarities and differences between DUOZI in Xiping folk songs and other art forms of DUOZI? These issues, based on current research results, are still a theoretical gap. To fill this theoretical research gap in Xiping folk songs, I have decided to take music works adding DUOZI in Xiping folk songs as the research object, and explore the musical and cultural connotations of DUOZI in Xiping folk songs. In specific research, I will first use literature research and interview methods to collect as much first-hand and second-hand research data as possible on Xiping folk song works adding DUOZI. Afterwards, I will use the knowledge of music analysis and adopt a case study method to analyze DUOZI in Xiping folk songs, including vocal range, interval, melody, rhythm, lyrics, and other aspects. Using a comparative research method, explore the differences and connections between DUOZI and other folk songs, operas, and folk arts. On the one hand, the research results fill the theoretical research gap of DUOZI in Xiping folk songs, and on the other hand, DUOZI, as a special form of expression of Xiping folk songs, can provide some reference and inspiration for modern music creation.

Figure 1: Photos of the Xiping folk song performance site.

Photography: Chai Zhanhong.

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#### Literature review

DUOZI music is widely used in Chinese ethnic and folk music. The parallel words and phrases are Duozi. Duozi is connected to form Duoju, which is a musical phrase. Continuous Duoju forms Duoban, which is a type of metre for music in Chinese opera. The usage and titles of DUOZI, Duoju, and Duoban in different art forms also have similarities and differences, and related research results intersect with each other (Ma, 2015). Below, I will mainly summarize the cultural connotation theory of DUOZI from the aspects of folk songs, Quyi, opera, and Xiping folk songs.

Firstly, *DUOZI* in other folk songs. *DUOZI* is used and referred to differently in folk songs across China. Hubei folk songs are called *Ganju*(Cao, 2019), Shaanbei folk songs are called *Lunju*(Yuan, 1999), and Xiping folk songs are called *DUOZI*. Three character *DUOZI* and four character *DUOZI* are more common. In the folk songs of the upper and lower phrases, *DUOZI* is often used in the lower phrase. For example, the phrase "Zan Men Er Ren Wei Peng You Wang Hou Jiao" in the Shaanbei folk song "Pa Shan Diao" goes like this (Ma, 2019). In four line folk songs, "*DUOZI*" is often used in the third line, such as the singing line "Lang Chang Shan Ge Xiang Ling" in "Ting Ge Sui Wan" (Zhao & Cai, 2014). The *DUOZI* in these folk songs have a common feature, mainly referring to a phrase in the song, belonging to *Duoju*. This *Duoju* is composed of parallel and overlapping lyrics (Liu, 2019). It is obvious that this is different from the *DUOZI* composed of multiple phrases in Xiping folk songs.

Furthermore, the DUOZI in Xiping folk songs. In my folk interviews, folk artists often use the term "Si Liu Ju with DOUZI". However, based on current literature, there is no direct interpretation of the Xiping folk song "Si Liu Ju with DOUZI". In 2014, Guo Dehua and Liu Shirong's explanation of "Si Liu Ju with DOUZI" in the folk music of Southwest Henan, Zhong Zhou Luo Gu Qu, is currently the most valuable reference material available. Two scholars believe that DUOZI is another part inserted in the middle of a melody. DUOZI has been repeatedly formed into Duoban, such as "Si Liu Ju with DOUZI" and "Bacha with DOUZI" (Guo & Liu, 2014). Xiping Town is located in the southwestern region of Henan Province, and it is the same place as the transmission site of Zhong Zhou Luo Gu Qu described by two scholars. Xiping folk songs are also known as "Luo Gu Qu" in folk (Nanyang Historical and Cultural Dictionary Compilation Committee, 2022). Associate Professor Lin Lijun believes that Zhong Zhou Luo Gu Qu and Xiping folk songs refer to an artistic form . So their interpretation of "Si Liu Ju with DOUZI" in "Zhong Zhou Luo Gu Qu" is actually an interpretation of "Si Liu Ju with DOUZI" in Xiping folk songs. Guo Dehua and Liu Shirong's mention of "repeat" is an important explanation for "DUOZI", which contains two layers of meaning. Firstly, it indicates that the DUOZI used in Xiping folk songs is *Duoban*, not *Duoju*. Secondly, "repeat" depicts the artistic form of *DUOZI* in Xiping folk songs(Lin, 2023). However, this sentence clearly cannot fully describe the full picture of DUOZI in Xiping folk songs, and further exploration is needed to fully demonstrate the musical and cultural connotations of DUOZI in Xiping folk songs.

Then, DUOZI in Chinese opera and Quyi. DUOZI appears not only in the form of Duoju, but also in the form of Duoban in Chinese opera and Quyi. DUOZI's music speed is fast. The music beat is 1/4 or 2/4 (Hu, 2022). The characteristic of DUOZI music is more lyrics but less pitch variation. This characteristic makes the music melody sound closer to rap. The lyrics of DUOZI mainly express urgent or anxious scenes (Gou, 2020). For example, in Mei Hua Da Gu opera, DUOZI refers to adding three character DUOZI, four character DUOZI, and five character DUOZI to the basic phrase structure, such as the "Yi XinYao Zha Di Xia Pao De" period in "Wang Er Jie Si Fu" (Yang, 2018). In Beijing opera, Duoban is attached to the original or slow tempo as an interlude and a component. The lyrics of Beijing Opera DUOZI are short sentences formed by repeated use of the same form of lyrics, called "Dieju" (Xiao, 2020); In Ping opera, Duoban is commonly known as "Lou Shang Lou". Its music beat is 1/4, with a tempo of allegro and a certain level of tension. The lyrics are seven character DUOZI. The music melody is using words to lead the melody, sounding like rap music. For example, the "Dong Fang Dui Zuo" period in Hua Wei Mei (Zhang, 2022). In Hebei Bangzi opera, Duoban is also known as "Duoban Oiang" or "DUOZI Ju". When Duoban is an independent plate-type, the music speed is slightly slower than theallegro. The music beat is 1/4. The lyrics of music are mostly seven character DUOZI and ten character DUOZI. The music structure is the upper and lower phrases structure. For example" Mai Bu Jin Fa Chang" in Xue Shou Yin(Yan, 2016). It is obvious that DUOZI is widely used in Chinese ethnic folk music and has also formed a certain theory. However, in different art forms, the title and usage of *DUOZI* are not entirely the same, and even the theories within the same art form are different. Regarding the study of DUOZI in Xiping folk songs, scholars such as Lin Lijun, Zhao Jun, Li Na, Guo Yixian, etc. have only mentioned DUOZI in their papers or provided simple interpretations of it, but have not conducted specialized and in-depth research. Currently, it is a blank stage. So, is DUOZI in Xiping folk songs, like other regional folk songs, mainly based on Duoju? What are the similarities and differences between DUOZI in Xiping folk songs and DUOZI in Quyi and opera? What are his characteristics? What is his usage and purpose? These issues require further research.

In summary, the theoretical research on *DUOZI* in Xiping folk songs in current literature is still in its early stages, and there are no specialized research results.DUOZI, a widely used and distinctive musical cultural phenomenon in Xiping folk songs, requires a more professional interpretation. This will facilitate everyone's better understanding, mastery, and appreciation of the traditional ethnic music and cultural connotations of DUOZI.

# Research methodology

This study belongs to qualitative research. Firstly, I will use literature research and interview methods to collect as much information as possible on Xiping folk songs adding *DUOZI*, including lyrics, melodies, videos, audio, and other materials, as an important research object of this paper(Pang, 2021). Especially the first-hand interview materials collected directly from folk artists in Xiping Town have more reference value. At present, the collected Xiping folk songs adding *DUOZI* are mainly concentrated in three aspects. Firstly, the work numbers 1-4 are from the monograph "Xiping Folk Songs", recorded and recorded by Cao Ganglin, Fu Huagao, and Qiao Siru (Han, 2016). Secondly, the works numbered 5-7 are from the monograph "Exploration of Xiping Folk Songs" (Zhao, 2013). Thirdly, the works numbered 8-15 were collected by the author during the folk art collection process, totaling 8 pieces. These 15 works of Xiping folk songs using *DUOZI* have lyrics and music scores, which are important research subjects. Please refer to the first two columns in Table 1 for details.

Secondly, I will use the knowledge of musicology to translate the collected Xiping folk songs into music scores. Using a case study approach, a comprehensive music analysis was conducted on the vocal range, interval, rhythm, musical structure, and speed of the lyrics and melody of the work. Induction was used to redefine the *DUOZI* of Xiping folk songs and explore their cultural connotations (Yao @ Yu, 2023). This is the main part of this paper's research. Also, clarify whether the *DUOZI* in Xiping folk songs is *DUOZI*, *Duoju*, or *Duoban*? How many words are the main components of each *Duoju*? What changes have occurred? Why does *DUOZI* generate an auditory sensation of "both like speaking and like singing" for the audience? Then, based on the answers to the above questions, summarize and interpret the musical and cultural connotations of *DUOZI* in Xiping folk songs.

Then, using a comparative research method (Zhou, 2022), this study explores the similarities and differences between *DUOZI* in Xiping folk songs and *DUOZI* in *Quyi*, other local folk songs, and traditional Chinese opera. In this process, literature research and case study methods are mainly used to compare and study the differences and connections of *DUOZI* in different art forms, in order to enable the audience to have a clearer understanding of *DUOZI* in Xiping folk songs(Li, 2022).

In addition, after the research results were obtained, special interviews were conducted with folk artists and music professionals in Xiping Town to triangulate the research results and prove their effectiveness and reliability (Yan, 2015).

#### Results

Using the knowledge of musicology, a case study was conducted on the score of *DUOZI* in 15 Xiping folk songs, as shown in Table 1.

Table 1: Music Analysis of *DUOZI* in Xiping Folk Songs

Work Numb er/Son g Title	Vocal range and interval analysis: ① Total vocal range; ② Maximum interval;	Melody analysis	Rhythm analysis	Lyrics analysis
Comm on feature	The intervals in the melody are mainly in the progression of major second and minor third.	the upper and lower phrases structure, 2 measures/phrase. Except for the melody line in number 2, which is downward, the melody lines in other works are: first upward and then downward, reaching the highest note at the beginning of the lower phrase, and then downward until the end.	All rhythms are completed within one beat, with no notes spanning two beats or bars. There is no rest in the first half of a beat. The rhythm of the last beat of the upper and lower phrases is special: Quarter notes per beat, or 2 Eighth Notes, but the lyrics for the second half of the beat are function words	Except for work number 2 which is 3 words/phrase, all other phrases are 7 words/phrase.
1. Si Liu Ju adding DUOZ I (1)	<pre>①b-d2 , minor tenth ; ②minor seventh;</pre>	16 periods in total; the upper phrase ends with a <i>Yu</i> , the lower phrase end with a <i>Zhi</i> .	words.  2 Eighth Notes  Eighth Note 2 Sixteenth Notes  4 Sixteenth Notes  Quarter notes  per beat.	Tell a humorous story about a salesman and a shopping lady who joke around, with a comedic effect.
2. Si Liu Ju adding DUOZ I (2)	①b-b1 , pure octave; ②major sixth.	4 periods in total; the upper phrase ends with a <i>Gong</i> , the lower phrase end with a <i>Zhi</i> ;	Eighth Note 2 Sixteenth Notes Quarter notes per beat 4 Sixteenth Notes.	The lyrics describe the colorful lanterns during the Yuanxiao Festival in parallel language, and the works have a festive and cheerful mood
3. Si Liu Ju adding DUOZ I (3)	①fl-cl , pure fifth; ②minor third.	7 periods in total; the upper phrase ends with a <i>Jue</i> , the lower phrase ends with a <i>Gong</i> .	The rhythm is mainly based on 4 Sixteen Notes, with syncopations per beat and Quarter notes per beat.	The lyrics use exaggerated techniques and storytelling to describe the story of a person who loves to wet the bed.

4. Si Liu Ju adding DUOZ I (5)	①f1-f2 , pure octave ②minor sixth;	8 periods in total; the upper phrase ends with a Shang, the lower phraseends with a Gong.	The rhythm is mainly composed of Eight Note 2 Sixteen Notes, and there is also a rhythm of 4 Sixteen Notes.	and humorous effect.  The lyrics use exaggerated techniques to tell the dream of a person who enjoys gambling. Having a satirical and comedic effect.  The lyrics use
5. Qiu Zi	①a-g <sup>1</sup> , minor senenth; ②minor third;	4 periods in total; the upper phrase mainly ends with a Shang, with one end with a Gong, the lower phrase mainly ends with a Shang and a Jue.	Eighth Note 2 Sixteenth Notes 2 Sixteenth Notes Eighth Note 4 Sixteenth Notes, syncopations per beat, Quarter notes per beat;	storytelling to tell the story of a couple who go to the Niangniang Temple to offer incense, worship Buddha, and seek their children, which has a religious connotation.
6. Shang Shan Xia Shan	①a-a1, pure octave; ②pure fifth.	The first half of music: The ending sound of the upper and lower phrases is a <i>Shang</i> .  The first half of music: the upper phrase ends with a <i>Shang</i> , the lower phrase ends with a <i>Gong</i> .  Special point: Occasionally, a measure of two beats is added to the phrases to adjust the	The use of Eighth Note 2 and Sixteen Notes is frequent. In addition, 4 Sixteen Notes, 2 Eighth Notes, and Quarter notes per beat rhythm are also used.	Introduced a family living in a cave through storytelling, using exaggerated techniques to describe the content, with a sense of humor and comedy.
7. Niao Chuan g Dai	①a-a <sup>1</sup> , pure octave; ②pure fourth.	rhythm of the music. 7 periods in total; The upper sense ends with the Shang three times, 4 times with a Yu.tHe lower sense ends 5 times with a	Eighth Note 2 Sixteenth Notes, 2 Eighth Notes, 4 Sixteenth Notes, Quarter notes per beat.	The story of a person who loves to wet the bed was described using exaggerated techniques and

Having a comedic

Special

Shang	and	2	times
with a	Gong.		

storytelling. Having a comedic and humorous effect.

work

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			Each phrase uses
8. Yi Zhi Deng Long Hong Diu Diu	①d¹-d², , pure octave ; ②minor seventh.	5 periods in total; the upper phrase ends with a Yu.the lower phrase ends with a Gong.	the rhythm of segmentation within a beat. In addition, there are 2 Sixteen Notes Eighth Note, Eighth Notes, 2 Sixteen Notes, 2 Eighth Notes, 4 Sixteen Notes, and Quarter notes per beat.
9. Yi Cong Hun Dun Kai Tian Di	①c <sup>1</sup> -c <sup>2</sup> , pure octave; ②minor seventh.	Special point: 1 period in total. followed directly by the highest note of <i>Si Liu Ju</i> 's last variation, and the music ends.; <i>the upper phrase</i> ends with a <i>Yu</i> , <i>the lower phrase</i> ends with a <i>Gong</i> .	4 Sixteenth Notes , 2 Sixteenth Notes Eighth Note , Dotted Eighth Note Sixteenth Note , 2 Eighth Notes.
10. Ca i Ya Mi	①#d¹-#d², pure octave ; ②minor seventh.	1.5 phrases in total; Special point: Add the upper and lower phrases or the lower sense to the phrase to drive emotions, followed by the highest note of <i>Si Liu Ju</i> 's last variation, and the music ends.  the upper phrase 以 ends with a Yu, the lower phrase ends	4 Sixteenth Notes 2 Sixteenth Notes Eighth Note Syncopations per Beat Quarter Note per Beat.
11. Sh i Ge Gui Nv Zhao ISSN:13	① f <sup>1</sup> -be <sup>2</sup> , minor seventh; ② pure fourth.	with a <i>Gong</i> . 5 periods in total; the upper phrase ends with a <i>Shang</i> , the lower phrase ends with a <i>Gong</i> . :2573-7104	4 Sixteenth Notes  2 Sixteenth  Notes Eighth Note  2 Eighth Notes

This introduces colorful lantern exhibition singing historical figures on lantern portraits, festive and lively music.

The work about historical figures such Zhou Yu and Yang Silang, as well as mythological figures such Erlang God and Eight Immortals.

point:

The work uses a question and answer duet format, using guessing riddles to facilitate communication and interaction between singers. The music has a cheerful and festive mood.

> The work tells the story of an elderly man surnamed Cui who raised ten daughters, all of

Po Jia		、 Quarter Note per Beat;	whom found husbands of different professions. The story is humorous and witty, and the comedy ends.
① be¹-#f² increased ninth; ② minor seventh.	10 periods in total; the upper phrase ends with a Shang, the lower phrase ends with a Gong.	Eighth Note 2 Sixteenth Notes, Quarter Note per Beat, 2 Eighth Notes, 4 Sixteenth Notes. The second beat of the first measure of the upper sense, 2 Eighth Notes, and the addition of a rest in the latter half of the beat make DUOZI's tone of speech stronger	The work popularizes the writing style of Chinese numbers 1-10 through singing, and has educational functions.
13. $Zh$ $i$ $i$ $Zi$ $i$ $i$ $i$ $i$ $i$ $i$ $i$ $i$ $i$		2 Eighth Notes, Eighth Note 2 Sixteenth Notes, 4 Sixteenth Notes.	The work criticizes some uncivilized social phenomena in life, occasionally adding exaggerated and humorous content, which makes people laugh and has a certain comedic effect.
14. ①b-b <sup>1</sup> ,  Lao pure octav  Shi ;  Wu Li ②minor  Yi Ba sixth.  Suo	7 periods in total; The ending sound of the upper phrase is <i>Shang</i> , and the ending sound of the lower phrase is <i>Gong</i>	Special points: Synaptions per Beat rhythm is used more frequently. In addition, there are 4 Sixteen Notes, Synaptions per Beat, 4 Sixteen Notes with added dots, and 2 Sixteen Notes Eighth Notes	The work advises young people to show filial piety to the elderly, which has educational functions.

Special point: Eighth Note 2: The rhythm of Sixteen Notes is frequently used. In addition. there are also Eighth Note 2 Sixteen Notes, 2 Eighth Notes, Sixteen Notes, and Quarter Note per Beat.

The work employs absurd techniques to criticize a land thug, with a comedic and satirical effect.

# Vocal range and interval analysis

From the vocal range and interval in the third column of Figure 2, it can be seen that the vocal range of DUOZI in Xiping folk songs is between pure fifth and minor tenth. Among them, pure octave is the most, with a total of 8, including 2 minor seventh, 2 increased ninth, 1 pure fifth, and 1 minor tenth. The lowest note is a in the small word group, and the highest note is # f2 in the small word group two. The maximum interval in the melody ranges from minor third to minor seventh, with 5 minor seventh, 4 minor sixth, 2 pure fourth, 2 minor third, 1 major sixth, and 1 pure fifth. Overall, the vocal range of Xiping folk songs is not broad, concentrated around one octave, close to the normal vocal range of ordinary people. Moreover, in the high pitch of this melody, there are more mid to low notes, which are close to the vocal range of our normal speech (Qi, 2015). In the process of melody progression, all DUOZI melodies are mainly composed of second and third progression, with occasional large jumps, but the largest interval is only minor seventh, and the smallest is only minor third, such as the Xiping folk songs "Si Liu Ju adding DUOZI (3)" and "Qiu Zi". Overall, the DUOZI melody of Xiping folk songs is mainly progressive in second and third intervals, with weak jumping ability, similar to the vocal range and pitch changes of speech. This should be one of the main reasons why DUOZI sounds "both like speaking and like singing". At this point, DUOZI is somewhat similar to our modern rap music.

#### Melody analysis

From the third column of Chart 2, it can be seen that all 15 DUOZI works of Xiping folk songs are 2/4 beats, based on the phrases of the upper and lower phrases structure, and are expressed through continuous variation. The number of variations for each DUOZI segment varies depending on the length of the content sung by the singer. The current 15 works mainly have 4 to 16 variations, while the 9th and 10th works are quite unique, with only one and a half lines of DUOZI added to the song. But no matter how many variations are made to the upper and lower phrases, the length of each phrase in DUOZI is 2 measures per phrase. This forms a sharp contrast with the Si Liu Ju melody before and after DUOZI, which consists of three measures per phrase. This change allows the audience to immediately feel: Oh, start singing DUOZI! Especially for the 2 measuresperphrase, the strength pattern is: strong+weak | strong+weak |, and this clear musical rhythm can easily lead the audience to unconsciously beat the rhythm with the singer. The melody lines of other works are similar, except for the downward line in number 2.

Moreover, the backbone tones of these works are similar, or the introduction and ending of the melody are similar. They can be seen as a constant variation of the theme music of the upper and lower phrases. So, these works can be seen as folk songs from the same source (Ma, 2020). The specific melody direction is as follows: each melody starts from the midrange, goes up and then down, reaches the highest note at the beginning of the second phrase, and then goes down to the end of the low range. Regarding the mode and tonality of DUOZI, the Chinese national pentatonic mode is mainly used, with occasional addition of Bian Gong's six tone mode (Song, 2021), such as work number 13 "Zhi Zi Kai Hua Ye Yye Huang". I have conducted a statistical analysis of the ending notes of the upper and lower phrases in these 15 DUOZI works (the 6th and 7th works are counted according to the two works due to significant changes in the ending notes), and found that in the upper sense of DUOZI, the main ending notes are Shang and Yu. Among them, 10 works ended with Shang, 5 works ended with Yu, 1 work ended with Gong, and 1 work ended with Jue. In the lower phrase of DUOZI, the main ending is Gong. Among them, 12 songs end with Gong, 3 songs end with Shang, and 2 songs end with Zhi. Based on the audio and video recordings of DUOZI's works from social research, it can be analyzed that DUOZI's singing speed is medium, and at the end, he will accelerate the speed to drive emotions, laying the foundation for the subsequent music climax. After the last line of DUOZI is sung, the singer will suddenly slow down and sing Si Liu Ju's final variation with the highest note from the entire piece until the end of the piece. So DUOZI not only plays a role in telling stories here, but also helps the song's emotions develop towards climax through changes in speed.

# Rhythms analysis

From the fourth column of Chart 2, it can be seen that these 15 DUOZI works of Xiping folk songs mainly use five rhythms, namely: quarter notes per beat, 2 Eighth Notes, Eighth Note 2 Sixteen Notes, 2 Sixteen Notes Eighth Note, and 4 Sixteen Notes. Occasionally, some works may use Synaptions per Beat, Dotted Eighth Note Sixteen Note, and 4 Sixteen Notes with added dots. From the above rhythm, it can be seen that DUOZI's rhythm has the following characteristics. Firstly, each beat is independent, no cross tempo or cross bar legato. Secondly, no weak beats, no weak measures. Thirdly, the rhythm of the last beat of the upper and lower phrases is special, usually using quarter notes per beat, or although it is 2 Eighth Notes, the second half of the beat lyrics are function words, making the ending feeling of the upper phrase and the lower phrase very obvious. Fourthly, each character has one sound, with a maximum of two pitches, and the use of sixteenth notes is more common, resulting in the characteristic of more lyrics but less pitch variation. So, the independent beat, the rhythm of music, and the characteristics of more lyrics but less pitch variation are another main reason why DUOZI music produces "both like speaking and like singing". It's just that this rap melody has a strong traditional Chinese music style. The music rhythm of "f+p | f+p | |" produced by the 2/4 beat with distinct strengths and weaknesses easily drives the audience to unconsciously follow the rhythm of the music along with the singer. In addition, these 15 DUOZI works of Xiping folk songs, except for the second one with a special melody, the other 14 belong to folk songs from the same source. So, these 14 works not only vary in melody, but also in rhythm. Even the repeated use of characteristic rhythms can create unique musical characteristics in different works. For example, the third piece heavily uses 4 Sixteen Notes rhythms, making the DUOZI music more granular; The 4th, 6th, and 15th works heavily use the rhythm of Eighth Note 2 Sixteen Notes, making the sense of jerkiness in these three DUOZI music more pronounced; The 8th and 14th works heavily use the Synchrotions per Beat rhythm, making these two DUOZI music more dynamic under a fixed beat; The 12th work adopts a post mortem 2 Eight Notes in the second beat of the

first measure of the upper phrase, causing a pause in the *DUOZI* rhythm of the two beats. The expression of this rhythm is like the feeling of a person taking a breath while speaking and then continuing. This processing doubles the jerkiness of this *DUOZI* music, which is closer to the human speaking state, although it has a melody.

## Lyrics analysis

From the fifth column of Chart 2, it can be seen that the lyrics of these 15 DUOZI works of Xiping folk songs, except for work number 2 which is 3 words/phrase, all other phrases are 7 words/phrase. Of course, these seven characters are the number of words that have no actual meaning except for function words. From the content of the lyrics, they are closely related to the lives of ordinary people. In addition to using line drawing techniques, the creative techniques of lyrics often employ exaggerated and imaginative expressions, creating novel effects and expressing different emotions by fabricating certain characteristics of people or things. Except for works 5, 9, 12, and 14, most of the other 11 works have comedic effects or depict festive scenes, which is directly related to the performance venue and social function of "DUOZI" works. These works are mostly performed in public during the Spring Lantern Festival when the performance team walks to every household or square. Its main function is to celebrate the Spring Lantern Festival, so folk artists will perform some works with festive effects. For example, telling a fun story or singing about people and events that make people happy has the function of entertaining the public (C.-Z. Tian, personal communication, February 1, 2019). From a functional perspective, in addition to entertainment functions, works also have certain critical and educational functions. Work 4 describes the thoughts and ideas of a person who enjoys gambling, which not only makes people burst into laughter but also has a certain educational effect; Works 3 and 7 depict a person who loves to wet the bed, and the exaggerated expression adds a comedic atmosphere; Work 14 educates young people to show filial piety to the elderly; Work 11 tells in plain language how ten characters from 1-10 are written, which has a certain educational function for ordinary people; Works 2 and 8 depict lantern exhibitions during spring and lantern festivals, which captivate people's hearts; The singing content of work 10 is guessing lantern riddles, which is itself a popular entertainment activity; Works 13 and 15 respectively exaggerate the expression of uncivilized behavior in society, which not only has a comedic effect but also serves as a criticism and satire of negative social norms. From the expression of lyrics, there are mainly two types. One method is narrative, for example, works 1, 3, 5, 10, and 15 use narrative to tell the story. The second method is to use parallelism. For example, work 2 describes different colored lanterns through parallelism; Works 4, 6, 8, and 11 use parallelism to list various historical and mythological figures; Works 9, 11, and 12 describe numbers 1-10 through parallelism; Works 3, 7, and 13 are described in chronological order using parallelism. It is obvious that parallelism is the main creative technique of *DUOZI*'s lyrics. This technique gives the lyrics a parallel effect, driving the development of the story and the musical emotions of the characters through repeated repetition, which is an important characteristic of DUOZI lyrics.

#### **Discussions and conclusion**

# The Cultural Connotation of Xiping Folk Song DUOZI

From the perspective of the vocal range and interval relationship in the works of *DUOZI* in Xiping folk songs, the melodic notes of *DUOZI* are concentrated in the mid to low range range, with the melody mainly progressing in second and third intervals. The jumping ability is not

strong, and it is similar to the vocal range and pitch changes of human speech. This is the main reason why DUOZI sounds "both like speaking and like singing". From a melodic perspective, DUOZI melodies are all 2/4 beats, based on the phrases of the upper and lower phrases structure, completed through continuous variation. The length of the upper phrase and the lower phrase are both 2 measures. From the similarity of melodies, apart from work 2, other works can be seen as continuous variations of the upper and lower phrases music theme, so these works can be regarded as folk songs from the same source. The length of the work can be long or short, with medium length as the main focus, focusing on 4 to 16 of the upper and lower phrases. In the upper phrase of DUOZI, the main endings are Shang and Yu. In the lower phrase of DUOZI, the main ending is Gong. The singing speed of DUOZI is medium, and at the end, it will accelerate the speed to drive the music emotions, laying the foundation for the subsequent music climax. From a rhythm analysis, DUOZI's music rhythm has the characteristic of completing within one beat, with no weak beat and no weak measure. This rhythm characteristic makes each beat of DUOZI's melody very independent. The use of quarter notes per beat in the last beat of the upper and lower phrases creates a sense of cadence in the melody, which also makes the ending of the upper and lower phrases more pronounced. The use of a large number of sixteenth notes gives the melody the characteristic of more lyrics but less pitch variation. In short, the independent beat, the rhythmic feel of music, and the characteristics of more lyrics but less pitch variation are another major reason why DUOZI music produces "both like speaking and like singing". It's just that this rap melody has a strong traditional Chinese music style. The strong and weak 2/4 beat music rhythm easily drives the audience to unconsciously follow the rhythm of the music along with the singer. In addition, most DUOZI music serves as folk songs from the same source, and rhythm variation is the main means of variation. The repeated use of special rhythms allows different works to emit different flavors. From the analysis of lyrics, DUOZI's lyrics are mostly 7 words/phrase. In addition to using line drawing techniques, they often use exaggerated and imaginative techniques to create novel feelings and express different thematic content. In terms of social function, works tend to have more comedic colors, mainly for entertainment purposes, while also having certain critical and educational functions. In terms of expression techniques, in addition to narrative storytelling, parallelism is often used to promote the emotional climax of the song through changes in speed.

### Differences and Similarities between DUOZI and Other Folk Songs, Quyi, and Opera

The *DUOZI* in Xiping folk songs belongs to *Duoban* because it is composed of many *Duoju* pieces. From a musical structure perspective, it belongs to another musical theme inserted during the music movement. The insertion of this *DUOZI* has changed the expression of the original music beat from 3 measures/phrases to 2 measures/phrases. Seven character *DUOZI* is the main focus. Moreover, the *DUOZI* in Xiping folk songs is a relatively independent and complete musical segment, in which he wants to tell a complete story. This is different from *DUOZI* in other folk songs or *DUOZI* in certain operas and folk arts. Because in most folk songs, as well as some operas and folk arts, *DUOZI* is actually mostly *Duoju*. They just insert two or more words of the same number into the lyrics, mainly three character *DUOZI* and four character *DUOZI*, and then promote emotional development through parallelism of lyrics, repetitive melodies or rhythms, and accelerating speed. The *DUOZI* in folk songs, traditional Chinese opera, and folk art generally does not express a relatively complete storyline, nor does it change the original way of expressing music beats. For example, the folk song "*Pa Shan Diao*" from Shanxi and Shaanxi is: "*Ba Ta Na Xie Chuan Bu Si De Gui Po Po, Si Bu Liao De Gui Gong Gong, Tou Mo Gui Nan Ren, Qiang Bang Gui Mei Ren, Yi Ge Yi Ge Dou Si Jing*" (Tong, Gu, Zhou&Sun, 2020). For

example, in Beijing opera Qin Xiang Lian Da Tang: "Ni Ba Na, Fu Mu Gao Tang, Qi Shi Er Nv, Yi GeYi Ge, Quan Dou Pao Qi, Ni Ben Shi, Wang En Fu Yi, Sha Ren De Zei."(Yan, 2016), Mei Hua Da Gu"Wang Er Jie Si Fu": "Yi Xin Yao Zha Di Xia Pao De, He Li Fu De, Cao Keng Beng De, Da Du Zi De Guo Zai Gao Lliang Ye Shang Pa."(Xiao, 2020). In these examples, DUOZI is clearly a phrase in music. This is clearly different from the DUOZI in Xiping folk songs. In addition, there are various forms of DUOZI in Chinese opera and Quyi. Relatively speaking, DUOZI in Xiping folk songs is closer to DUOZI in some opera and Quyi. For example, the scene of "Bo Yi Shu Qi Er Da Xian" in the Pingju drama "Da Gou Quan Fu" (Yang, 108); "Zhang Wu Ke Yong Mu Chou" segment from the Beijing Opera "Hua Wei Mei" (Ding, 2019); "Han Bei Ren Lei Tuo Gu Jiao" segment from Yu Opera "Bai She Zhu" (Li, 2020); Fragments of "Da Bu Duan Song Le Wei Man San Yue Xiao Ying Hai" from Beijing Opera "Fa Chang Huan Zi" (Beijing Opera Inheritance and Development (International) Research Office, 2018), etc. Their common feature is that the DUOZI here is a Duoban composed of many Duoju, and through the Duoban style, it tells a relatively complete story of people and events. The music beat changes accordingly, mainly in 1/4 beat or these 2/4 beats. The music is more lyrics but less pitch variation, with recitation, which promotes the development of music emotions while telling stories. The difference between them is that the DUOZI in Xiping folk songs is mainly composed of seven character DUOZI, often expressing a complete story plot together with Si Liu Ju's theme music. The forms of DUOZI in traditional Chinese opera and Quyi are diverse, including five character duo, six character duo, seven character DUOZI, etc. They form a part of their music together with their unique melodies in traditional Chinese opera and Quyi. In addition, the overall speed of "DUOZI" in Xiping folk songs is generally medium, with the aim of telling a story. In traditional Chinese opera and Quyi, Duoban's tempo is mostly allegro, expressing urgent and urgent scenes (Gou, 2020).

Of course, the research object in this paper, Work 2, is quite unique, similar to *Duoju* in folk songs, and this is to clarify.

After further communication with the folk artists Wei Xiuju and Yu Xinghua from Xiping, the above viewpoints were adjusted and ultimately recognized by them (Xiping Folk Song Interview Group, Personal Communication, December 5, 2023). After reading this paper, Cao Ganglin, an expert in folk music research in Xixia County, also agrees with the research results on the *DUOZI* of Xiping folk songs in this paper (G. L. Cao, personal communication, December 10, 2023). As for the further development and application of *DUOZI* of Xiping folk songs in modern music culture, further research is needed.

#### REFERENCES

- Cao Y. (2019). Research on the Context and Morphology of Chinese Ethnic Music Culture. Beijing: China Book Publishing House
- Ding B. J. (2019). Analysis of the artistic characteristics of "Flowers as Media" from the perspective of changing times. *Journal of Fuyang Normal University* (Social Sciences Edition) (04), 83-87 Doi: 10.14096/j.cnki.cn34-1044/c.2019.04.16
- Guo D. H.&Liu S. R. (2014). *Introduction to Traditional Chinese Opera and Music in Zhongzhou*. Zhengzhou: Henan University Press
- Guo Y. X. (2023) Spread and sing Xiping folk songs, continuing the cultural heritage of intangible cultural heritage. *Cultural industries*, 52-54

- Gou L. N. (2020) Appreciation of Modern Music and Exploration of Music Art. Changehun: Jilin People's Publishing House
- Han X. Y. (2016) Xiping Fold Songs. Zhengzhou: Henan Literature and Art Publishing House.
- Hu Y. (2022). Research on Vocal Stage Performance. Changchun: Jilin University Press.
- Li X. J. (2022). Doctoral Dissertation on Ethnic Music Teaching in Chinese Junior High Schools Based on the FMPCK Framework, Northeastern Normal University. https://link.cnki.net/doi/10.27011/d.cnki.gdbsu.2022.001674doi:10.27011/d.cnki.gdbsu.2022.001674
- Li Y. Y. (2020). Analysis of the Artistic Characteristics of the Newly Compiled "White Snake" in Yu Opera. *The Voice of the Yellow River* (02), 161+163 Doi: 10
- Lin L. J. (2023) From "Gong Gu Qu Er" to "Hua Gu Zi Xi". Chinese Drama, (08), 84-86
- Liu J. Y. (2019). *A new perspective on teaching ethnic vocal music*. Beijing: Kyushu Publishing House.
- Ma X. S. (2019). Exploring the Theoretical Basis and Development of Traditional Chinese Music. Beijing: Beijing University of Technology Press.
- Ma Z. C. (2015) 300 Questions on Traditional Chinese Opera Knowledge. Zhengzhou: Henan Literature and Art Publishing House
- Nanyang Historical and Cultural Dictionary Compilation Committee (2022). Nanyang Historical and Cultural Dictionary (Volume 2). Shanghai: Shanghai Dictionary Publishing House.
- Pang X. M. (2021). Master's thesis on the inheritance and development of folk songs in Cangshan, Shandong under the background of intangible cultural heritage protection, Guangxi Normal University https://link.cnki.net/doi/10.27036/d.cnki.ggxsu.2021.000423doi:10.27036/d.cnki.ggxsu.2021.000423 .
- Qi B. P. (2015) Qi Baiping A Study on the Range of Human Voice: An Interpretation of the Range of Singing. *Singing World*, (01): 35-38
- Song G. Z. (2021). A Study on the Nationalized Style of Chinese Pentatonal Mode Harmony. Changchun: Jilin Publishing Group Co., Ltd
- Tong Z. L., Gu J., Zhou Y. & Sun X. H. (2020) *Traditional Chinese Music Studies.Beijing*: People's Music Publishing House
- Xiao Z. R. (2020) A Preliminary Exploration of Northern Quyi Music (Part 2). Tianjin: Tianjin People's Publishing House
- Yan M., Yang G. J.&Yan J. Y. (2016) *Appreciation of Hebei Bangzi Opera*. Shanghai: Shanghai Music Publishing House
- Yan Y. (2015) *Qualitative research methods in communication studies. Beijing*: China Radio and Television Press
- Yang J. J. (2018). A Brief Discussion on the Art of Singing Pingju. *Drama Home*. (16): 43

- Yang N. (2018). Doctoral Dissertation on the Art of Drum Music in the Qing Dynasty, Central China Normal University.

  https://kns.cnki.net/kcms2/article/abstract?v=HboJJBuTKtT5GSDiU1OuM3rziB3X 3-H489BLJqjY
  AHyn6Bsp3afm0GWlQQo\_VuNovgGrMEVleF4MdKBjbmG7y2xWLo498kuLjy3 GyWyMXCImakJaHVRRvQ88F8EEIhCNg9hIuLdZJjGGBrIeQWbw=uniplatform=NZKPTlanguage=CHS
- Yao Y. P. & Yu R. Y. (2023) Further Exploration of Musicological Analysis. *Music Research* (01), 28-47
- Yuan J. F. (1999). Le Zhong Xue. Beijing: Huale Publishing House
- Zhang A. (2022). Master's Thesis on the Research of Cheng Zhaocai's Pingju Drama, China Academy of Traditional Chinese Opera. https://link.cnki.net/doi/10.27647/d.cnki.gzgxc.2022.000011doi:10.27647/d.cnki.gzgxc.2022.000011
- Zhao J. (2010) A Preliminary Exploration of Xiping Folk Songs. Oriental Art, (S1), 4
- Zhao Y. L&Cai Z. J. (2014) Wuxi Historical Literature Series. Shanghai: Shanghai Jiao Tong University Press
- Zhou J. C. (2022) Zhou Jingchun Research on Taiwan's Fanbei Gushan Tune. Beijing: Kyushu Publishing House