

# Orchestrate The Facts Of The Impacts And Costs Of Reflections On The Construction Of Voice Parts In Chinese National Vocal Music

Zhehao Cui<sup>1</sup>, Zhenggang Chen<sup>2</sup>

*Department of Fine Arts, International College, Krirk University, Email: chenzhenggang22811@163.com*

*Corresponding author: Zhehao Cui\* Email: cuizhehao20220811@163.com*

## Abstract

Influenced by numerous factors, such as history, culture, aesthetics, geographical environment, etc., the singing art of Chinese national vocal music has long been restricted to the high-pitched voice parts, and it is in an unbalanced state in the medium and low voice parts compared with the western Bel Canto's domestication of voice parts. The topic of balance of voice parts is a significant part of the singing art of Chinese national vocal music, which should be attached much importance to.

The phenomenon of lack of development of medium and low voice parts in Chinese national vocal music was proposed earlier both in Ma Zixing's article *The Orientation and Development of Middle and Low Voice Parts in National Vocal Music* in 1998 and Guo Kejian's article *Several Singing Modes of Male Voice in National Vocal Music* in 1999, and there is no strict division of voice parts in Chinese national vocal music like western Bel Canto. Then in the speech of the China National Ethnic Vocal Music Forum in 2005, Liao Changyong once again raised some problems such as the defects of the construction of voice parts in Chinese national vocal music, which caused more experts and scholars to launch research. It can be said that, the medium and low voice parts of Chinese national vocal music currently play a vital part in the singing art of Chinese national vocal music, which is concerned with the future development of Chinese national vocal music and even the establishment of Chinese vocal music schools.

**Key Words:** Chinese National Vocal Music; Middle Voice Part; Low Voice Part.

## Introduction

Vocal music is the most expressive and popular art in music art, while human voice is also recognized as the most expressive and mysterious musical instrument in the world. Bel Canto in the west generally divides voices into two categories: male voice and female voice, based on human being's physiological conditions (such as the length and thickness of

vocal cords, the size of throat, the length of pharyngeal cavity, the size of resonance cavity, etc.), as well as the difference of timbre and the range when people are singing songs. In general, male voices include tenor, baritone and bass, while female voices include soprano, mezzo-soprano and alto.

The types of voice parts are chiefly judged from singer's range characteristics,

characteristics of voice changing area, timbre characteristics as well as physiological characteristics.

### 1. Characteristics of Range

Range refers to the range between the lowest and highest pitches that a person's voice can reach, and it can be classified into natural range and singing range. The natural range refers to the range that a singer sings his own range naturally with his own voice without receiving training; singing range refers to the range in which a singer can use and dominate the performance of vocal music after receiving training.

As the natural ranges of all voice parts are varied, the following criteria can serve as the reference basis for making preliminary judgment of voice parts. The natural range of each voice part is as below: soprano is  $c^1—g^2$ , mezzo-soprano is  $a—f^2$ , and alto is  $f—e^2$ ; tenor is  $c^1—\#f^2$ , baritone is  $a—b^2$ , and bass is  $e—c^2$ .

Tonic refers to a number of sounds that the singer can sing effortlessly within the natural range. The levels of the tonic of each part are also different, and the following criteria can be used as the reference basis for judging the vocal part: soprano is  $f^1—c^2$ , mezzo-soprano is  $d^1—a^1$ , and alto is  $c^1—g^1$ ; tenor is  $f^1—c^2$ , baritone is  $d^1—a^1$ , and bass is  $b—f^1$ .

Each singer's singing range is divided into different vocal registers, and the timbre of each vocal register is also provided with its own characteristics. Usually, the sound in the

high vocal register is comparatively clear and bright; the sound in the medium vocal register is relatively natural and beautiful; the sound in the low vocal register tends to be deeper and calmer. The following criteria can be taken as a reference for judging the singer's voice parts. The singing range of each voice part is as below: soprano is  $c^1—c^3$ , mezzo-soprano is  $a—a^2$ , alto is  $e—e^2$ ; tenor is  $c^1—c^3$ , baritone is  $g—g^2$ , bass is  $e—e^2$ .

### Characteristics of Voice Change Area

(1) Register. Register belongs to a certain part of singing range, and there are many ways to divide it in contemporary vocal music theory. The whole range of a singer can be divided into three registers: high register, medium register and low register based on the relative pitch levels of high, medium and low; based on the tone quality in vocal music training, human vocals can be categorized into false register, mixed register and true register; as per the position and form during voice placement, human voices can be divided into head register, natural register, chest register, etc.

In view of the characteristics of tone quality and timbre of sound of each register and by means of the above three methods to divide the register, the structure of register of each voice part is usually demonstrated as Table 5.1.

Table 5.1 - Structural Expression of Register of Each Voice Part

	High register	Middle register	Low register
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Voice part	False register	Mixed register	True register
	Head register	Natural register	Chest register
Tenor and soprano	$\#f^2—c^3$	$f^1—\#f^2$	$c^1—f^1$
Baritone and mezzo-soprano	$b^e^2—b^2$	$d^1—b^e^2$	$a—d^1$
Bass and alto	$\#c^2—g^2$	$\#c^1—\#c^2$	$e—\#c^1$

Data Source: sorted by this research

(2) Voice change point. Voice change point is the most important of the three relatively obvious sounds in the transition from one register to another. Correct sound conversion plays a crucial part in vocal music skills. To grasp this link well, the most important thing for the singer is to determine

his own voice change point. The following criteria can serve as the basis for judging the singer's voice part.

Taking the conversion from the medium register to the high register as an example, the voice change area of each voice part and the position of voice change point are usually as shown in Table 5.2.

Table 5.2 - Voice change area of each voice part and the position of voice change point

Voice part	Position of voice change area	Position of voice change point
Tenor and soprano	$f^2, \#f^2$ and $g^2$	$f^2, \#f^2$
Baritone and mezzo-soprano	$d^2, b^e^2$ and $e^2$	$b^e^2$
Bass and alto	$b^1, c^2$ and $\#c^2$	$c^2$

Data Source: sorted by this research

Since the singing range is classified into three registers, there will arise the problem of voice change area in the mutual transition between the registers. Apart from that, even in the same voice part, different voice types correspond to different voice change points. Even for the same type of singers, the heights of voice change points are different as well. In brief, owing to the differences of singers' physiological conditions and voice structures, there will be differences in the transition between voice change areas and the height of

voice change point. This requires careful listening and analysis when judging the voice part.

### 3. Characteristics of Timbre

The characteristics of a person's timbre chiefly determine the voice part to which he belongs. As a matter of fact, tone color is what people often call timbre. In the course of singing, different timbre characteristics will vary with each individual, some will be brighter, some will be dimmer, some will be more generous and still some will be thinner, etc. The tone quality characteristics of each voice part lay

the most important foundation for determining the voice part and voice pattern. Under the objective physiological structure of human body, human voice has shaped its own unique voice characteristics, which can distinguish a variety of voices based on their unique personality. Thus, it becomes particularly significant to determine the singer's voice part depending on the characteristics of timbre.

#### 4. Physiological Characteristics

The singer's voice part and voice type can also be defined in consideration of the physiological characteristics of human vocal organs, and the medical theory of singing can offer a scientific reference in this regard. Firstly, the length, thickness and width of the singer's vocal cords are closely associated with the classification of voice part. Generally, the length of the singer's vocal cords can also be used as a reference when determining the singer's voice part and voice type. Definitely, special circumstances cannot be ruled out. Besides, the singer's physical development and body shape are also linked with the division of voice parts to a certain degree. From early childhood to youth, most of the early developed ones are high-pitched voice parts, and the later developed ones are bass voice parts; those who are stout and have a short neck often have a high voice part, while those with an opposite figure have a low voice part. Besides, there are some other factors that have certain reference value for determining the voice part. For instance, Demitliyefu measured the length of vocal tract (resonance tube), etc. by means of X-ray photography. Whether the harmony type of voice part appropriate is of enormous significance to

students' artistic development, and its quality directly influences the accuracy of vocal music teaching and the success rate of training.

## **Chapter 2 Necessity and Feasibility for the Construction of Balanced Voice Parts in Chinese National Vocal Music**

### (I) Necessity

In the context of information explosion, people can easily get in touch with music forms in different geographical and cultural backgrounds, and the aesthetic orientation of music has also developed to be diversified. If the voice part of Chinese national vocal music is not balanced enough, it is rather difficult to satisfy people's demand for music diversity only in the field of high-pitched voice parts. From the perspective of natural human body structure, different people have enormous differences in sound conditions due to factors such as the structure of vocal cord. In real life, people's voices are changeable, including both high-pitched voices and low-pitched voices. Balanced development of the voice part of Chinese national vocal music can make it more natural in artistic expression, which is tally with the natural law of development of artistic forms.

Looking back at the common groups of Chinese national vocal music in a variety of vocal competitions in China, most of them use the treble as the climax of the whole song, which will make the audience form a stereotype of Chinese national vocal music. For instance, "Come to Shambhala to Watch the Sun" and "I Love Five Finger Mountain, I Love Wanquan River" and so on. Over time, the phenomenon that the voice part of Chinese

national vocal music is not rich enough is reflected to some extent. As a result, some roles of medium and low registers in Chinese national operas are undertaken by singers systematically trained by the western Bel Canto, which is undoubtedly an important constraint for the singing art of Chinese national vocal music.

Currently, there are few works of medium and low voice parts in Chinese national vocal music. For some singers of medium and low voice parts, when they can't find their own works of Chinese national vocal music, they can only choose to change the tune to put on their performance. However, it is difficult to fully embody the original style of the song by this approach. From the perspective of the development of singing technology, the unbalanced development of voice part will also limit the exploration and progress of singing techniques of medium and low voice parts in Chinese national vocal music. For some students who are restricted by innate conditions, forcing them to sing high notes will also impose a heavy burden on their vocal cords. Ideally, singers should cultivate their own expertise and demonstrate their respective styles, instead of going in the same direction together and blindly pursuing high notes, which is not beneficial to the long-term development of the singing art of Chinese national vocal music.

Along with the scientific construction of vocal music disciplines, this unbalanced problem needs to be changed accordingly. Keeping pace with the development of society, the singing art of Chinese national vocal music can't stand still either. Only by keeping forging ahead can we continuously satisfy the needs of

the audience. Moreover, the current world culture focuses on the theme of the development direction of globalization, and Chinese national vocal music should also be innovated to some extent while inheriting tradition with the deepening of artistic and cultural exchanges between China and foreign countries, in a bid to make the music culture of the Chinese nation move towards a broader world stage.

## (II) Feasibility

In the west, the division of voice parts is in great detail. As a matter of fact, there are numerous manifestations in Chinese traditional vocal music art, which is similar to the division of voice parts in western vocal music. For example, the lines of business in Chinese Peking Opera are divided into "male role, female role, painted face, middle-aged male character and clown", each with its own style. The voice of "young male role" is in line with the characteristics of young people, which is relatively high-pitched and vigorous, while "an old male character" is deep and solemn; the young "female role" is mainly high-pitched falsetto, which sounds beautiful and moving, while "an old female character" mostly uses true voice; the painted role is generally a legendary male figure, who sings with a broad and generous true voice, aiming to show a great momentum; a clown is mainly responsible for the spoken part, with less aria, carrying some playful features. It can be seen that the traditional Chinese vocal art represented by traditional operas is quite diverse in the division of lines of business, so as to exert a distinct dramatic effect and arouse the audience's interest. On account of this,

Chinese national vocal music lays a good traditional foundation in the construction of balanced voice parts, particularly the division of "lines of business" in opera art is highly enlightening and endowed with outstanding reference value for the sound development of Chinese national vocal music.

From the external environment, Bel Canto, which originated in Europe, makes a clear division in voice parts, which has experienced a long process of localization in China. Specifically, the division of voice parts covers two parts: voice identification and voice training. Currently, voice part is divided into six categories based on timbre characteristics and voice conditions: soprano, mezzo-soprano, alto, tenor, baritone and bass. This relatively complete system of division of voice parts can offer a useful reference for the scientific development of Chinese national vocal music. In real practice, owing to the differences in language habits and physiological structures, it is still essential to conduct in-depth localization research in consideration of the actual situation.

From the point of view of academic research, there is a relatively small number of documents focusing on the medium and low voice parts in Chinese national vocal music, which results in the fact that the balanced development of its voice parts has not been called for in theory. To put it another way, this phenomenon suggests that the balanced development of voice parts in Chinese national vocal music across the whole country can also facilitate the emergence of related art research.

### **Chapter 3 Reasons for the Lack of Development of Middle and Low Voice Parts in Chinese National Vocal Music**

#### **1. Influence of Traditional Music Concepts**

In the past, Chinese opera performances were often put on the stage in noisy open-air environments, and there was a lack of amplification equipment, so opera performers had a hard time in singing in order to maintain a large volume, and did their utmost to make their voices recognizable and penetrating, making their high-pitched voices more suitable for this performance environment. Apart from that, the aesthetic appreciation of Chinese traditional music values the differences of timbre, and seldom adopts the harmony singing method that differs from voice part. Besides percussion, other Chinese musical instruments often appear in the form of solo, and different musical instruments playing together show a comparatively poor coordination. This kind of music characteristic with weak harmony color makes the treble stand out, while the bass is not. From the audience's point of view, what is impressive is often the suona, erhu as well as other musical instruments that play melodies, which are quite similar in singing. For instance, Chinese Peking Opera art usually places the more wonderful aria at the beginning or near the end of the opera, and both female and male characters win applause with melodious and loud aria, which makes the finishing point. Guided by this musical aesthetic, traditional vocal music seldom explores the singing skills of medium and low voice parts, or replaces the singing of medium and low voice parts with a

special spoken part. Nowadays, Chinese national vocal music continues the singing characteristics of traditional operas to a large extent. Timbre is dominated by "sweet, bright, watery, clear and soft", and these tone colors are commonly found in high voice parts. In addition, there are many ethnic groups in China, and a large number of local folk songs are influenced by geographical factors, so it is necessary for them to convey their songs with high pitches. Thus, the traditional singing of ethnic minorities in China is also dominated by high voice parts, for example, the folk songs in Shaanxi, Gansu, Hunan and Yunnan-Guizhou regions are dominated by sustained high pitches.

## 2. Influence of Language Factors

Apart from the aesthetic appreciation of Chinese traditional music, language is considered as a vital factor as well. Chinese is a Sino-Tibetan language, which conveys its meanings by different tones, endowed the usual language with certain melodic features in the sense of listening. This language tradition that stresses melody makes the traditional vocal music art also attach importance to the change of intonation. In life, most musical forms play a contrasting role with the bass, while the melody flows in the high register, and the language tradition makes the melody in the core position of the music. Apart from that, the way Chinese language sounds will also exert an enormous guiding effect on singing. For instance, Chinese traditional folk music in Suzhou is tactfully, lightly, implicitly and delicately influenced by dialects, while Chinese Yunnan folk songs are characterized by large interval span,

unrestrained and enthusiastic temperament as a result of the influence of local languages. Since Chinese language pays attention to intonation, the traditional vocal music art is characterized by linear rhyming; singers tend to make high pitches through narrow sound channels, while express less medium and low voice parts which need wide resonant cavity. In combination with the counter-examples of Chinese Mongolian, as Mongolian language falls into the category of Altaic language family which focuses less on intonation, its pronunciation position is lower and its vocal tract is wider, so Mongolian folk songs have more performances in low voice part than folk songs in other parts of China. In the meantime, this example also enlightens the researchers of vocal music. When studying the art of Chinese national vocal music, it is requisite to conduct discussion in combination with Chinese language and culture.

## 3. Weak Discipline Development and Evaluation Orientation

Since western music sounded the door of China at the beginning of last century, the concept of vocal music has gradually taken shape in China. In the 1950s after the founding of New China, the convening of China's "National Vocal Music Teaching Conference" marked the formal emergence of the subject of vocal music in New China. In 1956, Northeast China Conservatory of Music (predecessor of Shenyang Conservatory of Music) set up the major of Folk Singing, which was the the earliest preparation for the establishment of disciplines of national vocal music in China, and there is only a history of more than 60 years. It is a rather short period compared to

the development of European vocal music over the centuries. The national vocal music of our country started late and needs to be enhanced constantly in terms of discipline construction, which is also one of the crucial reasons for the unbalanced development of voice parts. Besides, Chinese national vocal music is not merely an art, but also needs to rely on scientific rational thinking. However, at present, there is still a very lack of scientific research on vocal music singing in China, with short research time, insufficient depth and lack of a large number of professionals specialized in voice science. It can be learned that the weak potential supported by science will hinder the healthy development of Chinese national vocal music in balanced voice parts to some extent.

Currently, some bias exists in the evaluation orientation of Chinese vocal music. Since China's reform and opening up, western theories and methods of vocal music have developed into the mainstream of Chinese vocal music education. In the blending of traditional vocal music art and it, the evaluation of treble quality takes up a major position. There are two reasons in this regard. Primarily, on the part of audience, the high-pitched melody often stands for the commanding height of emotions conveyed by a song. Singing a good song in high pitches often reflects the singer's profound skills, which is also easily recognized by the audience. Moreover, all types of competitions and school examinations pay much attention to high pitches, rather than the medium and low pitches. In this unbalanced evaluation orientation, the differences of innate voice conditions between different people have not

been fully respected, and people often judge a singer by such criteria as to whether he can sing high pitches well. The problem of ideological orientation also requires specialized scholars to devote more efforts to research.

#### **Chapter 4 Suggestions and Countermeasures for Balanced Development of Voice Parts in Chinese National Vocal Music**

Over decades of development, a relatively complete talent training model has been built for Chinese national vocal music. However, from the point of view of balanced development of voice part, still many courses are lack of relevant training arrangements and fail to give full consideration in respect of content depth. Thus, it is necessary to improve learners' comprehensive musical literacy, guide them to explore the singing skills of medium and low voice parts while developing their expertise and learn all sorts of music culture, and realize diversification from the point of view of aesthetic concepts. Furthermore, we should also reform the talent training mode from the point of view of textbook compilation, for example, more songs featuring medium and low voice parts can be introduced, with a view to change people's inherent cognition of Chinese national vocal music from the aspects of quantity and quality.

In the past, there were a number of classic songs with low and medium voice parts, such as *The Yangtze River's Rolling to the East*, *Grapes Ripe in Turpan*, *My Home in Beautiful Grassland*, etc. Meanwhile, the emergence of alto female singers such as De Dema and

Guan Mucun also made the audience feel it totally refreshed. However, the momentum did not last, nor did it create a fashion that changed the prevailing aesthetic. With a view to drive the diversification of the development of voice parts of Chinese national vocal music, numerous singing methods should be used in combination. Nicely, in recent years, some low voice part-dominated singing methods have begun to appear in TV programs and all sorts of vocal music competitions. In the field of music creation, it is advisable to encourage the creation of works of middle and low voice parts and increase the number of works, which can not only stimulate the balanced development of the voice part of Chinese national vocal music into a good cycle, but promote the development of creation fields. From the point of view of song creation, an increasing number of ethnic songs begin to attach importance to the performance of middle and low voice parts. Nowadays, Jiangyang Zhuoma, a relatively representative Chinese Tibetan singer, is famous for singing the songs of her own ethnicity with mezzo-soprano. Her singing sounds similar to male voice while demonstrating female characteristics as well, thereby attracting a large number of listeners with the resulting novelty.

From the angle of China's current national vocal music education, less efforts are made in training students in respect of middle and low voice parts. The balanced development of the voice part of Chinese national vocal music plays a guiding role in promoting vocal music education in Chinese colleges and universities. In the course of enrollment, colleges and universities should

plan the enrollment of students in middle and low voice parts in Chinese national vocal music with intentional purposes. In this respect, China Conservatory of Music has done pretty well. The division of voice parts and the classification of voice patterns should be closely associated with the teaching of Chinese national vocal music, follow the laws of nature and proceed from the reality, in a bid to facilitate the construction of scientific and rational teaching of national vocal music in China. It is of enormous significance to the singing art of Chinese national vocal music. From a macro point of view, it is also a significant symbol of the establishment of vocal music schools in China.

### **Conclusion**

In general, to address the problem of underdevelopment of middle and low voice parts in Chinese national vocal music, it is necessary to make concerted efforts in curriculum setting, textbook compilation, work creation, personnel training, enrollment planning and teaching research of vocal music as well as other aspects. Besides, we should innovate our ideas ideologically, and it is unreasonable to merely value the development of high voice parts only. The prosperity of the singing art of Chinese national vocal music can be promoted only under the common development of multiple voice parts.

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