# Research on a new path for singing training from the perspective of quantum theory

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Abstract: Starting from the inherent value of quantum theory and different visions, this paper studies the superposition state of quantum theory and the application of academic values such as wave-particle duality in singing training. The relationship between classical culture and Western quantum theory should be closely combined with quantum theory based on traditional Chinese culture as closely as possible. Finally, starting from the cultural understanding of quantum theory by Chinese scholars, we comprehensively investigate the academic intersection of quantum theory and singing training at home and abroad, and find the similarities between Confucianism, Buddhism and Taoism in traditional Chinese culture and quantum theory. The application of art has sufficient grasp, which is also the premise of the comprehensive application of quantum theory and art. Constructing a new way of singing training in scientific contexts such as Dao Nature has important value and significance for the combination of philosophy and art.

Keywords: quantum theory, singing training, new path

#### 1. Introduction

The thought of quantum theory in the scientific context has certain similarities and correlations with Chinese culture such as Laozi's thought and oriental philosophy. Professor Chen Jianxiang of Beijing Normal University once said that Lao Tzu's Tao Te Ching not only introduced Buddhism and Zen, but also introduced quantum mechanics. The physicist Bohr had long believed that quantum mechanics had an impact on philosophy and other fields such as psychology and art. Although quantum probability theory is a mathematical framework, it is abstracted from quantum mechanics, and the advantage is that it can be applied to other fields.

The Taoist philosophical concept of three things and the holographic law of the universe derived from the wave-particle duality in the quantum field has extraordinary significance for the mutual transformation of singing dimension, sound energy, and the energy of sound and light in the subconscious state.

Since the second half of the 20th century, the domestic interdisciplinary research status of singing has also begun to have a tendency of comprehensive research and application. Teacher Li Xumin's "Emotional Singing Method" is China's first theoretical work on vocal music from the perspective of modern system science, focusing on Chinese national characteristics and national aesthetics. It is a singing practice teaching method with a new theoretical system. From the perspective of science, art philosophy, art aesthetics, and ethnocultural studies, we study and explore the broad vision of many disciplines in China, and intend to construct a theoretical system of vocal music that is Chinese and Western [1]. The book mainly emphasizes the role of the human right brain subconscious in singing, and the ability of emotion to drive singing in singing, but does not advocate that the functional training of the human body itself is also a limitation of singing training. In Dong Shi's "Perception of Bel Canto", he talks about the movement of all things in the universe according to the law, the role of the power of qi in the muscles, and the Dantian as the center of force, and the breathing of singing in this process of running with the Dantian as the center. The composition and existence of the relationship [2]. This book is one of the rare vocal music theory books that mentions the operation of meridians in singing training. It has unique application and reference value, but it does not discuss the specific application of meridian operation in singing. The principle of Taoism, the ontology of Western science and modern philosophy, that is, the unified field, can be used in singing training [3]. The proposed principles of "natural landing of breath" and "no external force for treble" are in line with the natural view of the Dao, and are relatively comprehensive in theory, but are relatively lacking in specific training to achieve the desired effect in practice.

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The interdisciplinary research on singing abroad is mainly based on physiological anatomy, most of which emphasizes the muscles and organs used in singing, and rarely uses philosophical methods to train overall singing systematic. For example: Meribeth Dem's book "Mining the Charm of the Voice" explains the performance and how to obtain the method of "stable, coordinated and balanced" when singing, which will help vocal practitioners to improve the sound quality of the voice [4]. The principle discussed in this book is to explore a variety of ways to identify and evaluate one's own voice and those of others, and to learn new training methods accordingly. Italian Marafiodi's "Caruso's Voice Method" talks about natural singing. The book advocates placing the singing voice in the middle of the mask. Because of Caruso's special physiological conditions, he can give full play to his voice. The energy of resonance endowed by the physique, and the correct use of the vocal organs to obtain accurate and natural sounds [5]. The book points out that each art has its origin and arises from science to varying degrees. The activities of the vocal organs and physiology of singers are the activities of the brain, so it is the scientific basis of vocal art

# 2. The academic value and application value of the research

#### 2.1 Academic value

First, from the inherent value and different perspectives of quantum theory, accept the application of academic values such as the superposition state of quantum theory and wave-particle duality in the study of singing training; The connection between classical culture and Western quantum theory should be closely combined with quantum theory based on traditional Chinese culture as much as possible, to expand new ways of singing training, and to change the defect that the current singing system only trains partially.

The second is to start from the cultural understanding of quantum theory by Chinese scholars, comprehensively investigate the academic intersection of quantum theory and singing training at home and abroad, find the similarities and correlations between Confucianism, Buddhism and Taoism in traditional Chinese culture and quantum theory, and provide insights into the application of quantum theory in philosophy. It is also a prerequisite for the comprehensive application of quantum theory and art to have sufficient grasp of the application of quantum theory, literature and art. Construct a new way of singing training in scientific contexts such as Dao Nature, the unity of man and nature, holographic universe, energy field, etc., strive to combine modernity and tradition, and participate in the related research between quantum theory and singing with original musical discourse, It has important value and significance for the combination of philosophy and art.

Third, looking at the classics of singing art at home and abroad, there are not many studies related to singing, quantum and energetics. At present, most of the relevant discussions are still on the modeling of singing skills and voice image. Although some articles have mentioned the role of spirit and consciousness in singing training, most of them are fact-based and have not done a deeper elaboration and research. It is even rarer to associate singing training with the multi-dimensional system under quantum theory. Applying this property of quantum to the training of the singing system is a cutting-edge training method with pioneering thinking.

# 2.2 Application value

The first is to study the application of high-dimensional energy, that is, human subconsciousness in singing, to achieve implicit learning, fully explore the role of emotion in singing, and make singing a subconscious overall adjustment. Prompted passive, local adjustment;

The second is to use the holographic rhythm of the universe to improve the dimension of singing, so that the small cosmic energy waves of the human body resonate with the large universe of the external environment to achieve whole-hearted singing, which can shorten the time of singing function training, expand the energy field of singing, and make singing training become Efficient and convenient;

The third is to use the concept of three-generation and all things derived from wave-particle duality, and use the dimension of energy waves formed by quantum superposition in singing training, and regard the human body as a body that can be divided into two, three, and three. The black and white Tai Chi of Yin and Yang attributes uses the principle of this Tai Chi diagram to divide the human body into large, medium, and small heads, chest, and abdomen. The small Tai Chi forms the human body resonance field required for singing, and achieves the higher goal of singing wholeheartedly.

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## 3. The content and goal of a new path for singing training

#### 3.1 Research content

This subject takes the unique outlook on the universe, life and balance from the perspective of quantum theory, and takes the physiology and psychology in the singing training system as the research object; Research the integration of Chinese traditional culture in the construction of a new singing training system from the quantum perspective and explore the new path of the singing training system in the scientific context.

Taking the unique outlook on the universe, life and balance from the perspective of quantum theory, taking the physiology and psychology in the singing training system as the research object; taking the Dao of nature, the unity of man and nature, energetics, and overall singing as the goal, to explore and study quantum The integration function of Chinese traditional culture in the construction of a new singing training system and the exploration of a new path for the singing training system in the scientific context.

- (1) Turn on the Tai Chi resonance field of the human body. Relax the manifested system required for the cavity, breath, sound, etc. of singing, so that the human body is loose, the breath is loose, and the sound is loose, and the cavity is empty, the pipes are unobstructed, the air flows, and the sound is open, so as to achieve "loose, clear, soft, bright" sound;
- (2) Using the wave-particle duality of quantum mechanics, the sound wave is converted into light energy, and the sound is converted into force energy. In singing training, more liberating and manifest states are used to use the external skeletal muscles, etc., sound wave transformation, and the high and low bass transitions are more free during singing, and the ratio of true and false mixing is moderate. In the process of transformation, special attention should be paid to the use of fulcrum and focus, the overall sound mixing, and the resonance of the sound field should be coordinated and effectively coordinated;
- (3) The transformation of the subconscious in singing. Subconscious singing grasps the overall context of emotion, establishes lyrical imagery and realm, selects technical means suitable for expressing singing emotion and lyrical art, and maximizes the transformation of external conscious singing into implicit subconscious singing.

#### 3.2 Research goals

- (1) According to the principle of the three qi theory, the first weather, the second weather, and the mixed gas required in singing are activated. At present, the singing training system mainly uses acquired breathing methods, such as: clavicle breathing, chest breathing, and chest-abdominal combined breathing. The chest-abdominal combined breathing method is more scientific than the clavicle and chest breathing in terms of air volume, breath depth and breath storage, and is most used in singing. However, its defect is: when breathing, the tension of the diaphragm, waist and ribs is often used, and the human body is artificially divided into two parts that are not connected, and the breath is artificially stiff during singing. training method.
- (2) According to the principle that the human body is a small universe, the three plates of the human body needed to open the singing resonance. The sky plate centered on the Dantian above. The chest with the middle dantian as the center is the human disk, and the lower dantian as the center of the abdomen "turf". These three disks correspond exactly to the three resonance chambers of the human body's head, chest and abdomen in the singing training system. The corresponding relationship between the universe and the enhancement of the sound resonance effect are extremely important.

#### 4. Research ideas and innovation

#### 4.1 Research methods

- (1) Literature analysis method. Through book purchase and paper review, collect all academic literature on "quantum theory" related to music and art, and form important reference and inspiration for the development of this topic;
- (2) Comparative research method. Compare and study the effectiveness of the application of the part of ordinary singing training in singing, and study how to tap the human biological field, open the human body resonance field, and activate the hidden state system such as the human subconscious, so as to

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construct the singing training new path;

(3) Experimental method. Comparing singers trained with quantum theory principles and ordinary singing training methods in practice, using them on different singers to compare and identify the effects, and practice to open up new paths for singing training;

#### 4.2 Research innovation

# (1) Unique singing breath research.

Breathing during singing is to control the breath for singing through the training of breath. In addition to acquired qi, there are three words "qi qi qi". Among them, Qi is high-dimensional energy. It is the general source and driving force of the biochemical movement of all things in the universe. When studying the breath used for singing and vocalization, not only the breath of the acquired breath should be used, but also three quantum states of Qi such as "Qi Qiqi" should be added to the small cosmic field of the human body.

(2) Research on the training of the resonance cavity of the singing vocal organs

When singing, the breath hits the vocal cords to produce a fundamental tone, which is weak. Use the necessary space in the human body to obtain resonance, and generate different resonance waves after the resonance space is amplified. Ordinary singing training divides the adjustable resonance cavities of the human body into three: pharynx, mouth, and larynx. The non-adjustable resonance cavities are: chest, organs and bronchi, head and nose. According to the principle of wave-particle duality in quantum states, the human body is a small universe, and it is also a Taiji diagram divided into yin and yang. There are three disks of heaven and earth, the upper dantian as the center is the sky disk; the middle dantian as the center is the chest disk; the lower dantian as the center is the abdomen. When singing, as soon as the three-pan resonance cavity is opened, the three small Tai Chi fields of the human body are easily opened.

(3) Research on the application of subconsciousness and quantum superposition in singing.

The guidance of the mind in singing lies in a mind power (potential energy) generated by the mind under its action. This kind of mentality will greatly strengthen the physiological adjustment of singing, making singing closer to the direction of singing aesthetics. These invisible "field substances" such as "air field" and "air mass" can realize the realm of "feeling to the air", "leading the air with the intention" and "sound following the air" under the action of the mind in singing. Using the articulating organ to produce the sound required for singing, using the subconscious, the biomagnetic field of the human voice and the sound conduction properties of the field material, subconsciously awaken the whole body and mind, and subconsciously adjust the pharyngeal cavity resonance, Oral resonance, laryngeal cavity, abdominal cavity resonance, etc.

#### 5. Conclusion

In the context of globalization, the development of singing skills training must be integrated with world culture. The current singing training system only emphasizes local training methods, and there are still many issues that need to be further explored. For example: only pay attention to the use of the human body's external muscles, bones, cavities and other structures, while ignoring the human body's hidden emotions, subconscious understanding, research and application; another example: only pay attention to the mouth, throat, diaphragm, etc. The application of local functions, while ignoring that the human body is a small universe, it has the grasp of the overall singing effect of the biological field, the acquisition of balance and the presentation of the overall speaker effect; although some experts have also seen these limitations, but the current See, the integration of quantum thinking in singing training, and the application of energy and high-dimensional thinking of the unity of nature and man in vocal music, this multi-disciplinary and comprehensive training is still a relatively cutting-edge topic from theory to practice.

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## References

- [1] Li Xumin. "Emotional Awakening and Singing Method" [M]. China Social Sciences Press, 2018 4
- [2] Dong Shi. "Perception of Bel Canto" [M]. Heilongjiang People's Publishing House, 2006, 1
- [3] Guo Lin'an. "New Theory of Vocal Music" [M]. China Literature and History Publishing House, 2004
- [4] "Mining the Secret of Voice" by Meribeth Dem, Central Conservatory of Music Press, 2011.7