# The Integration of Vocal Techniques and Piano Accompaniment in Children's Choir Song Performance under the Background of Information Technology

Zhang Jian College of Education Inner Mongolia Normal University, China

**Abstract**: Vocal singing and piano accompaniment belong to two different forms of artistic expression, each with its own unique charm. However, in the process of vocal singing, by integrating them with piano accompaniment, the two can be in a harmonious state, bringing a more wonderful audio-visual experience to the audience, and achieving many classic music works. The training of children's chorus is the foundation of singing teaching, and it is also an important means to cultivate children's mastery of singing skills and form good vocal literacy. This article elaborates on the issue of harmony and accuracy in children's vocal choir, the characteristics of children's vocal sounds, and several issues that should be paid attention to in training vocal skills.

Keywords: Vocal Techniques, Piano Accompaniment, Children's Choir, Information Technology

### 1. INTRODUCTION

At one stage, people's understanding of the relationship between vocal singing and piano accompaniment was relatively one-sided and superficial. Most believed that vocal singing played a dominant role in the stage performance process, while piano accompaniment played an auxiliary role, only seeing the importance of vocal singing and neglecting the importance of piano accompaniment. In fact, vocal music singing, and piano accompaniment complement each other. Vocal music singing cannot be separated from the support of piano accompaniment. Piano accompaniment can help vocal music singers to push the interpretation of music works into a new realm. While conveying art and beauty, it also plays the role of emotional transmission, so that the audience can have a deeper understanding of vocal music works. The audience is influenced by internal emotions, and the level of music perception is richer.

A small number of works will be created with a specific rhythmic type or music fragment of the work, or change, vary and develop based on the Steps and skips of the chorus subject. For example, in Mountain in the Void, the piano prelude is a five bar phrase, which uses the first main Steps and skips of the soprano part to change and repeat, emphasizing the main melody of the work; For example, in sections 44 to 68 of "Ibrahimovic", before each vocal part sings its own phrase, there is a short piano solo phrase as a transitional link between the various vocal parts. Each phrase adopts a tone consistent with the subsequent chorus parts, making the work naturally connected and each musical form more distinct. The training of children's vocal choir is not only the foundation of singing teaching, but also the main means of cultivating children's mastery of singing skills and forming good vocal literacy.

In the training of choir, the first step is to strengthen the basic training of singing, with the accuracy of choir and voice being the most important issue. In choral works, each chord does not exist as an isolated longitudinal sound, but rather interweaves and forms a whole. Therefore, the handling of harmony in choral performance cannot be separated from the movement and tendency of harmony. When we talk about harmony, we refer to the relative accuracy of each chord (each harmony

part) in harmony movement. Choral performance, as a special artistic performance mode, it has gone through more than 200 years of history, and in this continuous process, the choir mode has also undergone continuous development and innovation

From the earliest choral system with religion as the theme and lack of accompaniment form to the later choral system with secular as the theme and then integrated into the accompaniment, in style, it gradually transited from the original classicism to the later romanticism, choral performance also needs continuous innovation and development with the development of the times, and piano accompaniment also gradually popularizes with the development of choral. In terms of the integration of piano accompaniment and artistic processing, we need to pay more attention to the creative techniques of choir. To try to breathe together with vocal performers and sing with them in their hearts, it is necessary for vocal performers and piano accompanists to have a deep and specific understanding of the artistic style, emotional expression, specific melody composition, speed control, and other aspects of the music performed. On this basis, it is also necessary to have a consistent understanding of the artistic and emotional core of the music work, only in this way can we truly achieve a full combination of vocal singing and piano accompaniment. Piano accompaniment in the form of harmony.

### 2. THE PROPOSED METHODOLOGY

### 2.1 The intonation processing of chords with different structural types

This type of piano accompaniment is presented in the form of harmony, which can be roughly divided into columnar harmony, decomposed harmony, semi decomposed harmony, rhythmic harmony, and patterned harmony. The form of columnar harmony accompaniment is simple and symmetrical in rhythm, rich in sound, and distinct in layers. In the accompaniment, it mainly serves as a foil and support for the human vocal part, and the piano accompaniment of the entire work is mainly columnar chords. Decomposed harmony accompaniment refers to the appearance of chords in the form of arpeggios, such as "Snowflakes"; Rhythmic harmonic

www.ijsea.com

accompaniment refers to the type of accompaniment that uses a specific rhythm type to play chords or break chords. The most common rhythm types in choral piano accompaniment are Polka rhythm and Waltz rhythm. From small chorus groups to chorus groups, to the current whole theater chorus and art performance type chorus, the development of chorus is gratifying and creative. The interpretation of sound in choir is not only about language meaning, but also about unique artistic needs.

Each choir performer in a choir expresses music and emotions through vocalization; Choral scenes and environments also require music to fill emotions and thoughts. After piano accompaniment enters the choir, the choir performer will cooperate well with it, such as the choir conductor. Although piano accompaniment is a performance component that intersperses in the choir art performance, it is also controlled by the conductor. Therefore, even if piano accompaniment is improvised and not continuous, it is also necessary to cooperate with the conductor, achieving a harmonious and unified musical effect with choir art performance. After grasping the characteristics of children's voices, it is easier to train children's vocal choir.

Then, during the training process, it is necessary to grasp the psychological characteristics of the child. Chorus can provide children with a rich audio world. Especially emotional singing can provide children with emotional satisfaction, Experience beauty (the beauty of timbre, harmony, polyphony, etc., thus forming a good Musicality and noble artistic sentiment. At the same time, based on the above two aspects, attention should also be paid to the training of singing skills in children's chorus. On this point, first, teachers must understand the physical state and function of children's voice generators. From the relationship between chorus and piano in voice creation, it can usually be divided into two categories: late creation and synchronous creation In terms of the category of synchronous creation, it mainly refers to the effective integration of the chorus works and the acoustic characteristics of the piano through the Musical composition in the chorus, thus showing different creative characteristics; For works created in the later stage, intonation is a key factor affecting the level of vocal performance.

For vocal performers, even if their own vocal performance level is high, they are often affected by various factors such as emotional state and surrounding environment during the live singing process, resulting in pitch problems, which directly affect the singer's perfect performance of the work. The integration of piano accompaniment can effectively alleviate this problem. Due to the effective regulation of pitch by piano accompaniment, singers can avoid a series of issues such as low pitch control during the singing process, thereby ensuring a smooth performance of live vocal music.

## 2.2 The Application and Expression of Piano Accompaniment and Children's Choir Performance in Works

Piano accompaniment needs to be performed based on piano solo. As an accompanist, before systematically learning piano accompaniment, one must possess qualified piano solo skills, a solid foundation in piano performance, good artistic expression, and the ability to quickly recognize scores, improvise, and understand art. Unlike piano solo, choral piano accompanists need to listen to the choir's performance, correctly judge the tone and volume, and respond to unexpected situations in the process of completing accompaniment tasks. This requires accompanists to

systematically learn music theory knowledge such as work analysis, form analysis, vocal music, music history, etc. In the process of learning and practice, they need to improve their performance skills, artistic perception, and music understanding abilities, to collaborate perfectly with choirs.

Piano improvisation accompaniment is a common way of piano accompaniment in choir art performances. When using piano accompaniment, the performer needs to rehearse each stage and step of the choir repeatedly based on the music theme of the choir music work. Even so, in a real choir performance environment, singing will still be influenced by the environment, music performance effects, audience reactions, and other factors, resulting in differences from the expected performance results. At this point, piano impromptu accompaniment becomes the bond between the choir performance and the audience. After the piano impromptu accompaniment is played, the musical elements in the choir music receive a "blessing" effect. The music effect of piano music, which is sometimes rich and sometimes crisp, can give the audience a refreshing feeling. The training of combining true and false sounds in the high-pitched area is generally divided into two steps. First, when there is a temporary feeling of emptiness and lack of intensity, appropriately expand the range upwards.

After some consolidation, proceed to the second step, which is to strive to enrich the falsetto components in the full and high vocal area. There are three methods: firstly, the breath should not float upwards, and when inhaling, the shoulders should not be shrugged. Moderately increase the breath pressure. The second is to appropriately expand the oral volume and use as much resonance as possible in the upper part of the pharyngeal cavity (oral cavity, nasal cavity, cephalic cavity, frontal sinus, and sphenoid sinus). The third is to use sensations such as "raising eyebrows, slightly lifting cheeks" and "smiling and yawning like mouth movements" to help choir members achieve a high position in their voices. Whether in terms of style, internal structure, thematic presentation, and form, they will showcase an extremely unique aspect.

For the accompaniment system that serves the choir sound system, it needs to be accompanied by different changes and developments in choir performance, to demonstrate more outstanding artistic effects. This performance can further make the piano accompaniment in choir more distinctive, and it will also continuously extend and expand its functionality. Inspire children to sing more with their head vocals or use mixed vocals with dominant head resonance. Because when children make their head sounds, they mainly use the smaller volume resonance vibration in the upper part of the pharyngeal cavity. The vibration state of the vocal cords is edge vibration or partial vibration, with a lighter load, which is more suitable for delicate children's vocal organs.

### 3. CONCLUSION

Vocal singing and piano accompaniment have their own characteristics, and the integration of the two can enrich the level of interpretation of children's choir works. In fact, vocal singing and piano accompaniment cannot be biased towards each other. The two are inseparable and together form the vocal performance system. Therefore, in the practice and research process of vocal performance, it is necessary to effectively coordinate the relationship between vocal performance and piano accompaniment. As a piano accompanist, one should understand the artistic characteristics of choral art and piano accompaniment, improve piano

www.ijsea.com 108

### International Journal of Science and Engineering Applications Volume 12-Issue 09, 107 – 109, 2023, ISSN:- 2319 - 7560 DOI: 10.7753/IJSEA1209.1035

performance ability and artistic appreciation ability, thereby enhancing the collaborative ability with choral performance, fully demonstrating the artistic connotation of choral works and the artistic charm of choral performance.

#### 4. REFERENCES

- [1] Hu Chunyin. Cooperation and Harmony -- Analysis of the Integration of Vocal Performance and Piano Accompaniment in Artistic Songs [J]. Yuefu New Voice: Journal of Shenyang Conservatory of Music, 2022, 40 (4): 133-137
- [2] Zhu Lin. The Practice and Application of Piano Accompaniment in Children's Chorus Art [J] 2021. DOI: 10.12228/j.issn.1005-5312.2021.03.059
- [3] Gao Jingfei. Research on the Piano Accompaniment of Schubert's Art Song "Swan Song" [D]. Qufu Normal University, 2014. DOI: 10.7666/d.D01062947
- [4] Tan Yun. Research on the Teaching of Composing and Piano Accompanying Performance in the Information Age Review of "Research on the" Decomposition "and" Integration "of Composing Technology Theory Course Teaching under the Digital Music Platform" [J]. Chinese Science and Technology Paper, 2020, 15 (10): 1
- [5] Zhang Yifan. Preliminary exploration of the relationship between vocal singing and piano accompaniment in art songs [J]. Art Review, 2020, 000 (003): P.1-2
- [6] Zhang Weien. On timbre training in children's choir [J]. Li Ren: Teacher, 2015 (14): 1

- [7] Lin Li. Practical Research on Basic Training in Children's Chorus [J]. Contemporary Teaching and Research Series, 2016 (3): 2
- [8] Du Xiaohui. On the Combination of Training and Vocal Techniques in Children's Chorus [J]. Journal of Jilin Normal University, 1997. DOI: CNKI: SUN: BHDX.0.1997-03-021
- [9] Xu Panpan. Research on the Creation and Singing of Liu Cong's Art Songs [J]. Wenzhou University, 2012
- [10] Deng Yu, He Rugui, Zhang Xinzhi. Reflections on the Integration and Importance of Piano Accompaniment in Vocal Music Teaching [C]//Academic Paper Collection on Promoting the Development of Core Literacy of Composite Talents through Multidisciplinary Integration Education. 2019
- [11] Wang Baili. A Study on the Balance Beauty of Vocal Singing and Piano Accompaniment in Art Songs [J]. China National Expo, 2022 (24): 137-138
- [12] Qi Weigeng. Effective Integration of Vocal Singing Teaching and Information Technology - Review of "Improving Vocal Effective Teaching under the Condition of Information Technology" [J]. Chinese Science and Technology Paper, 2019, 14 (11): 1. DOI: CNKI: SUN: ZKZX.0.2019-11-037
- [13] Shi Yuxiu. Exploring the Integration of Vocal Singing and Piano Accompaniment [J]. Drama House, 2018 (2):
- [14] Cheng Han. The Integration of Vocal Singing and Piano Accompaniment [J]. Popular Songs, 2016, 000 (01X): P.49-50

www.ijsea.com 109