

An Innovative Fusion of Traditional Percussion and Modern Electronic Music Arrangement

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1 Introduction

Chinese traditional music is one of the ancient art culture in China, which has a long history. After many innovations and developments by modern musicians, it has been successfully used in various kinds of music creations. To a certain extent, modern electronic music perfectly inherits the creative form of traditional music, and shows the similarity and complementarity in creative language materials and communication channels. The fusion of traditional percussion and modern electronic music arrangement, and the creation with the advantages of the two, can add the highlight to the brilliance and listening endurance of the music, and promote the collaborative development of the two under the trend of modern music.

2 The Creation Principle of Music Arrangement

Music arrangement is the art of adapting or creating new versions of music. It usually involves the combination of different musical elements to create music works or set different special concepts. Harmony and counterpoint are often used in the music arrangement, which are the key concepts in music arrangement and music theory. Different ways of using harmony and counterpoint lead to great differences in the final effect of music arrangement. In the music arrangement, according to the direction of the main melody, the harmonic melody can be written in three ways: synchronous direction, asynchronous codirection and reverse direction. From the perspective of music score, the different direction of the harmonic melodies can make the melody lines more independent, and it is easier to appear the feeling of two-voice chorus during performance. There are two types of counterpoint: strict counterpoint and free counterpoint. Strict counterpoint creates all kinds of counterpoint tunes on a fixed lyric, while free counterpoint is based on the major and minor key system, and according to the harmony progression to process and transform the tunes. The counterpoint method is based on certain rules to match sounds with each other, and combine different tunes at the same time, so that the music in the horizontal can maintain the independence of each voice and the contrast and contact between each voice, and in the vertical can form a harmonious but not obtrusive effect.

In the innovative fusion and application of traditional percussion and modern electronic music arrangement, in addition to the basic creative principles of music arrangement mentioned above, it is also necessary to understand the organization of traditional percussion and modern electronic music, so as to more perfectly integrate traditional percussion and modern electronic music.

2.1 The Organization of Traditional Percussion

The main sound source of traditional instruments such as traditional percussion is the

performance of traditional acoustic instruments, which can form the unconventional playing sounds. The organization of traditional percussion has the same presentation effect as linear function thinking. The organization process of traditional percussion is rigorous, which uses the notes to "build a linear function", forms the rhythm of the tune with beats, compose the tune system with different scales, harmonies and a variety of polyphony, and integrate the tune atonally according to certain logic and laws, so as to seek a more appropriate way to solve the coordination problem of other factors in the composition.

2.2 The Organization of Modern Electronic Music

The organization of modern electronic music is very different from that of traditional percussion. Electronic music mainly uses sound synthesizers, theremin and various music arrangement software to process or sample existing music materials. It breaks the limitation of the use of vocal music in traditional percussion creation, combines natural music and electronic synthetic music, and organizes then into a "non-linear function" that does not form a linear relationship, so that the composition structure sounds more complete. At present, most of the modern electronic music is arranged by software. First, the required sound source is recorded and sampled in advance, and then the sound is encrypted by Audition, FL Studio, Logic Pro X and other arrangement software, combined with hash function MD 5, RSA, Back-pack and other encryption algorithms. After processing, the specific rules of the song can be converted into the density and scale of the spatial spectrum graphics on the timeline according to the hardware equipment conditions, as well as the movement trend image of the tune, and make scientific adjustments according to the image.

3 The Difference Between Traditional Percussion and Modern Electronic Music

Whether the traditional percussion or modern electronic music, they both have greatly enriched the musical style and creative inspiration, and continue to innovate with the times. Both traditional percussion and modern electronic music have their own unique musical style. The specific differences are manifested in harmony, creative technique and theme presentation.

3.1 Differences in Harmony

The harmonies of traditional percussion differ from those of modern electronic music. The harmonic composition structure of modern electronic music arrangement is relatively simple, and the melody is attractive, so that the listeners are more likely to grasp the main melody. At the same time, the chord time of modern electronic music is short, the rhythm is fast, and the harmony structure is low difficulty, so that the chord harmony work can be completed directly with electronic equipment while ensuring the accuracy and speed. In the aspect of traditional percussion, due to the use of percussion instruments for music creation, it is necessary to consider the coordination and harmony of a variety of instruments when creating harmony and playing, which leads to the reduced chord speed, long chord time, slow rhythm, and high structural difficulty.

3.2 Differences in Creative Techniques and Skills

Traditional percussion uses traditional percussion instruments (such as Chinese gong chimes, slit drum, marimba, timbals, etc.) as the main creation carrier. Through the performance of traditional instruments by players, music is produced to maintain the consistency in the coordination of the piece, which is convenient to join the follow-up harmony. The creative process and technique of

traditional percussion are relatively fixed, and its key creation points are mainly reflected in the structure, melody and rhythm. The melody is conceived first, and then the structure and rhythm are arranged. Such a way of creation often requires musicians and creators to have a solid music foundation, proficient playing skills, and deep understanding of the work, in order to showcase the best performance and advantages of the music.

Modern electronic music is mainly produced, played and modified by electronic devices (such as synthesizers, arrangement software, samplers, sequencers, etc.). Modern electronic music uses sequencers to record and play various instruments, such as electric guitars, electric pianos, and voices, etc.. It firstly completes the melody framework creation, and then according to the music style and production requirements, uses the sound of open source music library to synthesize and arrange instruments, voices and even natural sounds, and finally encrypts and processes the pieces by using music creation methods, such as stretching, inversion etc.. This creation way allows modern electronic music to have greater creative freedom, timbre and sound unique degree and music freedom.

3.3 Differences in Presentation of Main Ideas

Traditional percussion music and modern electronic music are also different in terms of the emotional expression of the main idea. Traditional percussion is often classic and timeless music, which can give people with psychological or spiritual comfort and encouragement. Through the rigorous and unified musical structure and the application of musical rhythm, the traditional percussion has a sense of regularity and modesty, and can convey complex, profound and even philosophical thoughts and emotions to the audience. With a comfortable and gentle melody and an implicit and restrained musical style, it shows the passionate emotions hidden deep within people's hearts. Modern electronic music uses fast and precise notes and diversified scale changes to show explosive emotional changes at a certain moment, and mostly uses more direct, entertaining and understandable emotional expressions to bring strong impact and audio-visual pleasure to the audience.

4 Fusion of Traditional Percussion and Modern Electronic Music

The fusion creation of traditional percussion and modern electronic music is a hot field of domestic music creation at present. The combination of traditional percussion and modern electronic music can bring the audience a fresh and innovative music, which is conducive to the effective promotion and dissemination of traditional percussion and percussion instruments, can make full use of traditional percussion instruments, and promote the full utilization of the uniqueness and particularity of traditional percussion in the process of music transmission. The integration of traditional percussion adds cultural connotation to modern electronic music, so that the two complement each other and form good music under the collision of different music styles.

The fusion of traditional percussion music and modern electronic music can be divided into three categories, which are similar sound combination, different sound combination and mixed sound combination.

4.1 Similar Sound Combination

The combinations of similar sounds can be divided into the combination of homogeneous and similar sounds and the combination of heterogeneous and similar sounds. The concept of homogeneity in music arrangement generally refers to the timbre attributes with similarities, while

the concept of similarity refers to the categories of sounds that can be recognized on the spectrum and exist objectively. The performance of homogeneous sound combination is that in the music combining traditional percussion and modern electronic music, the part of electronic music is deformed according to the sound sampling of traditional percussion instruments, so that the sound intuitively felt by the audience has the same texture as the sound of traditional percussion instruments, which means that the essential properties of sound have not changed. Under this combination, the sounds of traditional percussion instruments and modern electronic music objectively belong to the percussion group. The sound language of the combination of homogeneous and similar sounds is integrated, and the timbre of it is highly unified, which is commonly used in electronic music works at present. The heterogeneous and similar sounds refers to a combination of sounds that combine instruments of the same nature and different frequencies. For example, although the spectrum of Chinese gong chimes and drum accompaniment in the material library of arrangement software is different, the two belong to the percussion instrument sound. The heterogeneous sound combination refers to the combination of two different sound materials. Although it is the fusion of traditional percussion and modern electronic music, the musical emotions it expresses are consistent. The unity of timbre texture of the heterogeneous and similar sound combination is slightly lower than that of the homogeneous and similar sound combination due to the difference between the timbre and spectrum, but the timbre effect of the heterogeneous sound combination on the audio system will be richer.

4.2 Different Sound Combination

Different sound combinations are further divided into homogeneous and different sound combination and heterogeneous and different sound combination. Homogeneous and different sound combination refers to the fusion of sound materials with similar timbre, and the frequency spectrum and harmonics of the sound material of the electronic music part are roughly the same as those of the actual percussion part, but the objective sound attributes are different. The first feeling of the audience is that the two sound elements are the same. Although the fundamental texture of the sound is different, the two sound materials are common and independent of each other, which is conducive to the combination of virtuality and reality in forming music, and the achievement of better effect. The heterogeneous and different sound combination is manifested in the fact that the frequency spectrum and attributes of the sound materials of electronic music and traditional percussion are different during the creation process, and the percussion and electronic music sounds do not interfere with each other when they are combined. In the present music creation, the application of this mode is relatively rare.

4.3 Mixed Sound Combination

The mixed sound combination mode is often diversified. Compared with single-layer sounds, mixed sounds have more diverse sound expression and fuller sound spectrum and form. Its composition is a combination of homogeneous and similar sounds, heterogeneous and similar sounds, homogeneous and different sounds, and heterogeneous and different sounds, which is uniformly applied to modern composition. At present, this method is widely used in music arrangement.

5 The Fusion of the Performance and Dissemination of Works

Under the impact of science and technology, with the help of various electronic devices and

arrangement software, the creation, performance and dissemination can be carried out at the same time, and the original arrangement form and fixed process of first scoring music in the brain and then recording it can be broken. The completely different creative techniques and concepts are adopted, so that the arrangers can hear the actual effect while creating, and the works can be processed and recorded in the form of digital parameters to prevent theft and facilitate recording and modification.

Modern electronic music absorbs the creative ideas and advantages of traditional percussion. With the help of various creative technical means, supplemented by the spread speed of Internet, social media and music lists, modern electronic music has shown a booming trend. For the arrangers, it is necessary to constantly explore the best meeting point between traditional percussion and modern electronic music, and give full play to the unique advantages of traditional percussion and modern electronic music while ensuring the collision of tradition and modern, to jointly promote the progress of music.