Research on Multimedia Music Teaching Based on Modern Multimedia Equipment

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Abstract
Multimedia music teaching system is the combination of multimedia and music system. In this paper, the author researches on music teaching based on modern multimedia equipment. The system combines the multimedia information processing function with the music equipment and music software, and displays the contents of the music teaching in an intuitive, specific and visual way. The application of multimedia music teaching system for teaching, management and other activities can significantly improve the quality of teaching and work efficiency.

Keywords: Electronic Synthesis, Multimedia, Music Teaching

1. INTRODUCTION

The rise of MIDI technology brings a revolution in the field of music. All kinds of electronic musical instruments and equipment with MIDI interface are springing up and emerging. In the country, performing arts and music recording companies use MIDI equipment and technology for music performances and music production, the music industry have a greater impact (Finelli, 2008; Bao, 2011). Some colleges and universities have established the electronic piano classroom or the electric piano classroom, applies in the music teaching (Du, 2013). With the rapid development of computer technology, the combination of computer and music is increasingly close, with the use of computer electronic synthesizer and other musical devices came into being (Gilbuena, 2015). Computer music software is a great variety, everything, and more and more perfect and powerful function. MIDI equipment, computer and music software combination, constitute a more powerful than the MIDI system function of the computer music system (Tang, 2011; Yang, 2014). Since then, the computer music in radio and television, music recording, music performances, and other fields are widely used, has played an important role (Halim, 2014). Also get attention and applied widely in the field of music education in computer music, music colleges and normal music department began to use computer music system for teaching, creation and research, some colleges have computer music lessons or minor. With the rapid development of society, the new culture industry of animation film develops rapidly, and animation film music has become an important part of audio-visual elements (Long, 2013). There are a lot of measure in an animated film successful, one of the people most concern is the film’s soundtrack, high-quality soundtrack can put the whole movie characters more vivid details. Animated film music is a part of the film music, animation film music in music art is a very novel form, it has its own characteristics and aesthetic value (Roselli, 2006).

2. MULTIMEDIA MUSIC TEACHING SYSTEM

Multimedia music teaching system is the combination of multimedia computer and computer music system. The system combines the multimedia information processing function of the multimedia computer with the music equipment and music software, and displays the contents of the music teaching in an intuitive, specific and visual way. Application of multimedia music teaching system for teaching, management and other activities, can significantly improve the quality of teaching and work efficiency. Multimedia music teaching system equipment can be divided into the following types: Computer: multimedia computer (including the sound card, TV card, Modem, etc.). Projection equipment: projector, video display platform. Video equipment: video recorder. Audio equipment: audio cassette, power amplifier, speaker. Music equipment: electronic synthesizer.
1) **Multimedia computer:** multimedia computer can handle the text, graphics, images, sound, animation and movies and other media information, you can convert the information into digital signals and edit and modify.

2) **Projector (or large screen color TV):** the computer screen on the contents of a clear, large screen display, so that more people can see at the same time display a variety of text and image information on the computer screen.

3) **Big screen:** hanging on the wall of the classroom, used to accept and display projector projection of the image signal.

4) **Video display:** you can send books, pictures, pictures and real image information directly to the projector or large screen color TV shows; you can highlight and enlarge the local image according to the needs.

5) **TV receiving card:** TV receiving card to watch television program, can be directly displayed on the big screen or tv. The image effect and sound quality are better than that of the common TV set.

6) **Sound card:** sound card is computer audio signal processing accessories, it can carry out the music creation and performance by computer with MIDI interface and the corresponding software can make electronic music instruments.

7) **Speaker:** accept the signal transmitted by the power amplifier, the signal is reduced to sound playback.

8) **Electronic synthesizer:** electronic synthesizer with a built-in computer interface can be directly connected to the computer, which combines music and audio playing keyboard as a whole, through the keyboard to play music directly to the computer input information, which can provide high quality audio, multi tone and multi voice polyphony.

Sequencer software is the most commonly used music software, it can play all kinds of music data recorded into the computer, and then edit, delete, modify, shift splicing, generation of these data, then the data replay sequencer software similar and multi-track digital recorder. The most famous sequencer software is Cakewalk, using Cakewalk sequencer software for music production, digital recording (hard disk recording and audio editing). Can use it to assist the teaching of composition theory, assisted music creation, etc.. The tone editing software is divided into the tone database, the synthetic software and the sampling waveform editing software. Timbre synthesis software is to turn the synthesizer or sound timbre synthesis parameters on the computer to make software, data processing and graphical way to adjust the parameters of instrument, the synthesis of new timbre. Sampling waveform editing software is an electronic instrument with RAM waveform.
sampler or the use of the software, it is mainly through the waveform data MIDI line input sampler, and then edit it, new timbre synthesis

Figure 3. Sequencer software

Multimedia music system brings great convenience to music creation and music composition. In the past, the auxiliary instrument is mainly piano music creation, both vocal and instrumental works, or solo and ensemble music, was first played on the piano, audio-visual effects. To the piano as the auxiliary instrument is convenient, but it is hard for them to play music, such as complex texture and figuration, the piano is also difficult to do. In addition, the work of the requirements of the tone can only rely on auditory imagination to add. It is difficult for an ordinary music worker to turn the composer's creation from the music into the actual sound, and also need to organize a series of complex work, such as band, rehearsal, and sound recording. With the computer music system, not only can solve the above contradictions, but also has more superiority.

First of all, from the music imagination, the synthesizer provides a variety of musical instruments in a variety of different styles of timbre, rhythm, drums, music, which can stimulate inspiration, arouse the function of imagination, can even provide creative material. From the creation of the control means, the composing is no longer stay in piano and music, but the musical ideas generated by one, can be directly into the sound, and stored in the sequencer, if necessary at any time, change notes, additions and deletions speed, strength and so on, can choose to listen to any one voice or overall effect. The use of real-time recording, can make the recording of the performance of real, delicate, vivid. The use of step recording method, you can separate the pieces of difficult to play, step by step entry, even if the keyboard is not proficient can also be music creation. From the creation process, it set the creation, performance, command, recording in one, reducing the intermediate links; music creation process is the production of music, recording process.

Figure 4. Music creation process

3. MULTIMEDIA MUSIC TEACHING EVALUATION

3.1. Music work analysis

For the animated film and music plays in the animated film in a considerable role, because the animation film has its characteristics on relatively small, and the animated film mainly consisting of sound and music
background to the development of the story, pictures and music together, and at the same time show in front of the audience is the main feature of modern film and television works. The music show in the form of requirements are different, sometimes need to be intense, sometimes sad and so on, these are the needs of music creation themselves feel so as to correspond to the movie screen with music, and thus enhance the overall level of animated films. In the conception of film music, is the need for in-depth understanding of the story and the characters and the movie authors want to express the content of the music, and together, achieve unity of visual and auditory, making animated films show a more perfect, such as the combination of Hayao Miyazaki’s works is a typical the pictures and music perfect works.

First of all, the film and television works of music and our daily concerts and concert music is not the same, the latter's stylized performance is very strong. Our daily movies of the figures and their movements, facial expressions, speaking from life than life, have a certain exaggeration; secondly, the film and television works not only music, but varied, such as music as TV, the original black and white TV, and now is the color TV, for the music, but also by the silent music to music and change, in the beginning is silent, only the evaluation of the film and the audience laughter echoed in the shadow of the audience. With the development of science and technology, film and television works also entered the sound era, the role of dialogue and story language in the movie soundtrack for the film is more and more big, compared to the traditional single music, modern music makes the film more artistic charm, more able to buckle moving heartstrings. Only the goal of music producers and film makers are consistent, to create a good animation film music and film and television works. Movie music creation need without damaging effect on the original film director, starting from the movie required auditory effects through the music needed for the film to penetrate and heighten the atmosphere and emotion. Thus, we should not deviate from the principles of music art, on the basis of the overall art of the film, music and movie content mutual coordination, mutual integration. This is not only conducive to the completion of the creation of animation film music, but also conducive to the sublimation of the story of the film, which is a key factor in the development of animated films.

3.2. Music creation

According to the characteristics of the style of music, we can see that Hisaishi's music style is the last century in the early 90s. The New age style N, actually is also a kind of brings a quiet, comfortable, leisure interest in music. This style of music to create a tranquil and harmonious atmosphere can relieve the pressure of the heart in life, to a certain time and space for a short meditation, to forget the sorrow, reach a soul detached and relaxed. Along with the development of society, the promotion of human spiritual civilization, animation film has become an indispensable part of today's popular culture and entertainment, for the audience, its status is also indispensable. To a certain extent, the animation film and other films are more similar, is the story of the show and give the audience a physical and psychological baptism and feelings, which also has a certain degree of educational significance.

In the creation of music, the melody is very simple, is to die, and other techniques to carry out into the cyclotron as the main body, emphasizing the development of rhyme and rhythm, make people for the main melody of music is more easy to remember, and can carry out simple humming. In the music of Mr. Hisaishi's works, it is also a strong. He is generally through the positioning of the body, according to the main affective factors determine the performance of music or themes of the times, and then through different ways or different style to render or performance of this theme, through the use of different instruments and with the music in a variety of forms change a lot, but it is not out of order, random change, there are more or less contact in music. Another feature of the music is music written at the beginning of the story when clever corresponding animation movie plot and the protagonist's character, so as to promote the film, to better meet the needs of the audience and television works now, so this is very important because love is not so much the field of music one of Mr. Hisaishi's music creation. The current film and television works to attract more viewers in a very short period of time, it is needed to make the film and the film soundtrack to the audience's heart, touch the hearts of the audience.

3.3. Theme creation technique

In music creation, theme Enthone independent, complete and expressive, and did not deviate from the theme of the film and television works, through a unique form of music, music theme is "". In young age, Hisaishi and the famous Japanese music educator Mr. Suzuki Jinchí made about studying violin, after its creation method and the film music composer Philip Glass as well as the influence of modern minimalistic music master Steve leckey et al. By Hisaishi for the creation of animation film music, the theme of music has the following 3 characteristics:

1. Melody bright characteristics

The above examples selected from chinchillas, the melody is simple and clear, distinct rhythm, the whole song is full of playful, and accompanied by a strong Japanese country folk wind, at the same time, without losing rigorous, this music version more, such as symphonic edition, electronic version, printing edition and so
on. Symphonic Power, gives a sense of the sacred and the suite to be exceptionally heavy feeling, piano and Cello together, to give people the feeling that time crossing. Although, it makes people gradually forget that once call countless people heart the story, but also give people a shock, childish, but particularly sacred. In the sound of music, we will feel the smell of soil from the countryside, can feel the breath of trees, and hear the wind singing.

2. Progressive to the main melody line
"Princess Mononoke" of this work can be said to be Hayao Miyazaki and Hisaishi two masters make painstaking efforts masterpiece, reached their peak. "Princess Mononoke" clear long style, but also laid a more Hisaishi's position. From this melody is not difficult to see that he is progressive to the main line for the theme song. "Progressive" is the relationship between the tenor and the sound of music is not greater than 4 degrees, the main description of the soft music form, through the upregulation of the expression of the emotion scale to rise. The film took place in the eastern world a long time ago, Hisaishi through the music of the material to show a strong sense of the Japanese national flavor. Hayao Miyazaki's film works in general is about social discontent, but in the stories of the hard work have changed the destiny, eventually to the successful end, this film is based on the very high music score requi

3. Popular "segmentation rhythm" is the main element of its rhythm
Hayao Miyazaki's "sky city" is full of new elements in the film, Hayao Miyazaki painting work perfect to show the story background, myth and science fiction feeling, even a little taste of the industrial revolution in europe. The basic idea of this music in the music began to beat on the set, the treble voice syncopated melody, after several times after the uplink appeared under four degrees, the expression of gentle but slightly sad mood, and the rhythm of segmentation and give a person a kind of steadfast feeling. The music is not difficult for us to find the theme of this song is very concise, but without losing the music to express the content, still expressed important ideas in film and television works, only with sadness, while the rich emotional expression of faith. Influenced by many music masters, their music has streamlined and distinctive style, and are used to show the way and nationality story, the creation of the way they played a very important influence in the late Hisaishi music creation ideas.
4. THE ARTISTIC FUNCTION OF MUSIC

4.1. Promote the development of the plot

Although the music has its own unique artistic nature, but for film music, with the characteristics of the film plot development is the main principle to follow, he fusion story based on its own artistic expression on the characteristics of artistic conception. When the film music in the early stage of creation, to fully understand the plot of the movie, to show the way, and to show the film artistic conception to locate the direction of music creation, music and movie to integration, beautiful music and the story of the film's aesthetic, the best realm. This is the direction of the pursuit of all films. The movie shows the story progress the main method is to set the connected story, and in the film with proper music will also promote the plot effect of expression, through the story of the picture and background music to let the audience know the degree of film production costs more profound. With a simple and simple rhythm, it is the main way for the film score to highlight the character's character. For example, in the film "spirited away" in music creation, it is through the image of music for different characters in the film depicts different character image, the development of the story of the ups and downs, and not to put undue pressure on the whole process of Chihiro Mountain Film in suppression.

At present, the display in front of our film and television works, there are music and music. Animated film is a special kind of art, so the requirements of the soundtrack are also very high. Because the film works as an art, it is from life than life, and not in fact true portrayal, but somewhat unreal, it needs to increase the color for the music, the more natural development of movies. For example, by Hisaishi for the animated film soundtrack, the overall effect of the film added a lot of features.

4.2. Create a solid atmosphere

Music can enhance the expression of the film picture. Although on the surface, the picture and music of the film are independent of each other, but they can cooperate with each other. Music can improve the performance of the screen on the screen effect, so that the audience's perception is more profound. This type of music is lyrical or delicate beautiful music can be closely linked to the heart of the audience, the audience and the distance closer to the film and television works. Hayao Miyazaki's a very representative work is "Totoro", this work is a magic realism animated film. The story is in under the accidental opportunity, two little girls know the forest in the "immortals" Totoro, the mother of two daughters in poor health and long-term hospitalization, father's work is very busy, so the girl love transferred to the chinchilla's body, they grew up together. The story of a rich fairy tale shows the complexity and variety of life through the child's perspective. Hisaishi used percussion music in the soundtrack of the film, and wrote a humorous piece of music. My fat body repeatedly show and spoof parody expressions and because the body is overweight and difficult image positioning of the naive immortals. Hisaishi's soundtrack to the film and television to improve the picture, so that the animation more vitality.

4.3. Express emotion

Animation film music is the soul of the film and television works, to a certain extent, the animated film itself for the plot of the story and characters of the interpretation of the expression has certain limitations, and the music can be a perfect interpretation of the image of the characters, character and environment story happened thus, music for film and television works, is essential. The main music animation film is the theme music, the audience can heart for music perception to image of the characters have a deep understanding, and through music can also put the film characters to express the emotion expression more vivid and delicate, create visual and auditory aesthetic mood in one film, to impress the audience. Animation film has a very unique form of expression, to a certain extent, the general will be in an unexpected scene to show the world in front of the world. So sometimes, film and television works to the audience show some of the things that the audience does...
not understand and recognition, and music is not the case, the music can enhance the understanding of
the audience for the film and television works acceptance, thus, music for film and television works to say is very
important. Show all the characters in the animated film is unreal and unreal, so the character image is not vivid,
of course, is not possible to express emotions in place, however, the music was added, it can be a good solution
to the problem of animated film.

5. CONCLUSIONS

In recent years, the Chinese animation industry has gradually become a pillar industry in the cultural
industry in the context of vigorously promoting the cultural industry in China. People are becoming more and
more agree with the art form of animation film. Animation film music has gradually become an important part
of audio-visual elements with the development of the animation film. There are a lot of measure in an animated
film successful, one of the people most concern is the film's soundtrack, high-quality soundtrack can put the
whole movie characters more vivid details. Quality music is the soul of the animated film, can touch people's
hearts. The overall production for the animated film, the background music for the appropriate collocation in the
right plot, the film could be pushed to a peak, and touched the audience's vision and mind, let the film's
memories. Therefore, inspired by the study of Japanese animation film music, these theories can promote the
development of animation film production in the future.

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