Talking about the Functions and Functions of Sound in Film and Television Post-Production

Shaohan Jiang, Yan Liu

Shenyang University, Shenyang, Liaoning, 110000, China

Keywords: Voice, Music, Sound, Functions, Post-production of film and television

Abstract: Voice in film and television works consists of human voice, music and sound. Only by coordinating the relationship among the three elements can a complete and harmonious artistic auditory world be formed. It not only can simply explain rich pictures, but also can effectively accumulate energy for pictures, transfer emotions, colors, depict characters' inner world and control rhythm. With the rapid development of network technology, post-production technology has ushered in a new development. The use of high-end special effects technology has become a trend in the development and production of film and television works. Therefore, it is necessary to study the application of post-production in film and television works.

1. Introduction

Film and television post-production is a highly comprehensive creation that combines various audio-visual means such as words, sounds and pictures. Movie and TV art is the art of combining audio and video. Only the perfect unity of the two basic artistic elements of picture and sound can fully embody the style of movie and TV works [1]. Music and acoustics not only make the picture more dynamic, but also make the screen image more concrete and more stereoscopic. Therefore, TV directors attach great importance to the sound quality of the film. With the progress of science and technology and the innovation of artistic creation concept, film and television sound production methods such as recording, later dubbing, sound effect editing and background music creation are continuously enriched [2]. This requires that post-production can make the film show a distinctive style, that is, using computer network technology to finish the film and television works, to make it more competitive and attractive, to meet the expectations of the audience, to meet people's increasing aesthetic ability and expectations of artistic works [3]. The sound discussed in this article mainly refers to the functions and functions played by background music and sound in postproduction. Through the design of music and acoustics, the visual environment is more realistic, the characterization is more profound, and the theme performance is more prominent. Through the voice telling, the spiritual sublimation of the work that cannot be achieved by a single picture is completed.

2. Guidance Function of Sound

2.1 Time and Space

Some typical time can be shown through sound effects in the later stage of a movie and television work. For example, the sound system in the morning includes cock crowing, bird crowing in the country morning, cell phone ringing, bread machine jumping, etc. Therefore, when we collect sound materials, we must understand the range of sound expressive force used and the time range that can be applied to the picture. That is to say, the main and auxiliary adjustments of human voice, music and acoustics should be made to make the sound in the film and television works sound hierarchical [4]. Because the superposition of special effects will bring shocking effects to the pictures of film and television works, so as to meet the audience's expectations of film and television works, which is the condition provided by modern network technology for the development of the film and television industry. Sound is all sounds in the nature and human

DOI: 10.25236/soshu.2020.094

environment except human voice in movies and TV programs. Sound does not simply simulate natural sound, but is used to explain the environment, create the mood and atmosphere of the environment, restore the lifelike feeling and enhance the life feeling of the film [5]. Movie music is a kind of music form with independence and visual coordination. In addition, in the later period, the audience can be reminded of nature and mountain paths with the singing of birds and the murmuring of streams. Cheers combined with the sound effects of playing and passing can make the audience think of the stadium. In film and television production, we all grasp the creation of music and sound and summarize different creation rules according to the style of the works, the development of plot and the narrative rhythm of each play.

2.2 Environment

Ambient sound can be located through various spatial sound effects simulations. For example, the operation of sound reverberation makes the audience feel whether it is in the narrow environment of telephone booth or in the open environment of library. For example, the characters push forward the dialogue of the plot. But not the human voice is the main audio in any case. For example, in the documentary "China on the tip of the tongue", the commentary outside the picture is the main audio, and the cries of the vegetable market in the picture are the auxiliary audio, which is the foreshadowing sound of the environmental background. Making dialogue is the first step and the most basic part. The dialogue must be carefully trimmed and every word must be strictly controlled. If the quality of the sound materials obtained from the recording at the same time is not good, dubbing should be carried out in the post-production, including monologues and narrations, so as to avoid noise and ensure the sound quality of the dialogue between the characters [6]. Different vocal range components form different musical themes and shape different musical images. The change of music speed directly affects a specific music image, but sometimes for artistic purposes, a melody is treated at different speeds, and the musical feeling obtained is completely different. Sound designers and sound editors won as many honors as the photographers who shot the film because they brought a lot of emotional impact to the film through sound. The picture was taken, and the sound was created bit by bit in the clip.

2.3 Sense of Perspective

The perspective of sound is also called the sense of distance, distance and depth of sound. The sound perspective is caused by the sound distance feeling caused by the different proportion of direct sound and reflected sound and the different sound volume in the process of sound transmission. For example, in TV special programs, when there is no commentary for a long time, the background music should be gradually adjusted to the volume of the main audio to enhance the picture atmosphere. Add ambient sound to each scene, and the picture will look more realistic [7]. Generally, the environmental sound of each scene is collected during shooting on the spot. Sometimes, in order to improve the sound quality, it is necessary to collect the sound at a later stage. At the same time, music also makes the program system coherent and orderly, becoming the best interval method. The aesthetic effect of music can render the environment, making film and television production have strong artistic expression, in-depth information transmission and strong expressive ability. In film and television creation, generally we should try our best to make the perspective of sound scene match the perspective of picture scene to create a real sense of hearing for the audience.

Sound can sometimes become the dominant tone in sound creation, playing a deepening and emphasizing role and expressing special emotional effects. In general, the interlocutor, as the main body of the picture, must be close to the audience, so the conversation is loudest, and the printer sound or footsteps still present on the scene may be far away from the characters, so the sound appearing in the picture is weak or even gradually reduced. For example, the fighting scenes and action effects in "Four Famous Catches" are all attributed to the special effects of the later stage of the works, so as to enhance the expressive force and appeal of the film and television works, and make the audience shout and enjoy themselves while being attractive. The audience can feel the sound coming from all directions. Making surround sound mixing is a crucial step. Surround stereo

can effectively expand movie and television works into a three-dimensional space, allowing viewers to be personally present.

2.4 Energy

Sound can enhance the picture energy and make the movie and television works more authentic. This is also the main reason why we won't play when watching some pictures shooting rough or simple animation, because sound has created a very real scene environment for the audience [9]. If the previous narrative paragraph of the movie just ends, the sound can fade out from the previous picture and fade into the next picture at the beginning of the next narrative paragraph. Not only should the artistic charm of music be brought into play, but also it should be combined with film and television pictures to set off each other. Including: opening music, theme music, scene music, ending music, etc. In the later period, the sound effect was not copied exactly from the real scene, but refined and amplified in a targeted way. That is, the former voice is fading while the latter voice is gradually appearing. In this way, there will be no obvious discontinuity in the cohesive sound, and the transition between sound and sound is more natural.

Music and sound can also enhance the expressive force of the picture through mutual cooperation in the works, and transmit the theme energy of the works to the audience. Voice Preamble refers to the sound of the next group of pictures appearing at the end of the previous group of pictures in advance during picture conversion, which can bring the audience into the environment in advance and indicate the upcoming events. For example, in the earthquake scene of the movie "Tangshan earthquake", when a young husband pushes away his wife and rushes alone into the ruins to rescue a couple of children, sad and solemn background music is played. through the artistic processing of sound, the cruelty of the earthquake is rendered to the extreme together with the screams of characters and impressionistic environmental sound effects. At the same time, the visual enjoyment brought by the virtual scene to the audience is no worse than that of the real scene, sometimes even better than the picture, at the same time reducing the cost of shooting the work, so it is a matter of killing two birds with one stone. For example, in the movie Titanic, the scene of a sunken ship needs to be shown. For example, in the domestic movie "Assemble", the beginning of the movie is in the Martyrs' Cemetery. As the camera is pulled up and slowly rocked to a stone bridge in the distance, the sound of guns gradually appeared along with the movement of the camera. It seems that the sound of guns came from a distance and brought the audience back to the hinterland of East China in 1948. The whole picture realized the time-space transformation. In short, no matter what form it takes, music is an integral part of the work, an art that is "absorbed" and cannot be self-contained or too strong or too full. The basic principle of music application is to win more with less and obey the whole.

3. The Aesthetic Function of Sound

3.1 Emotion

Voice is the most intuitive aspect of emotional expression, but it should be used properly. If music takes away, shifts or impacts plot clues, then it is not suitable for this movie. In order to show the development of different emotions and atmospheres at the same time, this effect can be achieved by using pairs of sounds. For example, if the two lovers meet again in a war-torn environment, the picture will always be accompanied by rumbling sound of the war environment, but this effect sound cannot foil the accident and joy of the reunion of the two lovers. According to their respective laws, they express different contents and combine them organically on the basis of their independent development, resulting in an overall effect that can't be achieved by pictures or sound alone, greatly expanding the amount of information conveyed by film and television works and breaking the temporal and spatial limitations of pictures. For example, the music in "Cats and Mice" is often used as acoustics, which can make the characterization of cats and mice more vivid [10]. In film and television works, emotions are mainly conveyed through background music. Therefore, in the later synthesis, selecting appropriate music to match the picture can enable the

audience to feel the thoughts and feelings implied in the picture through the guidance of music, or to experience the complex inner world of the characters in the play, thus completing the height that subtitles or dialogue cannot reach. The other is to use sound to provide psychological space, and edit the picture based on this, and use pure subjective sound to express monologues of memory, illusion, imagination and inner feelings.

3.2 Color

The sound with different timbre, pitch and tone can convey different sound color sense. Every place in the world has its own local conditions and customs, different cultures, different languages and different musical styles [2]. The arrangement of levels should be based on the content of the film and television works, with the voice revealing the deep meaning or expressing the inner feelings of the characters as the main part and the environmental voice as the auxiliary part, so as to more deeply express the theme content. Interlaced editing of character dialogues refers to the switching of sound and character pictures at different times, but cutting and cutting alternately. That is, the voice of the character in the previous shot does not end with the cut-out of the shot, and continues to the picture of the character in the next shot. For special sound effects, such as narration, echo, accent change, treble change, telephone language, etc., the sound can be processed through delay, reverberation, equalization, tone sandhi, etc., and then compressed, copied and pasted to accurately introduce the sound into its position. Such effects can play a finishing role in the works. Different musical instruments show different colors and emotions. The suona has a high tone and can produce elegant tone sandhi, which can be used to express festive atmosphere. Cello's voice is rich and full, and its timbre is relatively low, which can better replace the steady male image to sound. For example, in order to set off the reality of the missile in this example, the sound of an airplane flying through the sky can be added to remind people that the missile was dropped by the airplane, thus supplementing the picture.

Voice can also show nationality. Every region has music that represents its local characteristics. Especially during festivals, ethnic customs, traditions and music are unified. Audiences will bring music with regional style to the corresponding places through listening according to their psychological cognition. The former group of pictures stays at the beginning of the latter group of pictures in the form of voice-over, which can make the pictures smooth and imply the relationship between the two groups of pictures. Its full name is the configuration of sound. Although the audience has not paid much attention to it, it also plays a certain role in the post-production of film and television works. The configuration of sound is divided into two types, one is simultaneous recording and the other is later dubbing. This not only ensures the sound integrity, but also continues the scene atmosphere and emotion expressed in the previous shot. In addition to paying attention to distinct levels, sound editors should complement each other and have a good arrangement. We can neither usurp the host's role nor interfere with each other, let alone stay the course.

3.3 Psychological

The psychological attribute of sound in film and television works is often reflected by subjective music. This kind of subjective music has no sound source in the picture, it is surreal sound, it is a kind of functional music. For example, in the TV poetry essay Memories of peace in Jiangnan, the teacher led the students to take a boat on the lake. The students sang "Let's Swing Double Paddle". The scenery of the lake and the mountains in the picture merged with the students, and the singing gradually changed from the voice of the characters to the chorus accompanied by the band. When editing a group of continuous lenses accompanied by long objective sounds, only the picture can be switched, and the sounds are accumulated in chronological order to form a group of continuous vivid sound harmony.

The surreal sound can be a piece of music, sound effect, or a combination of music and sound, with emphasis on exaggerated, distorted, complex psychological activities, mental states or actions of the characters in the play, or symbolic and metaphorical treatment in coordination with the picture. Not only do we need to deal with the relationship between music and pictures, but also we

need to solve the problem of music splicing and combination so as to achieve the unity of sound and picture. Only with the close cooperation of commentary, acoustics and music can the picture achieve perfect artistic effect. If we deal with interpretation, sound and music effects in isolation, it will easily do more harm than good, making the film chaotic and not causing real feelings. Subjective sound is not produced in the lens picture, but a kind of sound added by the producer later. When editing, we should fully consider the development of the plot, grasp the changes of the characters' emotions, and select sound materials that can perfectly combine with the modeling elements of the picture.

3.4 Rhythm

The rhythm of the sound is like a clothesline. A piece of music with strong rhythm in the later period can connect irregular pictures together. At this time, the rhythm of the sound and the pictures are not parallel, but it will not make the audience feel abrupt. There are differences in the arrangement of sound to a certain extent. The former dubs according to the development of the story during the shooting process, so it is very difficult and challenging. However, the later dubbing only needs to be consistent with the plot of the story. At the same time, the soundtrack of the scene of the story is also the effect of the later dubbing. Multiple sounds with different meanings will appear at the same time, forming sharp contrast with each other, thus highlighting the artistic expression of a certain sound. In addition, although the film can accommodate a variety of sounds, but at the same time, often only highlight a certain sound. Therefore, we should try to make them interlace in the film, or through processing, make all kinds of sounds light and heavy, rich sense of hierarchy. Rhythm expressed by sound is also often related to the content of the picture. The fast moving picture is expressed by sound with sharp tone color and fast rhythm, while the slow plot development is expressed by music with rich and slow tone color.

4. Conclusion

In short, we must do a good job of coherence, alternation, supplement and echo when creating sound. Coherence means that when sounds change and replace, all kinds of sounds cannot suddenly stop and protrude, but must be smooth. In film and television works, the real and visualized presentation of pictures mainly relies on the guiding function of sound, which conforms to the audience's audio-visual psychology and behavior habits. The artistic processing and creative expression of pictures mainly depend on the aesthetic function of sound. Because the basic expression of film and television lies in the presentation of pictures, and the good application of post-production technology plays a great role in achieving shocking visual effects. Sound has rich expressive force, not only is the attachment of the picture, and the relationship with the picture is complementary. Therefore, we must do a good job in the later stage of sound creation so that sound and picture can be perfectly combined to achieve better artistic effects.

Acknowledgement

The authors acknowledge the Sound library sharing platform, (Grant:2019110350074).

References

- [1] Wang Yan. (2016). Teaching Practice and Reflections on "Video Post-production" in Secondary Vocational Schools. China Off-School Education: Early, vol. 000, no. 005, pp. P.152-152.
- [2] Han Xiuping, Sun Xiaowei, Zhang Qiang. (2015). Talking about the post-production and editing of film and television. Film Review, no. 1, pp. 77-78.
- [3] Zhang Huan. (2016). Application of Digital Technology in Film and TV Post-production. Audiovisual, vol. 000, no. 003, pp. 165-166.
- [4] Yu Wei. (2015). Analysis of the Application of Film and Television Post-production in Film and

- Television Works. Western Broadcasting and Television, vol. 3, no. 6, pp. 104-105.
- [5] Shi Zhancheng. (2015). "Sound Rhetoric and Audio Narrative": A Review of the Third National Symposium on Melody. Chinese Music, no. 3, pp. 93-97.
- [6] Wu Jianyang. (2014). Design and Choice of "Listening Points" in the Creation of Film and Television Sounds. Contemporary Film, no. 9, pp. 151-155.
- [7] Qi Xuesong. (2015). Application of sound elements in film and television post-production. Northern Music, vol. 035, no. 019, pp. 143-144.
- [8] Wang Wei. (2015). Application of Sound Creation in Contemporary Film and Television Art. TV Research, no. 12, pp. 69-70.
- [9] Liu Yaoyu. (2018). Talking about the function and role of sound in film and television post-production. Beauty and Times (Late Issue), vol. 000, no. 006, pp. 108-109.
- [10] Li Jia. (2016). Application of sound elements in film and television post-production. Popular Songs, vol. 000, no. 03X, pp. P.236.