

# Discussion on editing and photography technology innovation in broadcast TV production

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**Keywords:** Broadcast TV; Editing; Photography; Innovation

**Abstract:** Editing and photography, as the most important post-production of broadcast TV programs, play an important role in the effect of TV programs. An excellent TV photographer should have a good grasp of the theme of the program, a keen ability to handle and judge on the spot, be able to grasp the essence of the program at the first time, be good at grasping the overall situation, and shoot TV programs from the overall effect of the program. However, there is still a certain gap between broadcast TV and new media, and its own fixed characteristics can be distinguished from new media forms. This paper expounds the influence of editing and photography technology on the final presentation effect of broadcast TV, and analyzes the innovation direction of editing and photography technology in broadcast TV production respectively, hoping to provide reference for relevant personnel.

## 1. Introduction

There are four elements in the photography production of TV programs: composition, conception, color and light, among which color collocation and selection are important links in photography production, and color affects the audience's impression imperceptibly. With the gradual development of broadcast TV programs, people begin to pay more attention to the quality of TV programs. However, there is still a certain gap between broadcast TV and new media, and its own fixed characteristics can distinguish it from new media forms [1]. Therefore, starting from the photography technology and editing technology of TV production, we should systematically analyze the innovation of photography technology and the editing problem of TV programs, so as to improve the production quality and broadcast effect of TV programs and meet the public's demand for watching TV programs. Editing and photography, as the most important post-production of broadcast TV programs, play an important role in the effect of TV programs, so it is necessary to discuss editing and photography technology.

## 2. The necessity of editing and photography in broadcast TV production

Editing and photography are two indispensable technologies in the media industry. Under the background of the vigorous development of the media industry, high-quality editing and photography technology can present better effects of broadcast TV programs. A complete TV program needs to go through many links, from pre-planning to material shooting and post-editing. The role of TV post-editing is as important as that of pre-editing [2-3]. By adjusting the audio, the ideal broadcast effect is achieved, and the rhythm between shots is controlled, so that the audience can maintain a good audio-visual experience when watching the program. It can be said that TV program editing makes the material eventually become a work.

In the process of editing TV pictures, the duration of all pictures should be able to be freely retracted. In the process of shooting broadcast TV programs, except for specific artistic expression techniques, the lens setting should keep the picture stable. Therefore, an excellent TV photographer should have a good ability to grasp the theme of the program, a keen ability to handle and judge the scene, be able to grasp the essence of the program at the first time, be good at grasping the overall situation, and shoot TV programs from the overall effect of the program.

### **3. Innovation of editing technology in broadcast TV production**

#### **3.1. The picture is in harmony with the rhythm**

A complete finished video of TV broadcast program, because of its theme, requires the integrity and consistency of the whole video content. In editing, it is required that the duration of the pictures in the video material can be freely retracted [4]. It can satisfy the different switching of viewing angles, and can also promote and upgrade the effect and expression form of the program. Therefore, attention should be paid to the duration, frequency, response time, program characteristics, etc. in program production, and the unity of picture rhythm should be considered to highlight the program theme and improve the broadcast effect. The mobile lens itself has many expressions. When using these expressions, it is necessary to reflect the fun and flexibility of the program, rather than simply emphasizing the artistic characteristics of the program itself.

#### **3.2. Clear sequence of shots**

When editing TV programs, it is necessary to make the primary and secondary docking of the shots scientific and reasonable, and at the same time ensure the seamless connection of the pictures. At the same time, the report should be complete, the shots should be coherent, and the tone and color should be consistent as far as possible, so as to ensure that the public will not suddenly jump when watching the pictures. According to the priority of the characters and the relief of the events, the shots are docked in a certain order. For example, in the actual report pictures of some news media programs, the combination of shots is particularly important [5-6]. Combined with the sequence of events, and according to the primary and secondary links of the development of things, the lens parts are connected, and the different levels of characters are connected. So that the effect of the whole program can better express the theme, let the audience get as much information as possible in a short time, and have the greatest understanding of the events reported in the news.

#### **3.3. The combination of motion and static of the lens**

Editors must choose the right angle to highlight the news focus; To choose the best scene, TV pictures can generally be divided into close-up, distant view, panorama and close-up. Editors and photographers should choose different forms according to different news content, such as close-up of key objects.

In the editing process, if there is no special expression requirement, it is best not to reuse the fixed lens and the moving lens as a single lens, otherwise it will not only cause visual fatigue to the audience, but also affect the broadcast effect of the program [7]. The main purpose of the combination of fixed lens and moving lens is to keep the coordination and flexibility of TV programs. We should pay attention to the shooting quality of all kinds of shots and pictures in editing, ensure the consistency and continuity of the pictures in editing shots, and at the same time consider the harmony of the pictures to reduce the sharp jump of colors, so as to improve the appreciation of the program.

#### **3.4. Introduce creative elements**

No matter when, innovation is the key factor to keep the vitality of TV programs. Innovation needs unique creativity and the integration of popular elements in order to get the attention of the audience. The editing work of TV programs is to integrate the program content with creative elements and highlight the style and characteristics of the programs [8]. At present, video application software is developing in full swing, which has the characteristics of compact rhythm and high narrative efficiency in editing. These characteristics can also be used for reference in the middle and late editing of TV programs and new media, making TV programs more creative. In this process, editors should analyze the aesthetic needs of the current audience, focus on the theme of program expression, and reflect the uniqueness of editing in TV subtitles and pictures through diversified techniques and new technologies, so as to make TV programs more attractive.

## **4. Innovation of photography technology in broadcast TV production**

### **4.1. Innovative exposure and scenery shooting techniques**

When shooting, distinguish the brightness of shooting according to the setting of scene lighting, adjust and create the exposure, complete the tracking exposure of the subject through focusing and focusing for many times, and choose the appropriate angle to switch the picture to maximize the exposure effect. Manual adjustment mode can be used for exposure and creation according to the light and dark degree and different tone of the photographed object, and the focus operation can be carried out by pressing the focus button several times to ensure that the aperture is set at a predetermined value; Auto-adjusting aperture can be adjusted automatically according to different ambient light, and the subject can be photographed continuously, which is more suitable for tracking shooting and rapid environmental changes.

In the process of shooting TV programs, it is also very important to identify the scenery, which will directly affect the quality and effect of shooting [9]. For example, in the process of people-centered photography, people should be taken as the subject and the background as the object, and the background needs to be blurred to set off the people and meet the requirements of the theme. Among them, the triangle composition takes the scene as the three visual centers, or arranges the photographic scene by three points, which is stable and balanced.

### **4.2. Color application in innovative photography technology**

The most basic thing to deal with the lens is to ensure the stability of photography and the stability of the shot picture, so that you can have a good viewing experience when the program is broadcast, so as to obtain better viewing effect. In the process of photography, you can manually adjust the brightness of the shooting, and make the exposure effect reach the most ideal state through focusing and image conversion at an appropriate angle. High-definition TV programs require higher picture color and brightness, so it is necessary to use high-resolution lenses in shooting, and pay attention to the application of digital cameras, so that TV program shooting presents a larger dynamic range, with a high frame rate and a wide color gamut, and the program effect is rendered through colorful pictures.

In TV production, we should also pay attention to certain skills in color switching of photographic pictures. The switching of pictures should be based on the needs of the audience, and color also plays a certain role in the switching of pictures. If we want to maintain the audience's enthusiasm for watching, we should consider whether the colors of the front and rear pictures are unified when connecting the shots.

### **4.3. Innovative lens and composition method**

In the actual shooting process of broadcast TV programs, photographers need to ensure the stability of their own shots and pictures, so the stability in picture acquisition has become an important aspect of photography technology innovation. The innovation of composition technology can promote the aesthetic degree of picture content and realize all-round development on the basis of increasing artistry.

Generally, the lens keeps the picture stable. Photographers should always keep the lens stable during the recording process, so as to ensure the picture is stable, and there will be no picture turbulence. The camera equipment should also keep the picture stable during the process of pushing, pulling and following up, so as to ensure the clear picture effect of the program and ensure the audience to have a good visual experience.

Composition is based on the composition and structure of the content in the picture, taking into account the artistic beauty on the basis of meeting the needs of picture expression. Under normal circumstances, the composition skills of broadcast TV programs need to meet three requirements [10]: First, the concept should be clear. Before shooting TV programs, the photographer needs to have a full understanding of the program content, so that the shooting focus is unified with the program content; Second, the picture should be able to highlight the key points. In the process of shooting TV programs, photographers can use the golden ratio, picture center method, picture

segmentation method and other artistic expressions to keep the beauty of the picture while highlighting the center, so as to make the overall picture harmonious and orderly. Third, scientifically deal with the dynamic and static relationship of the picture. In shooting composition, we should be able to grasp the different characteristics of dynamic and static things and maximize the flexibility of composition.

#### **4.4. Increase the interest of photography**

With the increasing marginalization of broadcast TV programs, it is necessary to show more interest in the production of broadcast TV in order to attract the public's attention, which needs to be done through photography technology. The author suggests that producers can also try to make shooting more interesting, create photographic works that are more in line with public demand and public aesthetic standards, and create favorable conditions for subsequent program editing. It is necessary to introduce artistic expression into the technical shooting process to present more detailed and vivid content for the audience, so that the audience can get a better and more comprehensive sensory enjoyment. Photographers should be clear about some factors that affect their photographic quality, and solve the existing problems, so as to improve the photographic quality, make the pictures taken more concrete and vivid, and have stronger appeal and persuasion.

### **5. Conclusions**

Editing and photography are two indispensable technologies in the media industry. Under the background of the vigorous development of the media industry, high-quality editing and photography technology can present better effects of broadcast TV programs. In the process of editing TV pictures, the duration of all pictures should be able to be freely retracted. In the process of shooting broadcast TV programs, except for specific artistic expression techniques, the lens setting should keep the picture stable. For the editing and photography technology in China's broadcast TV production, it is necessary to do better shooting and editing according to the production requirements. In the specific shooting and editing process, it is necessary to carry out technical innovation in strict accordance with the shooting and editing requirements and according to the actual situation, so as to make better programs and bring different feelings to the public.

### **References**

- [1] Peng Hongmei, Zou Jingjing. On the innovation and editing of photography technology in TV program production [J]. TV Technology, 2019, 43(22):2.
- [2] Wang Gang. Research on editing and photography technology in TV program content production [J]. TV Technology, 2021, 45(12):3.
- [3] Shi Dong. "Integration of media, smart radio and television" technology innovation and application [J]. China broadcast TV Journal, 2017(11):2.
- [4] Wu Nan, Zhao Songzheng, Zhang Xiaodi. Relationship embeddedness, inter-organizational learning ability and technological innovation performance [J]. Science and Technology Management Research, 2015, 35(9):6.
- [5] Zhong Dapeng. Research on the Stylized Creative Structure of Microfilm and the Innovation of Lens Editing [J]. Film Review, 2018(1):3.
- [6] Lin Zhaohai. Research on the Application of Editing and Photography Technology in TV Program Production [J]. TV Technology, 2022(007):046.
- [7] Guo Jianmin. Research on Post-editing Processing Technology of Broadcast TV Video [J]. TV Technology, 2022(003):046.
- [8] Zhu Jian. Analysis of the characteristics of short video shooting and editing for brass instruments teaching [J]. TV Technology, 2021, 45(10):3.

[9] Xiao Zhifan. Analysis of the late editing art in TV program production [J]. TV Technology, 2021, 45(6):3.

[10] Qi Yuling. Research on editing art skills in post-production of TV programs [J]. TV Technology, 2019, 43(21):2.