

# Analysis of Multimedia Application in Special Effects Editing of Film and Animation

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**Abstract:** With the continuous development of my country's information technology related research, my country's electronic information technology has also been developed very significantly. The continuous development of the information age has brought new changes to the development of my country's film and television animation industry. Film animation is a new industry in our country, and the development of computer technology has a very direct impact on the development of film animation industry. In the early days, my country's film and television animation editing methods and editing concepts were relatively backward. With the continuous development of information technology, the influence and expressiveness of animation content completed by the editing of special effects of film and television animation have been significantly improved.

## 1. Introduction

The post-editing work of film and television animation includes two-dimensional plane animation production editing work, three-dimensional virtual simulation production editing work and special effects synthesis work. With the development of computer technology, multimedia information technology has become the main technology of film and television animation post-editing work. in accordance with. The post-editing work of film and television animation in my country is now relatively backward for other countries. With the continuous development of social economy, residents have correspondingly increased demand for the expression form and content-related requirements of film and television animation. In the process of editing special effects of film and television animation, the use of multimedia information technology to complete the editing of special effects of film and television animation can effectively improve the expressiveness and influence of film and television animation content, and lay a better foundation for the further development of my country's film and television animation industry <sup>[1]</sup>. This research will analyze the current status of multimedia applications in the post-production special effects work of film and television animation, and propose corresponding improvement requirements on this basis, and contribute to the discovery of my country's film and television animation industry.

## 2. The Meaning of Multimedia Technology and Its Development Trend

Multimedia information technology is actually a technology that achieves information exchange and dissemination after the integration of multiple media methods. Multimedia technology can be applied in a wide range, such as text information, image information, audio information, animation information, etc. <sup>[2]</sup>. The main function of multimedia information technology is to process the acquired information and complete subsequent editing and storage. Multimedia technology is not a mechanical device, but a technical means for processing related information. With the development of the trend of social information, multimedia technology has been widely used in residents' lives. Projection, face recognition and many other technologies cannot leave the support of multimedia information technology. For film and animation post-production special effects editing, the application of multimedia technology can improve the efficiency and quality of post-editing work.

The application of multimedia technology is an inevitable trend for the further development of film and animation post-production special effects editing.

### **3. Development Status and Trends of Film and Television Animation**

The film and television animation industry are a very promising industry, and it is also the latest emerging industry in my country. Compared with other industries in my country, the film and animation industry has developed faster and has greater development potential. The emergence of the film and television animation industry is an inevitable trend for the further development of the national economy. During the development of the film and television animation industry, my country has also adopted relevant measures to protect and promote the further development of the film and animation industry<sup>[3]</sup>. With the continuous development of information technology, my country's film and television animation enterprises gradually realized the necessity and inevitability of multimedia technology in the development process. The film and television animation industry in my country appeared late. In fact, in many foreign countries, the film and television animation industry has become one of the country's main economic pillars. In order to allow the further development of my country's film and television animation industry, in the process of the development of film and television animation, relevant departments and film and television companies must take relevant measures to promote the development of the film and animation industry. In the future, the film and television animation industry will inevitably become one of my country's main economic pillars.

### **4. Application of Multimedia Technology in the Film and Television Animation Industry**

#### **4.1 Editing Special Effects in Virtual Space**

In the editing of post-production special effects of film and television animation, post-production staff can use multimedia technology to detect volcanic eruptions, car collisions, rain and snow and other environmental changes that are rarely seen in daily life, as well as those that the human body cannot directly distinguish. The microbial world is presented, and the production of post-production special effects is completed in this way. Using multimedia information technology in the editing of special effects of film and television animation, the staff can create more realistic scenes based on their imagination and related requirements of film and television animation production. In addition to the real scenes, the post-production staff of film and television animation also Multimedia technology can be used to create surreal scenes and sound effects. The application of multimedia information technology for the production of special effects in film and animation can help the staff to adjust the related data in the later stage by simulating the space, and complete the production of special effects on this basis. Through the two methods of simulating real space and creating virtual space, the controllability and adjustability of the editing work of film and animation post-production special effects will be greatly improved, which is the main way for film and animation creators to reflect their creative ability.

#### **4.2 Application of Audiovisual Technology**

Multimedia audio-visual technology is a very basic application method of multimedia technology in the editing of post-production special effects of film and television animation. In the process of making post-production special effects, special effects producers make visual and auditory impacts in the two-dimensional animation plane. Enhance the influence of film and television animation. Multimedia audio-visual technology can configure related lights, background music, etc. for film and television animation. In this way, an integrated picture can be produced for film and television animation content. In the process of applying multimedia audio-visual technology, special effects producers need to analyze the overall style of film and television animation works, focusing on the basic style of film and television animation works, analyze the

application of audio-visual technology, and determine the final special effects through this method project plan. The hard work of multimedia audio-visual technology has improved the post-production methods of traditional film and television animation. In the process of producing special effects for film and television animation, film and television animation staff can create films and animation works that are more in line with the public's aesthetics through the comprehensive application of multimedia audio-visual technology. Video technology can create sounds that are more in line with the characteristics of the characters in movies and animations, and increase the performance of the entire work.

### **4.3 Application of New Imaging Equipment**

With the continuous development of multimedia technology, more and more imaging devices have gradually appeared, and have been used in the production of post-production special effects for film and animation. Motion capture technology, video technology, image capture technology and other new multimedia information technologies have created a more distinctive character image for the characters in film and television animation works. In the process of making film and television animation works, the production staff can use these devices to capture the living conditions of the characters in real life. In this way, the performance of the characters in the works can be more suitable for the audience's cognitive ability. Capture equipment can also help film and television animation producers to capture relevant video data and image data, and in this way post-production special effects can be displayed more flexibly. The application of capture equipment reduces the work content of the post-production special effects staff. The special effects production staff can complete the collection of relevant information only through simple operations, which improves the creation efficiency of film and television animation works.

## **5. Suggestions for Improving the Application of Multimedia Technology in the Film and Television Animation Industry**

With the continuous development of social economy, residents' requirements for film and television animation works will also change day by day. In order to ensure that film and television animation works can better meet the aesthetic requirements of residents, the film and animation industry will be further developed. First of all, the efforts of educational institutions in the film and animation industry are needed. In the process of educating professionals in film and animation special effects editing, educators need to use multimedia technology and other related methods to create a more vivid learning environment for students, and to improve students' the degree of understanding of the special effects work of film and animation post-production helps students to establish a clear understanding of the work of post-production special effects of film and animation. Film and television animation works are actually a complex of multiple arts, and the artistic content contained in them is diverse. In order to ensure that film and television animation post-production staff can complete related post-production work, in the development process of film and television animation industry, relevant departments also need Strengthen the importance of film and animation professionals, and formulate clear management requirements for the training of film and animation professionals. Film and television animation enterprises also need to continuously improve the professional quality of relevant staff in the enterprise, and this way will lay a good foundation for the further development of my country's film and animation industry.

## **6. Conclusion**

This research explores the specific applications of multimedia technology in the current film and television animation industry. Through virtual space technology, audio-visual technology and new multimedia imaging equipment, the work efficiency and quality of the film and animation post-production staff can be very significant. Promote. At the same time, the quality of film and television animation works can also be guaranteed. The film and television animation industry are

an emerging industry in my country, and it is also one of the main economic pillars of the country in the future. In order to ensure that my country's film and television animation industry can be further developed and contribute its due role to the country's economic development, relevant departments must strengthen with the support of the film and television animation industry, film and television animation-related companies also need to strengthen their internal management work, so that my country's film and animation industry can develop better through this method.

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