

Research on the Integration of Digital Media Technology and Film and Television Creation

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Abstract: The continuous progress of social economy and rapid update of science and technology promote the fast perfection of digital media technology, which plays a great role in people's production and life, innovates the traditional media communication mode, meets people's daily media information communication needs, and puts forward higher requirements for the progress of digital media technology. The organic integration of digital media technology and film and television creation provides a new direction for the digital media industry and a better opportunity for the perfection of digital media technology. Starting from the overview of digital media technology and film and television creation, this paper analyzes the application of digital media technology in film and television creation, and discusses the integration of digital media technology and film and television creation.

1. Introduction

Due to the new media era, digital media technology has developed rapidly. The effective integration of digital media technology and film and television creation has opened the door of the new century for the new media, ushered in a new development direction for the new media, and has far-reaching significance for the long-term progress of new media.

2. Overview of Digital Media Technology and Film and Television Creation

In recent years, digital media technology has developed rapidly and produces a great influence on film and television creation. Digital technology is integrated and applied in film and television creation, effectively changing the quality and features of film and television works, promoting the great transformation of film and television creation platform, and promoting the cross-era transformation of film and television creation.

2.1 Digital Media Technology

Digital media technology is to use modern computer technology and communication network means to comprehensively process text, image, sound and other information, and transform abstract information content into manageable, interactive and perceptual message. Digital media technology has developed into various fields in the world in the integrated form of cultural industry, digital

media and network technology, and its industrial coverage is still expanding. Digital media technology includes the design of scenes, the design of character image, the design of game program, human-computer interaction technology and multimedia post-processing technology, etc. It is comprehensive and cumbersome^[1].

2.2 Film and Television Creation

As an emerging industry in the multimedia era, film and television creation is deeply loved by young people at present, and the multimedia is developing rapidly. Especially with the continuous improvement of people's life quality, people have higher and higher requirements for TV programs such as television, movies and other network information, so the production of film and television is facing greater challenges. The rapid progress of film and television media industry means a new development opportunity for art education majors such as film and television creation industry, and provides a new development direction for the film and television creation. Traditional film and television creation includes many kinds of majors, such as broadcasting and television director, hosting, public utilities management, film and television director, film and television performance and so on. TV media major has become the most popular and more acceptable new industry, loved by the masses, and its media form is also the most influential. From the dream world created by Hollywood film directors to the real-life content concerned by TV news, and then to the ubiquitous TV advertising content, it affects our life and world all the time.

3. Analysis on Application of Digital Media Technology in Film and Television Creation

Digital media technology effectively reduces the production process of film and television creation, promote the work efficiency and quality, and strengthen the comprehensive strength of creators, such as art designer, photographer, cameraman, editor and producer, director, so that they can realize their creative intention more accurately and finely. It can highlight their personality characteristics, provide a broader creative space and development space for film and television creators, and further explore the creative potential of creators^[2].

3.1 Digital Development of Film and Television Creation

The network age and the information age have made the digital nonlinear editing system and computer synthesis technology widely used and popularized, simplified the work procedure of film and television creation. The scene of film and television lens is formed by a number of independent picking, processing and recording elements, which effectively improves the thinking imagination of film and television producers. Static pictures, images and graphics materials in film and television production are indispensable parts. It is unnecessary for the producers to modify them. For some dynamic video materials used in film and television creation, the producers need to use computer software and hardware equipment reasonably to selectively capture the content that needs to be presented on the video playing screen after capturing the video by camera, and use the common file storage format to effectively organize and store it, so as to effectively integrate a series of digital video materials for later film and television creation. This line is generally called frame grabbing or video capture.

3.2 Video Synthesis

Image synthesis plays a crucial role in the process of film and television production. It is a special effect mixed processing of various original film and television materials through modern

digital media technology^[3]. For example, superposition, matting, color channel synthesis and other synthesis techniques have been widely used in the process of film and television creation. The representative works include *Story of Hua Qiang*, in which the film and television synthesis techniques have been used very successfully. Nowadays, with the fast progress of computer technology and the wide application of digital media technology in film and television media creation, digital film and television synthesis technology and methods have been effectively improved. The digital technology of film and television synthesis fully uses the synthesis means and principles of computer iconology, scientifically uses digital technology to collect a variety of original materials through special collection equipment, and reasonably uses computer technology to effectively integrate these film and television information materials. After the synthesis, it becomes the final film and television works with strong personality creation color, and finally it is output to the film or tape for circular playback. The effect of film and television frame is much better than the film and television works synthesized by traditional optical means. The above digital synthesis means and methods provide more creative ideas and ways for the later film and television works, and provide more convenient and diverse means for the work of film and television workers. Using computer technology and digital technology makes the frame effect far more beautiful and clearer than the previous optical synthesis effect, adds more color illusion, makes its color expression more colorful and adds more development space and power support for the film and television creative synthesis technology.

4. Analysis on the Integration of Digital Media Technology and Film and Television Creation

From the application of digital media technology in film and television creation, we can know the importance of digital media technology for the progress of film and television creation. Film and television creators should have a full and correct understanding of the impact of digital media technology on film and television creation. After fully realizing the importance of digital media, they should effectively integrate it into film and television production.

4.1 Authenticity of Film and Television Creation Content

In the process of film and television creation, the essence is to ensure the authenticity and effectiveness of its production content. However, for film and television art production works, their own fictional behavior is different from the authenticity and the actual situation of life. Its main purpose is to meet the audience's video enjoyment and ideological desire, and on this basis, to beautify and improve its ideological content, so as to make it wonderful and full of fantasy. The application of digital media technology to film and television creation not only brings more visual and auditory enjoyment to the audience, but also provides more authenticity for the broadcasting effect of film and television works. The realization of these contents needs to achieve the following two points. The first is to ensure the authenticity and effectiveness of the scene. Because in the shooting of film and television works and the interception of material, the main information involved is the screen color, sound and scene content, and then these materials are collected and integrated for synthesis and editing, which belongs to the core content of digital media technology. From the perspective of digital media technology teaching, these are reasonable editing of film and television color, image and sound based on the real environment, which has a certain authenticity. If the collection work is not enough, the audience will feel that the content of the film and television works is too fictitious, which will have a serious negative impact on the production effect of the film and television works. The second is to focus on the authenticity of the frame. For the audience, they are more concerned about their own visual and auditory feelings and effects. Using digital media technology to enhance the authenticity of frames is very important for film and television

works. Meanwhile, using audio production means in digital media technology can strengthen the audio effect of film and television works, so that the audience can produce feelings of being on the scene, so as to achieve the resonance of body, mind and the content of film and television works, further improve the creation quality and effect of film and television works ^[4].

4.2 Change the Way of Film and Television Creation

In the process of film and television creation, the effective application of digital media technology in film and television creation makes the script content of film and television creation more digital, innovates the traditional linear thinking mode, makes its thinking mode more diversified, subverts the traditional concept of time and space, makes the difficult shooting lens easier to operate, makes the form and content more diversified and sufficient, and effectively changes the way of thinking of the creator. Meanwhile, the traditional film and television scripts can't meet the audience's video needs at this stage. Only the effective combination of film and television creation and digital technology can promote the quality and effect of film and television works, so as to promote the rapid and effective progress of film and television creation.

5. Conclusion

In brief, due to the fast progress of the times, science and technology, the effective application of digital media technology in film and television creation has a deep understanding of the screen, audio and image of film and television works. Through the analysis of the meaning of digital media technology and film and television creation, we can strengthen the further understanding and application of the two contents, and promote the more effective integration, so as to promote the long-term and healthy development of digital media technology and film and television industry.

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