

# Discussion on the Application of Digital Media Art in Film and Television Animation Design

Yongjuan Su

Nanjing Normal University Taizhou College, Taizhou, Jiangsu 225300, China

## ABSTRACT

Film and television animation is an important means of cultural output, which has positive significance in promoting national values and meeting the spiritual and cultural needs of the people. The application of digital media art in film and television animation design can greatly improve animation production efficiency and promote the development of animation design towards personalization, popularization, and technology. Moreover, it has changed a series of drawbacks in traditional animation design and is of great significance for promoting the sustainable development of film and television animation in China.

## KEYWORDS

film and television animation design; digital Media Art

## 1 Introduction

Since the 21st century, China's science and technology have developed rapidly; Digital technology has gradually penetrated into various industries in the social field and is playing a positive role in promoting the development of social industries. In this era, digital media art has emerged. In recent years, the improvement of economic conditions has enabled people's material needs to be met and they have begun to pay attention to spiritual enjoyment. In order to provide a better viewing experience for the audience, modern film and television animation design has begun to explore the integration and application of digital media technology in animation design, in order to add artistic characteristics to animation design, improve the overall quality of animation design, and respond to people's higher pursuit of animation art.

## 2 What is Digital Media Art

Digital media art is a new form of art that is based on digital technology and modern media technology, integrating human rational scientific thought with artistic sensory thinking. In short, it is the use of technological tools to express the beauty of art, in order to maximize the display of artistic charm. Since the 1990s, digital media art has gone through various forms of artistic expression, from flat to three-dimensional, from two-dimensional to three-dimensional, and from visual to intrinsic; Its applications involve multiple fields such as modern modeling, landscape design, graphic design, digital cinema, fashion design, and game design. The application of digital media art in film and television animation design has enriched the expression style of animation, expanded the dissemination channels of animation, and promoted the popularization development of animation. It has become an important driving force for the development of film and television animation art.

Digital media art has technological characteristics. The creative form and expressive techniques

of digital media art highly rely on computer science and technology, and to a certain extent, it is a combination of software technologies such as computer graphics and images, multimedia video animation, etc. Behind this technology lies the obscure algorithmic mechanisms, complex programming languages, and monotonous computer instructions. Therefore, applicants of digital media art should not only be proficient in the operating rules and techniques of various computer software, but also have the comprehensive ability to use tools to express their artistic ideas. Digital media art has media characteristics. Digital media art is an art form based on electronic information, and the characteristics of electronic information dissemination make this art form inherently interactive, social, and virtual. In addition, the full integration of mobile devices and social media in social life has enriched and diversified the channels, platforms, and expressions of digital media art; Massive and digitally processed film and television animations are being disseminated on various online platforms, while also driving the development of digital media art and film and television animation design. Digital media art also has popularity. Most traditional art performances have high demands on performers, often requiring years of practice to achieve ideal performance results. Moreover, such high difficulty artistic performances initially only target those with higher social status as audiences, and the widespread application of digital media technology in the art field has played an important role in helping art step down from the elegant stage.<sup>[1]</sup>

### **3 The Positive Significance of Applying Digital Media Art to Film and Television Animation Design**

The application of digital media art in film and animation design has promoted the coordinated development of them, and they are complementary to each other. Digital media art has continuously improved the level of modern film and television animation production, making film and television animation design more artistic in terms of character details, scene layout, and visual color. It can be seen that digital media art has positive significance for film and animation design.

#### **3.1 Greatly Improving Animation Design Efficiency and Enriching Animation Design Expression Forms**

Traditional animation design focuses on hand drawing as the main design mode, but this mode is time-consuming, consumes a lot of materials, and is difficult to modify in the later stage, which has many drawbacks. The application of digital media art in film and television animation design effectively solves the shortcomings of hand drawn mode, greatly improving the efficiency of animation design and reducing the difficulty of modification. At the same time, utilizing technological means for animation design helps to fully stimulate the innovative thinking of designers, and can also turn their ideas about animation design into reality, thereby maximizing their design talents and presenting more high-quality and high-level film and television animations to the audience. In addition, film and television animation itself is a visual art, and digital media art endows film and television animation design with better dynamic effects, greatly enriching the expression forms of film and television animation, and can convey the spirit of the work with a stronger visual impact.

#### **3.2 Boosting the Development of Personnel Allocation for Film and Animation Design Towards Popularization**

The traditional animation design with hand drawing as the main mode requires a lot of

manpower and material resources, and requires designers to have both professional knowledge related to film and television animation and certain experience in art painting. Therefore, the production of traditional animation is very difficult. But with the support of digital media art, designers can easily design animations through a series of animation production software, such as Flash, Affert Effect, and so on. The application of such software is relatively easy to operate and modify compared to hand drawn animation; Even if one does not have a background in film and animation or art, they can participate in design after short-term training, which further expands the scope of personnel in the film and animation design industry. This has brought animation production down from the "elegant altar" where only a few professionals can participate, and made the designer configuration more popular.

### **3.3 Anti-Traditional Creative Forms Have Begun to Emerge, and Film and Animation Production is Becoming Increasingly Personalized**

Limited by time, materials, labor costs and other factors, the development space of traditional animation art is extremely limited, and the creation form is also relatively conservative. Hand drawn paper cuttings animation is the main animation form. With the advancement of computer technology and the background of the information age, various massive information resources provide a large amount of creative materials for film and television animation. More and more collage animation and mixed media animation creations are emerging. With the support of digital media art, animation production is no longer limited to two-dimensional, three-dimensional, and freeze frame animation forms, but is increasingly pursuing bold innovation, promoting the development of animation design towards a "niche" and "focus media" direction. Moreover, there is an increasing emphasis on showcasing the original appearance of art, while also strengthening the audio-visual effects of animation, in order to bring stronger visual impact to the audience.<sup>[2]</sup>

## **4 Exploration of Digital Media Art Application in Film and Television Animation Design**

Digital media art pursues the perfect integration of technology and art, in order to express the original charm of art to a greater extent. The initial application of digital media art in film and television animation design mainly focused on two-dimensional animation and three-dimensional animation. In 2D and 3D animation design, digital media art can be used to achieve automatic image processing, making a series of drawing, drawing lines, and coloring very convenient. Subsequently, automatic animation generation can be easily achieved through the setting of keyframes. This type of animation product is both smooth and clear, and pays more attention to the details of character images and scene arrangements, which is the key to improving the quality of film and television animation works. For example, the domestic film *White Snake* has excellent animation design and production, especially in terms of scene design. It not only reflects the realistic style of the film, but also presents a very beautiful visual effect. The landscape form and color changes in the movie are very rich in the combination of light sources and the sky. The color control of flowers, grass, trees, and trees is very effective, and the strong colors reflect the vigorous vitality that southern plants should have. This gives the audience a strong visual impact, even the rarely appearing streets and faintly visible buildings showcase the unique calmness and grandeur of Jiangnan ancient towns and Tang Dynasty architecture, not to mention the details and decorations that are difficult to notice at a glance in movies. For example, a wooden boat with a mortise and tenon structure and a copper incense burner with a sense of weight, a new and old tower under

repair, a wine jar made of pottery in Snake Hunting Village with a "realgar wine" label, and a high-tech Baoqingfang. The above details cannot be portrayed by traditional hand drawing.

Traditional film and television animation production is a continuous process, which means that the production process is consistent with the animation playback process. This is also an important factor affecting the time-consuming, high cost, and difficult production of traditional animation. However, with the help of digital media art, animation design can achieve simultaneous animation design by multiple people at different time periods without maintaining this temporal continuity; Simply concatenate the results in order, and the labor, material, and time costs of animation production will be reduced. In addition, digital media art can also showcase scenes that are difficult to capture in real-life situations, thereby helping to enhance the visibility and artistry of film and television animation works. For example, the audiovisual three-dimensional feast *Coco*, inspired by Mexico's intangible cultural heritage -- the Day of the Dead, utilized a large number of technical means in animation design, including the design of visual elements, the application of CG animation, and the application of digital media technology, creating a three-dimensional spatial hierarchy, unique sound expression, and visual enjoyment in color for animated films. The orange yellow petal bridge and the protagonist's ultra large action performances in the animation are all easily presented through digital media art. Although the success of this film is closely related to its ingenuity in topic selection, the application of digital media art undoubtedly provides important technical support for the magical artistic effects of this animation.

The key to a good film and television animation being enduring and enduring is whether the theme conveyed by the animation has deep connotations and can resonate and reflect on the audience. Therefore, the core of creating film and television animation is to enhance the visual impact of the image, deepen the connotation of the animation, and resonate with the audience and the theme of the animation. Digital media art undoubtedly plays an important role in strengthening the expressive function of film and television animation. For example, *Nezha: Birth of the Demon Child*, with the support of digital media art, diverse color combinations create a unique visual style, presenting the audience with vibrant colors.<sup>[3]</sup>

## 5 Conclusion

In the context of the Internet era, the application of digital media art in film and television animation design is a trend. Although its emergence has brought some challenges to animation design, it has given animation design new creative vitality. Therefore, strengthening the application of digital media art in film and television animation design is an effective measure to promote the improvement of various artistic expressions in China.

## References

- [1] Jiaqi Pan. On the Application of Digital Media Art in Film and Television Animation. *Popular Literature and Art*, 2021 (4): 139-140.
- [2] Lexuan Yang. Research on the Application of Digital Media Art in Animation Design. *Drama Home*, 2021 (22): 158-159.
- [3] Xifan Yang. The Value and Application of Digital Media Art in Film and Television Animation. *Popular Literature and Art*, 2021 (15): 124-125.

## About the Author

Yongjuan Su(1984-), female, Han People; Taizhou, Zhejiang Province; master's degree, associate professor, Nanjing Normal University Taizhou College; research direction: digital media and animation.