The Development of 3D Movie Animation Industry in the New Media Art Era

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Abstract. With the continuous progress of technology and the increasing diversification of supporting tools, the penetration and application of 3D film and television special effects technology in the animation industry is also deeper, thus playing an irreplaceable role. By studying the development of 3D film and television animation industry in the era of new media art, new media art has become the new mainstream of world art at this stage. The use of network media to achieve information dissemination has greatly improved the speed and coverage of communication, and the application of Internet communication platform has also provided conditions for the interactive exchange of works. Not only has great commercial value, but also has potential value that can be tapped. The new media art is greatly different from the traditional art form in both its internal characteristics and its external manifestations. However, 3D film and television special effects technology is an important technology to promote the development of animation film and television, which makes the production of animated films more sophisticated, can bring the audience an immersive feeling, and enables the audience to get a better sense of experience. Better promote the deep integration of technology and film, and bring more rich experiences and enjoyment to the public.

Keywords: New media art era, 3D film and television, Development of the animation industry.

1. Introduction

With the continuous development of the film industry, the artistic feast and visual enjoyment brought to the public are becoming increasingly shocking. With the improvement of people's living standards, people have begun to pursue spiritual pursuits, which has provided development opportunities for animated films that meet people's spiritual needs and gradually formed the animated film industry. Especially with the in-depth application of 3D film and television special effects technology, new added value has been added to film and television works in the new era. The production of 3D animation must be supported by comprehensive and mature computer 3D technology, and both the modeling process and materials need to be effectively simulated through computer calculations to simulate real situations. The reason why 3D animation has unique advantages is not only its realistic effects, but also these other advantages. The application of 3D technology can effectively create exquisite fantasy scenes, and to some extent, it replaces the tedious video editing process and on-site scene shooting work of cast members, greatly improving work efficiency and artistic quality of the work [1]. With the continuous progress of technology and the increasing diversification of supporting tools, the penetration and application of 3D film and television special effects technology in the animation industry have become more in-depth, thus playing an irreplaceable and important role [2]. New media art is greatly different from traditional art forms in both its internal characteristics and its external manifestations. However, 3D films and television special effects technology is an important technology driving the development of the animation film and television field [3]. It makes the production of animation movies more sophisticated, can bring the audience an immersive experience, and enable the audience to obtain a better sense of experience [4]. Better promote the deep integration of technology and film, bringing a richer experience and enjoyment to the public.

2. The concept of new media art

The new media art mainly appeared at the end of the 20th century, which is a comprehensive art based on the development of science and technology and information technology, and further integrated with artists' ideas. It is different from new media art, ready-made art, decorative art and body art, but is built on devices and equipment. It mainly absorbs the specialties of other art forms, organically combines advanced science and technology with advanced art forms, explores new fields of art, and perceives the world with new eyes. Today, the new media art has become the main conceptual art media with more outstanding interactivity, comprehensiveness and experience than the traditional media. At the same time, with the continuous development of information technology and the widespread emergence of new forms of communication, the way of spreading works of art through vision has been enriched [7]. Roy ascot, a new media artist, once said that the most distinctive characteristics of new media art are connectivity and interactivity.

With the development and derivation of Internet and other Internet-based media, single communication has become a rigid and monopolistic mode, and interaction has become a new need and trend. As a work of art, its interactivity can be used to describe two unrelated characteristics. Internet, multimedia and animation media are important channels for information dissemination, and the wide application of new technologies also adds a touch of new green to the dissemination of art, which greatly enriches the traditional forms of communication and provides a good development space for the progress of new media art [8]. In the world of new media, information is placed in a public space, and it is up to the public to find the information they need, and then transmit the information. Mastering new media technology is the basis of communication and application. Computer technology is a way of expression in the new media era, which provides infinite possibilities for artistic creation and enhances artistic expression.

3. The Current Situation of 3D Film and Television Animation

There are two main types of film and television special effects technology, which are divided into two-dimensional animation and 3D animation according to their spatial distribution. The former is a traditional flat animation, mainly in the form of hand drawing, which creates a rich artistic sense by setting continuous flat images. Due to the lack of experience in shooting 3D animated films in our country, many animated films and television works in the process of using 3D film and television technology to shoot and edit movies do not have obvious 3D stereoscopic effects, failing to provide an immersive experience for the audience [9-10]. Many animated films work blindly imitate the effects of Western animated blockbusters. As long as it is a representative foreign animated film with high box office in the market, we imitate it from aspects such as plot and character setting. Due to cultural differences and habitual thinking between China and the West, it is not recognized by the public. With the development of the economy, there is an increasing investment and research in 3D film and television animation, but the existing problems are also becoming increasingly apparent, mainly reflected in the following aspects, as shown in Figure 1.

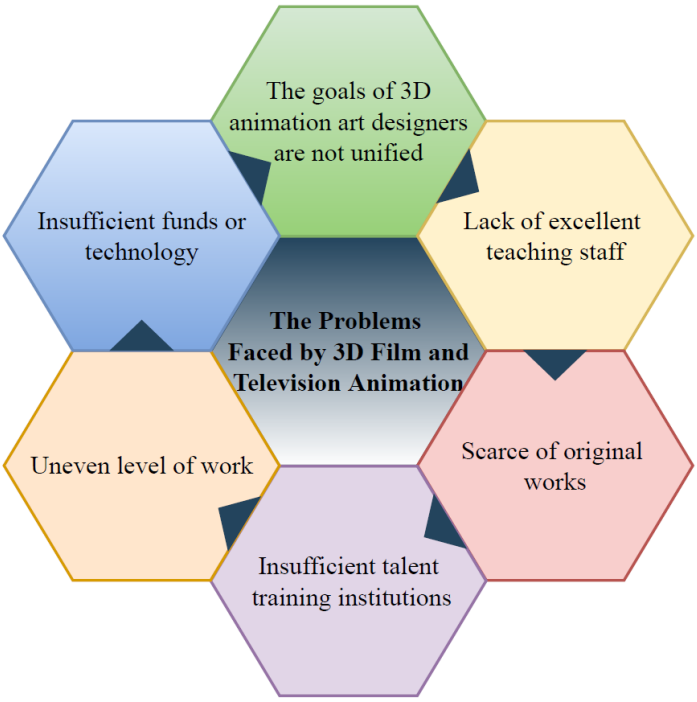


Figure 1. Problems Faced by 3D Movie Animation

The appearance of 3D animation special effects animation film has greatly promoted the development of animation film market, and also brought severe market competition. Due to proper 3D special effects, it can bring strong technical support to animation films, so the filming effect has been greatly improved, including a series of policies on broadcasting, tax exemption policies for animation film industry and development funds. The introduction of these policies has effectively promoted the further development of animation film industry in China [11].

4. The Promotion of New Media to the Development of 3D Film and Television Animation Industry

4.1. New media art has changed the communication form of 3D film and television animation

In the context of new media art, original animation shows unprecedented creativity through the stimulation of new technology, which benefits from the comprehensiveness and creativity of new media itself. The characteristics of new media make various art categories form a special blend of innovation, integrating various art forms of new media. new media art has expanded its influence and speed of communication by using the way of network information communication [12]. The dissemination method of online animation is one of the many typical representatives. Online animation is a new mode of dissemination for animation, which is an organic combination of online media and animation art. The production of 3D animation must be supported by comprehensive and mature computer 3D technology, and both the modeling process and materials need to be effectively simulated through computer calculations to simulate real situations. The reason why 3D animation has unique advantages is not only its realistic effects, but also these other advantages. The director of news special programs should have effective and innovative enthusiasm and initiative, broaden their thinking and obtain more program materials; We should have an independent spirit and seek valuable information as well as feedback from the audience. In the film and television industry, having an innovative spirit is particularly crucial. Firstly, by excavating new materials from traditional or contemporary culture and using these new materials for creation, it is possible to create movies that are different from other film and television works and win the love of the audience.

Innovation is also needed in the technology of 3D film and television animation. Although China's current level of 3D film and television animation technology is relatively backward, it is believed that

after a period of technical experience accumulation, China's 3D film and television animation technology can reach the level of European and American countries, and on this basis, achieve technological innovation. Therefore, the use of online media to achieve information dissemination greatly improves the speed and coverage of dissemination. The application of internet communication platforms also provides conditions for the interactive exchange of works. Not only does it have huge commercial value, but it also has potential value that can be explored.

4.2. New media art enriches the connotation of animation art.

New media art is very dependent on technology, which has changed the aesthetic field of media art to some extent. In the aspect of character design and scene design, we also need to creatively use more elements, including traditional cultural elements and fashion elements in contemporary popular culture, and bring new visual experience to the audience by using these new elements. Breaking the limitations of animation production, animation production is freer and more flexible, forms become more diverse, and artistic language and laws can no longer bind it. This paper analyzes the new media art and enriches the main content of animation art as shown in Figure 2.

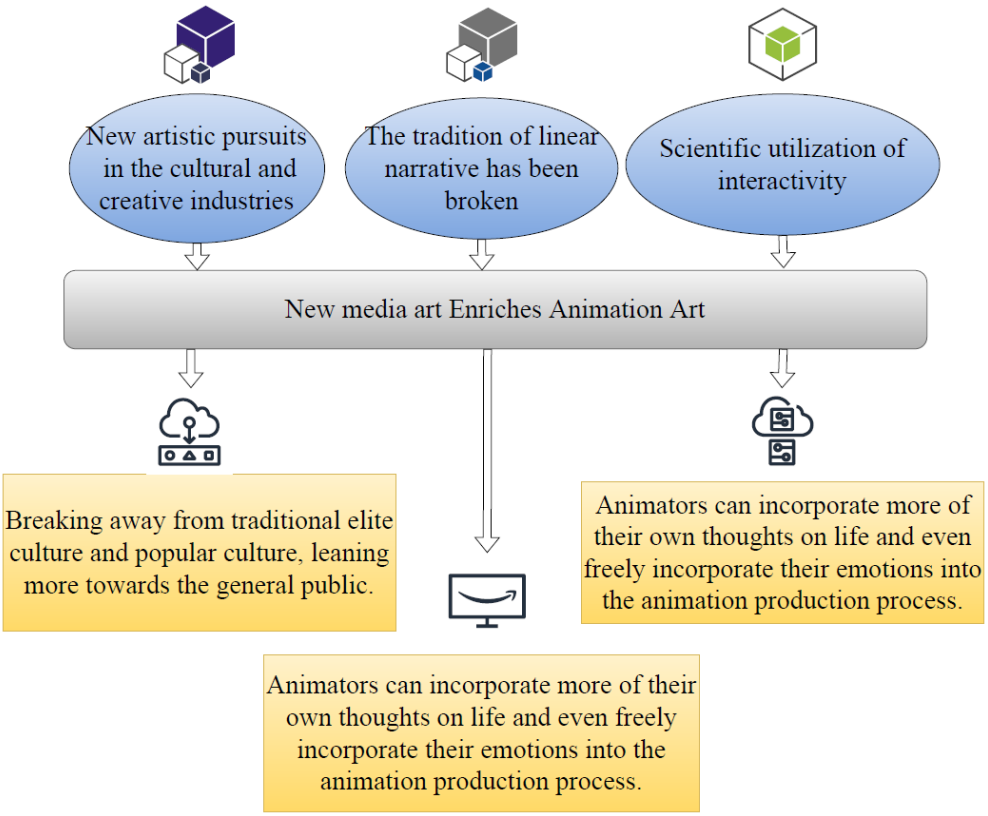


Figure 2. New media art enriches animation art

Through the analysis of the above figure, it can be seen that the new media art enriches the animation art, which can be mainly divided into three categories:

① The new artistic pursuit direction of cultural and creative industries is entertainment and games.

Under the guidance of this general direction, animation art is constantly innovating and reforming, accumulating experience in the shooting process of 3D film and television works, and gradually becoming a high-end talent with both quality and skills. Breaking the traditional elite culture and popular culture, it is more inclined to the public and makes the boundaries of various cultures more blurred.

② Linear narration cannot limit the animation art in the new media era.

Because editing won't damage the sound and image quality of the works, animators can combine their own thoughts on life with China's specific national conditions to carry out novel innovation and design, and then create excellent animated film and television works with China characteristics. Even

freely add their own emotions to the animation production process, and the final effect of the work will be as close as possible to people's needs.

③ The scientific utilization of interactivity has brought a new development direction to animation industry.

New media technology can adapt to the development of science and technology, and this complementary relationship has had a great influence in the art field. In addition, the animated film is a systematic project, with a large investment. If the technology is not up to standard, or if it imitates other people's things too much, it will reduce its appeal, and thus it will not get a good box office and word of mouth. In the process of the development of new media art, many products have been produced, among which online games, which are popular all over the world, are typical.

5. Conclusion

With the in-depth development and innovation of 3D film and television animation, its application in the 3D animation film industry will become increasingly widespread. For the domestic animation film industry, in order to continuously improve its comprehensive competitive strength, efforts need to be made in technological innovation and artistic integration. In this regard, this paper analyzes the development of 3D film, television and animation industry in the era of new media art. Currently, most of the cutscenes in games have become real-time animations, rather than traditional frame by frame animations. The brilliant scenes, exciting fighting actions, and dazzling special effects techniques in the game all showcase the brilliance of animation. The current cutscenes in the game can be considered a complete animated short film to some extent. Like modern science and technology, new media art is also the product of continuous innovation practice. Its transmission and innovation contain a variety of options, and this attribute will become more diverse with the development of the times, and the intersection will become more and more obvious. Therefore, people should look at new media art with a development perspective, and use new media art in a more scientific and correct way. At the same time, we should also be good at exploring the needs of the film and television market, exploring the unique elements of traditional Chinese culture, and boldly innovating in animation film and television technology, so that China's 3D film and television animation works can reach new heights.

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